

**Planungszeichnung**


962-3-020902

**WOLFF 5520.6**



2.2.1.1

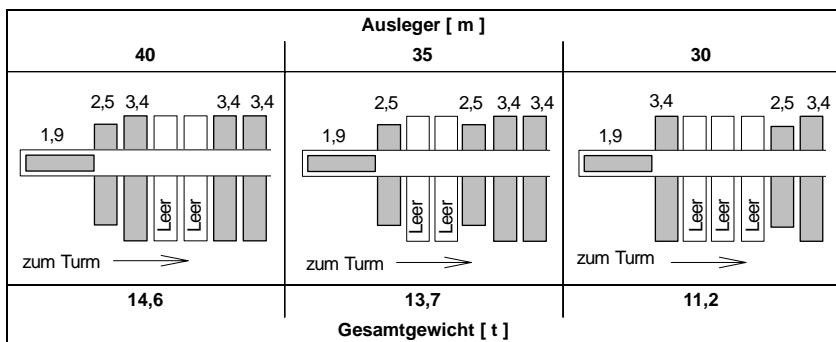
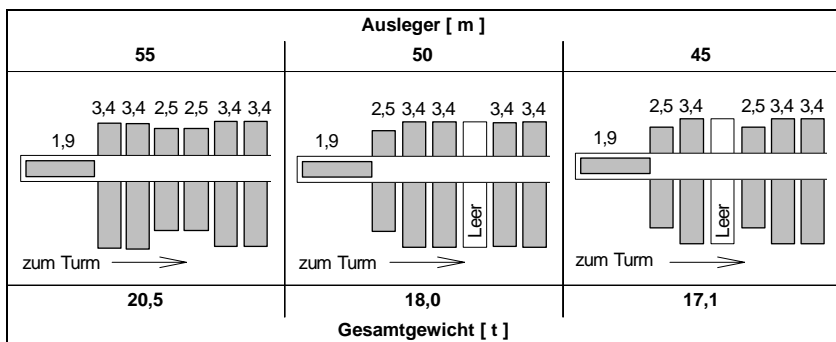
Tragfähigkeitstabelle

| Ausladung [m]     |    | 25         | 30  | 35  | 40   | 45  | 50  | 55  |     |                   |
|-------------------|----|------------|---|-----|------|-----|-----|-----|-----|-------------------|
| Auslegerlänge [m] | 55 | 2,5 - 22,9 |  | 5,4 | 4,4  | 3,6 | 3,1 | 2,6 | 2,3 | Tragfähigkeit [t] |
|                   | 50 | 2,5 - 24,2 |   | 5,8 | 4,6  | 3,9 | 3,3 | 2,8 | 2,5 |                   |
|                   | 45 | 2,5 - 24,4 |   | 5,8 | 4,7  | 3,9 | 3,3 | 2,9 |     |                   |
|                   | 40 | 2,5 - 24,6 |   | 5,9 | 4,78 | 4,0 | 3,4 |     |     |                   |
|                   | 35 | 2,5 - 24,9 |   | 5,9 | 4,8  | 4,0 |     |     |     |                   |
|                   | 30 | 2,5 - 25,7 |   | 6,0 | 5,0  |     |     |     |     |                   |

Die Tragfähigkeitswerte beziehen sich auf 42,0 m Hakenweg. Bei größeren Hakenwegen verringert sich die zulässige Tragfähigkeit um das Mehrgewicht des zusätzlichen Hubseils (beim 2-fachen Seilstrangbetrieb um 2,368 kg je Meter Hakenweg).

Anordnung der Gegengewichte beim Einsatz der Hubwinde


Hw 628 FU



2.2.1.2

Tragfähigkeitstabelle

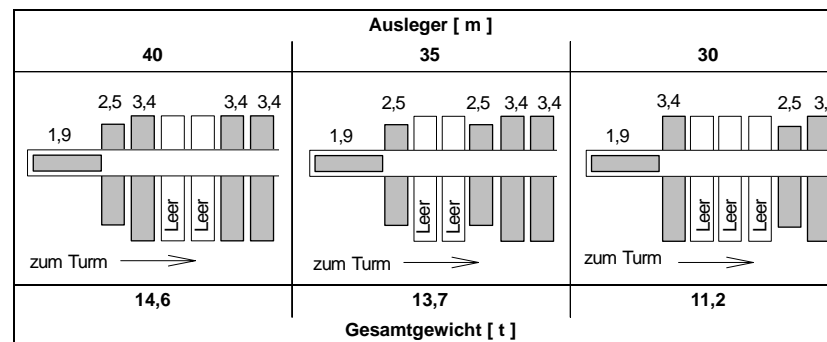
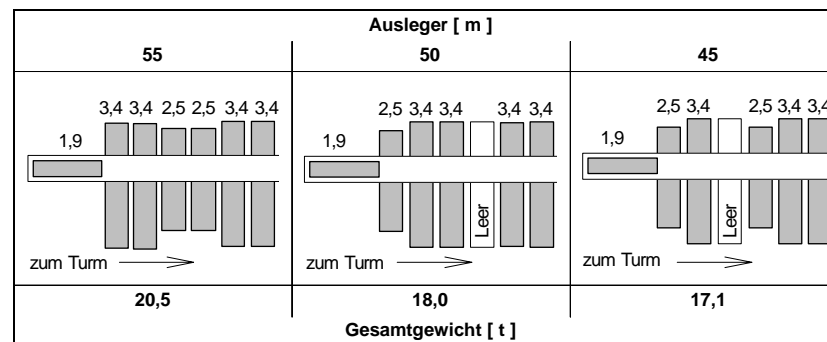
(Diese Traglastwerte sind Abschaltwerte)

| Ausladung [m]     |    | 25         | 30  | 35  | 40  | 45  | 50  | 55  |     |                   |
|-------------------|----|------------|---|-----|-----|-----|-----|-----|-----|-------------------|
| Auslegerlänge [m] | 55 | 2,5 - 25,3 |  | 6,0 | 4,9 | 4,1 | 3,5 | 3,0 | 2,7 | Tragfähigkeit [t] |
|                   | 50 | 2,5 - 26,5 |   | 6,0 | 5,2 | 4,4 | 3,7 | 3,2 | 2,8 |                   |
|                   | 45 | 2,5 - 26,6 |   | 6,0 | 5,2 | 4,4 | 3,7 | 3,2 |     |                   |
|                   | 40 | 2,5 - 26,7 |   | 6,0 | 5,3 | 4,4 | 3,8 |     |     |                   |
|                   | 35 | 2,5 - 26,8 |   | 6,0 | 5,3 | 4,4 |     |     |     |                   |
|                   | 30 | 2,5 - 27,6 |   | 6,0 | 5,4 |     |     |     |     |                   |

Die Tragfähigkeitswerte beziehen sich auf 42,0 m Hakenweg. Bei größeren Hakenwegen verringert sich die zulässige Tragfähigkeit um das Mehrgewicht des zusätzlichen Hubseils (beim 2-fachen Seilstrangbetrieb um 2,368 kg je Meter Hakenweg).

Anordnung der Gegengewichte beim Einsatz der Hubwinde

Hw 628 FU



2.2.1.3

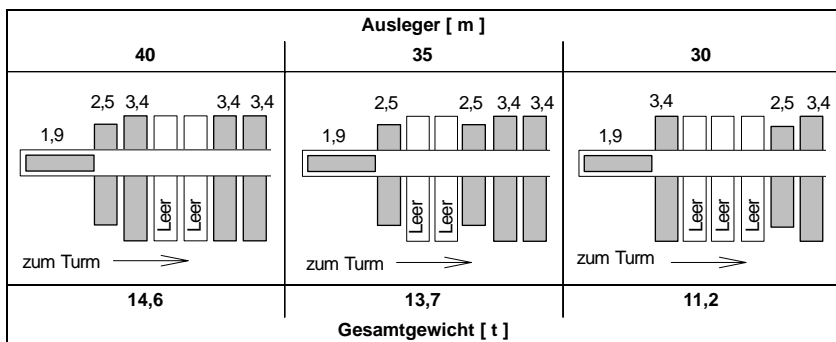
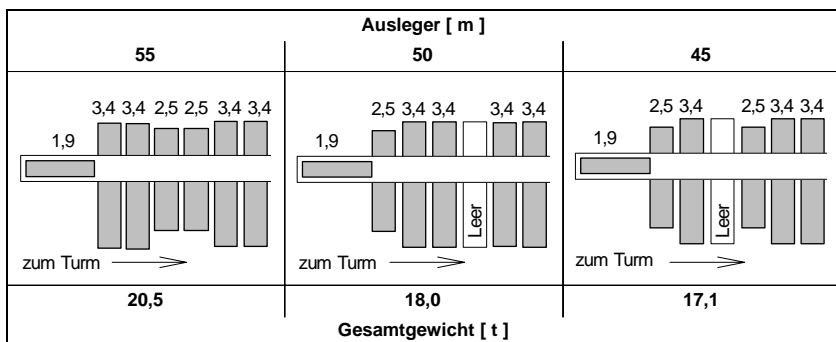
Tragfähigkeitstabelle

| Ausladung [m]     |    | 25         | 30  | 35  | 40   | 45  | 50  | 55  |     |                   |
|-------------------|----|------------|-----|-----|------|-----|-----|-----|-----|-------------------|
| Auslegerlänge [m] | 55 | 2,5 - 22,9 | 6,0 | 5,4 | 4,4  | 3,6 | 3,1 | 2,6 | 2,3 | Tragfähigkeit [t] |
|                   | 50 | 2,5 - 24,2 |     | 5,8 | 4,6  | 3,9 | 3,3 | 2,8 | 2,5 |                   |
|                   | 45 | 2,5 - 24,4 |     | 5,8 | 4,7  | 3,9 | 3,3 | 2,9 |     |                   |
|                   | 40 | 2,5 - 24,6 |     | 5,9 | 4,78 | 4,0 | 3,4 |     |     |                   |
|                   | 35 | 2,5 - 24,9 |     | 5,9 | 4,8  | 4,0 |     |     |     |                   |
|                   | 30 | 2,5 - 25,7 |     | 6,0 | 5,0  |     |     |     |     |                   |

Die Tragfähigkeitswerte beziehen sich auf 42,0 m Hakenweg. Bei größeren Hakenwegen verringert sich die zulässige Tragfähigkeit um das Mehrgewicht des zusätzlichen Hubseils (beim 2-fachen Seilstrangbetrieb um 2,368 kg je Meter Hakenweg).

Anordnung der Gegengewichte beim Einsatz der Hubwinde

Hw 637 FU



2.2.1.4

Tragfähigkeitstabelle

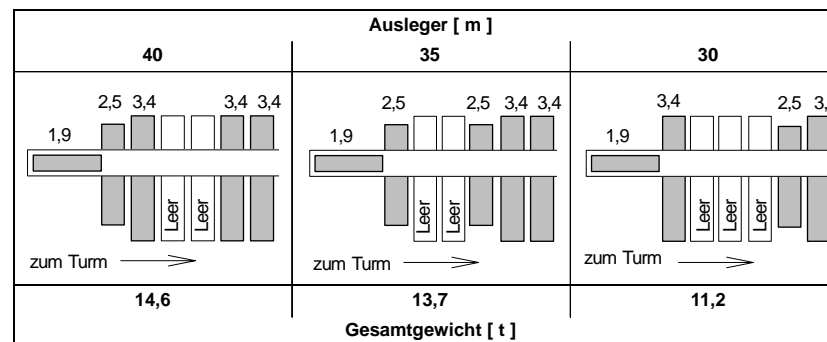
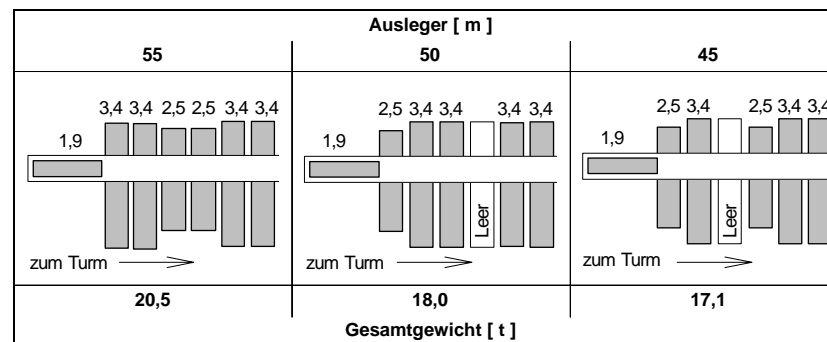
(Diese Traglastwerte sind Abschaltwerte)

| Ausladung [m]     |    | 25         | 30  | 35  | 40  | 45  | 50  | 55  |     |                   |
|-------------------|----|------------|-----|-----|-----|-----|-----|-----|-----|-------------------|
| Auslegerlänge [m] | 55 | 2,5 - 25,3 | 6,0 | 6,0 | 4,9 | 4,1 | 3,5 | 3,0 | 2,7 | Tragfähigkeit [t] |
|                   | 50 | 2,5 - 26,5 |     | 6,0 | 5,2 | 4,4 | 3,7 | 3,2 | 2,8 |                   |
|                   | 45 | 2,5 - 26,6 |     | 6,0 | 5,2 | 4,4 | 3,7 | 3,2 |     |                   |
|                   | 40 | 2,5 - 26,7 |     | 6,0 | 5,3 | 4,4 | 3,8 |     |     |                   |
|                   | 35 | 2,5 - 26,8 |     | 6,0 | 5,3 | 4,4 |     |     |     |                   |
|                   | 30 | 2,5 - 27,6 |     | 6,0 | 5,4 |     |     |     |     |                   |



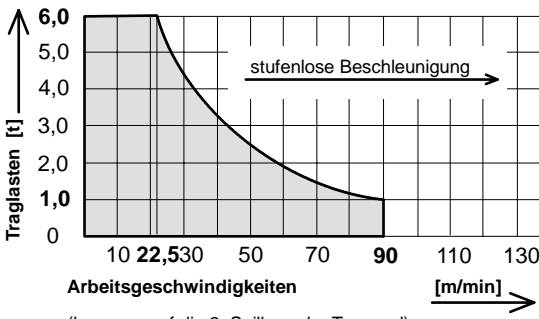

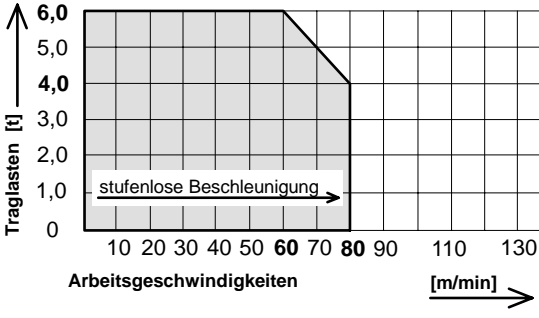

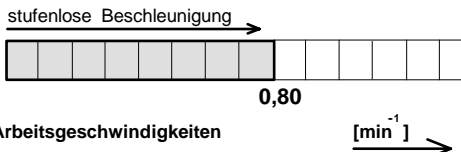
Die Tragfähigkeitswerte beziehen sich auf 42,0 m Hakenweg. Bei größeren Hakenwegen verringert sich die zulässige Tragfähigkeit um das Mehrgewicht des zusätzlichen Hubseils (beim 2-fachen Seilstrangbetrieb um 2,368 kg je Meter Hakenweg).

Anordnung der Gegengewichte beim Einsatz der Hubwinde



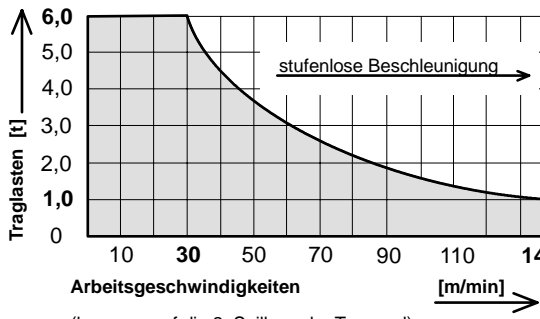

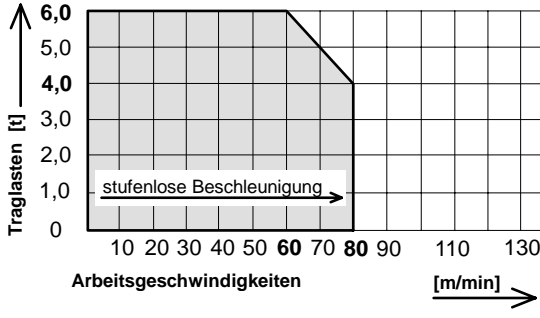

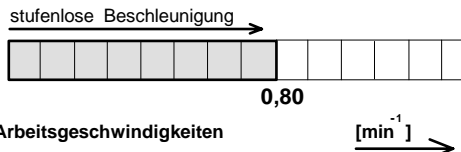
Hw 637 FU



2.2.2.1 Arbeitsgeschwindigkeiten 400 V, 50 Hz

| Triebwerk [Typ]   | Arbeitsgeschwindigkeiten Traglast   | Hakenweg max. [m] | Leistung [kW] | Gesamtanschlusswert [kVA]                                   |
|---|---|-------------------|---------------|---|
| Hw 628 FU   | Heben    | 190               | 28            | 46,0<br>Gesamtanschlusswert bei Gleichzeitigkeitsfaktor 0,8 |
|    |  <p>Traglasten [t]</p> <p>Arbeitsgeschwindigkeiten [m/min]</p> <p>(bezogen auf die 2. Seilage der Trommel)</p> |                   |               |   |
| Kw  | Katzfahren    |                   | 4,0           |   |
|   |  <p>Traglasten [t]</p> <p>Arbeitsgeschwindigkeiten [m/min]</p>  |                   |               |   |
| Dw  | Drehen 0,8 min <sup>-1</sup>  |                   | 7,5           |   |
|  |  <p>Arbeitsgeschwindigkeiten [min<sup>-1</sup>]</p>  |                   |               |   |

2.2.2.2 Arbeitsgeschwindigkeiten 400 V, 50 Hz

| Triebwerk [Typ]   | Arbeitsgeschwindigkeiten Traglast   | Hakenweg max. [m] | Leistung [kW] | Gesamtanschlusswert [kVA]                                   |
|---|---|-------------------|---------------|---|
| Hw 637 FU   | Heben    | 190               | 37            | 52,0<br>Gesamtanschlusswert bei Gleichzeitigkeitsfaktor 0,8 |
|    |  <p>Traglasten [t]</p> <p>Arbeitsgeschwindigkeiten [m/min]</p> <p>(bezogen auf die 2. Seilage der Trommel)</p> |                   |               |   |
| Kw  | Katzfahren    |                   | 4,0           |   |
|   |  <p>Traglasten [t]</p> <p>Arbeitsgeschwindigkeiten [m/min]</p>  |                   |               |   |
| Dw  | Drehen 0,8 min <sup>-1</sup>  |                   | 7,5           |   |
|  |  <p>Arbeitsgeschwindigkeiten [min<sup>-1</sup>]</p>  |                   |               |   |

## 2.2.3.1 Tragfähigkeitstabelle [kg] Angaben in Meter Abständen DIN 15018 / H1 - B3

| Ausladung<br>[m] | Auslegerlänge [m]                              |      |      |      |      |      |
|------------------|--|------|------|------|------|------|
|                  | 30   | 35   | 40   | 45   | 50   | 55   |
| 18,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 19,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 20,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 21,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 22,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 23,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 5980 |
| 24,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 5690 |
| 25,0             | 6000   | 5900 | 5900 | 5800 | 5800 | 5400 |
| 26,0             | 5920   | 5700 | 5640 | 5580 | 5510 | 5180 |
| 27,0             | 5660   | 5460 | 5390 | 5330 | 5270 | 4950 |
| 28,0             | 5420   | 5230 | 5170 | 5110 | 5050 | 4740 |
| 29,0             | 5200   | 5010 | 4960 | 4900 | 4840 | 4540 |
| 30,0             | 5000   | 4800 | 4800 | 4700 | 4600 | 4400 |
| 31,0             |  | 4630 | 4580 | 4520 | 4470 | 4190 |
| 32,0             |  | 4460 | 4400 | 4350 | 4300 | 4030 |
| 33,0             |  | 4300 | 4240 | 4200 | 4140 | 3880 |
| 34,0             |  | 4140 | 4090 | 4050 | 4000 | 3740 |
| 35,0             |  | 4000 | 4000 | 3900 | 3900 | 3600 |
| 36,0             |  |      | 3820 | 3770 | 3730 | 3490 |
| 37,0             |  |      | 3690 | 3650 | 3600 | 3370 |
| 38,0             |  |      | 3570 | 3530 | 3490 | 3260 |
| 39,0             |  |      | 3460 | 3420 | 3370 | 3160 |
| 40,0             |  |      | 3400 | 3300 | 3300 | 3100 |
| 41,0             |  |      |      | 3210 | 3170 | 2960 |
| 42,0             |  |      |      | 3110 | 3070 | 2870 |
| 43,0             |  |      |      | 3020 | 2980 | 2780 |
| 44,0             |  |      |      | 2930 | 2900 | 2700 |
| 45,0             |  |      |      | 2900 | 2800 | 2600 |
| 46,0             | Die Traglasten beziehen sich auf 42 m Hakenweg |      |      |      | 2730 | 2550 |
| 47,0             | Die Traglasten beziehen sich auf 42 m Hakenweg |      |      |      | 2660 | 2480 |
| 48,0             |  |      |      |      | 2590 | 2410 |
| 49,0             |  |      |      |      | 2520 | 2340 |
| 50,0             |  |      |      |      | 2500 | 2300 |
| 51,0             |  |      |      |      |      | 2220 |
| 52,0             |  |      |      |      |      | 2160 |
| 53,0             |  |      |      |      |      | 2110 |
| 54,0             |  |      |      |      |      | 2050 |
| 55,0             |  |      |      |      |      | 2000 |

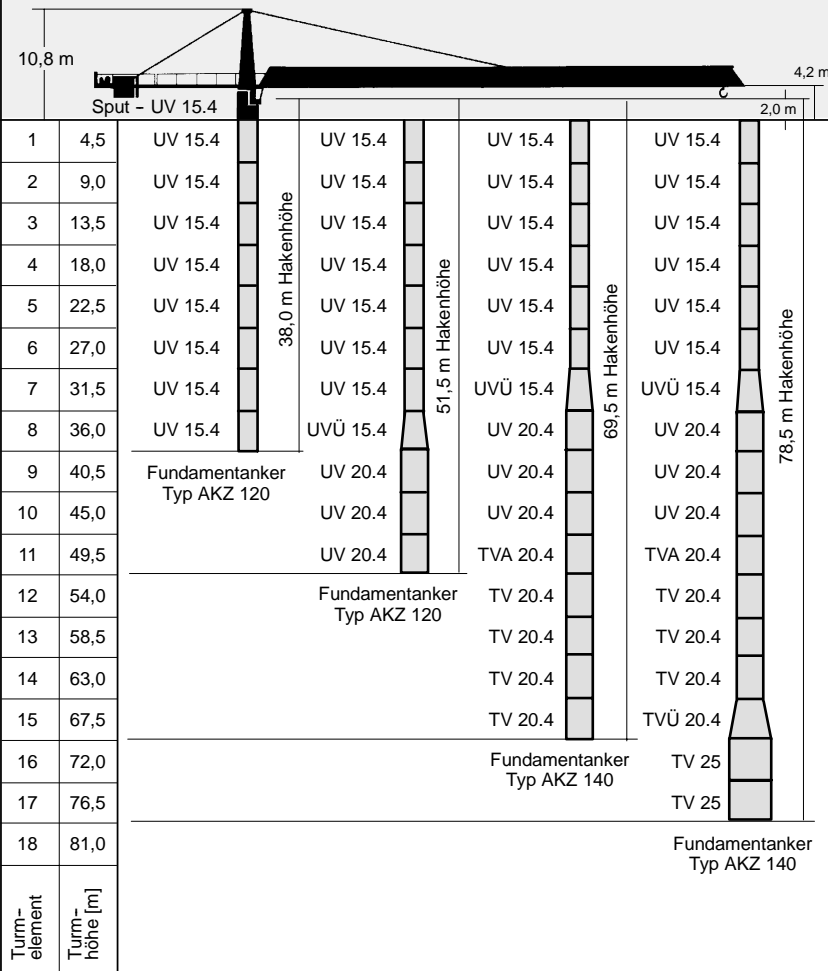
## 2.2.3.2 Tragfähigkeitstabelle [kg] - Angaben in Meter Abständen DIN 15018 / H1 - B3

| Ausladung<br>[m] | Auslegerlänge [m]                              |      |      |      |      |      |
|------------------|--|------|------|------|------|------|
|                  | 30   | 35   | 40   | 45   | 50   | 55   |
| 18,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 19,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 20,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 21,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 22,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 23,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 24,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 25,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 6000 |
| 26,0             | 6000   | 6000 | 6000 | 6000 | 6000 | 5820 |
| 27,0             | 6000   | 5950 | 5920 | 5900 | 5870 | 5580 |
| 28,0             | 5890   | 5710 | 5690 | 5660 | 5630 | 5350 |
| 29,0             | 5660   | 5490 | 5460 | 5440 | 5410 | 5140 |
| 30,0             | 5500   | 5300 | 5300 | 5200 | 5200 | 4900 |
| 31,0             |  | 5090 | 5060 | 5040 | 5010 | 4760 |
| 32,0             |  | 4910 | 4880 | 4860 | 4830 | 4590 |
| 33,0             |  | 4730 | 4710 | 4690 | 4660 | 4430 |
| 34,0             |  | 4570 | 4550 | 4530 | 4510 | 4270 |
| 35,0             |  | 4400 | 4400 | 4400 | 4400 | 4100 |
| 36,0             |  |      | 4250 | 4230 | 4210 | 3990 |
| 37,0             |  |      | 4110 | 4100 | 4080 | 3870 |
| 38,0             |  |      | 3990 | 3970 | 3950 | 3740 |
| 39,0             |  |      | 3870 | 3850 | 3830 | 3630 |
| 40,0             |  |      | 3800 | 3700 | 3700 | 3500 |
| 41,0             |  |      |      | 3630 | 3610 | 3420 |
| 42,0             |  |      |      | 3520 | 3500 | 3320 |
| 43,0             |  |      |      | 3420 | 3400 | 3220 |
| 44,0             |  |      |      | 3330 | 3310 | 3130 |
| 45,0             |  |      |      | 3200 | 3200 | 3000 |
| 46,0             | Die Traglasten beziehen sich auf 42 m Hakenweg |      |      |      | 3130 | 2960 |
| 47,0             | Die Traglasten beziehen sich auf 42 m Hakenweg |      |      |      | 3050 | 2880 |
| 48,0             |  |      |      |      | 2970 | 2810 |
| 49,0             |  |      |      |      | 2900 | 2730 |
| 50,0             |  |      |      |      | 2800 | 2700 |
| 51,0             |  |      |      |      |      | 2600 |
| 52,0             |  |      |      |      |      | 2530 |
| 53,0             |  |      |      |      |      | 2470 |
| 54,0             |  |      |      |      |      | 2410 |
| 55,0             |  |      |      |      |      | 2400 |

2.2.6.1 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Betonfundament

Drehteil:

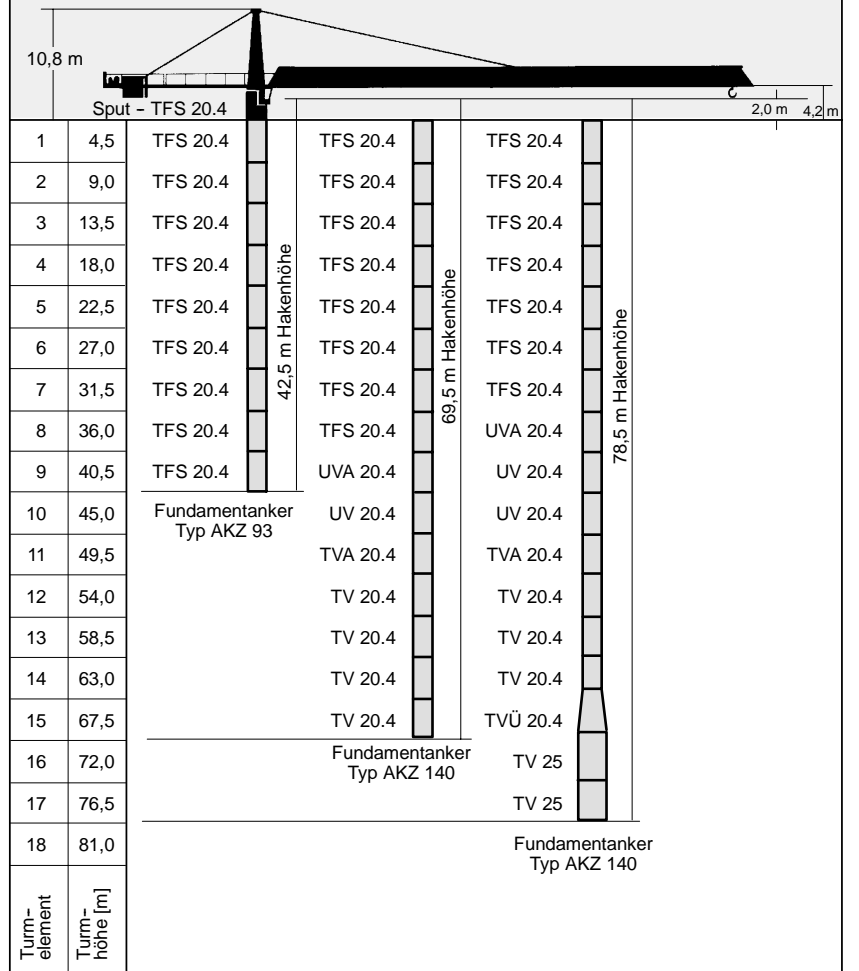


Angaben über Fundamentanker siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.6.2 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Betonfundament

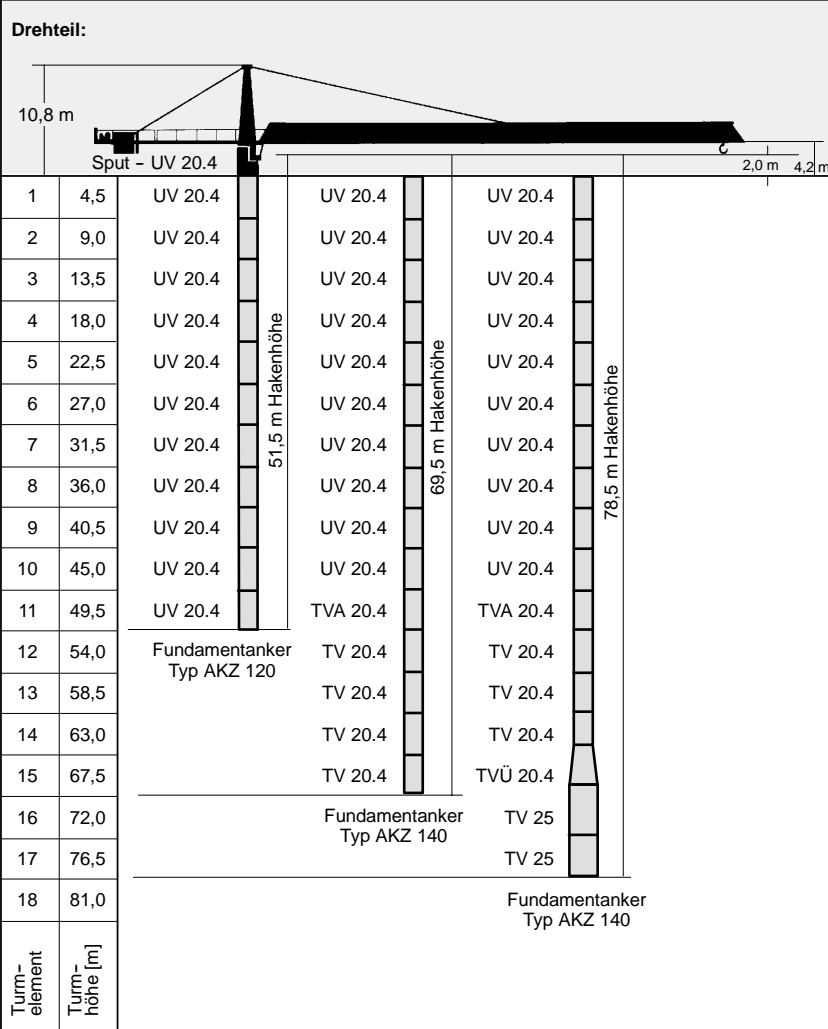
Drehteil:



Angaben über Fundamentanker siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.6.3 Turmkombinationen

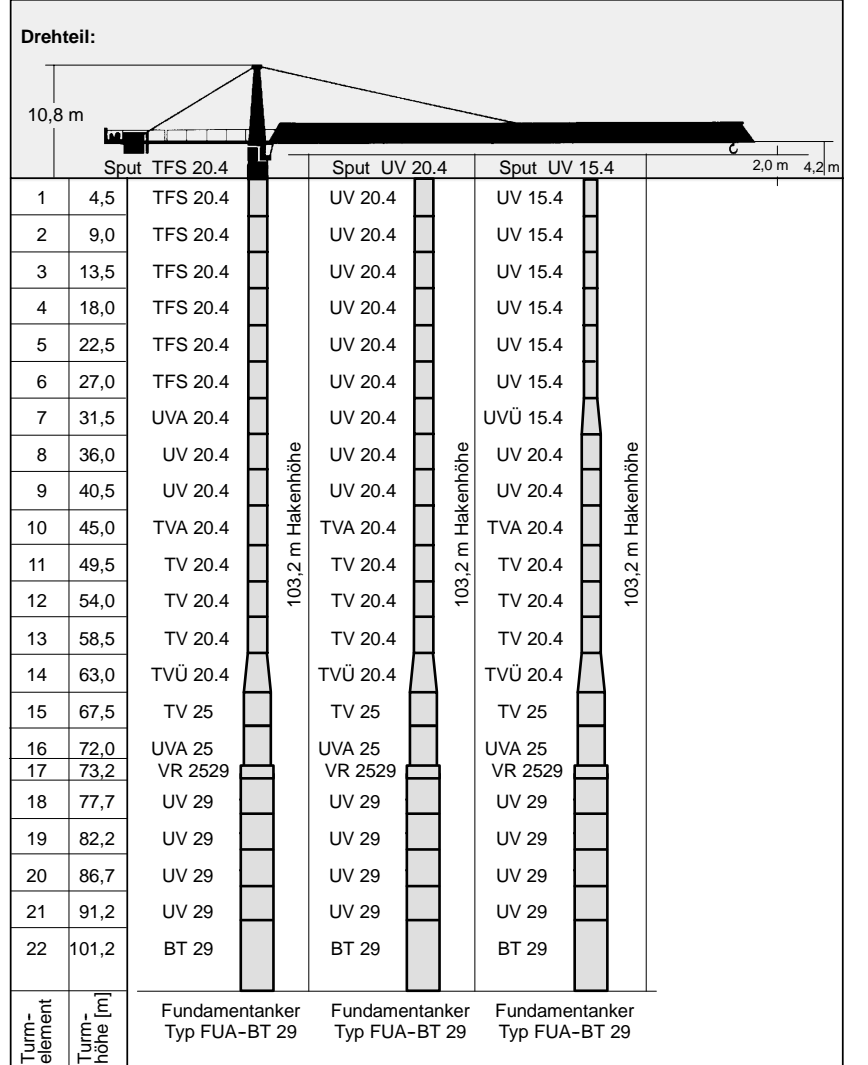
für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Betonfundament



Angaben über Fundamentanker siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.6.4 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Betonfundament



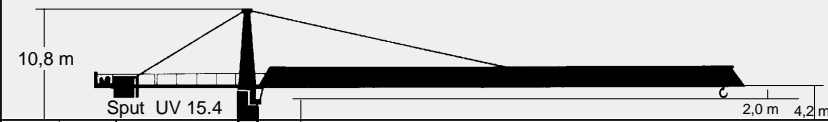
Angaben über Fundamentanker siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.



2.2.7.1 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmen

Drehteil:



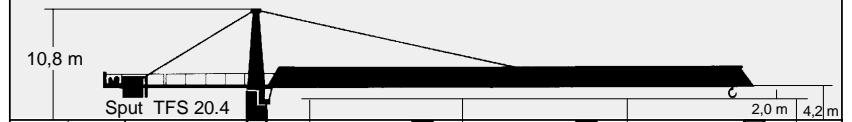
|                  |                   |                        |                  |
|------------------|-------------------|------------------------|------------------|
| 1                | 4,5               | UV 15.4                | 34,3 m Hakenhöhe |
| 2                | 9,0               | UV 15.4                |                  |
| 3                | 13,5              | UV 15.4                |                  |
| 4                | 18,0              | UV 15.4                |                  |
| 5                | 22,5              | UV 15.4                |                  |
| 6                | 27,0              | UV 15.4                |                  |
| 7                | 31,5              | UV 15.4                |                  |
| 8                | 36,0              | 0,8 m KR 7 - 32        | 75,2 m Hakenhöhe |
| 9                | 40,5              | Anschluss TFS 15/UV 15 |                  |
| 10               | 45,0              |                        |                  |
| 11               | 49,5              |                        |                  |
| 12               | 54,0              |                        |                  |
| 13               | 58,5              |                        |                  |
| 14               | 63,0              |                        |                  |
| 15               | 67,5              |                        |                  |
| 16               | 72,0              |                        |                  |
| 17               | 76,5              |                        |                  |
| 18               | 81,0              |                        |                  |
| Turm-<br>element | Turm-<br>höhe [m] |                        |                  |

Angaben über Kreuzrahmen siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.7.2 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmen

Drehteil:



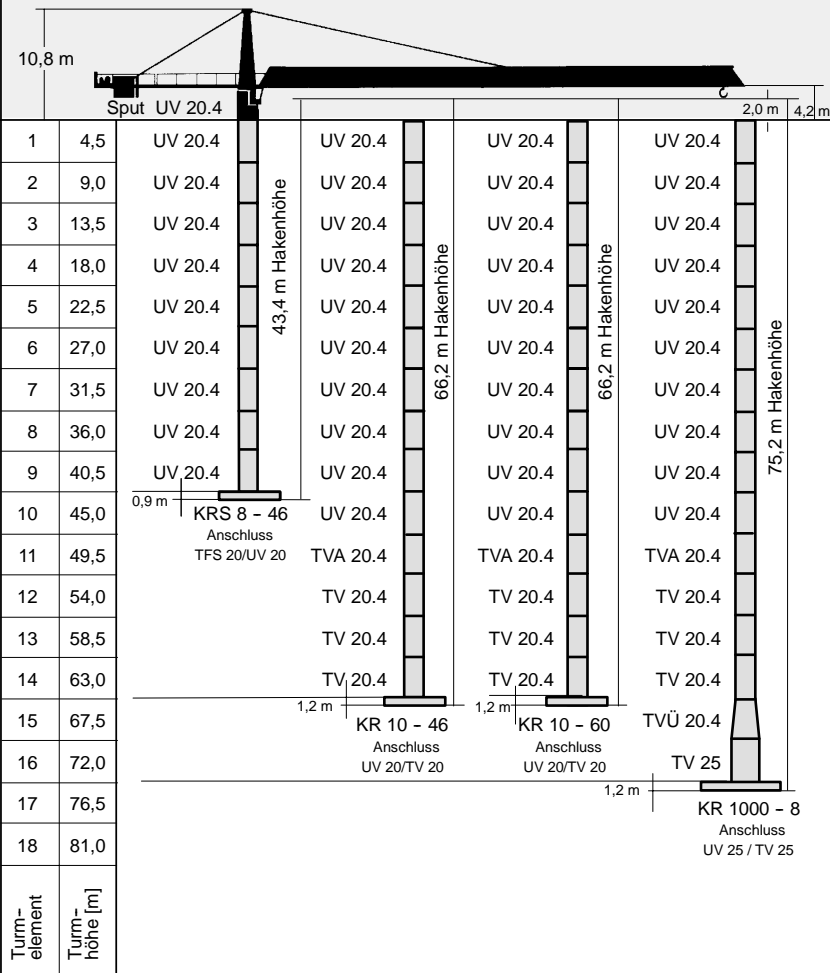
|                  |                   |                        |                  |                  |                  |                         |                   |       |       |       |
|------------------|-------------------|------------------------|------------------|------------------|------------------|-------------------------|-------------------|-------|-------|-------|
| 1                | 4,5               | TFS 20.4               | 43,4 m Hakenhöhe | 66,2 m Hakenhöhe | 66,2 m Hakenhöhe | 75,2 m Hakenhöhe        |                   |       |       |       |
| 2                | 9,0               | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 3                | 13,5              | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 4                | 18,0              | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 5                | 22,5              | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 6                | 27,0              | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 7                | 31,5              | TFS 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 8                | 36,0              | 0,9 m KRS 8 - 46       | 75,2 m Hakenhöhe | 66,2 m Hakenhöhe | 66,2 m Hakenhöhe | 75,2 m Hakenhöhe        |                   |       |       |       |
| 9                | 40,5              | Anschluss TFS 20/UV 20 |                  |                  |                  |                         |                   |       |       |       |
| 10               | 45,0              | UV 20.4                |                  |                  |                  |                         |                   |       |       |       |
| 11               | 49,5              | TVA 20.4               |                  |                  |                  |                         |                   |       |       |       |
| 12               | 54,0              | TV 20.4                |                  |                  |                  |                         |                   |       |       |       |
| 13               | 58,5              | TV 20.4                |                  |                  |                  |                         |                   |       |       |       |
| 14               | 63,0              | TV 20.4                |                  |                  |                  |                         |                   |       |       |       |
| 15               | 67,5              | 1,2 m KR 10 - 46       |                  |                  |                  |                         | 1,2 m             | 1,2 m | 1,2 m | 1,2 m |
| 16               | 72,0              | Anschluss UV 20/TV 20  |                  |                  |                  |                         |                   |       |       |       |
| 17               | 76,5              | 1,2 m KR 10 - 60       |                  |                  |                  |                         |                   |       |       |       |
| 18               | 81,0              | Anschluss UV 20/TV 20  |                  |                  |                  |                         | 1,2 m KR 1000 - 8 |       |       |       |
|                  |                   |                        |                  |                  |                  | Anschluss UV 25 / TV 25 |                   |       |       |       |
| Turm-<br>element | Turm-<br>höhe [m] |                        |                  |                  |                  |                         |                   |       |       |       |

Angaben über Kreuzrahmen siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.7.3 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmen

Drehteil:

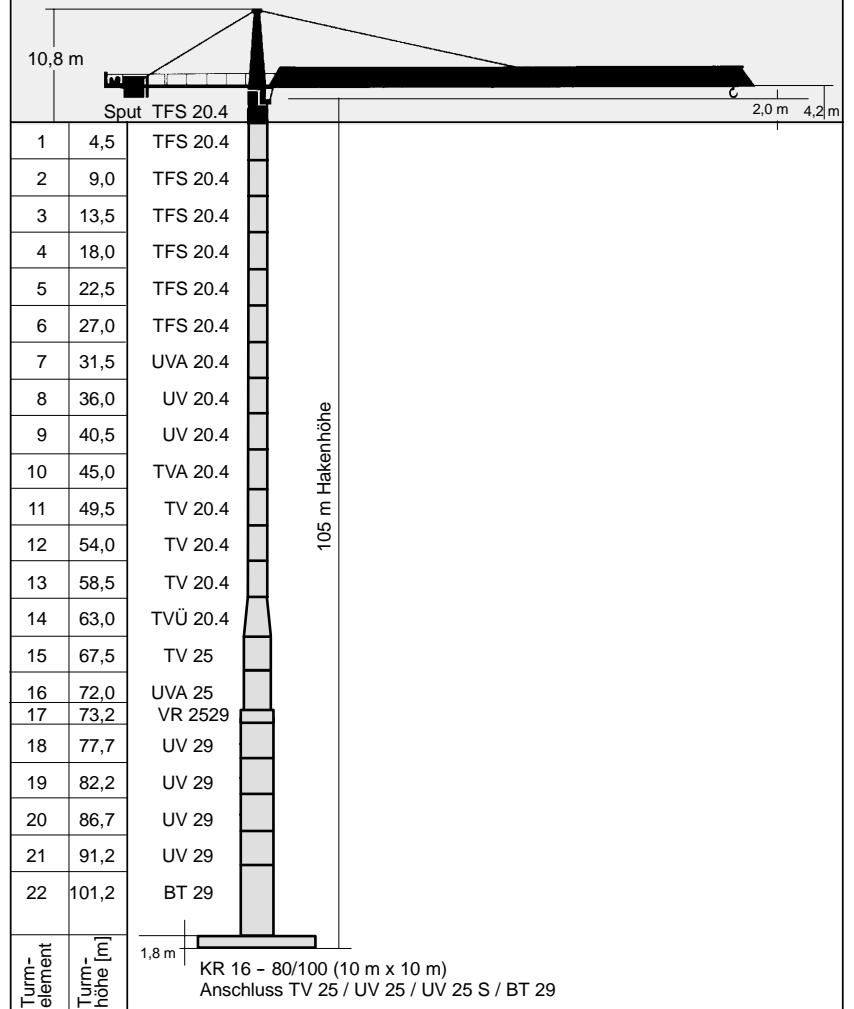


Angaben über Kreuzrahmen siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.7.4 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmen

Drehteil:

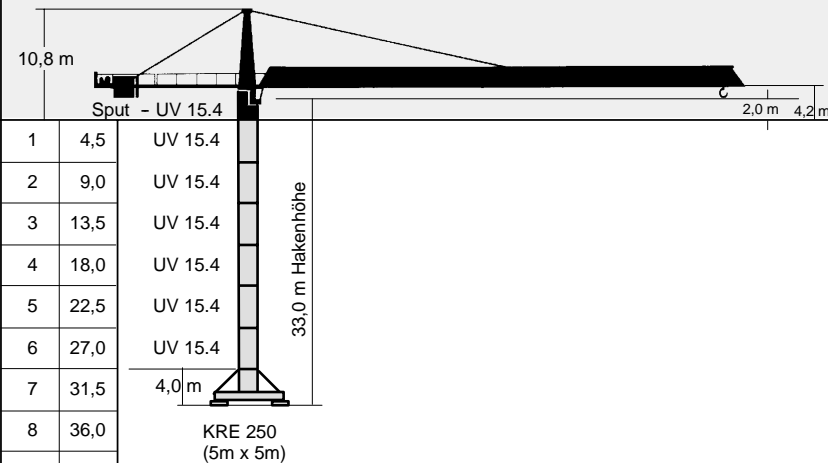


Angaben über Kreuzrahmen siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.8.1 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmenelement

Drehteil:



|    |      |                      |
|----|------|----------------------|
| 1  | 4,5  | UV 15.4              |
| 2  | 9,0  | UV 15.4              |
| 3  | 13,5 | UV 15.4              |
| 4  | 18,0 | UV 15.4              |
| 5  | 22,5 | UV 15.4              |
| 6  | 27,0 | UV 15.4              |
| 7  | 31,5 | 4,0 m                |
| 8  | 36,0 | KRE 250<br>(5m x 5m) |
| 9  | 40,5 |                      |
| 10 | 45,0 |                      |
| 11 | 49,5 |                      |
| 12 | 54,0 |                      |
| 13 | 58,5 |                      |
| 14 | 63,0 |                      |
| 15 | 67,5 |                      |
| 16 | 72,0 |                      |
| 17 | 76,5 |                      |
| 18 | 81,0 |                      |

33,0 m Hakenhöhe

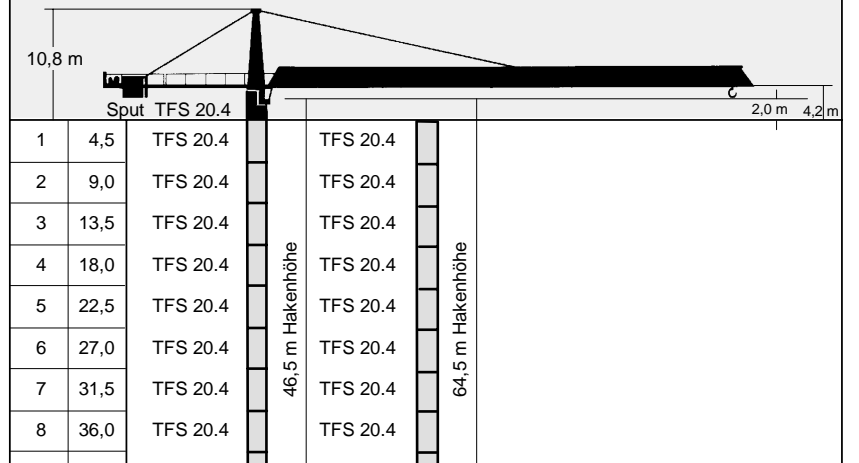
Turm-  
element  
Turm-  
höhe [m]

Angaben über Kreuzrahmenelemente siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.8.2 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmenelement

Drehteil:



|    |      |                        |
|----|------|------------------------|
| 1  | 4,5  | TFS 20.4               |
| 2  | 9,0  | TFS 20.4               |
| 3  | 13,5 | TFS 20.4               |
| 4  | 18,0 | TFS 20.4               |
| 5  | 22,5 | TFS 20.4               |
| 6  | 27,0 | TFS 20.4               |
| 7  | 31,5 | TFS 20.4               |
| 8  | 36,0 | TFS 20.4               |
| 9  | 40,5 | UVA 20.4               |
| 10 | 45,0 | 4,0 m                  |
| 11 | 49,5 | KRE 260.1<br>(6m x 6m) |
| 12 | 54,0 |                        |
| 13 | 58,5 |                        |
| 14 | 63,0 |                        |
| 15 | 67,5 |                        |
| 16 | 72,0 |                        |
| 17 | 76,5 |                        |
| 18 | 81,0 |                        |

46,5 m Hakenhöhe

64,5 m Hakenhöhe

KRE 260.2  
(6m x 6m)

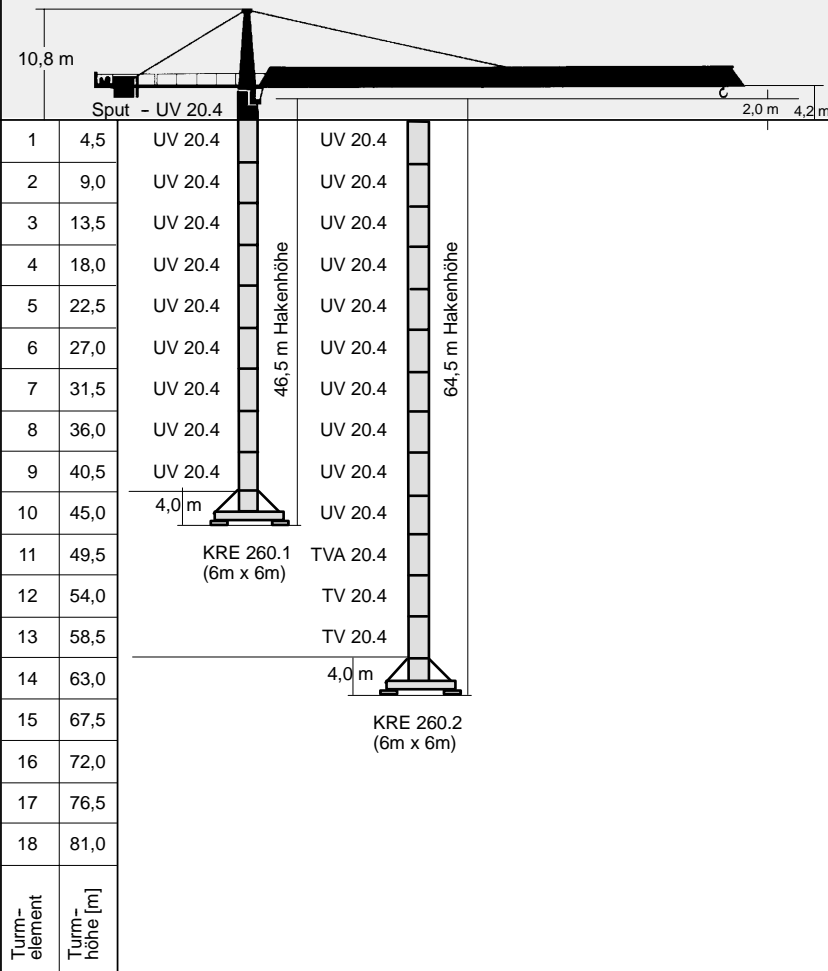
Turm-  
element  
Turm-  
höhe [m]

Angaben über Kreuzrahmenelemente siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.8.3 Turmkombinationen

für einen freistehenden stationären Turmdrehkran ohne Klettereinrichtung auf einem Kreuzrahmenelement

Drehteil:

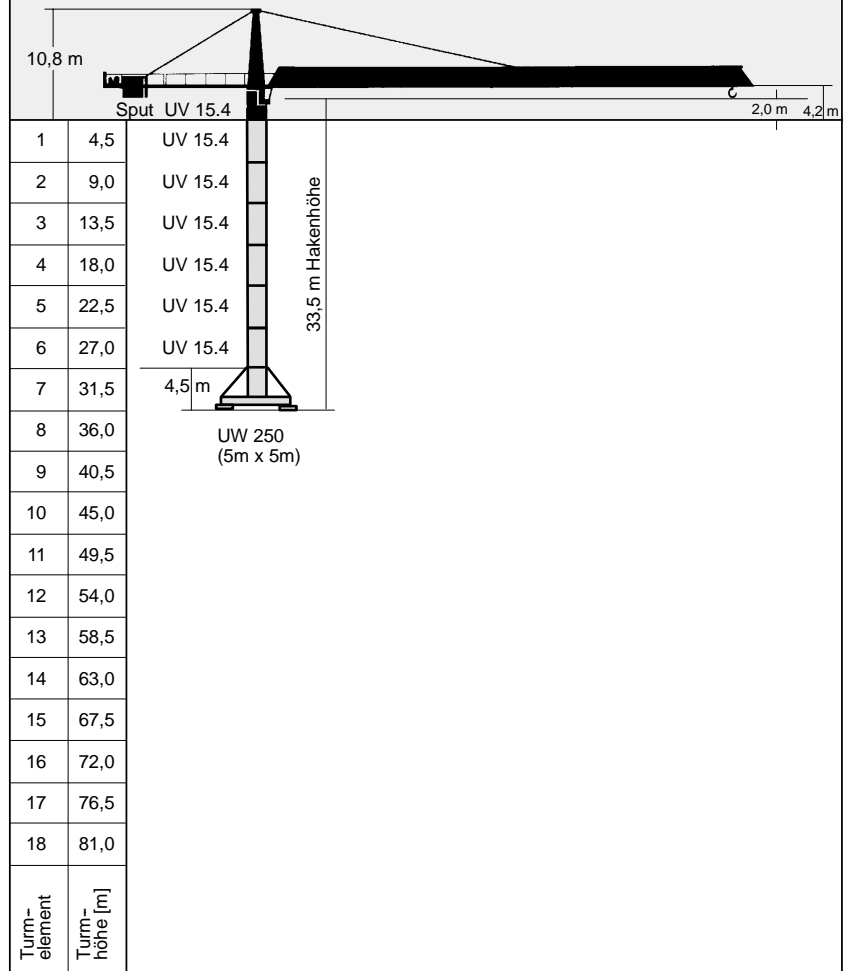


Angaben über Kreuzrahmenelemente siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.9.1 Turmkombinationen

für einen fahrbaren Turmdrehkran ohne Klettereinrichtung

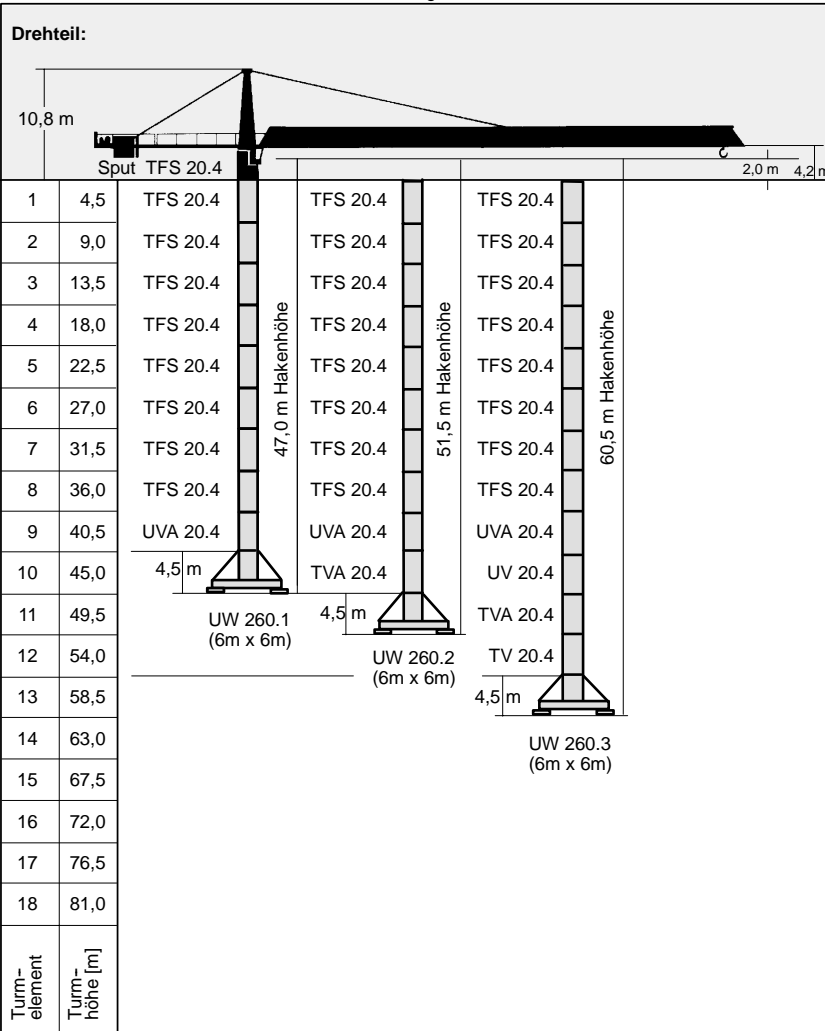
Drehteil:



Angaben über Unterwagen siehe Abschnitt 12.  
Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.9.2 Turmkombinationen

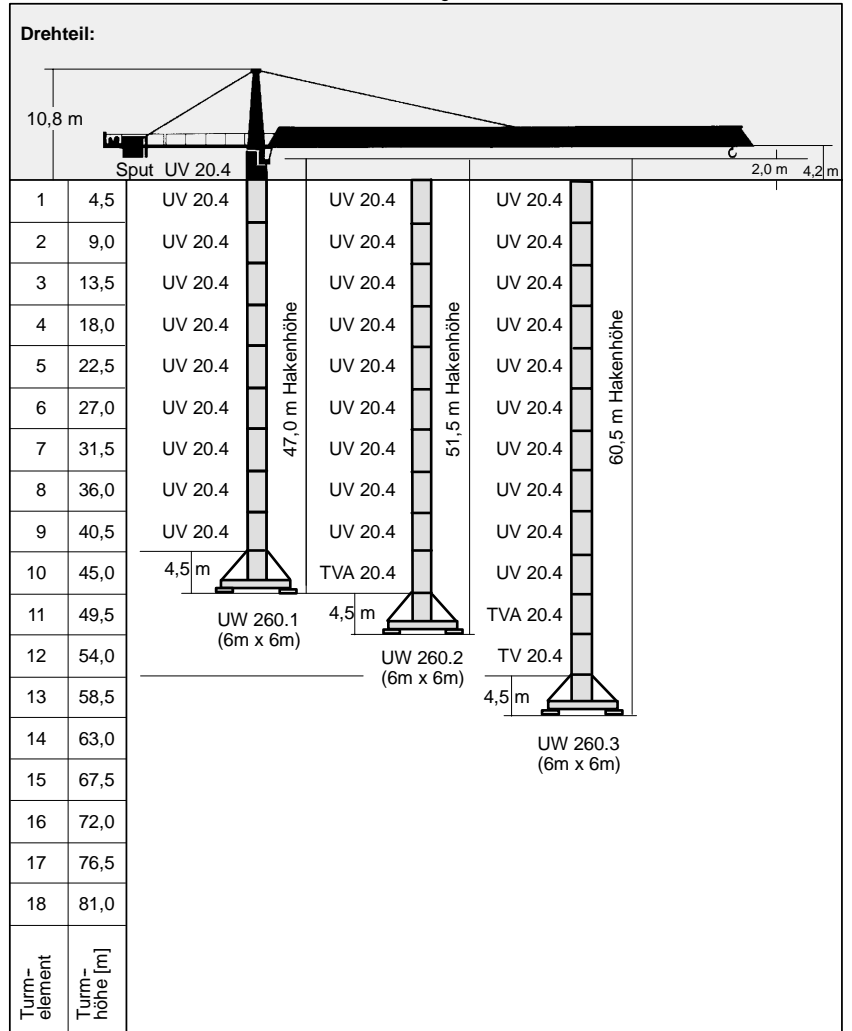
für einen fahrbaren Turmdrehkran ohne Klettereinrichtung



Angaben über Unterwagen siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.2.9.3 Turmkombinationen

für einen fahrbaren Turmdrehkran ohne Klettereinrichtung



Angaben über Unterwagen siehe Abschnitt 12.  
 Die hier gezeigten Turmkombinationen stellen Empfehlungen für eine kostengünstige Kranaufstellung dar.  
 Turmkombinationen mit anderen Turmelementen sind möglich, müssen aber vor der Aufstellung des Turmdrehkranes vom Hersteller geprüft und schriftlich bestätigt werden.

2.3.1

Kolliliste

| Position   | Stck. | Beschreibung   | Kolli | L                                    | B                      | H    | Gewicht (kg) | Volumen (m <sup>3</sup> ) |      |       |
|--|-------|--|-------|--------------------------------------|------------------------|------|--------------|---------------------------|------|-------|
|  |       |  |       | (m)                                  | (m)                    | (m)  |              |                           |      |       |
| 1  | 1     | Turmspitze kompl. div. Abspannteilen                                     |       | <b>Sput - UV 15.4</b>                |                        |      |              |                           | 6800 | 42,12 |
|  |       | 10,80  |       | 1,95                                 | 2,00                   |      |              |                           |      |       |
|  | 1     | 1  |       | Turmspitze kompl. div. Abspannteilen | <b>Sput - TFS 20.4</b> |      |              |                           |      |       |
|  | 10,80 | 2,17   | 2,42  |                                      |                        |      |              |                           |      |       |
| 1  | 1     | Turmspitze kompl. div. Abspannteile                                      |       | <b>Sput - UV 20.4</b>                |                        |      |              |                           | 6860 | 56,72 |
|  | 10,80 | 2,17   |       | 2,42                                 |                        |      |              |                           |      |       |
| Pos. 1 zerlegt   | 1     | Turmspitzenoberteil mit Podesten und div. Abspannteilen                  |       |                                      | 6,30                   | 1,35 | 2,10         | 1720                      |      |       |
|  |       | <b>Sput - UV 15.4</b>  |       |                                      |                        |      | 5080         | 24,62                     |      |       |
|  | 1     | Turmspitzenunterteil mit Drehrahmen, KDV Drehwerk und Schleifringssystem |       | <b>Sput - TFS 20.4</b>               |                        |      |              |                           | 4980 | 29,51 |
|  |       |  |       | 5,62                                 | 1,88                   | 2,33 |              |                           |      |       |
|  |       |  |       | <b>Sput - UV 20.4</b>                |                        |      |              |                           |      |       |
| 5,62   | 2,17  | 2,42   |       |                                      |                        |      |              |                           |      |       |
| 2  | 1     | Führerhaus mit Aufhängung  |       | 2,80                                 | 2,15                   | 2,45 | 1100         | 14,75                     |      |       |
|  |       | Führerhaus-Aufhängung  |       |                                      | 1,03                   | 2,01 | 0,59         | 230                       | 1,22 |       |
| 4  | 1     | Gegenausleger mit Abspannteilen  |       | 13,48                                | 2,38                   | 0,55 | 2730         | 17,65                     |      |       |
| 5  | 1     | Maschinenplattform mit Hubseil (ø 16 mm x 170 m)                         |       | <b>Hw 628 FU</b>                     |                        |      |              |                           | 2630 | 11,83 |
|  |       |  |       | 2,38                                 | 2,29                   | 2,17 |              |                           |      |       |
|  |       |  |       | <b>Hw 637 FU</b>                     |                        |      |              |                           | 2700 | 11,83 |
| 2,38   | 2,29  | 2,17   |       |                                      |                        |      |              |                           |      |       |
| Losteile und Kleinteile können nach vorhandenen Platzverhältnissen verteilt werden |       |  |       |                                      |                        |      |              |                           |      |       |

2.3.2

Kolliliste

| Position   | Stck. | Beschreibung                     | Kolli | L     | B    | H    | Gewicht (kg) | Volumen (m <sup>3</sup> ) |
|--|-------|----------------------------------|-------|-------|------|------|--------------|---------------------------|
|  |       |                                  |       | (m)   | (m)  | (m)  |              |                           |
| 6  | 1     | Auslegerteil 1 mit Katzfahrwerk  |       | 10,19 | 1,26 | 1,96 | 2010         | 25,16                     |
| 7  | 1     | Auslegerteil 2                   |       | 10,23 | 1,23 | 1,96 | 1470         | 24,66                     |
| 8  | 1     | Auslegerteil 3 mit Abspannteilen |       | 10,23 | 1,23 | 1,96 | 2400         | 24,66                     |
| 9  | 2     | Auslegerteil 4                   |       | 5,25  | 1,23 | 1,76 | 620          | 11,37                     |
| 10   | 1     | Auslegerteil 5                   |       | 10,23 | 1,23 | 1,76 | 1070         | 22,15                     |
| 11   | 1     | Auslegerteil 6                   |       | 10,19 | 1,23 | 1,75 | 865          | 21,93                     |
| 12   | 1     | Seilwirbel-traverse              |       | 0,91  | 1,20 | 0,46 | 107          | 0,50                      |
| 13   | 1     | Laufkatze Lk 6                   |       | 1,59  | 1,50 | 0,96 | 300          | 2,29                      |
| 14   | 1     | Unterflasche U 6 (Losteil)       |       | 0,50  | 0,22 | 1,11 | 350          | 0,12                      |
| 16   | 1     | Normgeländer (Losteil)           |       | 2,55  | 1,1  | 1,00 | 320          | 2,81                      |
| 17   | 1     | Kiste (Kleinteil)                |       | 1,6   | 0,9  | 0,8  | 400          | 1,15                      |
| Losteile und Kleinteile können nach vorhandenen Platzverhältnissen verteilt werden |       |                                  |       |       |      |      |              |                           |

2.5.1

## Montagegewichte - Drehteil

|  |          |                 |
|--|----------|-----------------|
| <b>Turmspitze kompl. - Turmanschluss UV 15.4</b>   |          |                 |
| Abspannlaschen (1 x 600 mm, 2 x 5700 mm), Führerhaus, Führerhausaufhängung, Podest und Normgeländer  |          | <b>8 030 kg</b> |
| - Turmspitzenoberteil kompl.mit Abspannlaschen u. Podest   | 1 720 kg |                 |
| - Führerhaus mit Führerhausaufhängung und Normgeländer   | 1 230 kg |                 |
| - Turmspitzenunterteil mit Drehrahmen, KDV, Drehwerk Normgeländer und Schleifringssystem   | 5 080 kg |                 |
| <b>Turmspitze kompl. - Turmanschluss TFS 20.4.</b>   |          |                 |
| Abspannlaschen (1 x 600 mm, 2 x 5700 mm), Führerhaus, Führerhausaufhängung, Podest mit Normgeländer  |          | <b>7 930 kg</b> |
| - Turmspitzenoberteil kompl. mit Abspannlaschen u. Podest  | 1 720 kg |                 |
| - Führerhaus mit Führerhausaufhängung und Normgeländern  | 1 230 kg |                 |
| - Turmspitzenunterteil mit Drehrahmen, KDV, Drehwerk, Normgeländer und Schleifringssystem  | 4 980 kg |                 |
| <b>Turmspitze kompl. - Turmanschluss UV 20.4</b>   |          |                 |
| Abspannlaschen (1 x 600 mm, 2 x 5700 mm), Führerhaus, Führerhausaufhängung, Podest und Normgeländer  |          | <b>8 090 kg</b> |
| - Turmspitzenoberteil kompl.mit Abspannlaschen u. Podest   | 1 720 kg |                 |
| - Führerhaus mit Führerhausaufhängung und Normgeländer   | 1 230 kg |                 |
| - Turmspitzenunterteil mit Drehrahmen, KDV, Drehwerk Normgeländer und Schleifringssystem   | 5 140 kg |                 |
| <b>Gegenausleger mit Hw 628 FU kompl.</b>  |          |                 |
| Gegengewichtsstein 1,9 t (Maschinenplattform)<br>Maschinenplattform Hw 628 FU mit Hubseil (Ø 16 mm x 170 m)<br>2 Abspannlaschen (2 x 6330 mm) und Normgeländer |          | <b>7 640 kg</b> |
| - Gegenausleger mit 2 Abspannlaschen und Normgeländer  | 3 110 kg |                 |
| - Maschinenplattform Hw 628 FU mit Hubseil (Ø 16 mm x 170 m)   | 2 630 kg |                 |
| - Gegengewichtsstein 1,9 t   | 1 900 kg |                 |
| <b>Gegenausleger mit Hw 637 FU kompl.</b>  |          |                 |
| Gegengewichtsstein 1,9 t (Maschinenplattform)<br>Maschinenplattform Hw 637 FU mit Hubseil (Ø 16 mm x 170 m)<br>2 Abspannlaschen (2 x 6330 mm) und Normgeländer |          | <b>7 710 kg</b> |
| - Gegenausleger mit 2 Abspannlaschen und Normgeländer  | 3 110 kg |                 |
| - Maschinenplattform Hw 637 FU mit Hubseil (Ø 16 mm x 170 m)   | 2 700 kg |                 |
| - Gegengewichtsstein 1,9 t   | 1 900 kg |                 |

962-4-028208

2.5.2

## Montagegewichte - Drehteil

|             |                                |  |                 |
|-------------|--------------------------------|--|-----------------|
| <b>55 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>9 200 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze, Katzfahrseile<br>- Unterflasche<br>- Normgeländer     |                 |
| <b>50 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>8 580 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze<br>- Katzfahrseile<br>- Unterflasche<br>- Normgeländer |                 |
| <b>45 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>8 335 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze<br>- Katzfahrseile<br>- Unterflasche<br>- Normgeländer |                 |
| <b>40 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>7 715 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze<br>- Katzfahrseile<br>- Unterflasche<br>- Normgeländer |                 |
| <b>35 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>7 265 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze<br>- Katzfahrseile<br>- Unterflasche<br>- Normgeländer |                 |
| <b>30 m</b> | <b>Laufkatzausleger kompl.</b> |  | <b>6 645 kg</b> |
|             |                                | - Abspannlaschen<br>- Laufkatze<br>- Katzfahrseile<br>- Unterflasche<br>- Normgeländer |                 |

962-4-026489

2.5.3

## Montagegewichte - Kreuzrahmen

|   |  |                  |
|---|--|------------------|
| <b>Kreuzrahmen KR 7 - 32</b>                        | (ohne Zubehör)                         | <b>3 450 kg</b>  |
|   | - 4 Aufschraubzapfen AZ 85 E 20.5      | 195 kg           |
|   | - 4 Aufschraubzapfen AZ 93.4           | 200 kg           |
|   | - 4 Aufschraubzapfen AZ 120            | 272 kg           |
| <b>Kreuzrahmen KRS 8 - 46</b><br>(4,6 m x 4,6 m)    | (ohne Zubehör)                         | <b>5 200 kg</b>  |
|   | - 4 Aufschraubzapfen AZ 85 E 20.5      | 195 kg           |
|   | - 4 Aufschraubzapfen AZ 93.4           | 200 kg           |
|   | - 4 Aufschraubzapfen AZ 120 M          | 272 kg           |
| <b>Kreuzrahmen KR 10 - 46/60</b><br>(4,6 m x 4,6 m) | (ohne Zubehör)                         | <b>7 000 kg</b>  |
|   | - 4 Aufschraubzapfen AZR 120 E 15.5    | 560 kg           |
|   | - 4 Aufschraubzapfen AZ 140 M          | 684 kg           |
| <b>Kreuzrahmen KR 10 - 46/60</b><br>(6,0 m x 6,0 m) | (ohne Zubehör)                         | <b>8 805 kg</b>  |
|   | - 4 Aufschraubzapfen AZR 120 E 15.5    | 560 kg           |
|   | - 4 Aufschraubzapfen AZ 140 M          | 684 kg           |
| <b>Kreuzrahmen KR 1000 - 8</b>                      |  | <b>14 630 kg</b> |
|   | - 4 Aufschraubzapfen AZ 140 E          | 684 kg           |
|   | - 4 Aufschraubzapfen AZ 156 M          | 748 kg           |
| <b>Kreuzrahmen KR 16 - 80/100</b><br>(8 m x 8 m)    | (ohne Zubehör)                         | <b>21 450 kg</b> |
|   | - 4 Aufschraubzapfen AZ 140 E KR16-80  | 620 kg           |
|   | - 4 Aufschraubzapfen AZ 156 M KR16-80  | 680 kg           |
|   | - 4 Aufschraubzapfen AZ 156S M KR16-80 | 675 kg           |
| <b>Kreuzrahmen KR 16 - 80/100</b><br>(10 m x 10 m)  | (ohne Zubehör)                         | <b>25 400 kg</b> |
|   | - 4 Aufschraubzapfen AZ 140 E KR16-80  | 620 kg           |
|   | - 4 Aufschraubzapfen AZ 156 M KR16-80  | 680 kg           |
|   | - 4 Aufschraubzapfen AZ 156S M KR16-80 | 675 kg           |

962-4-026490

2.5.4

## Montagegewichte - Kreuzrahmenelemente und Unterwagen

|  |  |                  |
|--|--|------------------|
| <b>Kreuzrahmenelement KRE 250 kompl.</b>   |  | <b>5 750 kg</b>  |
|  | - Kreuzrahmenplattform mit Schwenkarm,<br>Ecklagerungen und Transportsicherungen | 2 730 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 3 020 kg         |
| <b>Kreuzrahmenelement KRE 260.1 kompl.</b> |  | <b>8 100 kg</b>  |
|  | - Kreuzrahmenplattform mit Schwenkarm,<br>Ecklagerungen und Transportsicherungen | 4 320 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 3 780 kg         |
| <b>Kreuzrahmenelement KRE 260.2 kompl.</b> |  | <b>10 900 kg</b> |
|  | - Kreuzrahmenplattform mit Schwenkarm,<br>Ecklagerungen und Transportsicherungen | 5 455 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 5 445 kg         |
| <b>Unterwagen UW 250 kompl.</b>            |  | <b>8 800 kg</b>  |
|  | - Unterwagenplattform mit Schwenkarmen,<br>Fahrschemeln und Transportsicherungen | 5 600 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 3 200 kg         |
| <b>Unterwagen UW 260.1 kompl.</b>          |  | <b>11 400 kg</b> |
|  | - Unterwagenplattform mit Schwenkarmen,<br>Fahrschemeln und Transportsicherungen | 7 150 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 4 250 kg         |
| <b>Unterwagen UW 260.2 kompl.</b>          |  | <b>13 930 kg</b> |
|  | - Unterwagenplattform mit Schwenkarmen,<br>Fahrschemeln und Transportsicherungen | 8 050 kg         |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 5 880 kg         |
| <b>Unterwagen UW 260.3 kompl.</b>          |  | <b>17 200 kg</b> |
|  | - Unterwagenplattform mit Schwenkarmen,<br>Fahrschemeln und Transportsicherungen | 11 300 kg        |
|  | - Basismaststück mit Druckstreben und Spurstangen                                | 5 900 kg         |

962-4-026491



2.5.5 Erforderliche Hakenhöhe für den Fahrzeugkran



**Gefahr!**

Anhängeseile mit ausreichender Traglast verwenden und Anhängenplan beachten!

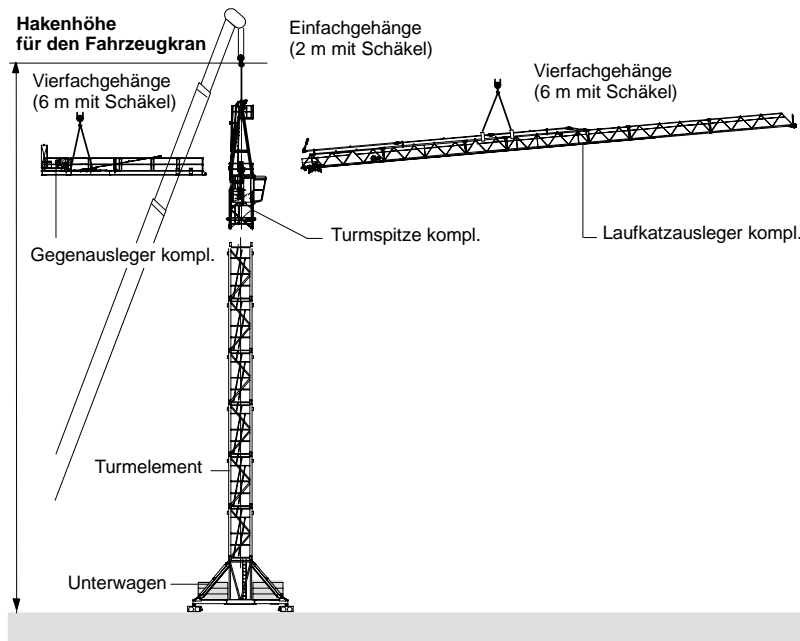
**Erforderliche Hakenhöhe für den Fahrzeugkran**

=  
**Hakenhöhe des WOLFF Turmdrehkrans + 15 m.**

Die Hakenhöhe des WOLFF Turmdrehkrans entnehmen Sie bitte aus den Turmkombinationen.

Wird der Turmdrehkran auf einen anderen Unterbau aufgestellt, so verändert sich die erforderliche Hakenhöhe des Fahrzeugkrans um das Baumaß des Unterbaues.

Niveau - Unterschiede (Fahrzeugkran - Turmdrehkranbasis) sind bei der Montage zu berücksichtigen.



2.6.1.1 Laufkatzausleger - Anhängenplan 55 m bis 50 m Ausleger



**Gefahr bei der Demontage!**

Befestigungsschrauben am Anlenkpunkt des Laufkatzauslegers lösen. Laufkatzausleger muss ausbalanciert sein, bevor der Laufkatzausleger weggeschwenkt wird. Es dürfen sich keine losen Teile auf dem Laufkatzausleger befinden.

Die Einzelstücke des Laufkatzauslegers sind am Obergurt mit einem Bauteil-Kennzeichnungsschild gekennzeichnet.

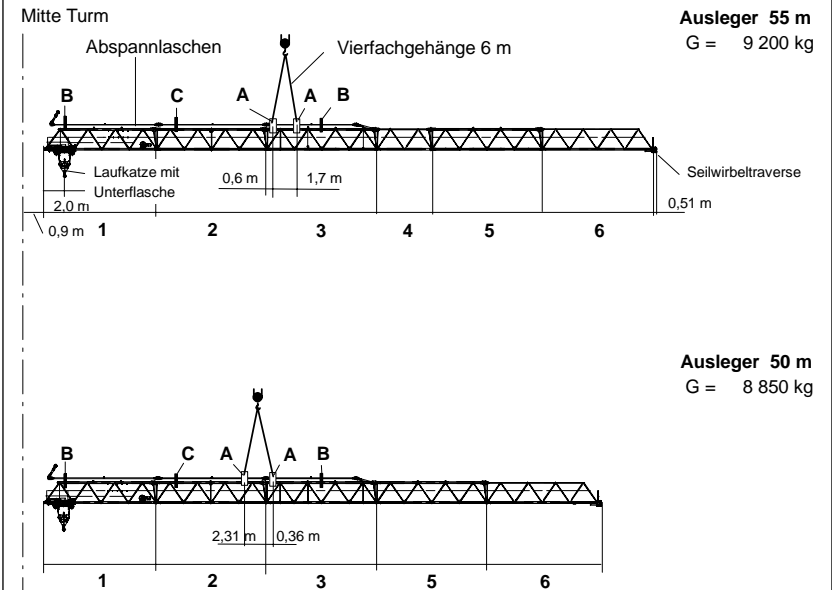
|                |                       |           |   |        |
|----------------|-----------------------|-----------|---|--------|
| <b>Längen:</b> | Laufkatzauslegerstück | 1/2/3/5/6 | = | 10,0 m |
|                | Laufkatzauslegerstück | 4/7       | = | 5,0 m  |
|                | Seilwirbeltraverse    |           | = | 0,51 m |

Nähere Angaben zu Aufhängung **A**, Halterung **B** und **C** siehe Punkt 2.6.2.



**Achtung!**

Zur Montage Unterflasche mit 2 Anschlagseilen DIN 3088 (Ø 8 mm x 1 m mit Schäkkel) an die Laufkatze anhängen, Montageseil (Perlon Ø 14 mm x 12 m) einscheren und an der Laufkatze sichern.



2.6.1.2 Laufkatzausleger - Anhängeplan 45 m bis 30 m Ausleger



**Gefahr bei der Demontage!**

Befestigungsschrauben am Anlenkpunkt des Laufkatzauslegers lösen. Laufkatzausleger muss ausbalanciert sein, bevor der Laufkatzausleger weggeschwenkt wird. Es dürfen sich keine losen Teile auf dem Laufkatzausleger befinden.

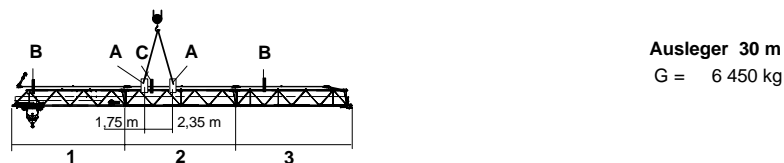
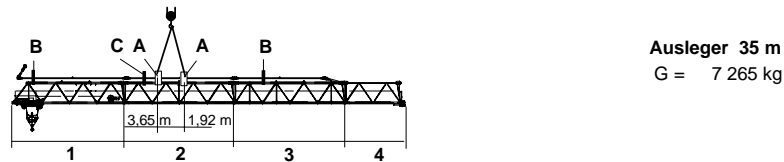
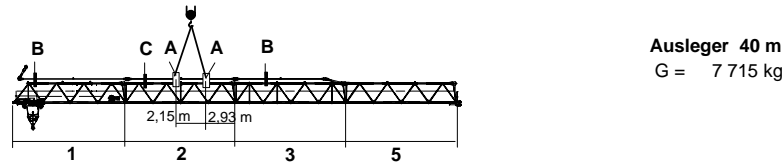
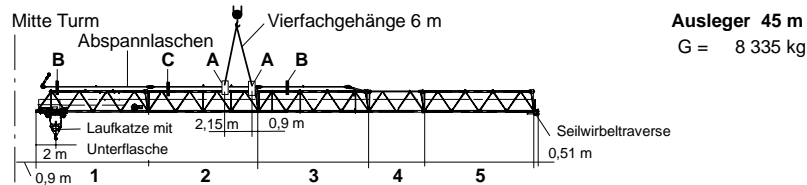
Die Einzelstücke des Laufkatzauslegers sind am Obergurt mit einem Bauteil-Kennzeichnungsschild gekennzeichnet.

|                |                       |         |          |
|----------------|-----------------------|---------|----------|
| <b>Längen:</b> | Laufkatzauslegerstück | 1/2/3/5 | = 10,0 m |
|                | Laufkatzauslegerstück | 4       | = 5,0 m  |
|                | Seilwirbeltraverse    |         | = 0,51 m |

Nähere Angaben zu Aufhängung **A**, Halterung **B** und **C** siehe Punkt 2.6.2.

**Achtung!**

Zur Montage Unterflasche mit 2 Anschlagseilen DIN 3088 (Ø 8 mm x 1 m mit Schäkeln) an die Laufkatze anhängen, Montageseil (Perlon Ø 14 mm x 12 m) einscheren und an der Laufkatze sichern.



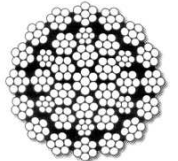
2.7.1 Hubseil für Hubwinden - Hw 628 FU / Hw 637 FU

Seil Ø = 16 mm +4%  
+2%

Auslegung nach DIN 15020  
Betriebsweise nach TWG 1 Am

**Erstausrüstung**

**CASAR STARLIFT** -  
ein drehungsfreies,  
flexibles Hubseil mit  
verdichteter  
Stahlseilseele.



|                          |                          |
|--------------------------|--------------------------|
| <b>Nennfestigkeit</b>    | = 1770 N/mm <sup>2</sup> |
| <b>Rechn. Bruchkraft</b> | = 234,1 kN               |
| <b>Mindestbruchkraft</b> | = 178,1 kN               |
| <b>Gewicht pro Meter</b> | = 1,191 kg               |

**Machart**

Gleichschlagsausführung, rechtsgängig,  
aus blanken Seildrähten.

|                           |         |
|---------------------------|---------|
| mittlerer Füllfaktor      | = 0,654 |
| mittlerer Verseilfaktor   | = 0,76  |
| mittlerer Gewichts faktor | = 0,90  |
| Gesamtdrahtzahl           | = 245   |

Anzahl der tragenden Drähte in den  
Außenlitzten - zur Beurteilung der  
Ablegereife nach DIN 15020 Bl. 2 /  
ISO DIS 4309 = 112

**Grundausrüstung**

|                        |                                  |
|------------------------|----------------------------------|
| <b>Seillänge</b> 170 m | <b>Seilstrang</b> ..... 2 - fach |
|                        | <b>Ausladung</b> ..... 55 m      |
|                        | <b>Hakenweg</b> ..... 42 m       |

Bei Erhöhung des Hakenweges um 1 Turmelement (4,5 m) verlängert sich die erforderliche Seillänge um **9 m bei 2 - fachem Seilstrang**.



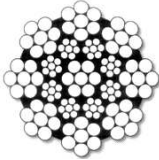
**Achtung!**

**Ein Drahtseil ist ein komplexes Maschinenelement.**

Herkömmliche Seilmacharten sind häufig den Erfordernissen moderner Seiltriebe nicht mehr gewachsen. Kurze Aufliegezeiten sind die Folge.

2.7.2

Katzfahrseil

|  |  |
|--|--|
| <p><b>Seil Ø = 8 mm</b>    + 4%<br/>                          + 2%</p> | <p>Auslegung nach DIN 15020<br/>Betriebsweise nach TWG 1 Am</p>  |
| <p><b>Erstausrüstung</b></p>   | <p><b>CASAR UNILIFT</b> -<br/>ein 8 litziges Seil in<br/>überschneidungsfreier<br/>Doppelparallelkonstruktion<br/>aus unverdichteten Litzen.</p>    |
| <p><b>Machart</b></p>  | <p>Kreuzschlagausführung, rechtsgängig,<br/>Oberfläche der Drähte: verzinkt.</p> <p>mittlerer Füllfaktor        = 0,643<br/>mittlerer Verseilfaktor    = 0,90<br/>mittlerer Gewichsfaktor    = 0,87<br/>mittlerer Gesamtdrahtzahl = 119</p> <p>Anzahl der tragenden Drähte in den<br/>Außenlitzen – zur Beurteilung der<br/>Ablegereife nach DIN 15020 Bl. 2 /<br/>ISO DIS 4309                = <b>56</b></p> |

Grundausrüstung

|           |           |                                 |
|-----------|-----------|---------------------------------|
| Seillänge | 1 x 65 m  | Auslegung: Ausladung ..... 55 m |
|           | 1 x 108 m |                                 |

**Achtung!**

**Ein Drahtseil ist ein komplexes Maschinenelement.**

Herkömmliche Seilmacharten sind häufig den Erfordernissen moderner Seiltriebe nicht mehr gewachsen. Kurze Aufliegezeiten sind die Folge.

2.8.1

Einsetzbares Außenkletterwerk

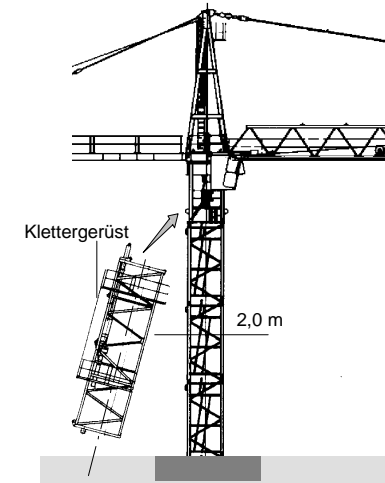
Folgendes abnehmbares hydraulisches Außenkletterwerk kann beim WOLFF 5520.6 eingesetzt werden.

-                    **KWH 20.3**

Angaben über das Kletterwerk KWH 20.3 siehe separate Dokumentation in Abschnitt 12, Zusatzausrüstung.

**Mindesthöhe bei stationärer Aufstellung:**  
3 Turmelemente = 13,5 m Turmhöhe

**Mindesthöhe bei fahrbarer Aufstellung:**  
2 Turmelemente + Unterwagen  
ca. 13,5 m Turmhöhe



2.8.1.1

Ausgleichsgewichtstabelle zum Klettern

\* Die angegebenen Ausgleichsgewichte sind Brutto-Gewichte der Turmzwischenstücke oder einer Last

\*\* Die angegebene Ausladung bezieht sich auf Mitte Turm und ist als Richtwert zu behandeln. Der exakte Ausgleich wird durch Verfahren der Katze erreicht und kann durch versatzfreies Auseinanderfahren an den Stoßstellen des Turmes kontrolliert werden.

--- Ausgleich nicht möglich

| wenn UV 20 - Turmelemente eingeklettert werden    | Ausleger   |      |      |      |      |      |
|---|------------|------|------|------|------|------|
|   | 30 m       | 35 m | 40 m | 45 m | 50 m | 55 m |
| mit Ausgleichsgewicht *<br>UV 20 = 1,95 t         | **<br>11,7 | 11,1 | 8,4  | ---  | ---  | ---  |
| ohne Ausgleichsgewicht                            | ---        | ---  |      | 26,7 | 23,5 | 12,8 |
| wenn TFS 20.4 - Turmelemente eingeklettert werden |            |      |      |      |      |      |
| mit Ausgleichsgewicht *<br>TFS 20.4 = 1,45 t      | **<br>15,5 | 14,9 | 11,5 | ---  | ---  | --   |
| ohne Ausgleichsgewicht                            | ---        | ---  | ---  | 29,4 | 26,2 | 15,6 |



**Gefahr!**

Während des Klettervorganges muss das drehbare Teil in der Einschubrichtung des Verschiebewagens arretiert werden. Vor der endgültigen Verbolzung des Turmes darf weder der Ausgleich, noch die Arretierung des drehbaren Teiles aufgehoben werden (siehe Betriebsanleitung KWH 20.3). Das Kletterwerk ist eine Montagehilfseinrichtung und darf unter normalen Betriebsbedingungen nicht am WOLFF - Turmdrehkran verbleiben.

**2.8.4 Einsetzbares Innenkletterwerk KSH 15**

Für die Aufstellung des WOLFF 5520 mit Kletterwerk KSH 15 ist die hier gezeigte Turmkombination zu beachten.

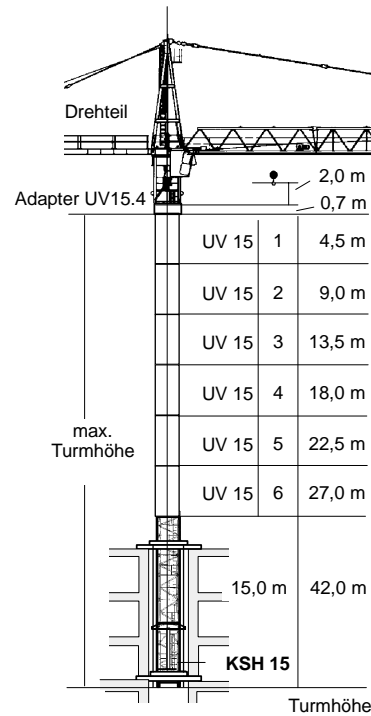
Angaben über das Kletterwerk KSH 15 siehe Zusatzausrüstung Abschnitt 12.

**2.8.4.1 Ausgleichsgewichtstabelle**

\* Die angegebenen Ausgleichsgewichte sind Gewichte der Turmelemente oder einer Last.

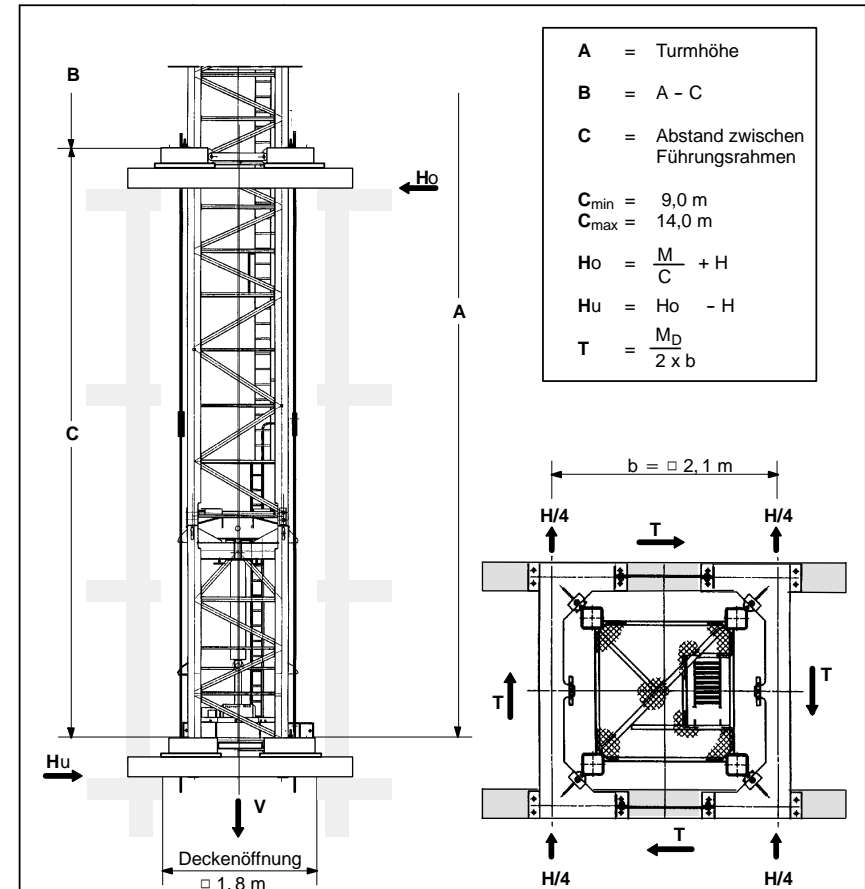
\*\* Alle Ausladungsangaben beziehen sich auf Mitte Turm und sind als Richtwert zu behandeln. Der exakte Ausgleich wird durch Verfahren der Laufkatze mit dem in der Tabelle angegebenen Turmelement oder einer Last erreicht. Der Ausgleich stimmt, wenn zwischen den Eckspannpratzen der Kletterrahmen und den Eckstielen ein gleichgroßer Luftspalt vorhanden ist.

-- kein Ausgleich möglich



| 5520.10<br>Ausgleichsgewicht * | Ausleger |      |      |      |      |      |      |
|--------------------------------|----------|------|------|------|------|------|------|
|                                | 30 m     | 35 m | 40 m | 45 m | 50 m | 55 m |      |
| UV 20.4 = 1,95 t               | **       | 27,5 | 28,3 | 26,4 | 26,0 | 25,7 | 24,3 |
| TFS 20.4 = 1,45 t              | --       | 33,7 | 31,4 | 31,0 | 30,6 | 28,9 | 28,9 |
| Gewicht = 5,00 t               | 13,9     | 14,3 | 13,3 | 13,1 | 12,9 | 12,2 | 12,2 |
| 5520.6                         |          |      |      |      |      |      |      |
| UV 20.4 = 1,95 t               | --       | 32,5 | 30,3 | 29,9 | 29,5 | 27,9 | 27,9 |
| TFS 20.4 = 1,45 t              | --       | --   | 37,2 | 36,7 | 36,2 | 34,2 | 34,2 |
| Gewicht = 5,00 t               | 14,9     | 15,3 | 14,2 | 14,0 | 13,8 | 13,1 | 13,1 |

**2.8.4.2 Einspannkräfte im Gebäude für hydraulisches Innenkletterwerk KSH 15**



**Einspannkräfte im Gebäude (kN)**

| A (m)     | 42,0 |     |     |     | 37,5 |     |     |     | 33,0 |     |     |     | 28,5 |     |     |     |
|-----------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
|           | 9    | 10  | 12  | 14  | 9    | 10  | 12  | 14  | 9    | 10  | 12  | 14  | 9    | 10  | 12  | 14  |
| <b>V</b>  | 687  | 687 | 687 | 687 | 668  | 668 | 668 | 668 | 650  | 650 | 650 | 650 | 632  | 632 | 632 | 632 |
| <b>Ho</b> | 374  | 345 | 302 | 271 | 315  | 292 | 257 | 231 | 262  | 244 | 215 | 195 | 220  | 200 | 177 | 161 |
| <b>Hu</b> | 287  | 258 | 215 | 185 | 235  | 212 | 177 | 151 | 211  | 190 | 158 | 136 | 196  | 176 | 147 | 126 |
| <b>T</b>  | 45   | 45  | 45  | 45  | 45   | 45  | 45  | 45  | 45   | 45  | 45  | 45  | 45   | 45  | 45  | 45  |

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## 2.8.5 Einsetzbares Innenkletterwerk KSH 20 L

Für die Aufstellung des WOLFF 5520 mit Kletterwerk KSH 20 L ist die hier gezeigte Turmkombination zu beachten.

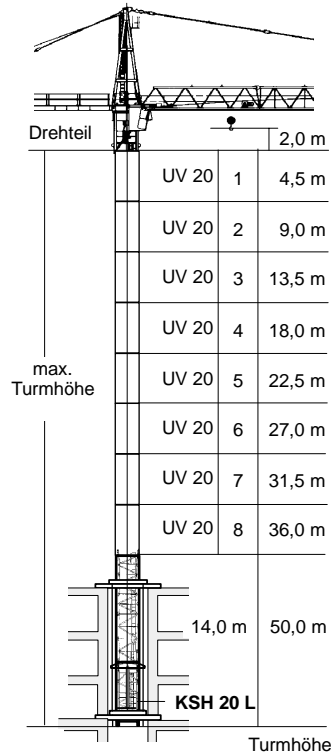
Angaben über das Kletterwerk KSH 20 L siehe Zusatzausrüstung Abschnitt 12.

## 2.8.5.1 Ausgleichsgewichtstabelle

\* Die angegebenen Ausgleichsgewichte sind Gewichte der Turmelemente oder einer Last.

\*\* Alle Ausladungsangaben beziehen sich auf Mitte Turm und sind als Richtwert zu behandeln. Der exakte Ausgleich wird durch Verfahren der Laufkatze mit dem in der Tabelle angegebenen Turmelement oder einer Last erreicht. Der Ausgleich stimmt, wenn zwischen den Führungsblechen der Kletterrahmen und den Eckstielen ein gleichgroßer Luftspalt vorhanden ist.

-- kein Ausgleich möglich



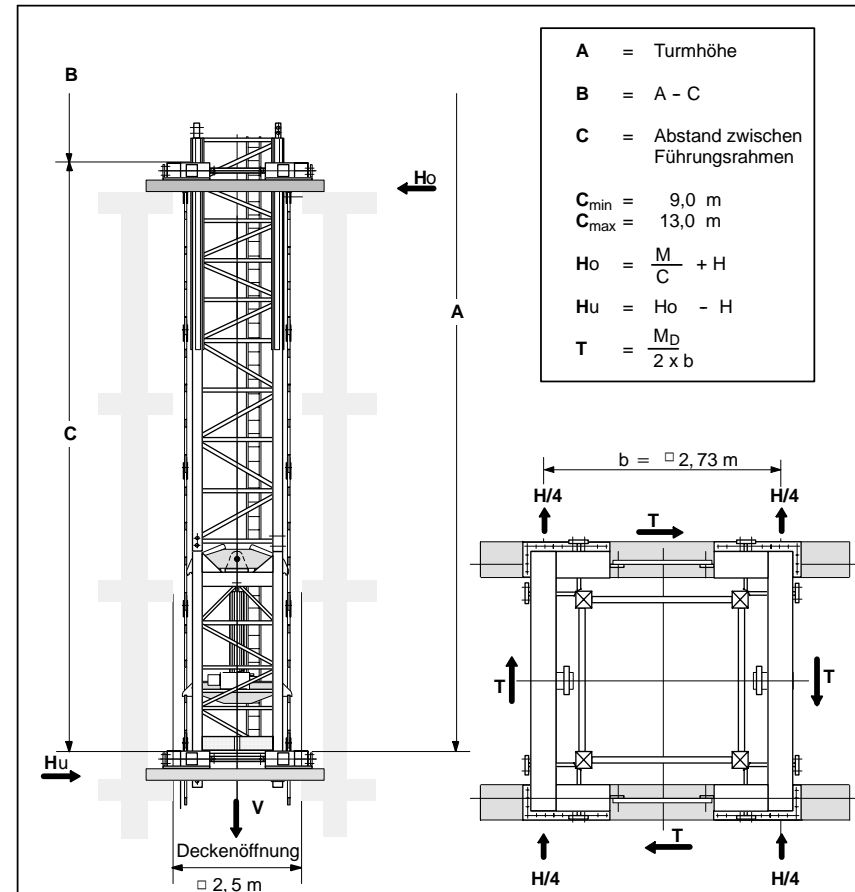
| 5520.10<br>Ausgleichsgewicht * | Ausleger |      |      |      |      |      |
|--------------------------------|----------|------|------|------|------|------|
|                                | 30 m     | 35 m | 40 m | 45 m | 50 m | 55 m |
| UV 20.4 = 1,95 t               | **       |      |      |      |      |      |
| TFS 20.4 = 1,45 t              | --       | 33,7 | 31,4 | 31,0 | 30,6 | 28,9 |
| Gewicht = 5,00 t               | 13,9     | 14,3 | 13,3 | 13,1 | 12,9 | 12,2 |
| <b>5520.6</b>                  |          |      |      |      |      |      |
| UV 20.4 = 1,95 t               | --       | 32,5 | 30,3 | 29,9 | 29,5 | 27,9 |
| TFS 20.4 = 1,45 t              | --       | --   | 37,2 | 36,7 | 36,2 | 34,2 |
| Gewicht = 5,00 t               | 14,9     | 15,3 | 14,2 | 14,0 | 13,8 | 13,1 |

# WOLFF 5520

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## 2.8.5.2 Einspannkräfte im Gebäude für hydraulisches Innenkletterwerk KSH 20 L



### Einspannkräfte im Gebäude (kN)

| A (m) | 50,0 |     |     |     | 45,5 |     |     |     | 41,0 |     |     |     | 36,5 |     |     |     |
|-------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| C (m) | 9    | 10  | 12  | 13  | 9    | 10  | 12  | 13  | 9    | 10  | 12  | 13  | 9    | 10  | 12  | 13  |
| V     | 741  | 741 | 741 | 741 | 722  | 722 | 722 | 722 | 703  | 703 | 703 | 703 | 684  | 684 | 684 | 684 |
| Ho    | 506  | 466 | 405 | 381 | 437  | 402 | 351 | 331 | 374  | 345 | 302 | 286 | 315  | 292 | 257 | 243 |
| Hu    | 406  | 366 | 305 | 281 | 344  | 309 | 258 | 238 | 287  | 258 | 215 | 199 | 235  | 212 | 177 | 163 |
| T     | 35   | 35  | 35  | 35  | 35   | 35  | 35  | 35  | 35   | 35  | 35  | 35  | 35   | 35  | 35  | 35  |

**2.8.6 Einsetzbares Innenkletterwerk KSH 20 M**

Für die Aufstellung des WOLFF 5520 mit Kletterwerk KSH 20 M ist die hier gezeigte Turmkombination zu beachten.

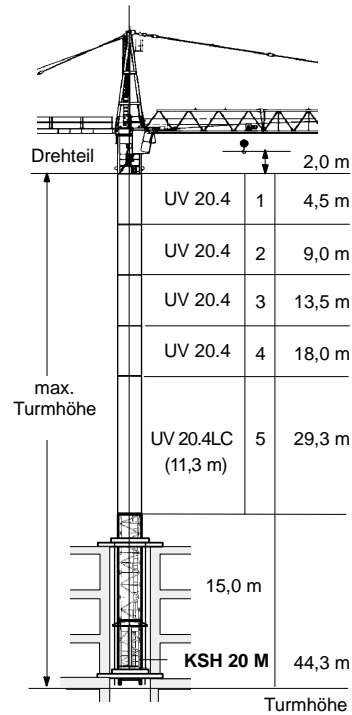
Angaben über das Kletterwerk KSH 20 M siehe Zusatzausrüstung Abschnitt 12.

**2.8.6.1 Ausgleichsgewichtstabelle**

\* Die angegebenen Ausgleichsgewichte sind Gewichte der Turmelemente oder einer Last.

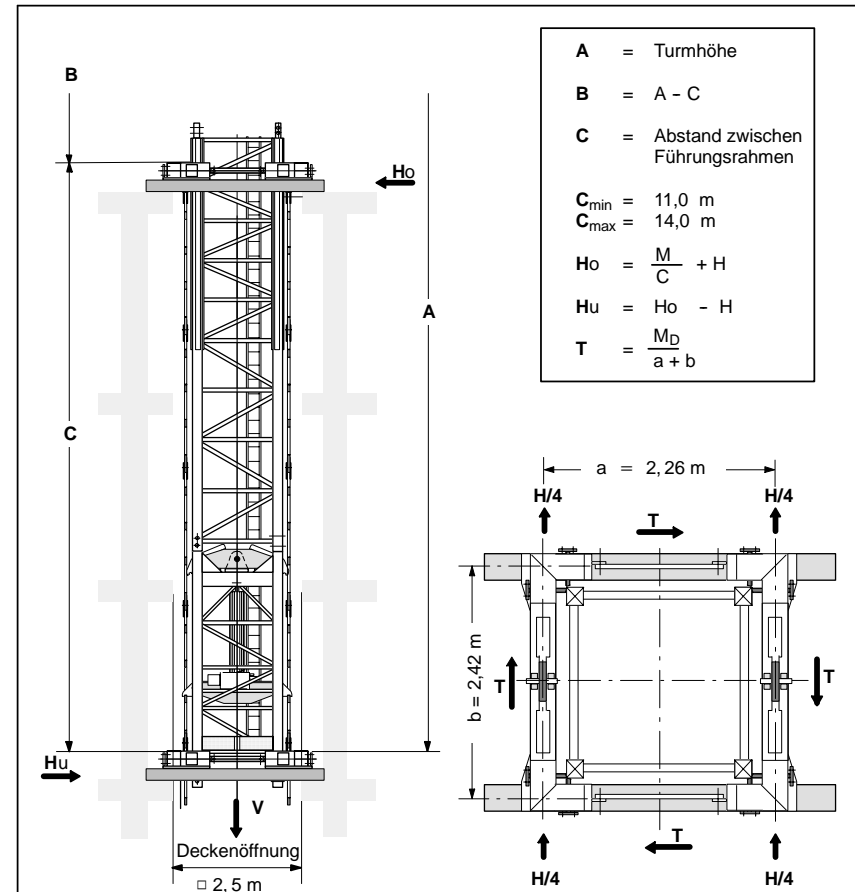
\*\* Alle Ausladungangaben beziehen sich auf Mitte Turm und sind als Richtwert zu behandeln. Der exakte Ausgleich wird durch Verfahren der Laufkatze mit dem in der Tabelle angegebenen Turmelement oder einer Last erreicht. Der Ausgleich stimmt, wenn zwischen den Führungsblechen der Kletterrahmen und den Eckstienen ein gleichgroßer Luftspalt vorhanden ist.

-- kein Ausgleich möglich



| 5520.10<br>Ausgleichsgewicht * | Ausleger |      |      |      |      |      |
|--------------------------------|----------|------|------|------|------|------|
|                                | 30 m     | 35 m | 40 m | 45 m | 50 m | 55 m |
| UV 20.4 = 1,95 t               | **       |      |      |      |      |      |
| TFS 20.4 = 1,45 t              | --       | 33,7 | 31,4 | 31,0 | 30,6 | 28,9 |
| Gewicht = 5,00 t               | 13,9     | 14,3 | 13,3 | 13,1 | 12,9 | 12,2 |
| 5520.6                         |          |      |      |      |      |      |
| UV 20.4 = 1,95 t               | --       | 32,5 | 30,3 | 29,9 | 29,5 | 27,9 |
| TFS 20.4 = 1,45 t              | --       | --   | 37,2 | 36,7 | 36,2 | 34,2 |
| Gewicht = 5,00 t               | 14,9     | 15,3 | 14,2 | 14,0 | 13,8 | 13,1 |

**2.8.6.2 Einspannkräfte im Gebäude für hydraulisches Innenkletterwerk KSH 20 M**



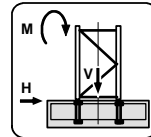
- A = Turmhöhe
- B = A - C
- C = Abstand zwischen Führungsrahmen
- C<sub>min</sub> = 11,0 m
- C<sub>max</sub> = 14,0 m
- Ho =  $\frac{M}{C} + H$
- Hu = Ho - H
- T =  $\frac{M_D}{a + b}$

**Einspannkräfte im Gebäude (kN)**

| A (m) | 44,3 |     |     |     | 39,8 |     |     |     | 35,3 |     |     |     | 30,8 |     |     |     |
|-------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| C (m) | 11   | 12  | 13  | 14  | 11   | 12  | 13  | 14  | 11   | 12  | 13  | 14  | 11   | 12  | 13  | 14  |
| V     | 720  | 720 | 720 | 720 | 700  | 700 | 700 | 700 | 680  | 680 | 680 | 680 | 660  | 660 | 660 | 660 |
| Ho    | 379  | 355 | 335 | 224 | 329  | 308 | 291 | 277 | 279  | 262 | 248 | 237 | 234  | 221 | 210 | 200 |
| Hu    | 285  | 261 | 241 | 130 | 241  | 220 | 203 | 189 | 198  | 181 | 167 | 156 | 178  | 163 | 151 | 140 |
| T     | 40   | 40  | 40  | 40  | 40   | 40  | 40  | 40  | 40   | 40  | 40  | 40  | 40   | 40  | 40  | 40  |

3.1.1 Fundamentbelastungen nach DIN

Inklusive aller dynamischer Faktoren unter Berücksichtigung Theorie II. Ordnung für stationären Turmdrehkran auf Betonfundament gemäß Turmkombination ohne Kletterwerk  
 Ständig wirkendes Moment = 629 kNm  
 M = Moment H = Horizontallast V = Vertikallast



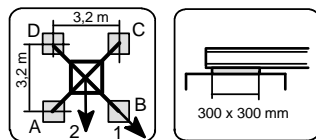
Fundamentbelastungen

Ausleger 30 - 55 m

| Hakenhöhe<br>☞<br>[m]                                       | Kran in Betrieb<br>Drehmoment 190 kNm |           |           | Kran außer Betrieb |           |           | Montage    |           |           |
|---|---------------------------------------|-----------|-----------|--------------------|-----------|-----------|------------|-----------|-----------|
|   | M<br>[kNm]                            | H<br>[kN] | V<br>[kN] | M<br>[kNm]         | H<br>[kN] | V<br>[kN] | M<br>[kNm] | H<br>[kN] | V<br>[kN] |
| 11,0  | 1332                                  | 18        | 405       | 208                | 46        | 451       | 1318       | 11        | 265       |
| 15,5  | 1423                                  | 19        | 421       | 430                | 50        | 477       | 1377       | 13        | 279       |
| 20,0  | 1523                                  | 21        | 437       | 677                | 55        | 496       | 1444       | 14        | 293       |
| 24,5  | 1625                                  | 22        | 452       | 970                | 61        | 514       | 1521       | 16        | 307       |
| 29,0  | 1760                                  | 24        | 468       | 1315               | 67        | 532       | 1608       | 17        | 321       |
| 33,5  | 1897                                  | 25        | 483       | 1696               | 74        | 550       | 1705       | 18        | 335       |
| 38,0  | 2049                                  | 27        | 498       | 2118               | 80        | 568       | 1813       | 20        | 349       |
| 42,5  | 2216                                  | 28        | 514       | 2583               | 87        | 587       | 1932       | 21        | 363       |
| 47,0  | 2376                                  | 30        | 540       | 3094               | 93        | 605       | 2050       | 23        | 387       |
| 51,5  | 2564                                  | 31        | 560       | 3657               | 100       | 623       | 2186       | 24        | 405       |
| 56,0  | 2731                                  | 34        | 602       | 4223               | 112       | 661       | 2316       | 27        | 443       |
| 60,5  | 2935                                  | 36        | 669       | 4868               | 120       | 690       | 2469       | 29        | 472       |
| 65,0  | 3160                                  | 38        | 700       | 5573               | 127       | 718       | 2635       | 31        | 500       |
| 69,5  | 3407                                  | 40        | 731       | 6352               | 136       | 746       | 2817       | 33        | 528       |
| 74,0  | 3617                                  | 42        | 770       | 7092               | 146       | 782       | 2982       | 35        | 568       |
| 78,5  | 3873                                  | 44        | 805       | 7952               | 156       | 814       | 3179       | 38        | 600       |
| <b>Achtung ! Turmkombination mit Basisturmelement BT 29</b> |                                       |           |           |                    |           |           |            |           |           |
| 85,2  | 4220                                  | 48        | 1014      | 9250               | 168       | 905       | 3460       | 43        | 728       |
| 89,7  | 4500                                  | 51        | 1061      | 10240              | 179       | 951       | 3690       | 45        | 765       |
| 94,2  | 4810                                  | 54        | 1107      | 11300              | 190       | 997       | 3930       | 48        | 811       |
| 98,7  | 5140                                  | 56        | 1153      | 13270              | 209       | 1043      | 4190       | 50        | 857       |
| 103,2   | 5500                                  | 54        | 1200      | 14540              | 220       | 1090      | 4470       | 53        | 903       |
|   |                                       |           |           |                    |           |           |            |           |           |
|   |                                       |           |           |                    |           |           |            |           |           |

3.2.1.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

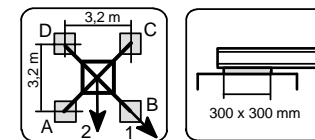


**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 85,0                  | 1                | 315                                    | 559       | 315       | 72        | 18                      | 1                | 259                                     | 455       | 259       | 62        | 40                      |
|                  |                       | 2                | 488                                    | 488       | 143       | 143       |                         | 2                | 398                                     | 398       | 120       | 120       |                         |
| 11,8             | 85,0                  | 1                | 320                                    | 577       | 320       | 62        | 19                      | 1                | 263                                     | 470       | 263       | 56        | 42                      |
|                  |                       | 2                | 502                                    | 502       | 138       | 138       |                         | 2                | 409                                     | 409       | 117       | 117       |                         |
| 16,3             | 85,0                  | 1                | 324                                    | 597       | 324       | 51        | 21                      | 1                | 267                                     | 486       | 267       | 49        | 47                      |
|                  |                       | 2                | 517                                    | 517       | 131       | 131       |                         | 2                | 422                                     | 422       | 113       | 113       |                         |
| 20,8             | 85,0                  | 1                | 328                                    | 620       | 328       | 37        | 22                      | 1                | 272                                     | 504       | 272       | 40        | 60                      |
|                  |                       | 2                | 534                                    | 534       | 122       | 122       |                         | 2                | 436                                     | 436       | 108       | 108       |                         |
| 25,3             | 85,0                  | 1                | 332                                    | 645       | 332       | 20        | 23                      | 1                | 276                                     | 523       | 276       | 29        | 66                      |
|                  |                       | 2                | 553                                    | 553       | 112       | 112       |                         | 2                | 451                                     | 451       | 101       | 101       |                         |
| 29,8             | 85,0                  | 1                | 337                                    | 673       | 337       | 1         | 25                      | 1                | 280                                     | 545       | 280       | 16        | 72                      |
|                  |                       | 2                | 574                                    | 574       | 99        | 99        |                         | 2                | 467                                     | 467       | 93        | 93        |                         |
| 34,3             | 95,0                  | 1                | 366                                    | 729       | 366       | 3         | 26                      | 1                | 351                                     | 628       | 351       | 74        | 78                      |
|                  |                       | 2                | 623                                    | 623       | 109       | 109       |                         | 2                | 547                                     | 547       | 155       | 155       |                         |

3.2.1.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk



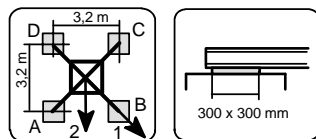
**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 77,5                  | 1                | 304                                    | 532       | 304       | 77        | 18                      | 1                | 240                                     | 437       | 240       | 43        | 40                      |
|                  |                       | 2                | 465                                    | 465       | 143       | 143       |                         | 2                | 379                                     | 379       | 101       | 101       |                         |
| 11,8             | 77,5                  | 1                | 309                                    | 550       | 309       | 67        | 20                      | 1                | 244                                     | 452       | 244       | 37        | 43                      |
|                  |                       | 2                | 479                                    | 479       | 138       | 138       |                         | 2                | 391                                     | 391       | 98        | 98        |                         |
| 16,3             | 77,5                  | 1                | 313                                    | 571       | 313       | 55        | 21                      | 1                | 249                                     | 468       | 249       | 29        | 47                      |
|                  |                       | 2                | 495                                    | 495       | 131       | 131       |                         | 2                | 404                                     | 404       | 94        | 94        |                         |
| 20,8             | 77,5                  | 1                | 317                                    | 593       | 317       | 41        | 22                      | 1                | 253                                     | 486       | 253       | 20        | 61                      |
|                  |                       | 2                | 512                                    | 512       | 122       | 122       |                         | 2                | 418                                     | 418       | 88        | 88        |                         |
| 25,3             | 77,5                  | 1                | 321                                    | 619       | 321       | 24        | 24                      | 1                | 257                                     | 505       | 257       | 9         | 67                      |
|                  |                       | 2                | 532                                    | 532       | 111       | 111       |                         | 2                | 433                                     | 433       | 82        | 82        |                         |
| 29,8             | 77,5                  | 1                | 326                                    | 647       | 326       | 5         | 25                      | 1                | 257                                     | 531       | 257       | 0         | 72                      |
|                  |                       | 2                | 553                                    | 553       | 99        | 99        |                         | 2                | 458                                     | 458       | 164       | 164       |                         |
| 34,3             | 92,5                  | 1                | 368                                    | 716       | 368       | 19        | 26                      | 1                | 353                                     | 638       | 353       | 67        | 78                      |
|                  |                       | 2                | 614                                    | 614       | 121       | 121       |                         | 2                | 555                                     | 555       | 150       | 150       |                         |



3.2.1.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

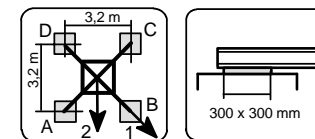


**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 80,0                  | 1                | 314                                    | 553       | 314       | 75        | 18                      | 1                | 246                                     | 444       | 246       | 49        | 41                      |
|                  |                       | 2                | 483                                    | 483       | 145       | 145       |                         | 2                | 386                                     | 386       | 107       | 107       |                         |
| 11,8             | 80,0                  | 1                | 318                                    | 572       | 318       | 65        | 20                      | 1                | 251                                     | 458       | 251       | 43        | 43                      |
|                  |                       | 2                | 497                                    | 497       | 139       | 139       |                         | 2                | 398                                     | 398       | 104       | 104       |                         |
| 16,3             | 80,0                  | 1                | 323                                    | 592       | 323       | 53        | 21                      | 1                | 255                                     | 475       | 255       | 35        | 48                      |
|                  |                       | 2                | 513                                    | 513       | 132       | 132       |                         | 2                | 410                                     | 410       | 99        | 99        |                         |
| 20,8             | 80,0                  | 1                | 327                                    | 616       | 327       | 38        | 22                      | 1                | 259                                     | 493       | 259       | 25        | 61                      |
|                  |                       | 2                | 531                                    | 531       | 123       | 123       |                         | 2                | 424                                     | 424       | 94        | 94        |                         |
| 25,3             | 80,0                  | 1                | 331                                    | 641       | 331       | 21        | 24                      | 1                | 263                                     | 513       | 263       | 14        | 67                      |
|                  |                       | 2                | 551                                    | 551       | 112       | 112       |                         | 2                | 440                                     | 440       | 87        | 87        |                         |
| 29,8             | 80,0                  | 1                | 335                                    | 670       | 335       | 0         | 25                      | 1                | 320                                     | 556       | 320       | 85        | 73                      |
|                  |                       | 2                | 572                                    | 572       | 99        | 99        |                         | 2                | 487                                     | 487       | 154       | 154       |                         |
| 34,3             | 87,5                  | 1                | 354                                    | 726       | 354       | 0         | 26                      | 1                | 343                                     | 659       | 343       | 28        | 79                      |
|                  |                       | 2                | 615                                    | 615       | 102       | 102       |                         | 2                | 567                                     | 567       | 120       | 120       |                         |

3.2.1.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

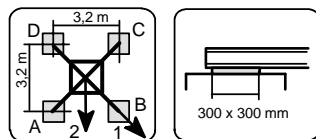


**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 75,0                  | 1                | 309                                    | 550       | 309       | 69        | 19                      | 1                | 256                                     | 445       | 256       | 68        | 41                      |
|                  |                       | 2                | 479                                    | 479       | 139       | 139       |                         | 2                | 389                                     | 389       | 123       | 123       |                         |
| 11,8             | 75,0                  | 1                | 314                                    | 569       | 314       | 59        | 20                      | 1                | 261                                     | 461       | 261       | 60        | 44                      |
|                  |                       | 2                | 494                                    | 494       | 133       | 133       |                         | 2                | 403                                     | 403       | 119       | 119       |                         |
| 16,3             | 75,0                  | 1                | 318                                    | 590       | 318       | 46        | 21                      | 1                | 265                                     | 480       | 265       | 50        | 48                      |
|                  |                       | 2                | 510                                    | 510       | 126       | 126       |                         | 2                | 417                                     | 417       | 113       | 113       |                         |
| 20,8             | 75,0                  | 1                | 322                                    | 613       | 322       | 31        | 23                      | 1                | 269                                     | 501       | 269       | 38        | 62                      |
|                  |                       | 2                | 528                                    | 528       | 116       | 116       |                         | 2                | 433                                     | 433       | 105       | 105       |                         |
| 25,3             | 75,0                  | 1                | 326                                    | 640       | 326       | 13        | 24                      | 1                | 273                                     | 523       | 273       | 24        | 68                      |
|                  |                       | 2                | 548                                    | 548       | 105       | 105       |                         | 2                | 450                                     | 450       | 97        | 97        |                         |
| 29,8             | 75,0                  | 1                | 323                                    | 677       | 323       | 0         | 25                      | 1                | 316                                     | 569       | 316       | 62        | 74                      |
|                  |                       | 2                | 570                                    | 570       | 91        | 91        |                         | 2                | 495                                     | 495       | 136       | 136       |                         |
| 34,3             | 82,5                  | 1                | 340                                    | 735       | 340       | 0         | 27                      | 1                | 339                                     | 674       | 339       | 4         | 80                      |
|                  |                       | 2                | 613                                    | 613       | 94        | 94        |                         | 2                | 576                                     | 576       | 102       | 102       |                         |

3.2.1.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

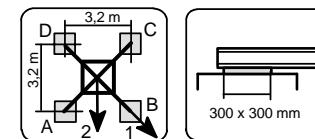


**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 75,0                  | 1                | 312                                    | 554       | 312       | 70        | 19                      | 1                | 257                                     | 472       | 257       | 42        | 42                      |
|                  |                       | 2                | 483                                    | 483       | 141       | 141       |                         | 2                | 409                                     | 409       | 105       | 105       |                         |
| 11,8             | 75,0                  | 1                | 316                                    | 573       | 316       | 60        | 20                      | 1                | 261                                     | 489       | 261       | 33        | 44                      |
|                  |                       | 2                | 498                                    | 498       | 135       | 135       |                         | 2                | 422                                     | 422       | 100       | 100       |                         |
| 16,3             | 75,0                  | 1                | 321                                    | 594       | 321       | 47        | 21                      | 1                | 265                                     | 508       | 265       | 23        | 49                      |
|                  |                       | 2                | 514                                    | 514       | 127       | 127       |                         | 2                | 437                                     | 437       | 94        | 94        |                         |
| 20,8             | 75,0                  | 1                | 325                                    | 618       | 325       | 32        | 23                      | 1                | 270                                     | 529       | 270       | 10        | 63                      |
|                  |                       | 2                | 532                                    | 532       | 118       | 118       |                         | 2                | 453                                     | 453       | 86        | 86        |                         |
| 25,3             | 75,0                  | 1                | 329                                    | 645       | 329       | 14        | 24                      | 1                | 270                                     | 556       | 270       | 0         | 69                      |
|                  |                       | 2                | 552                                    | 552       | 106       | 106       |                         | 2                | 471                                     | 471       | 77        | 77        |                         |
| 29,8             | 75,0                  | 1                | 326                                    | 682       | 326       | 0         | 25                      | 1                | 257                                     | 598       | 257       | 0         | 75                      |
|                  |                       | 2                | 575                                    | 575       | 92        | 92        |                         | 2                | 510                                     | 510       | 127       | 127       |                         |
| 34,3             | 80,0                  | 1                | 330                                    | 741       | 330       | 0         | 27                      | 1                | 317                                     | 707       | 317       | 0         | 81                      |
|                  |                       | 2                | 612                                    | 612       | 88        | 88        |                         | 2                | 585                                     | 585       | 85        | 85        |                         |

3.2.1.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

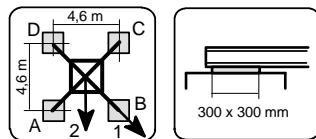


**KR 7 - 32** Eckabstand 3,2 m x 3,2 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,3              | 67,5                  | 1                | 301                                    | 535       | 301       | 67        | 19                      | 1                | 197                                     | 565       | 197       | 0         | 42                      |
|                  |                       | 2                | 466                                    | 466       | 136       | 136       |                         | 2                | 439                                     | 439       | 40        | 40        |                         |
| 11,8             | 67,5                  | 1                | 305                                    | 554       | 305       | 57        | 20                      | 1                | 192                                     | 591       | 192       | 0         | 45                      |
|                  |                       | 2                | 481                                    | 481       | 129       | 129       |                         | 2                | 453                                     | 453       | 35        | 35        |                         |
| 16,3             | 67,5                  | 1                | 310                                    | 576       | 310       | 44        | 22                      | 1                | 185                                     | 622       | 185       | 0         | 49                      |
|                  |                       | 2                | 498                                    | 498       | 121       | 121       |                         | 2                | 468                                     | 468       | 28        | 28        |                         |
| 20,8             | 67,5                  | 1                | 314                                    | 600       | 314       | 28        | 23                      | 1                | 176                                     | 657       | 176       | 0         | 64                      |
|                  |                       | 2                | 516                                    | 516       | 112       | 112       |                         | 2                | 485                                     | 485       | 20        | 20        |                         |
| 25,3             | 72,5                  | 1                | 331                                    | 640       | 331       | 22        | 24                      | 1                | 190                                     | 696       | 190       | 0         | 70                      |
|                  |                       | 2                | 549                                    | 549       | 112       | 112       |                         | 2                | 515                                     | 515       | 23        | 23        |                         |
| 29,8             | 77,5                  | 1                | 347                                    | 682       | 347       | 12        | 26                      | 1                | 202                                     | 740       | 202       | 0         | 76                      |
|                  |                       | 2                | 584                                    | 584       | 111       | 111       |                         | 2                | 548                                     | 548       | 24        | 24        |                         |
| 34,3             | 82,5                  | 1                | 364                                    | 730       | 364       | 0         | 27                      | 1                | 211                                     | 789       | 211       | 0         | 81                      |
|                  |                       | 2                | 622                                    | 622       | 106       | 106       |                         | 2                | 619                                     | 619       | 80        | 80        |                         |

3.2.2.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

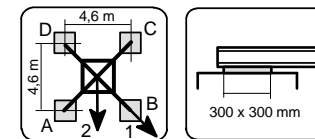


**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 7,4              | 45,0                  | 1                | 218                                    | 388    | 218    | 49     | 18                      | 1                | 162                                     | 299    | 162    | 25     | 40                      |
|                  |                       | 2                | 338                                    | 338    | 98     | 98     |                         | 2                | 259                                     | 259    | 65     | 65     |                         |
| 11,9             | 45,0                  | 1                | 222                                    | 401    | 222    | 43     | 20                      | 1                | 165                                     | 309    | 165    | 21     | 43                      |
|                  |                       | 2                | 348                                    | 348    | 95     | 95     |                         | 2                | 267                                     | 267    | 63     | 63     |                         |
| 16,4             | 45,0                  | 1                | 225                                    | 415    | 225    | 35     | 21                      | 1                | 169                                     | 321    | 169    | 16     | 47                      |
|                  |                       | 2                | 360                                    | 360    | 91     | 91     |                         | 2                | 276                                     | 276    | 61     | 61     |                         |
| 20,9             | 45,0                  | 1                | 229                                    | 431    | 229    | 26     | 22                      | 1                | 172                                     | 334    | 172    | 10     | 61                      |
|                  |                       | 2                | 372                                    | 372    | 86     | 86     |                         | 2                | 287                                     | 287    | 58     | 58     |                         |
| 25,4             | 45,0                  | 1                | 232                                    | 449    | 232    | 16     | 24                      | 1                | 176                                     | 348    | 176    | 3      | 67                      |
|                  |                       | 2                | 385                                    | 385    | 79     | 79     |                         | 2                | 298                                     | 298    | 54     | 54     |                         |
| 29,9             | 45,0                  | 1                | 236                                    | 468    | 236    | 4      | 25                      | 1                | 174                                     | 369    | 174    | 0      | 73                      |
|                  |                       | 2                | 400                                    | 400    | 72     | 72     |                         | 2                | 322                                     | 322    | 119    | 119    |                         |
| 34,4             | 52,5                  | 1                | 258                                    | 507    | 258    | 9      | 27                      | 1                | 243                                     | 441    | 243    | 45     | 80                      |
|                  |                       | 2                | 434                                    | 434    | 82     | 82     |                         | 2                | 383                                     | 383    | 103    | 103    |                         |
| 38,9             | 67,5                  | 1                | 299                                    | 568    | 299    | 30     | 28                      | 1                | 284                                     | 542    | 284    | 26     | 86                      |
|                  |                       | 2                | 489                                    | 489    | 109    | 109    |                         | 2                | 466                                     | 466    | 102    | 102    |                         |
| 43,4             | 80,0                  | 1                | 334                                    | 624    | 334    | 43     | 30                      | 1                | 313                                     | 648    | 313    | 0      | 92                      |
|                  |                       | 2                | 539                                    | 539    | 128    | 128    |                         | 2                | 548                                     | 548    | 90     | 90     |                         |

3.2.2.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

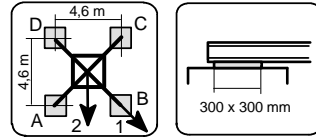


**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 7,4              | 40,0                  | 1                | 213                                    | 372    | 213    | 55     | 18                      | 1                | 149                                     | 286    | 149    | 12     | 40                      |
|                  |                       | 2                | 326                                    | 326    | 101    | 101    |                         | 2                | 246                                     | 246    | 52     | 52     |                         |
| 11,9             | 40,0                  | 1                | 217                                    | 385    | 217    | 49     | 20                      | 1                | 153                                     | 297    | 153    | 8      | 43                      |
|                  |                       | 2                | 336                                    | 336    | 98     | 98     |                         | 2                | 255                                     | 255    | 51     | 51     |                         |
| 16,4             | 40,0                  | 1                | 220                                    | 400    | 220    | 41     | 21                      | 1                | 156                                     | 309    | 156    | 3      | 48                      |
|                  |                       | 2                | 347                                    | 347    | 94     | 94     |                         | 2                | 264                                     | 264    | 48     | 48     |                         |
| 20,9             | 40,0                  | 1                | 224                                    | 416    | 224    | 32     | 23                      | 1                | 157                                     | 325    | 157    | 0      | 62                      |
|                  |                       | 2                | 359                                    | 359    | 88     | 88     |                         | 2                | 274                                     | 274    | 45     | 45     |                         |
| 25,4             | 40,0                  | 1                | 227                                    | 433    | 227    | 22     | 24                      | 1                | 153                                     | 346    | 153    | 0      | 68                      |
|                  |                       | 2                | 373                                    | 373    | 82     | 82     |                         | 2                | 286                                     | 286    | 41     | 41     |                         |
| 29,9             | 40,0                  | 1                | 231                                    | 453    | 231    | 9      | 25                      | 1                | 148                                     | 370    | 148    | 0      | 74                      |
|                  |                       | 2                | 388                                    | 388    | 74     | 74     |                         | 2                | 321                                     | 321    | 111    | 111    |                         |
| 34,4             | 50,0                  | 1                | 259                                    | 499    | 259    | 20     | 27                      | 1                | 244                                     | 448    | 244    | 41     | 80                      |
|                  |                       | 2                | 429                                    | 429    | 90     | 90     |                         | 2                | 389                                     | 389    | 100    | 100    |                         |
| 38,9             | 65,0                  | 1                | 300                                    | 559    | 300    | 42     | 28                      | 1                | 285                                     | 550    | 285    | 21     | 87                      |
|                  |                       | 2                | 484                                    | 484    | 117    | 117    |                         | 2                | 473                                     | 473    | 98     | 98     |                         |
| 43,4             | 80,0                  | 1                | 341                                    | 622    | 341    | 61     | 30                      | 1                | 321                                     | 664    | 321    | 0      | 93                      |
|                  |                       | 2                | 540                                    | 540    | 143    | 143    |                         | 2                | 561                                     | 561    | 92     | 92     |                         |

3.2.2.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk



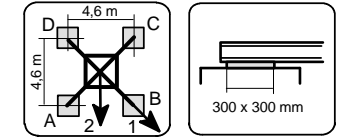
**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,4              | 40,0                  | 1                | 217                                    | 384       | 217       | 50        | 18                      | 1                | 149                                     | 287       | 149       | 12        | 41                      |
|                  |                       | 2                | 335                                    | 335       | 99        | 99        |                         | 2                | 246                                     | 246       | 52        | 52        |                         |
| 11,9             | 40,0                  | 1                | 220                                    | 397       | 220       | 44        | 20                      | 1                | 153                                     | 298       | 153       | 8         | 44                      |
|                  |                       | 2                | 345                                    | 345       | 96        | 96        |                         | 2                | 255                                     | 255       | 50        | 50        |                         |
| 16,4             | 40,0                  | 1                | 224                                    | 411       | 224       | 36        | 21                      | 1                | 156                                     | 310       | 156       | 3         | 48                      |
|                  |                       | 2                | 356                                    | 356       | 91        | 91        |                         | 2                | 265                                     | 265       | 48        | 48        |                         |
| 20,9             | 40,0                  | 1                | 227                                    | 428       | 227       | 27        | 23                      | 1                | 156                                     | 326       | 156       | 0         | 62                      |
|                  |                       | 2                | 369                                    | 369       | 86        | 86        |                         | 2                | 275                                     | 275       | 44        | 44        |                         |
| 25,4             | 40,0                  | 1                | 231                                    | 446       | 231       | 16        | 24                      | 1                | 153                                     | 348       | 153       | 0         | 69                      |
|                  |                       | 2                | 383                                    | 383       | 79        | 79        |                         | 2                | 299                                     | 299       | 133       | 133       |                         |
| 29,9             | 40,0                  | 1                | 234                                    | 465       | 234       | 4         | 26                      | 1                | 219                                     | 387       | 219       | 51        | 75                      |
|                  |                       | 2                | 398                                    | 398       | 71        | 71        |                         | 2                | 338                                     | 338       | 101       | 101       |                         |
| 34,4             | 45,0                  | 1                | 250                                    | 499       | 250       | 2         | 27                      | 1                | 235                                     | 460       | 235       | 11        | 81                      |
|                  |                       | 2                | 426                                    | 426       | 74        | 74        |                         | 2                | 394                                     | 394       | 77        | 77        |                         |
| 38,9             | 60,0                  | 1                | 291                                    | 560       | 291       | 22        | 28                      | 1                | 267                                     | 572       | 267       | 0         | 87                      |
|                  |                       | 2                | 482                                    | 482       | 101       | 101       |                         | 2                | 479                                     | 479       | 74        | 74        |                         |
| 43,4             | 75,0                  | 1                | 332                                    | 624       | 332       | 41        | 30                      | 1                | 280                                     | 709       | 280       | 0         | 94                      |
|                  |                       | 2                | 539                                    | 539       | 126       | 126       |                         | 2                | 568                                     | 568       | 67        | 67        |                         |

962-4-020905-3

3.2.2.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk



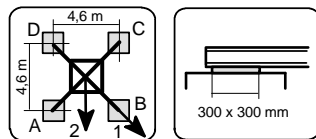
**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 7,4              | 37,5                  | 1                | 218                                    | 386       | 218       | 51        | 19                      | 1                | 165                                     | 297       | 165       | 34        | 41                      |
|                  |                       | 2                | 337                                    | 337       | 100       | 100       |                         | 2                | 258                                     | 258       | 73        | 73        |                         |
| 11,9             | 37,5                  | 1                | 222                                    | 399       | 222       | 44        | 20                      | 1                | 169                                     | 309       | 169       | 29        | 44                      |
|                  |                       | 2                | 347                                    | 347       | 96        | 96        |                         | 2                | 268                                     | 268       | 70        | 70        |                         |
| 16,4             | 37,5                  | 1                | 225                                    | 414       | 225       | 37        | 21                      | 1                | 172                                     | 322       | 172       | 22        | 49                      |
|                  |                       | 2                | 359                                    | 359       | 92        | 92        |                         | 2                | 278                                     | 278       | 66        | 66        |                         |
| 20,9             | 37,5                  | 1                | 229                                    | 431       | 229       | 27        | 23                      | 1                | 176                                     | 337       | 176       | 15        | 63                      |
|                  |                       | 2                | 372                                    | 372       | 86        | 86        |                         | 2                | 290                                     | 290       | 62        | 62        |                         |
| 25,4             | 37,5                  | 1                | 232                                    | 449       | 232       | 16        | 24                      | 1                | 179                                     | 353       | 179       | 6         | 69                      |
|                  |                       | 2                | 386                                    | 386       | 79        | 79        |                         | 2                | 308                                     | 308       | 126       | 126       |                         |
| 29,9             | 37,5                  | 1                | 236                                    | 469       | 236       | 3         | 26                      | 1                | 221                                     | 401       | 221       | 41        | 76                      |
|                  |                       | 2                | 401                                    | 401       | 71        | 71        |                         | 2                | 348                                     | 348       | 93        | 93        |                         |
| 34,4             | 42,5                  | 1                | 252                                    | 503       | 252       | 0         | 27                      | 1                | 236                                     | 475       | 236       | 0         | 82                      |
|                  |                       | 2                | 430                                    | 430       | 74        | 74        |                         | 2                | 405                                     | 405       | 69        | 69        |                         |
| 38,9             | 55,0                  | 1                | 287                                    | 559       | 287       | 14        | 29                      | 1                | 243                                     | 601       | 243       | 0         | 88                      |
|                  |                       | 2                | 479                                    | 479       | 94        | 94        |                         | 2                | 484                                     | 484       | 59        | 59        |                         |
| 43,4             | 77,5                  | 1                | 346                                    | 642       | 346       | 51        | 30                      | 1                | 293                                     | 740       | 293       | 0         | 94                      |
|                  |                       | 2                | 555                                    | 555       | 137       | 137       |                         | 2                | 593                                     | 593       | 70        | 70        |                         |

962-4-020905-4

3.2.2.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

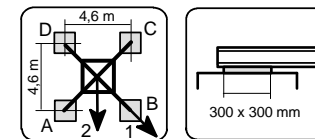


**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 7,4              | 37,5                  | 1                | 221                                    | 389    | 221    | 53     | 19                      | 1                | 166                                     | 316    | 166    | 16     | 42                      |
|                  |                       | 2                | 340                                    | 340    | 102    | 102    |                         | 2                | 272                                     | 272    | 60     | 60     |                         |
| 11,9             | 37,5                  | 1                | 225                                    | 403    | 225    | 46     | 20                      | 1                | 169                                     | 328    | 169    | 11     | 45                      |
|                  |                       | 2                | 351                                    | 351    | 99     | 99     |                         | 2                | 282                                     | 282    | 57     | 57     |                         |
| 16,4             | 37,5                  | 1                | 228                                    | 418    | 228    | 38     | 22                      | 1                | 173                                     | 342    | 173    | 4      | 49                      |
|                  |                       | 2                | 362                                    | 362    | 94     | 94     |                         | 2                | 292                                     | 292    | 53     | 53     |                         |
| 20,9             | 37,5                  | 1                | 232                                    | 435    | 232    | 29     | 23                      | 1                | 172                                     | 361    | 172    | 0      | 64                      |
|                  |                       | 2                | 375                                    | 375    | 88     | 88     |                         | 2                | 304                                     | 304    | 49     | 49     |                         |
| 25,4             | 37,5                  | 1                | 235                                    | 453    | 235    | 17     | 24                      | 1                | 166                                     | 387    | 166    | 0      | 70                      |
|                  |                       | 2                | 389                                    | 389    | 81     | 81     |                         | 2                | 319                                     | 319    | 121    | 121    |                         |
| 29,9             | 37,5                  | 1                | 239                                    | 473    | 239    | 4      | 26                      | 1                | 224                                     | 415    | 224    | 32     | 76                      |
|                  |                       | 2                | 405                                    | 405    | 73     | 73     |                         | 2                | 359                                     | 359    | 88     | 88     |                         |
| 34,4             | 40,0                  | 1                | 243                                    | 507    | 243    | 0      | 27                      | 1                | 217                                     | 499    | 217    | 0      | 83                      |
|                  |                       | 2                | 428                                    | 428    | 69     | 69     |                         | 2                | 410                                     | 410    | 57     | 57     |                         |
| 38,9             | 57,5                  | 1                | 296                                    | 570    | 296    | 21     | 29                      | 1                | 248                                     | 627    | 248    | 0      | 89                      |
|                  |                       | 2                | 490                                    | 490    | 102    | 102    |                         | 2                | 502                                     | 502    | 59     | 59     |                         |
| 43,4             | 80,0                  | 1                | 355                                    | 653    | 355    | 58     | 30                      | 1                | 297                                     | 769    | 297    | 0      | 95                      |
|                  |                       | 2                | 566                                    | 566    | 145    | 145    |                         | 2                | 612                                     | 612    | 69     | 69     |                         |

3.2.2.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

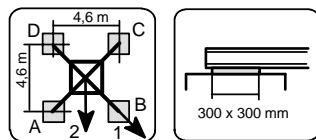


**KRS 8 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 7,4              | 30,0                  | 1                | 210                                    | 373    | 210    | 47     | 19                      | 1                | 101                                     | 393    | 101    | 0      | 43                      |
|                  |                       | 2                | 325                                    | 325    | 95     | 95     |                         | 2                | 288                                     | 288    | 10     | 10     |                         |
| 11,9             | 32,5                  | 1                | 220                                    | 393    | 220    | 47     | 20                      | 1                | 111                                     | 412    | 111    | 0      | 45                      |
|                  |                       | 2                | 342                                    | 342    | 98     | 98     |                         | 2                | 304                                     | 304    | 13     | 13     |                         |
| 16,4             | 35,0                  | 1                | 230                                    | 415    | 230    | 45     | 22                      | 1                | 120                                     | 433    | 120    | 0      | 50                      |
|                  |                       | 2                | 360                                    | 360    | 99     | 99     |                         | 2                | 321                                     | 321    | 15     | 15     |                         |
| 20,9             | 35,0                  | 1                | 233                                    | 431    | 233    | 35     | 23                      | 1                | 115                                     | 457    | 115    | 0      | 65                      |
|                  |                       | 2                | 373                                    | 373    | 93     | 93     |                         | 2                | 333                                     | 333    | 10     | 10     |                         |
| 25,4             | 37,5                  | 1                | 243                                    | 456    | 243    | 30     | 25                      | 1                | 121                                     | 483    | 121    | 0      | 71                      |
|                  |                       | 2                | 394                                    | 394    | 92     | 92     |                         | 2                | 352                                     | 352    | 11     | 11     |                         |
| 29,9             | 42,5                  | 1                | 259                                    | 489    | 259    | 29     | 26                      | 1                | 138                                     | 513    | 138    | 0      | 77                      |
|                  |                       | 2                | 422                                    | 422    | 96     | 96     |                         | 2                | 392                                     | 392    | 96     | 96     |                         |
| 34,4             | 45,0                  | 1                | 269                                    | 518    | 269    | 19     | 27                      | 1                | 142                                     | 546    | 142    | 0      | 83                      |
|                  |                       | 2                | 445                                    | 445    | 92     | 92     |                         | 2                | 443                                     | 443    | 64     | 64     |                         |
| 38,9             | 60,0                  | 1                | 310                                    | 580    | 310    | 39     | 29                      | 1                | 256                                     | 667    | 256    | 0      | 90                      |
|                  |                       | 2                | 501                                    | 501    | 118    | 118    |                         | 2                | 530                                     | 530    | 59     | 59     |                         |
| 43,4             | 82,5                  | 1                | 369                                    | 664    | 369    | 75     | 30                      | 1                | 303                                     | 811    | 303    | 0      | 96                      |
|                  |                       | 2                | 578                                    | 578    | 161    | 161    |                         | 2                | 641                                     | 641    | 68     | 68     |                         |

3.2.3.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

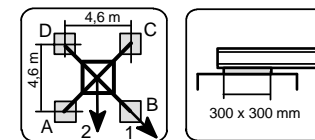


**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 40,0                  | 1                | 217                                    | 396       | 217       | 37        | 20                      | 1                | 160                                     | 305       | 160       | 15        | 43                      |
|                  |                       | 2                | 344                                    | 344       | 89        | 89        |                         | 2                | 263                                     | 263       | 58        | 58        |                         |
| 16,7             | 40,0                  | 1                | 220                                    | 411       | 220       | 29        | 21                      | 1                | 164                                     | 317       | 164       | 11        | 48                      |
|                  |                       | 2                | 355                                    | 355       | 85        | 85        |                         | 2                | 272                                     | 272       | 55        | 55        |                         |
| 21,2             | 40,0                  | 1                | 224                                    | 427       | 224       | 21        | 23                      | 1                | 167                                     | 330       | 167       | 5         | 61                      |
|                  |                       | 2                | 367                                    | 367       | 80        | 80        |                         | 2                | 282                                     | 282       | 52        | 52        |                         |
| 25,7             | 40,0                  | 1                | 227                                    | 444       | 227       | 10        | 24                      | 1                | 168                                     | 346       | 168       | 0         | 68                      |
|                  |                       | 2                | 380                                    | 380       | 74        | 74        |                         | 2                | 293                                     | 293       | 48        | 48        |                         |
| 30,2             | 40,0                  | 1                | 229                                    | 465       | 229       | 0         | 25                      | 1                | 163                                     | 370       | 163       | 0         | 74                      |
|                  |                       | 2                | 395                                    | 395       | 66        | 66        |                         | 2                | 319                                     | 319       | 112       | 112       |                         |
| 34,7             | 50,0                  | 1                | 259                                    | 509       | 259       | 9         | 27                      | 1                | 244                                     | 445       | 244       | 43        | 80                      |
|                  |                       | 2                | 436                                    | 436       | 83        | 83        |                         | 2                | 386                                     | 386       | 102       | 102       |                         |
| 39,2             | 65,0                  | 1                | 300                                    | 569       | 300       | 31        | 28                      | 1                | 285                                     | 546       | 285       | 24        | 86                      |
|                  |                       | 2                | 490                                    | 490       | 110       | 110       |                         | 2                | 470                                     | 470       | 101       | 101       |                         |
| 43,7             | 77,5                  | 1                | 335                                    | 625       | 335       | 44        | 30                      | 1                | 313                                     | 654       | 313       | 0         | 93                      |
|                  |                       | 2                | 540                                    | 540       | 130       | 130       |                         | 2                | 551                                     | 551       | 89        | 89        |                         |
| 48,2             | 92,5                  | 1                | 377                                    | 690       | 377       | 64        | 31                      | 1                | 326                                     | 797       | 326       | 0         | 99                      |
|                  |                       | 2                | 598                                    | 598       | 156       | 156       |                         | 2                | 644                                     | 644       | 80        | 80        |                         |
| 52,7             | 115,0                 | 1                | 438                                    | 775       | 438       | 100       | 33                      | 1                | 369                                     | 953       | 369       | 0         | 105                     |
|                  |                       | 2                | 676                                    | 676       | 199       | 199       |                         | 2                | 760                                     | 760       | 86        | 86        |                         |
| 57,2             | 137,5                 | 1                | 504                                    | 864       | 504       | 144       | 35                      | 1                | 420                                     | 1114      | 420       | 0         | 114                     |
|                  |                       | 2                | 758                                    | 758       | 249       | 249       |                         | 2                | 882                                     | 882       | 95        | 95        |                         |
| 61,7             | 167,5                 | 1                | 586                                    | 973       | 586       | 199       | 37                      | 1                | 493                                     | 1297      | 493       | 0         | 122                     |
|                  |                       | 2                | 859                                    | 859       | 312       | 312       |                         | 2                | 1029                                    | 1029      | 112       | 112       |                         |
| 66,2             | 197,5                 | 1                | 668                                    | 1084      | 668       | 251       | 39                      | 1                | 558                                     | 1495      | 558       | 0         | 130                     |
|                  |                       | 2                | 962                                    | 962       | 373       | 373       |                         | 2                | 1181                                    | 1181      | 124       | 124       |                         |

3.2.3.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

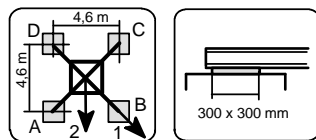


**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 35,0                  | 1                | 212                                    | 381       | 212       | 43        | 20                      | 1                | 148                                     | 293       | 148       | 3         | 43                      |
|                  |                       | 2                | 331                                    | 331       | 92        | 92        |                         | 2                | 250                                     | 250       | 45        | 45        |                         |
| 16,7             | 35,0                  | 1                | 215                                    | 395       | 215       | 36        | 21                      | 1                | 149                                     | 307       | 149       | 0         | 48                      |
|                  |                       | 2                | 343                                    | 343       | 88        | 88        |                         | 2                | 260                                     | 260       | 43        | 43        |                         |
| 21,2             | 35,0                  | 1                | 219                                    | 411       | 219       | 27        | 23                      | 1                | 146                                     | 326       | 146       | 0         | 62                      |
|                  |                       | 2                | 355                                    | 355       | 83        | 83        |                         | 2                | 270                                     | 270       | 39        | 39        |                         |
| 25,7             | 35,0                  | 1                | 222                                    | 429       | 222       | 16        | 24                      | 1                | 142                                     | 348       | 142       | 0         | 68                      |
|                  |                       | 2                | 368                                    | 368       | 77        | 77        |                         | 2                | 281                                     | 281       | 35        | 35        |                         |
| 30,2             | 37,5                  | 1                | 232                                    | 454       | 232       | 10        | 26                      | 1                | 150                                     | 371       | 150       | 0         | 74                      |
|                  |                       | 2                | 389                                    | 389       | 75        | 75        |                         | 2                | 324                                     | 324       | 110       | 110       |                         |
| 34,7             | 47,5                  | 1                | 261                                    | 500       | 261       | 21        | 27                      | 1                | 246                                     | 453       | 246       | 39        | 81                      |
|                  |                       | 2                | 430                                    | 430       | 91        | 91        |                         | 2                | 392                                     | 392       | 99        | 99        |                         |
| 39,2             | 62,5                  | 1                | 302                                    | 561       | 302       | 43        | 28                      | 1                | 287                                     | 554       | 287       | 19        | 87                      |
|                  |                       | 2                | 485                                    | 485       | 119       | 119       |                         | 2                | 476                                     | 476       | 97        | 97        |                         |
| 43,7             | 75,0                  | 1                | 336                                    | 617       | 336       | 56        | 30                      | 1                | 308                                     | 670       | 308       | 0         | 93                      |
|                  |                       | 2                | 535                                    | 535       | 138       | 138       |                         | 2                | 558                                     | 558       | 85        | 85        |                         |
| 48,2             | 92,5                  | 1                | 385                                    | 688       | 385       | 81        | 31                      | 1                | 332                                     | 814       | 332       | 0         | 99                      |
|                  |                       | 2                | 599                                    | 599       | 170       | 170       |                         | 2                | 658                                     | 658       | 82        | 82        |                         |
| 52,7             | 115,0                 | 1                | 446                                    | 774       | 446       | 117       | 33                      | 1                | 374                                     | 973       | 374       | 0         | 106                     |
|                  |                       | 2                | 678                                    | 678       | 213       | 213       |                         | 2                | 775                                     | 775       | 86        | 86        |                         |
| 57,2             | 140,0                 | 1                | 518                                    | 869       | 518       | 166       | 35                      | 1                | 437                                     | 1136      | 437       | 0         | 114                     |
|                  |                       | 2                | 766                                    | 766       | 269       | 269       |                         | 2                | 904                                     | 904       | 101       | 101       |                         |
| 61,7             | 167,5                 | 1                | 593                                    | 972       | 593       | 215       | 37                      | 1                | 496                                     | 1322      | 496       | 0         | 123                     |
|                  |                       | 2                | 861                                    | 861       | 326       | 326       |                         | 2                | 1046                                    | 1046      | 111       | 111       |                         |
| 66,2             | 200,0                 | 1                | 682                                    | 1091      | 682       | 273       | 39                      | 1                | 572                                     | 1523      | 572       | 0         | 131                     |
|                  |                       | 2                | 971                                    | 971       | 393       | 393       |                         | 2                | 1205                                    | 1205      | 128       | 128       |                         |

3.2.3.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

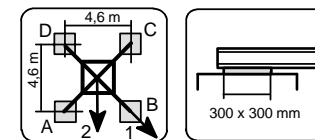


**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 35,0                  | 1                | 215                                    | 392       | 215       | 38        | 20                      | 1                | 148                                     | 293       | 148       | 2         | 44                      |
|                  |                       | 2                | 341                                    | 341       | 90        | 90        |                         | 2                | 251                                     | 251       | 45        | 45        |                         |
| 16,7             | 35,0                  | 1                | 219                                    | 407       | 219       | 31        | 21                      | 1                | 148                                     | 308       | 148       | 0         | 49                      |
|                  |                       | 2                | 352                                    | 352       | 86        | 86        |                         | 2                | 260                                     | 260       | 42        | 42        |                         |
| 21,2             | 35,0                  | 1                | 222                                    | 423       | 222       | 21        | 23                      | 1                | 146                                     | 327       | 146       | 0         | 63                      |
|                  |                       | 2                | 364                                    | 364       | 80        | 80        |                         | 2                | 270                                     | 270       | 39        | 39        |                         |
| 25,7             | 35,0                  | 1                | 226                                    | 441       | 226       | 11        | 24                      | 1                | 142                                     | 349       | 142       | 0         | 69                      |
|                  |                       | 2                | 378                                    | 378       | 74        | 74        |                         | 2                | 296                                     | 296       | 126       | 126       |                         |
| 30,2             | 35,0                  | 1                | 227                                    | 462       | 227       | 0         | 26                      | 1                | 214                                     | 385       | 214       | 43        | 75                      |
|                  |                       | 2                | 393                                    | 393       | 66        | 66        |                         | 2                | 335                                     | 335       | 93        | 93        |                         |
| 34,7             | 42,5                  | 1                | 252                                    | 501       | 252       | 2         | 27                      | 1                | 237                                     | 464       | 237       | 9         | 81                      |
|                  |                       | 2                | 428                                    | 428       | 75        | 75        |                         | 2                | 397                                     | 397       | 76        | 76        |                         |
| 39,2             | 57,5                  | 1                | 293                                    | 562       | 293       | 24        | 29                      | 1                | 266                                     | 578       | 266       | 0         | 88                      |
|                  |                       | 2                | 483                                    | 483       | 102       | 102       |                         | 2                | 482                                     | 482       | 73        | 73        |                         |
| 43,7             | 72,5                  | 1                | 334                                    | 625       | 334       | 42        | 30                      | 1                | 280                                     | 714       | 280       | 0         | 94                      |
|                  |                       | 2                | 540                                    | 540       | 128       | 128       |                         | 2                | 571                                     | 571       | 66        | 66        |                         |
| 48,2             | 95,0                  | 1                | 394                                    | 709       | 394       | 80        | 31                      | 1                | 328                                     | 861       | 328       | 0         | 100                     |
|                  |                       | 2                | 617                                    | 617       | 172       | 172       |                         | 2                | 684                                     | 684       | 75        | 75        |                         |
| 52,7             | 122,5                 | 1                | 468                                    | 808       | 468       | 128       | 33                      | 1                | 394                                     | 1023      | 394       | 0         | 107                     |
|                  |                       | 2                | 708                                    | 708       | 227       | 227       |                         | 2                | 814                                     | 814       | 91        | 91        |                         |
| 57,2             | 145,0                 | 1                | 534                                    | 897       | 534       | 170       | 35                      | 1                | 444                                     | 1187      | 444       | 0         | 115                     |
|                  |                       | 2                | 790                                    | 790       | 277       | 277       |                         | 2                | 938                                     | 938       | 99        | 99        |                         |
| 61,7             | 175,0                 | 1                | 616                                    | 1007      | 616       | 224       | 37                      | 1                | 514                                     | 1375      | 514       | 0         | 123                     |
|                  |                       | 2                | 892                                    | 892       | 339       | 339       |                         | 2                | 1087                                    | 1087      | 114       | 114       |                         |
| 66,2             | 207,5                 | 1                | 704                                    | 1126      | 704       | 282       | 39                      | 1                | 588                                     | 1579      | 588       | 0         | 131                     |
|                  |                       | 2                | 1002                                   | 1002      | 406       | 406       |                         | 2                | 1247                                    | 1247      | 131       | 131       |                         |

3.2.3.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

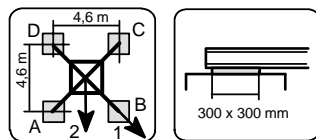


**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 32,5                  | 1                | 217                                    | 395       | 217       | 39        | 20                      | 1                | 164                                     | 305       | 164       | 23        | 45                      |
|                  |                       | 2                | 343                                    | 343       | 91        | 91        |                         | 2                | 263                                     | 263       | 64        | 64        |                         |
| 16,7             | 32,5                  | 1                | 220                                    | 410       | 220       | 31        | 22                      | 1                | 167                                     | 318       | 167       | 17        | 49                      |
|                  |                       | 2                | 354                                    | 354       | 86        | 86        |                         | 2                | 274                                     | 274       | 61        | 61        |                         |
| 21,2             | 32,5                  | 1                | 224                                    | 426       | 224       | 21        | 23                      | 1                | 171                                     | 333       | 171       | 9         | 63                      |
|                  |                       | 2                | 367                                    | 367       | 81        | 81        |                         | 2                | 285                                     | 285       | 56        | 56        |                         |
| 25,7             | 32,5                  | 1                | 227                                    | 444       | 227       | 10        | 24                      | 1                | 128                                     | 351       | 128       | 0         | 70                      |
|                  |                       | 2                | 381                                    | 381       | 74        | 74        |                         | 2                | 305                                     | 305       | 119       | 119       |                         |
| 30,2             | 32,5                  | 1                | 228                                    | 467       | 228       | 0         | 26                      | 1                | 216                                     | 399       | 216       | 33        | 76                      |
|                  |                       | 2                | 396                                    | 396       | 66        | 66        |                         | 2                | 345                                     | 345       | 86        | 86        |                         |
| 34,7             | 40,0                  | 1                | 253                                    | 505       | 253       | 1         | 27                      | 1                | 236                                     | 480       | 236       | 0         | 82                      |
|                  |                       | 2                | 431                                    | 431       | 75        | 75        |                         | 2                | 408                                     | 408       | 68        | 68        |                         |
| 39,2             | 52,5                  | 1                | 288                                    | 560       | 288       | 16        | 29                      | 1                | 242                                     | 606       | 242       | 0         | 88                      |
|                  |                       | 2                | 480                                    | 480       | 95        | 95        |                         | 2                | 487                                     | 487       | 58        | 58        |                         |
| 43,7             | 75,0                  | 1                | 348                                    | 643       | 348       | 53        | 30                      | 1                | 293                                     | 745       | 293       | 0         | 95                      |
|                  |                       | 2                | 556                                    | 556       | 139       | 139       |                         | 2                | 596                                     | 596       | 69        | 69        |                         |
| 48,2             | 97,5                  | 1                | 408                                    | 727       | 408       | 89        | 32                      | 1                | 339                                     | 895       | 339       | 0         | 101                     |
|                  |                       | 2                | 634                                    | 634       | 183       | 183       |                         | 2                | 710                                     | 710       | 77        | 77        |                         |
| 52,7             | 125,0                 | 1                | 482                                    | 827       | 482       | 136       | 33                      | 1                | 403                                     | 1060      | 403       | 0         | 108                     |
|                  |                       | 2                | 726                                    | 726       | 238       | 238       |                         | 2                | 841                                     | 841       | 92        | 92        |                         |
| 57,2             | 147,5                 | 1                | 548                                    | 916       | 548       | 179       | 36                      | 1                | 452                                     | 1226      | 452       | 0         | 116                     |
|                  |                       | 2                | 808                                    | 808       | 287       | 287       |                         | 2                | 966                                     | 966       | 99        | 99        |                         |
| 61,7             | 177,5                 | 1                | 630                                    | 1027      | 630       | 232       | 38                      | 1                | 520                                     | 1418      | 520       | 0         | 124                     |
|                  |                       | 2                | 911                                    | 911       | 349       | 349       |                         | 2                | 1116                                    | 1116      | 113       | 113       |                         |
| 66,2             | 210,0                 | 1                | 718                                    | 1147      | 718       | 289       | 39                      | 1                | 593                                     | 1626      | 593       | 0         | 132                     |
|                  |                       | 2                | 1021                                   | 1021      | 415       | 415       |                         | 2                | 1278                                    | 1278      | 128       | 128       |                         |

3.2.3.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

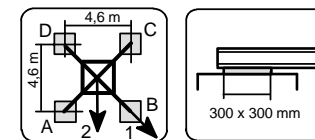


**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           |                  | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           |                 | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|------------------|-------------------------|---|-----------|-----------|-----------|-----------------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           | Auslegerstellung |                         | Ecklasten                               |           |           |           | Horizontalkraft |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                  |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                 |                         |
| 12,2             | 32,5                  | 1                | 220                                    | 399       | 220       | 41        | 20               | 1                       | 164                                     | 324       | 164       | 5         | 45              |                         |
|                  |                       | 2                | 346                                    | 346       | 93        | 93        |                  | 2                       | 277                                     | 277       | 52        | 52        |                 |                         |
| 16,7             | 32,5                  | 1                | 223                                    | 414       | 223       | 33        | 22               | 1                       | 166                                     | 340       | 166       | 0         | 50              |                         |
|                  |                       | 2                | 358                                    | 358       | 88        | 88        |                  | 2                       | 288                                     | 288       | 48        | 48        |                 |                         |
| 21,2             | 32,5                  | 1                | 227                                    | 430       | 227       | 23        | 23               | 1                       | 161                                     | 362       | 161       | 0         | 64              |                         |
|                  |                       | 2                | 371                                    | 371       | 83        | 83        |                  | 2                       | 299                                     | 299       | 43        | 43        |                 |                         |
| 25,7             | 32,5                  | 1                | 230                                    | 448       | 230       | 12        | 25               | 1                       | 156                                     | 388       | 156       | 0         | 70              |                         |
|                  |                       | 2                | 384                                    | 384       | 76        | 76        |                  | 2                       | 316                                     | 316       | 114       | 114       |                 |                         |
| 30,2             | 32,5                  | 1                | 232                                    | 470       | 232       | 0         | 26               | 1                       | 148                                     | 416       | 148       | 0         | 77              |                         |
|                  |                       | 2                | 400                                    | 400       | 67        | 67        |                  | 2                       | 356                                     | 356       | 81        | 81        |                 |                         |
| 34,7             | 37,5                  | 1                | 246                                    | 507       | 246       | 0         | 27               | 1                       | 217                                     | 505       | 217       | 0         | 83              |                         |
|                  |                       | 2                | 429                                    | 429       | 70        | 70        |                  | 2                       | 413                                     | 413       | 56        | 56        |                 |                         |
| 39,2             | 55,0                  | 1                | 297                                    | 571       | 297       | 23        | 29               | 1                       | 247                                     | 633       | 247       | 0         | 89              |                         |
|                  |                       | 2                | 491                                    | 491       | 103       | 103       |                  | 2                       | 505                                     | 505       | 58        | 58        |                 |                         |
| 43,7             | 77,5                  | 1                | 357                                    | 654       | 357       | 59        | 30               | 1                       | 296                                     | 773       | 296       | 0         | 95              |                         |
|                  |                       | 2                | 567                                    | 567       | 146       | 146       |                  | 2                       | 615                                     | 615       | 68        | 68        |                 |                         |
| 48,2             | 102,5                 | 1                | 424                                    | 745       | 424       | 102       | 32               | 1                       | 355                                     | 925       | 355       | 0         | 102             |                         |
|                  |                       | 2                | 651                                    | 651       | 196       | 196       |                  | 2                       | 736                                     | 736       | 82        | 82        |                 |                         |
| 52,7             | 127,5                 | 1                | 491                                    | 839       | 491       | 142       | 33               | 1                       | 405                                     | 1092      | 405       | 0         | 108             |                         |
|                  |                       | 2                | 737                                    | 737       | 244       | 244       |                  | 2                       | 862                                     | 862       | 90        | 90        |                 |                         |
| 57,2             | 152,5                 | 1                | 563                                    | 935       | 563       | 191       | 36               | 1                       | 466                                     | 1260      | 466       | 0         | 117             |                         |
|                  |                       | 2                | 826                                    | 826       | 300       | 300       |                  | 2                       | 993                                     | 993       | 102       | 102       |                 |                         |
| 61,7             | 182,5                 | 1                | 645                                    | 1046      | 645       | 244       | 38               | 1                       | 533                                     | 1454      | 533       | 0         | 125             |                         |
|                  |                       | 2                | 928                                    | 928       | 361       | 361       |                  | 2                       | 1144                                    | 1144      | 116       | 116       |                 |                         |
| 66,2             | 215,0                 | 1                | 733                                    | 1166      | 733       | 300       | 40               | 1                       | 604                                     | 1664      | 604       | 0         | 133             |                         |
|                  |                       | 2                | 1039                                   | 1039      | 427       | 427       |                  | 2                       | 1307                                    | 1307      | 130       | 130       |                 |                         |

3.2.3.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk



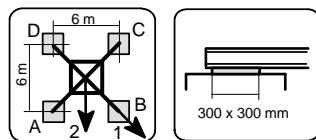
**KR 10 - 46** Eckabstand 4,6 m x 4,6 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           |                  | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           |                 | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|------------------|-------------------------|---|-----------|-----------|-----------|-----------------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           | Auslegerstellung |                         | Ecklasten                               |           |           |           | Horizontalkraft |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                  |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                 |                         |
| 12,2             | 30,0                  | 1                | 221                                    | 395       | 221       | 47        | 21               | 1                       | 113                                     | 413       | 113       | 0         | 46              |                         |
|                  |                       | 2                | 344                                    | 344       | 98        | 98        |                  | 2                       | 306                                     | 306       | 13        | 13        |                 |                         |
| 16,7             | 30,0                  | 1                | 225                                    | 410       | 225       | 39        | 22               | 1                       | 109                                     | 434       | 109       | 0         | 50              |                         |
|                  |                       | 2                | 356                                    | 356       | 93        | 93        |                  | 2                       | 317                                     | 317       | 10        | 10        |                 |                         |
| 21,2             | 32,5                  | 1                | 234                                    | 433       | 234       | 36        | 23               | 1                       | 117                                     | 458       | 117       | 0         | 65              |                         |
|                  |                       | 2                | 375                                    | 375       | 94        | 94        |                  | 2                       | 335                                     | 335       | 11        | 11        |                 |                         |
| 25,7             | 35,0                  | 1                | 244                                    | 458       | 244       | 30        | 25               | 1                       | 123                                     | 484       | 123       | 0         | 71              |                         |
|                  |                       | 2                | 395                                    | 395       | 93        | 93        |                  | 2                       | 354                                     | 354       | 11        | 11        |                 |                         |
| 30,2             | 40,0                  | 1                | 260                                    | 491       | 260       | 30        | 26               | 1                       | 140                                     | 514       | 140       | 0         | 77              |                         |
|                  |                       | 2                | 423                                    | 423       | 97        | 97        |                  | 2                       | 395                                     | 395       | 95        | 95        |                 |                         |
| 34,7             | 42,5                  | 1                | 270                                    | 519       | 270       | 20        | 28               | 1                       | 143                                     | 547       | 143       | 0         | 84              |                         |
|                  |                       | 2                | 446                                    | 446       | 93        | 93        |                  | 2                       | 446                                     | 446       | 63        | 63        |                 |                         |
| 39,2             | 57,5                  | 1                | 311                                    | 581       | 311       | 40        | 29               | 1                       | 256                                     | 672       | 256       | 0         | 90              |                         |
|                  |                       | 2                | 502                                    | 502       | 120       | 120       |                  | 2                       | 533                                     | 533       | 58        | 58        |                 |                         |
| 43,7             | 80,0                  | 1                | 371                                    | 665       | 371       | 76        | 30               | 1                       | 303                                     | 816       | 303       | 0         | 96              |                         |
|                  |                       | 2                | 579                                    | 579       | 163       | 163       |                  | 2                       | 644                                     | 644       | 67        | 67        |                 |                         |
| 48,2             | 105,0                 | 1                | 438                                    | 757       | 438       | 119       | 32               | 1                       | 360                                     | 971       | 360       | 0         | 103             |                         |
|                  |                       | 2                | 663                                    | 663       | 212       | 212       |                  | 2                       | 766                                     | 766       | 79        | 79        |                 |                         |
| 52,7             | 132,5                 | 1                | 511                                    | 857       | 511       | 165       | 33               | 1                       | 421                                     | 1142      | 421       | 0         | 109             |                         |
|                  |                       | 2                | 756                                    | 756       | 266       | 266       |                  | 2                       | 900                                     | 900       | 92        | 92        |                 |                         |
| 57,2             | 157,5                 | 1                | 583                                    | 953       | 583       | 213       | 36               | 1                       | 480                                     | 1312      | 480       | 0         | 118             |                         |
|                  |                       | 2                | 845                                    | 845       | 321       | 321       |                  | 2                       | 1032                                    | 1032      | 104       | 104       |                 |                         |
| 61,7             | 187,5                 | 1                | 665                                    | 1065      | 665       | 265       | 38               | 1                       | 546                                     | 1509      | 546       | 0         | 126             |                         |
|                  |                       | 2                | 948                                    | 948       | 382       | 382       |                  | 2                       | 1184                                    | 1184      | 117       | 117       |                 |                         |
| 66,2             | 222,5                 | 1                | 760                                    | 1192      | 760       | 327       | 40               | 1                       | 627                                     | 1724      | 627       | 0         | 134             |                         |
|                  |                       | 2                | 1066                                   | 1066      | 454       | 454       |                  | 2                       | 1354                                    | 1354      | 135       | 135       |                 |                         |



3.2.4.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

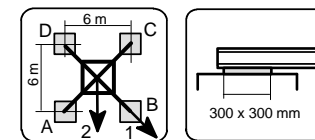


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 17,5                  | 1                | 167                                    | 304       | 167       | 29        | 20                      | 1                | 109                                     | 222       | 109       | 0         | 44                      |
|                  |                       | 2                | 264                                    | 264       | 69        | 69        |                         | 2                | 189                                     | 189       | 31        | 31        |                         |
| 16,7             | 17,5                  | 1                | 171                                    | 318       | 171       | 25        | 22                      | 1                | 112                                     | 235       | 112       | 0         | 49                      |
|                  |                       | 2                | 275                                    | 275       | 68        | 68        |                         | 2                | 198                                     | 198       | 32        | 32        |                         |
| 21,2             | 17,5                  | 1                | 175                                    | 330       | 175       | 19        | 23                      | 1                | 112                                     | 250       | 112       | 0         | 63                      |
|                  |                       | 2                | 285                                    | 285       | 65        | 65        |                         | 2                | 207                                     | 207       | 30        | 30        |                         |
| 25,7             | 17,5                  | 1                | 178                                    | 344       | 178       | 13        | 25                      | 1                | 111                                     | 266       | 111       | 0         | 69                      |
|                  |                       | 2                | 296                                    | 296       | 61        | 61        |                         | 2                | 216                                     | 216       | 111       | 111       |                         |
| 30,2             | 17,5                  | 1                | 182                                    | 359       | 182       | 4         | 26                      | 1                | 109                                     | 284       | 109       | 0         | 75                      |
|                  |                       | 2                | 307                                    | 307       | 56        | 56        |                         | 2                | 246                                     | 246       | 87        | 87        |                         |
| 34,7             | 25,0                  | 1                | 204                                    | 395       | 204       | 14        | 27                      | 1                | 189                                     | 343       | 189       | 35        | 81                      |
|                  |                       | 2                | 339                                    | 339       | 70        | 70        |                         | 2                | 298                                     | 298       | 80        | 80        |                         |
| 39,2             | 35,0                  | 1                | 233                                    | 438       | 233       | 28        | 29                      | 1                | 218                                     | 417       | 218       | 18        | 88                      |
|                  |                       | 2                | 378                                    | 378       | 88        | 88        |                         | 2                | 359                                     | 359       | 77        | 77        |                         |
| 43,7             | 45,0                  | 1                | 261                                    | 482       | 261       | 40        | 30                      | 1                | 243                                     | 499       | 243       | 0         | 94                      |
|                  |                       | 2                | 417                                    | 417       | 105       | 105       |                         | 2                | 423                                     | 423       | 70        | 70        |                         |
| 48,2             | 57,5                  | 1                | 296                                    | 534       | 296       | 57        | 32                      | 1                | 258                                     | 609       | 258       | 0         | 100                     |
|                  |                       | 2                | 465                                    | 465       | 127       | 127       |                         | 2                | 496                                     | 496       | 66        | 66        |                         |
| 52,7             | 72,5                  | 1                | 338                                    | 595       | 338       | 81        | 33                      | 1                | 282                                     | 727       | 282       | 0         | 107                     |
|                  |                       | 2                | 520                                    | 520       | 156       | 156       |                         | 2                | 580                                     | 580       | 66        | 66        |                         |
| 57,2             | 92,5                  | 1                | 395                                    | 671       | 395       | 119       | 35                      | 1                | 333                                     | 854       | 333       | 0         | 114                     |
|                  |                       | 2                | 590                                    | 590       | 200       | 200       |                         | 2                | 682                                     | 682       | 78        | 78        |                         |
| 61,7             | 112,5                 | 1                | 452                                    | 749       | 452       | 155       | 37                      | 1                | 377                                     | 994       | 377       | 0         | 122                     |
|                  |                       | 2                | 662                                    | 662       | 242       | 242       |                         | 2                | 789                                     | 789       | 86        | 86        |                         |
| 66,2             | 135,0                 | 1                | 515                                    | 835       | 515       | 196       | 39                      | 1                | 428                                     | 1146      | 428       | 0         | 130                     |
|                  |                       | 2                | 741                                    | 741       | 290       | 290       |                         | 2                | 906                                     | 906       | 95        | 95        |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.2.4.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

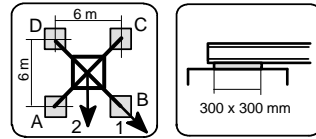


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 12,5                  | 1                | 162                                    | 291       | 162       | 32        | 20                      | 1                | 84                                      | 223       | 84        | 0         | 44                      |
|                  |                       | 2                | 253                                    | 253       | 70        | 70        |                         | 2                | 176                                     | 176       | 19        | 19        |                         |
| 16,7             | 12,5                  | 1                | 167                                    | 305       | 167       | 29        | 22                      | 1                | 87                                      | 236       | 87        | 0         | 49                      |
|                  |                       | 2                | 264                                    | 264       | 69        | 69        |                         | 2                | 186                                     | 186       | 19        | 19        |                         |
| 21,2             | 12,5                  | 1                | 170                                    | 317       | 170       | 23        | 23                      | 1                | 87                                      | 250       | 87        | 0         | 63                      |
|                  |                       | 2                | 274                                    | 274       | 66        | 66        |                         | 2                | 194                                     | 194       | 17        | 17        |                         |
| 25,7             | 12,5                  | 1                | 174                                    | 331       | 174       | 16        | 25                      | 1                | 86                                      | 267       | 86        | 0         | 69                      |
|                  |                       | 2                | 285                                    | 285       | 62        | 62        |                         | 2                | 214                                     | 214       | 103       | 103       |                         |
| 30,2             | 12,5                  | 1                | 177                                    | 347       | 177       | 8         | 26                      | 1                | 83                                      | 285       | 83        | 0         | 76                      |
|                  |                       | 2                | 297                                    | 297       | 57        | 57        |                         | 2                | 245                                     | 245       | 80        | 80        |                         |
| 34,7             | 22,5                  | 1                | 206                                    | 388       | 206       | 23        | 28                      | 1                | 191                                     | 349       | 191       | 32        | 82                      |
|                  |                       | 2                | 335                                    | 335       | 77        | 77        |                         | 2                | 303                                     | 303       | 79        | 79        |                         |
| 39,2             | 32,5                  | 1                | 234                                    | 431       | 234       | 37        | 29                      | 1                | 219                                     | 424       | 219       | 15        | 88                      |
|                  |                       | 2                | 374                                    | 374       | 95        | 95        |                         | 2                | 364                                     | 364       | 74        | 74        |                         |
| 43,7             | 42,5                  | 1                | 263                                    | 476       | 263       | 49        | 30                      | 1                | 240                                     | 511       | 240       | 0         | 94                      |
|                  |                       | 2                | 414                                    | 414       | 112       | 112       |                         | 2                | 428                                     | 428       | 67        | 67        |                         |
| 48,2             | 55,0                  | 1                | 297                                    | 529       | 297       | 66        | 32                      | 1                | 254                                     | 622       | 254       | 0         | 101                     |
|                  |                       | 2                | 461                                    | 461       | 134       | 134       |                         | 2                | 502                                     | 502       | 63        | 63        |                         |
| 52,7             | 72,5                  | 1                | 346                                    | 596       | 346       | 96        | 33                      | 1                | 290                                     | 742       | 290       | 0         | 107                     |
|                  |                       | 2                | 523                                    | 523       | 169       | 169       |                         | 2                | 593                                     | 593       | 68        | 68        |                         |
| 57,2             | 90,0                  | 1                | 397                                    | 666       | 397       | 127       | 35                      | 1                | 328                                     | 871       | 328       | 0         | 114                     |
|                  |                       | 2                | 587                                    | 587       | 206       | 206       |                         | 2                | 689                                     | 689       | 74        | 74        |                         |
| 61,7             | 112,5                 | 1                | 460                                    | 750       | 460       | 170       | 37                      | 1                | 383                                     | 1013      | 383       | 0         | 123                     |
|                  |                       | 2                | 665                                    | 665       | 255       | 255       |                         | 2                | 803                                     | 803       | 87        | 87        |                         |
| 66,2             | 135,0                 | 1                | 523                                    | 837       | 523       | 210       | 39                      | 1                | 433                                     | 1168      | 433       | 0         | 131                     |
|                  |                       | 2                | 745                                    | 745       | 302       | 302       |                         | 2                | 921                                     | 921       | 95        | 95        |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.2.4.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

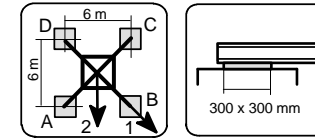


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |  |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|--|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |  |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |  |
| 12,2             | 12,5                  | 1                | 165                                    | 301       | 165       | 29        | 20                      | 1                | 83                                      | 223       | 83        | 0         | 45                      |  |
|                  |                       | 2                | 261                                    | 261       | 69        | 69        |                         | 2                | 177                                     | 177       | 19        | 19        |                         |  |
| 16,7             | 12,5                  | 1                | 170                                    | 314       | 170       | 26        | 22                      | 1                | 87                                      | 237       | 87        | 0         | 50                      |  |
|                  |                       | 2                | 272                                    | 272       | 68        | 68        |                         | 2                | 186                                     | 186       | 19        | 19        |                         |  |
| 21,2             | 12,5                  | 1                | 174                                    | 327       | 174       | 20        | 23                      | 1                | 86                                      | 251       | 86        | 0         | 64                      |  |
|                  |                       | 2                | 282                                    | 282       | 65        | 65        |                         | 2                | 199                                     | 199       | 118       | 118       |                         |  |
| 25,7             | 12,5                  | 1                | 177                                    | 342       | 177       | 13        | 25                      | 1                | 85                                      | 268       | 85        | 0         | 70                      |  |
|                  |                       | 2                | 293                                    | 293       | 61        | 61        |                         | 2                | 228                                     | 228       | 97        | 97        |                         |  |
| 30,2             | 12,5                  | 1                | 181                                    | 357       | 181       | 4         | 26                      | 1                | 166                                     | 297       | 166       | 34        | 76                      |  |
|                  |                       | 2                | 305                                    | 305       | 56        | 56        |                         | 2                | 258                                     | 258       | 73        | 73        |                         |  |
| 34,7             | 17,5                  | 1                | 197                                    | 386       | 197       | 7         | 28                      | 1                | 182                                     | 355       | 182       | 8         | 83                      |  |
|                  |                       | 2                | 331                                    | 331       | 62        | 62        |                         | 2                | 305                                     | 305       | 59        | 59        |                         |  |
| 39,2             | 27,5                  | 1                | 225                                    | 430       | 225       | 20        | 29                      | 1                | 200                                     | 441       | 200       | 0         | 89                      |  |
|                  |                       | 2                | 370                                    | 370       | 80        | 80        |                         | 2                | 366                                     | 366       | 54        | 54        |                         |  |
| 43,7             | 40,0                  | 1                | 260                                    | 481       | 260       | 39        | 31                      | 1                | 218                                     | 544       | 218       | 0         | 95                      |  |
|                  |                       | 2                | 416                                    | 416       | 103       | 103       |                         | 2                | 437                                     | 437       | 52        | 52        |                         |  |
| 48,2             | 57,5                  | 1                | 307                                    | 547       | 307       | 67        | 32                      | 1                | 256                                     | 657       | 256       | 0         | 101                     |  |
|                  |                       | 2                | 477                                    | 477       | 138       | 138       |                         | 2                | 525                                     | 525       | 60        | 60        |                         |  |
| 52,7             | 77,5                  | 1                | 362                                    | 621       | 362       | 103       | 34                      | 1                | 303                                     | 780       | 303       | 0         | 108                     |  |
|                  |                       | 2                | 545                                    | 545       | 179       | 179       |                         | 2                | 622                                     | 622       | 71        | 71        |                         |  |
| 57,2             | 95,0                  | 1                | 413                                    | 691       | 413       | 134       | 35                      | 1                | 340                                     | 910       | 340       | 0         | 115                     |  |
|                  |                       | 2                | 609                                    | 609       | 216       | 216       |                         | 2                | 719                                     | 719       | 76        | 76        |                         |  |
| 61,7             | 117,5                 | 1                | 476                                    | 776       | 476       | 176       | 37                      | 1                | 395                                     | 1054      | 395       | 0         | 123                     |  |
|                  |                       | 2                | 688                                    | 688       | 264       | 264       |                         | 2                | 834                                     | 834       | 88        | 88        |                         |  |
| 66,2             | 140,0                 | 1                | 539                                    | 863       | 539       | 216       | 39                      | 1                | 443                                     | 1211      | 443       | 0         | 131                     |  |
|                  |                       | 2                | 768                                    | 768       | 310       | 310       |                         | 2                | 952                                     | 952       | 96        | 96        |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |

3.2.4.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

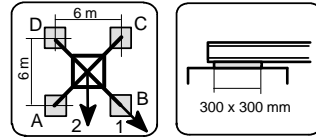


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |  |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|--|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |  |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |  |
| 12,2             | 10,0                  | 1                | 167                                    | 303       | 167       | 30        | 21                      | 1                | 71                                      | 224       | 71        | 0         | 46                      |  |
|                  |                       | 2                | 263                                    | 263       | 70        | 70        |                         | 2                | 190                                     | 190       | 37        | 37        |                         |  |
| 16,7             | 10,0                  | 1                | 172                                    | 317       | 172       | 26        | 22                      | 1                | 74                                      | 237       | 74        | 0         | 50                      |  |
|                  |                       | 2                | 274                                    | 274       | 69        | 69        |                         | 2                | 201                                     | 201       | 37        | 37        |                         |  |
| 21,2             | 10,0                  | 1                | 175                                    | 330       | 175       | 20        | 24                      | 1                | 73                                      | 252       | 73        | 0         | 65                      |  |
|                  |                       | 2                | 285                                    | 285       | 66        | 66        |                         | 2                | 210                                     | 210       | 34        | 34        |                         |  |
| 25,7             | 10,0                  | 1                | 179                                    | 345       | 179       | 13        | 25                      | 1                | 72                                      | 269       | 72        | 0         | 71                      |  |
|                  |                       | 2                | 296                                    | 296       | 61        | 61        |                         | 2                | 235                                     | 235       | 92        | 92        |                         |  |
| 30,2             | 12,5                  | 1                | 188                                    | 366       | 188       | 10        | 27                      | 1                | 173                                     | 314       | 173       | 33        | 77                      |  |
|                  |                       | 2                | 314                                    | 314       | 62        | 62        |                         | 2                | 273                                     | 273       | 74        | 74        |                         |  |
| 34,7             | 15,0                  | 1                | 198                                    | 390       | 198       | 6         | 28                      | 1                | 183                                     | 368       | 183       | 0         | 83                      |  |
|                  |                       | 2                | 334                                    | 334       | 63        | 63        |                         | 2                | 313                                     | 313       | 53        | 53        |                         |  |
| 39,2             | 25,0                  | 1                | 227                                    | 434       | 227       | 20        | 29                      | 1                | 192                                     | 463       | 192       | 0         | 90                      |  |
|                  |                       | 2                | 373                                    | 373       | 80        | 80        |                         | 2                | 375                                     | 375       | 48        | 48        |                         |  |
| 43,7             | 40,0                  | 1                | 268                                    | 492       | 268       | 44        | 31                      | 1                | 221                                     | 568       | 221       | 0         | 96                      |  |
|                  |                       | 2                | 426                                    | 426       | 109       | 109       |                         | 2                | 453                                     | 453       | 52        | 52        |                         |  |
| 48,2             | 57,5                  | 1                | 315                                    | 558       | 315       | 72        | 32                      | 1                | 258                                     | 683       | 258       | 0         | 102                     |  |
|                  |                       | 2                | 487                                    | 487       | 143       | 143       |                         | 2                | 541                                     | 541       | 58        | 58        |                         |  |
| 52,7             | 77,5                  | 1                | 369                                    | 632       | 369       | 107       | 34                      | 1                | 305                                     | 808       | 305       | 0         | 109                     |  |
|                  |                       | 2                | 555                                    | 555       | 184       | 184       |                         | 2                | 640                                     | 640       | 69        | 69        |                         |  |
| 57,2             | 97,5                  | 1                | 427                                    | 709       | 427       | 144       | 36                      | 1                | 353                                     | 940       | 353       | 0         | 116                     |  |
|                  |                       | 2                | 626                                    | 626       | 227       | 227       |                         | 2                | 744                                     | 744       | 79        | 79        |                         |  |
| 61,7             | 120,0                 | 1                | 490                                    | 795       | 490       | 185       | 38                      | 1                | 406                                     | 1087      | 406       | 0         | 124                     |  |
|                  |                       | 2                | 705                                    | 705       | 274       | 274       |                         | 2                | 859                                     | 859       | 91        | 91        |                         |  |
| 66,2             | 145,0                 | 1                | 559                                    | 888       | 559       | 231       | 39                      | 1                | 466                                     | 1246      | 466       | 0         | 132                     |  |
|                  |                       | 2                | 792                                    | 792       | 327       | 327       |                         | 2                | 985                                     | 985       | 104       | 104       |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  |

3.2.4.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

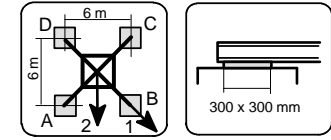


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 10,0                  | 1                | 169                                    | 307       | 169       | 32        | 21                      | 1                | 106                                     | 245       | 106       | 0         | 46                      |
|                  |                       | 2                | 267                                    | 267       | 72        | 72        |                         | 2                | 201                                     | 201       | 28        | 28        |                         |
| 16,7             | 10,0                  | 1                | 174                                    | 320       | 174       | 28        | 22                      | 1                | 108                                     | 261       | 108       | 0         | 51                      |
|                  |                       | 2                | 278                                    | 278       | 71        | 71        |                         | 2                | 211                                     | 211       | 27        | 27        |                         |
| 21,2             | 10,0                  | 1                | 178                                    | 334       | 178       | 22        | 24                      | 1                | 106                                     | 278       | 106       | 0         | 65                      |
|                  |                       | 2                | 288                                    | 288       | 68        | 68        |                         | 2                | 221                                     | 221       | 24        | 24        |                         |
| 25,7             | 10,0                  | 1                | 181                                    | 348       | 181       | 15        | 25                      | 1                | 104                                     | 297       | 104       | 0         | 72                      |
|                  |                       | 2                | 299                                    | 299       | 63        | 63        |                         | 2                | 244                                     | 244       | 89        | 89        |                         |
| 30,2             | 12,5                  | 1                | 191                                    | 370       | 191       | 12        | 27                      | 1                | 176                                     | 325       | 176       | 27        | 78                      |
|                  |                       | 2                | 318                                    | 318       | 64        | 64        |                         | 2                | 282                                     | 282       | 71        | 71        |                         |
| 34,7             | 12,5                  | 1                | 195                                    | 388       | 195       | 2         | 28                      | 1                | 166                                     | 386       | 166       | 0         | 84                      |
|                  |                       | 2                | 331                                    | 331       | 58        | 58        |                         | 2                | 316                                     | 316       | 43        | 43        |                         |
| 39,2             | 25,0                  | 1                | 229                                    | 438       | 229       | 21        | 30                      | 1                | 187                                     | 483       | 187       | 0         | 90                      |
|                  |                       | 2                | 377                                    | 377       | 82        | 82        |                         | 2                | 385                                     | 385       | 44        | 44        |                         |
| 43,7             | 42,5                  | 1                | 277                                    | 502       | 277       | 51        | 31                      | 1                | 229                                     | 589       | 229       | 0         | 97                      |
|                  |                       | 2                | 436                                    | 436       | 117       | 117       |                         | 2                | 470                                     | 470       | 53        | 53        |                         |
| 48,2             | 60,0                  | 1                | 324                                    | 569       | 324       | 79        | 32                      | 1                | 265                                     | 706       | 265       | 0         | 103                     |
|                  |                       | 2                | 497                                    | 497       | 151       | 151       |                         | 2                | 558                                     | 558       | 59        | 59        |                         |
| 52,7             | 80,0                  | 1                | 378                                    | 643       | 378       | 113       | 34                      | 1                | 311                                     | 832       | 311       | 0         | 109                     |
|                  |                       | 2                | 566                                    | 566       | 191       | 191       |                         | 2                | 658                                     | 658       | 69        | 69        |                         |
| 57,2             | 100,0                 | 1                | 436                                    | 721       | 436       | 150       | 36                      | 1                | 358                                     | 966       | 358       | 0         | 117                     |
|                  |                       | 2                | 637                                    | 637       | 234       | 234       |                         | 2                | 762                                     | 762       | 79        | 79        |                         |
| 61,7             | 122,5                 | 1                | 499                                    | 806       | 499       | 191       | 38                      | 1                | 410                                     | 1114      | 410       | 0         | 125                     |
|                  |                       | 2                | 716                                    | 716       | 281       | 281       |                         | 2                | 878                                     | 878       | 90        | 90        |                         |
| 66,2             | 147,5                 | 1                | 568                                    | 900       | 568       | 236       | 40                      | 1                | 469                                     | 1276      | 469       | 0         | 133                     |
|                  |                       | 2                | 803                                    | 803       | 334       | 334       |                         | 2                | 1005                                    | 1005      | 102       | 102       |                         |

3.2.4.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

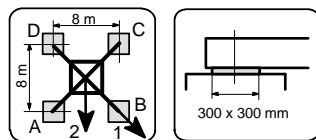


**KR 10 - 60** Eckabstand 6,0 m x 6,0 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 12,2             | 12,5                  | 1                | 184                                    | 317       | 184       | 50        | 21                      | 1                | 85                                      | 317       | 85        | 0         | 47                      |
|                  |                       | 2                | 278                                    | 278       | 89        | 89        |                         | 2                | 234                                     | 234       | 10        | 10        |                         |
| 16,7             | 12,5                  | 1                | 188                                    | 331       | 188       | 46        | 23                      | 1                | 87                                      | 333       | 87        | 0         | 51                      |
|                  |                       | 2                | 289                                    | 289       | 88        | 88        |                         | 2                | 245                                     | 245       | 9         | 9         |                         |
| 21,2             | 12,5                  | 1                | 192                                    | 344       | 192       | 40        | 24                      | 1                | 85                                      | 351       | 85        | 0         | 66                      |
|                  |                       | 2                | 299                                    | 299       | 84        | 84        |                         | 2                | 255                                     | 255       | 6         | 6         |                         |
| 25,7             | 15,0                  | 1                | 202                                    | 365       | 202       | 38        | 25                      | 1                | 95                                      | 371       | 95        | 0         | 72                      |
|                  |                       | 2                | 317                                    | 317       | 86        | 86        |                         | 2                | 273                                     | 273       | 100       | 100       |                         |
| 30,2             | 17,5                  | 1                | 211                                    | 387       | 211       | 36        | 27                      | 1                | 103                                     | 393       | 103       | 0         | 79                      |
|                  |                       | 2                | 336                                    | 336       | 87        | 87        |                         | 2                | 311                                     | 311       | 82        | 82        |                         |
| 34,7             | 20,0                  | 1                | 221                                    | 411       | 221       | 31        | 28                      | 1                | 110                                     | 418       | 110       | 0         | 85                      |
|                  |                       | 2                | 355                                    | 355       | 87        | 87        |                         | 2                | 353                                     | 353       | 60        | 60        |                         |
| 39,2             | 27,5                  | 1                | 243                                    | 449       | 243       | 38        | 30                      | 1                | 201                                     | 512       | 201       | 0         | 91                      |
|                  |                       | 2                | 389                                    | 389       | 98        | 98        |                         | 2                | 410                                     | 410       | 47        | 47        |                         |
| 43,7             | 45,0                  | 1                | 291                                    | 514       | 291       | 68        | 31                      | 1                | 241                                     | 621       | 241       | 0         | 97                      |
|                  |                       | 2                | 448                                    | 448       | 133       | 133       |                         | 2                | 495                                     | 495       | 56        | 56        |                         |
| 48,2             | 62,5                  | 1                | 338                                    | 581       | 338       | 95        | 33                      | 1                | 276                                     | 740       | 276       | 0         | 104                     |
|                  |                       | 2                | 510                                    | 510       | 166       | 166       |                         | 2                | 585                                     | 585       | 61        | 61        |                         |
| 52,7             | 82,5                  | 1                | 392                                    | 656       | 392       | 129       | 34                      | 1                | 320                                     | 869       | 320       | 0         | 110                     |
|                  |                       | 2                | 579                                    | 579       | 206       | 206       |                         | 2                | 685                                     | 685       | 70        | 70        |                         |
| 57,2             | 102,5                 | 1                | 450                                    | 733       | 450       | 166       | 36                      | 1                | 366                                     | 1006      | 366       | 0         | 118                     |
|                  |                       | 2                | 650                                    | 650       | 249       | 249       |                         | 2                | 790                                     | 790       | 79        | 79        |                         |
| 61,7             | 125,0                 | 1                | 513                                    | 819       | 513       | 206       | 38                      | 1                | 417                                     | 1157      | 417       | 0         | 126                     |
|                  |                       | 2                | 730                                    | 730       | 296       | 296       |                         | 2                | 907                                     | 907       | 89        | 89        |                         |
| 66,2             | 152,5                 | 1                | 589                                    | 920       | 589       | 257       | 40                      | 1                | 486                                     | 1322      | 486       | 0         | 134                     |
|                  |                       | 2                | 823                                    | 823       | 354       | 354       |                         | 2                | 1041                                    | 1041      | 106       | 106       |                         |

3.2.5.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

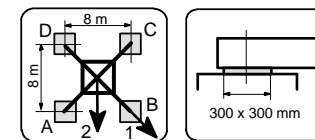


**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 16,7             | 0,0                   | 1                | 147                                    | 257       | 147       | 37        | 23                      | 1                                       | 90        | 179       | 90        | 2                       | 51  |
|                  |                       | 2                | 225                                    | 225       | 69        | 69        |                         | 2                                       | 153       | 153       | 28        | 28                      |     |
| 21,2             | 0,0                   | 1                | 150                                    | 267       | 150       | 34        | 24                      | 1                                       | 94        | 188       | 94        | 0                       | 64  |
|                  |                       | 2                | 233                                    | 233       | 68        | 68        |                         | 2                                       | 160       | 160       | 27        | 27                      |     |
| 25,7             | 0,0                   | 1                | 154                                    | 278       | 154       | 29        | 25                      | 1                                       | 95        | 200       | 95        | 0                       | 71  |
|                  |                       | 2                | 242                                    | 242       | 66        | 66        |                         | 2                                       | 179       | 179       | 98        | 98                      |     |
| 30,2             | 0,0                   | 1                | 157                                    | 290       | 157       | 24        | 27                      | 1                                       | 142       | 228       | 142       | 57                      | 77  |
|                  |                       | 2                | 251                                    | 251       | 63        | 63        |                         | 2                                       | 203       | 203       | 82        | 82                      |     |
| 34,7             | 0,0                   | 1                | 161                                    | 303       | 161       | 18        | 28                      | 1                                       | 146       | 262       | 146       | 30                      | 83  |
|                  |                       | 2                | 262                                    | 262       | 60        | 60        |                         | 2                                       | 228       | 228       | 64        | 64                      |     |
| 39,2             | 5,0                   | 1                | 177                                    | 330       | 177       | 24        | 30                      | 1                                       | 162       | 312       | 162       | 12                      | 89  |
|                  |                       | 2                | 285                                    | 285       | 69        | 69        |                         | 2                                       | 268       | 268       | 56        | 56                      |     |
| 43,7             | 12,5                  | 1                | 199                                    | 364       | 199       | 35        | 31                      | 1                                       | 181       | 375       | 181       | 0                       | 95  |
|                  |                       | 2                | 316                                    | 316       | 83        | 83        |                         | 2                                       | 317       | 317       | 52        | 52                      |     |
| 48,2             | 20,0                  | 1                | 221                                    | 399       | 221       | 44        | 33                      | 1                                       | 185       | 455       | 185       | 0                       | 102 |
|                  |                       | 2                | 347                                    | 347       | 96        | 96        |                         | 2                                       | 367       | 367       | 45        | 45                      |     |
| 52,7             | 32,5                  | 1                | 257                                    | 448       | 257       | 66        | 34                      | 1                                       | 213       | 544       | 213       | 0                       | 108 |
|                  |                       | 2                | 392                                    | 392       | 122       | 122       |                         | 2                                       | 434       | 434       | 50        | 50                      |     |
| 57,2             | 47,5                  | 1                | 299                                    | 505       | 299       | 93        | 36                      | 1                                       | 249       | 640       | 249       | 0                       | 115 |
|                  |                       | 2                | 445                                    | 445       | 154       | 154       |                         | 2                                       | 511       | 511       | 58        | 58                      |     |
| 61,7             | 62,5                  | 1                | 344                                    | 565       | 344       | 123       | 38                      | 1                                       | 285       | 745       | 285       | 0                       | 123 |
|                  |                       | 2                | 500                                    | 500       | 187       | 187       |                         | 2                                       | 592       | 592       | 66        | 66                      |     |
| 66,2             | 77,5                  | 1                | 388                                    | 627       | 388       | 150       | 39                      | 1                                       | 318       | 859       | 318       | 0                       | 131 |
|                  |                       | 2                | 557                                    | 557       | 220       | 220       |                         | 2                                       | 677       | 677       | 70        | 70                      |     |
| 70,7             | 97,5                  | 1                | 446                                    | 702       | 446       | 189       | 41                      | 1                                       | 369       | 984       | 369       | 0                       | 140 |
|                  |                       | 2                | 627                                    | 627       | 264       | 264       |                         | 2                                       | 779       | 779       | 82        | 82                      |     |
| 75,2             | 117,5                 | 1                | 504                                    | 779       | 504       | 229       | 44                      | 1                                       | 420       | 1115      | 420       | 0                       | 149 |
|                  |                       | 2                | 698                                    | 698       | 309       | 309       |                         | 2                                       | 883       | 883       | 94        | 94                      |     |

3.2.5.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

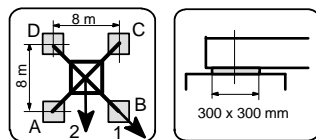


**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 16,7             | 0,0                   | 1                | 155                                    | 259       | 155       | 51        | 23                      | 1                                       | 90        | 179       | 90        | 2                       | 51  |
|                  |                       | 2                | 228                                    | 228       | 81        | 81        |                         | 2                                       | 153       | 153       | 28        | 28                      |     |
| 21,2             | 0,0                   | 1                | 158                                    | 269       | 158       | 48        | 24                      | 1                                       | 94        | 189       | 94        | 0                       | 65  |
|                  |                       | 2                | 236                                    | 236       | 80        | 80        |                         | 2                                       | 168       | 168       | 119       | 119                     |     |
| 25,7             | 0,0                   | 1                | 162                                    | 280       | 162       | 43        | 26                      | 1                                       | 147       | 207       | 147       | 87                      | 71  |
|                  |                       | 2                | 245                                    | 245       | 78        | 78        |                         | 2                                       | 189       | 189       | 104       | 104                     |     |
| 30,2             | 0,0                   | 1                | 165                                    | 292       | 165       | 38        | 27                      | 1                                       | 150       | 239       | 150       | 62                      | 77  |
|                  |                       | 2                | 255                                    | 255       | 75        | 75        |                         | 2                                       | 213       | 213       | 88        | 88                      |     |
| 34,7             | 0,0                   | 1                | 169                                    | 305       | 169       | 32        | 28                      | 1                                       | 154       | 273       | 154       | 34                      | 84  |
|                  |                       | 2                | 265                                    | 265       | 72        | 72        |                         | 2                                       | 238       | 238       | 69        | 69                      |     |
| 39,2             | 2,5                   | 1                | 178                                    | 326       | 178       | 31        | 30                      | 1                                       | 163       | 317       | 163       | 9                       | 90  |
|                  |                       | 2                | 283                                    | 283       | 74        | 74        |                         | 2                                       | 272       | 272       | 55        | 55                      |     |
| 43,7             | 10,0                  | 1                | 201                                    | 360       | 201       | 42        | 31                      | 1                                       | 180       | 383       | 180       | 0                       | 96  |
|                  |                       | 2                | 313                                    | 313       | 88        | 88        |                         | 2                                       | 321       | 321       | 50        | 50                      |     |
| 48,2             | 17,5                  | 1                | 223                                    | 395       | 223       | 51        | 33                      | 1                                       | 183       | 465       | 183       | 0                       | 102 |
|                  |                       | 2                | 344                                    | 344       | 101       | 101       |                         | 2                                       | 372       | 372       | 44        | 44                      |     |
| 52,7             | 30,0                  | 1                | 259                                    | 444       | 259       | 73        | 34                      | 1                                       | 210       | 554       | 210       | 0                       | 109 |
|                  |                       | 2                | 390                                    | 390       | 128       | 128       |                         | 2                                       | 440       | 440       | 48        | 48                      |     |
| 57,2             | 45,0                  | 1                | 301                                    | 502       | 301       | 100       | 36                      | 1                                       | 246       | 652       | 246       | 0                       | 115 |
|                  |                       | 2                | 443                                    | 443       | 159       | 159       |                         | 2                                       | 516       | 516       | 55        | 55                      |     |
| 61,7             | 62,5                  | 1                | 352                                    | 568       | 352       | 135       | 38                      | 1                                       | 294       | 759       | 294       | 0                       | 124 |
|                  |                       | 2                | 505                                    | 505       | 199       | 199       |                         | 2                                       | 605       | 605       | 68        | 68                      |     |
| 66,2             | 77,5                  | 1                | 396                                    | 630       | 396       | 163       | 40                      | 1                                       | 325       | 874       | 325       | 0                       | 132 |
|                  |                       | 2                | 561                                    | 561       | 231       | 231       |                         | 2                                       | 690       | 690       | 72        | 72                      |     |
| 70,7             | 97,5                  | 1                | 453                                    | 706       | 453       | 201       | 41                      | 1                                       | 376       | 1002      | 376       | 0                       | 140 |
|                  |                       | 2                | 632                                    | 632       | 275       | 275       |                         | 2                                       | 793       | 793       | 84        | 84                      |     |
| 75,2             | 117,5                 | 1                | 511                                    | 782       | 511       | 240       | 44                      | 1                                       | 426       | 1134      | 426       | 0                       | 149 |
|                  |                       | 2                | 703                                    | 703       | 320       | 320       |                         | 2                                       | 897       | 897       | 95        | 95                      |     |

3.2.5.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

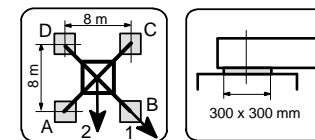


**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 16,7             | 0,0                   | 1                | 158                                    | 267       | 158       | 50        | 23                      | 1                | 90                                      | 180       | 90        | 1         | 52                      |
|                  |                       | 2                | 235                                    | 235       | 81        | 81        |                         | 2                | 156                                     | 156       | 66        | 66        |                         |
| 21,2             | 0,0                   | 1                | 162                                    | 277       | 162       | 46        | 24                      | 1                | 147                                     | 191       | 147       | 102       | 66                      |
|                  |                       | 2                | 243                                    | 243       | 80        | 80        |                         | 2                | 178                                     | 178       | 115       | 115       |                         |
| 25,7             | 0,0                   | 1                | 165                                    | 289       | 165       | 42        | 26                      | 1                | 150                                     | 221       | 150       | 79        | 72                      |
|                  |                       | 2                | 252                                    | 252       | 78        | 78        |                         | 2                | 200                                     | 200       | 100       | 100       |                         |
| 30,2             | 0,0                   | 1                | 169                                    | 301       | 169       | 36        | 27                      | 1                | 154                                     | 253       | 154       | 54        | 78                      |
|                  |                       | 2                | 262                                    | 262       | 75        | 75        |                         | 2                | 224                                     | 224       | 83        | 83        |                         |
| 34,7             | 0,0                   | 1                | 172                                    | 314       | 172       | 30        | 29                      | 1                | 157                                     | 288       | 157       | 26        | 84                      |
|                  |                       | 2                | 272                                    | 272       | 72        | 72        |                         | 2                | 250                                     | 250       | 64        | 64        |                         |
| 39,2             | 0,0                   | 1                | 176                                    | 328       | 176       | 23        | 30                      | 1                | 155                                     | 332       | 155       | 0         | 91                      |
|                  |                       | 2                | 284                                    | 284       | 68        | 68        |                         | 2                | 278                                     | 278       | 43        | 43        |                         |
| 43,7             | 7,5                   | 1                | 198                                    | 363       | 198       | 33        | 31                      | 1                | 162                                     | 408       | 162       | 0         | 97                      |
|                  |                       | 2                | 314                                    | 314       | 81        | 81        |                         | 2                | 327                                     | 327       | 39        | 39        |                         |
| 48,2             | 20,0                  | 1                | 233                                    | 411       | 233       | 55        | 33                      | 1                | 190                                     | 491       | 190       | 0         | 103                     |
|                  |                       | 2                | 358                                    | 358       | 107       | 107       |                         | 2                | 391                                     | 391       | 44        | 44        |                         |
| 52,7             | 35,0                  | 1                | 275                                    | 467       | 275       | 83        | 34                      | 1                | 228                                     | 582       | 228       | 0         | 110                     |
|                  |                       | 2                | 410                                    | 410       | 139       | 139       |                         | 2                | 465                                     | 465       | 54        | 54        |                         |
| 57,2             | 50,0                  | 1                | 317                                    | 524       | 317       | 109       | 36                      | 1                | 263                                     | 681       | 263       | 0         | 116                     |
|                  |                       | 2                | 463                                    | 463       | 170       | 170       |                         | 2                | 543                                     | 543       | 61        | 61        |                         |
| 61,7             | 65,0                  | 1                | 361                                    | 585       | 361       | 138       | 38                      | 1                | 298                                     | 789       | 298       | 0         | 124                     |
|                  |                       | 2                | 519                                    | 519       | 203       | 203       |                         | 2                | 625                                     | 625       | 67        | 67        |                         |
| 66,2             | 82,5                  | 1                | 412                                    | 653       | 412       | 171       | 40                      | 1                | 341                                     | 906       | 341       | 0         | 132                     |
|                  |                       | 2                | 583                                    | 583       | 242       | 242       |                         | 2                | 717                                     | 717       | 77        | 77        |                         |
| 70,7             | 100,0                 | 1                | 463                                    | 723       | 463       | 203       | 42                      | 1                | 378                                     | 1036      | 378       | 0         | 141                     |
|                  |                       | 2                | 647                                    | 647       | 279       | 279       |                         | 2                | 814                                     | 814       | 82        | 82        |                         |
| 75,2             | 120,0                 | 1                | 521                                    | 800       | 521       | 242       | 44                      | 1                | 427                                     | 1169      | 427       | 0         | 150                     |
|                  |                       | 2                | 718                                    | 718       | 324       | 324       |                         | 2                | 919                                     | 919       | 93        | 93        |                         |

3.2.5.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

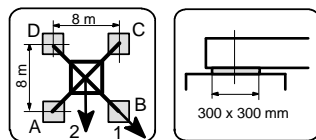


**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 16,7             | 0,0                   | 1                | 166                                    | 275       | 166       | 57        | 23                      | 1                | 113                                     | 200       | 113       | 26        | 52                      |
|                  |                       | 2                | 243                                    | 243       | 89        | 89        |                         | 2                | 175                                     | 175       | 51        | 51        |                         |
| 21,2             | 0,0                   | 1                | 169                                    | 286       | 169       | 53        | 24                      | 1                | 116                                     | 210       | 116       | 23        | 66                      |
|                  |                       | 2                | 252                                    | 252       | 87        | 87        |                         | 2                | 190                                     | 190       | 119       | 119       |                         |
| 25,7             | 0,0                   | 1                | 173                                    | 297       | 173       | 49        | 26                      | 1                | 158                                     | 235       | 158       | 81        | 73                      |
|                  |                       | 2                | 261                                    | 261       | 85        | 85        |                         | 2                | 212                                     | 212       | 103       | 103       |                         |
| 30,2             | 0,0                   | 1                | 176                                    | 310       | 176       | 43        | 27                      | 1                | 161                                     | 268       | 161       | 55        | 79                      |
|                  |                       | 2                | 271                                    | 271       | 82        | 82        |                         | 2                | 237                                     | 237       | 86        | 86        |                         |
| 34,7             | 0,0                   | 1                | 180                                    | 323       | 180       | 37        | 29                      | 1                | 165                                     | 303       | 165       | 26        | 85                      |
|                  |                       | 2                | 281                                    | 281       | 79        | 79        |                         | 2                | 263                                     | 263       | 67        | 67        |                         |
| 39,2             | 0,0                   | 1                | 183                                    | 338       | 183       | 29        | 30                      | 1                | 163                                     | 348       | 163       | 0         | 91                      |
|                  |                       | 2                | 292                                    | 292       | 74        | 74        |                         | 2                | 291                                     | 291       | 46        | 46        |                         |
| 43,7             | 7,5                   | 1                | 206                                    | 372       | 206       | 39        | 32                      | 1                | 169                                     | 425       | 169       | 0         | 98                      |
|                  |                       | 2                | 323                                    | 323       | 88        | 88        |                         | 2                | 341                                     | 341       | 40        | 40        |                         |
| 48,2             | 20,0                  | 1                | 240                                    | 421       | 240       | 60        | 33                      | 1                | 196                                     | 510       | 196       | 0         | 104                     |
|                  |                       | 2                | 368                                    | 368       | 113       | 113       |                         | 2                | 406                                     | 406       | 45        | 45        |                         |
| 52,7             | 35,0                  | 1                | 282                                    | 477       | 282       | 88        | 34                      | 1                | 234                                     | 602       | 234       | 0         | 110                     |
|                  |                       | 2                | 420                                    | 420       | 145       | 145       |                         | 2                | 480                                     | 480       | 55        | 55        |                         |
| 57,2             | 50,0                  | 1                | 325                                    | 535       | 325       | 114       | 36                      | 1                | 267                                     | 703       | 267       | 0         | 117                     |
|                  |                       | 2                | 473                                    | 473       | 176       | 176       |                         | 2                | 558                                     | 558       | 61        | 61        |                         |
| 61,7             | 65,0                  | 1                | 369                                    | 596       | 369       | 142       | 38                      | 1                | 302                                     | 813       | 302       | 0         | 125                     |
|                  |                       | 2                | 530                                    | 530       | 209       | 209       |                         | 2                | 642                                     | 642       | 67        | 67        |                         |
| 66,2             | 82,5                  | 1                | 420                                    | 665       | 420       | 175       | 40                      | 1                | 344                                     | 932       | 344       | 0         | 133                     |
|                  |                       | 2                | 593                                    | 593       | 247       | 247       |                         | 2                | 734                                     | 734       | 75        | 75        |                         |
| 70,7             | 102,5                 | 1                | 477                                    | 742       | 477       | 212       | 42                      | 1                | 392                                     | 1064      | 392       | 0         | 142                     |
|                  |                       | 2                | 664                                    | 664       | 290       | 290       |                         | 2                | 838                                     | 838       | 86        | 86        |                         |
| 75,2             | 122,5                 | 1                | 535                                    | 819       | 535       | 251       | 44                      | 1                | 440                                     | 1200      | 440       | 0         | 151                     |
|                  |                       | 2                | 736                                    | 736       | 334       | 334       |                         | 2                | 944                                     | 944       | 96        | 96        |                         |

3.2.5.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

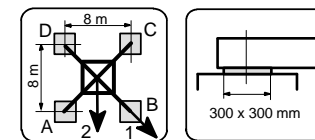


**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 16,7             | 0,0                   | 1                | 169                                    | 279       | 169       | 59        | 23                      | 1                                       | 113       | 212       | 113       | 15                      | 53  |
|                  |                       | 2                | 246                                    | 246       | 91        | 91        |                         | 2                                       | 183       | 183       | 44        | 44                      |     |
| 21,2             | 0,0                   | 1                | 172                                    | 289       | 172       | 55        | 25                      | 1                                       | 117       | 222       | 117       | 12                      | 67  |
|                  |                       | 2                | 255                                    | 255       | 89        | 89        |                         | 2                                       | 197       | 197       | 117       | 117                     |     |
| 25,7             | 0,0                   | 1                | 176                                    | 301       | 176       | 51        | 26                      | 1                                       | 161       | 244       | 161       | 77                      | 73  |
|                  |                       | 2                | 264                                    | 264       | 87        | 87        |                         | 2                                       | 220       | 220       | 102       | 102                     |     |
| 30,2             | 0,0                   | 1                | 179                                    | 313       | 179       | 45        | 27                      | 1                                       | 164       | 277       | 164       | 51                      | 80  |
|                  |                       | 2                | 274                                    | 274       | 84        | 84        |                         | 2                                       | 244       | 244       | 84        | 84                      |     |
| 34,7             | 0,0                   | 1                | 183                                    | 327       | 183       | 38        | 29                      | 1                                       | 168       | 313       | 168       | 22                      | 86  |
|                  |                       | 2                | 285                                    | 285       | 81        | 81        |                         | 2                                       | 270       | 270       | 65        | 65                      |     |
| 39,2             | 0,0                   | 1                | 186                                    | 342       | 186       | 31        | 30                      | 1                                       | 161       | 362       | 161       | 0                       | 92  |
|                  |                       | 2                | 296                                    | 296       | 76        | 76        |                         | 2                                       | 299       | 299       | 43        | 43                      |     |
| 43,7             | 7,5                   | 1                | 208                                    | 376       | 208       | 41        | 32                      | 1                                       | 167       | 441       | 167       | 0                       | 98  |
|                  |                       | 2                | 327                                    | 327       | 90        | 90        |                         | 2                                       | 349       | 349       | 38        | 38                      |     |
| 48,2             | 22,5                  | 1                | 249                                    | 431       | 249       | 68        | 33                      | 1                                       | 206       | 526       | 206       | 0                       | 105 |
|                  |                       | 2                | 378                                    | 378       | 121       | 121       |                         | 2                                       | 421       | 421       | 48        | 48                      |     |
| 52,7             | 35,0                  | 1                | 285                                    | 481       | 285       | 89        | 35                      | 1                                       | 230       | 620       | 230       | 0                       | 111 |
|                  |                       | 2                | 424                                    | 424       | 146       | 146       |                         | 2                                       | 489       | 489       | 51        | 51                      |     |
| 57,2             | 52,5                  | 1                | 334                                    | 546       | 334       | 121       | 36                      | 1                                       | 276       | 723       | 276       | 0                       | 118 |
|                  |                       | 2                | 484                                    | 484       | 183       | 183       |                         | 2                                       | 574       | 574       | 63        | 63                      |     |
| 61,7             | 67,5                  | 1                | 378                                    | 607       | 378       | 149       | 38                      | 1                                       | 309       | 833       | 309       | 0                       | 126 |
|                  |                       | 2                | 540                                    | 540       | 216       | 216       |                         | 2                                       | 658       | 658       | 68        | 68                      |     |
| 66,2             | 85,0                  | 1                | 429                                    | 676       | 429       | 182       | 40                      | 1                                       | 351       | 954       | 351       | 0                       | 134 |
|                  |                       | 2                | 604                                    | 604       | 254       | 254       |                         | 2                                       | 751       | 751       | 77        | 77                      |     |
| 70,7             | 105,0                 | 1                | 486                                    | 753       | 486       | 219       | 42                      | 1                                       | 398       | 1088      | 398       | 0                       | 142 |
|                  |                       | 2                | 675                                    | 675       | 297       | 297       |                         | 2                                       | 856       | 856       | 86        | 86                      |     |
| 75,2             | 125,0                 | 1                | 544                                    | 831       | 544       | 257       | 44                      | 1                                       | 446       | 1225      | 446       | 0                       | 151 |
|                  |                       | 2                | 747                                    | 747       | 341       | 341       |                         | 2                                       | 962       | 962       | 96        | 96                      |     |

3.2.5.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk



**KR 1000 - 8** Eckabstand 8,0 m x 8,0 m **Ausleger 55 m**

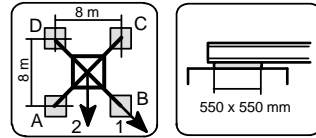
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 16,7             | 0,0                   | 1                | 176                                    | 283       | 176       | 69        | 23                      | 1                                       | 104       | 251       | 104       | 0                       | 53  |
|                  |                       | 2                | 252                                    | 252       | 101       | 101       |                         | 2                                       | 204       | 204       | 26        | 26                      |     |
| 21,2             | 0,0                   | 1                | 180                                    | 294       | 180       | 66        | 25                      | 1                                       | 105       | 264       | 105       | 0                       | 68  |
|                  |                       | 2                | 261                                    | 261       | 99        | 99        |                         | 2                                       | 212       | 212       | 25        | 25                      |     |
| 25,7             | 0,0                   | 1                | 183                                    | 306       | 183       | 61        | 26                      | 1                                       | 105       | 279       | 105       | 0                       | 74  |
|                  |                       | 2                | 270                                    | 270       | 97        | 97        |                         | 2                                       | 234       | 234       | 103       | 103                     |     |
| 30,2             | 0,0                   | 1                | 187                                    | 318       | 187       | 55        | 28                      | 1                                       | 103       | 295       | 103       | 0                       | 80  |
|                  |                       | 2                | 280                                    | 280       | 94        | 94        |                         | 2                                       | 259       | 259       | 85        | 85                      |     |
| 34,7             | 0,0                   | 1                | 190                                    | 332       | 190       | 49        | 29                      | 1                                       | 175       | 331       | 175       | 20                      | 87  |
|                  |                       | 2                | 291                                    | 291       | 90        | 90        |                         | 2                                       | 285       | 285       | 65        | 65                      |     |
| 39,2             | 0,0                   | 1                | 194                                    | 347       | 194       | 41        | 30                      | 1                                       | 166       | 384       | 166       | 0                       | 93  |
|                  |                       | 2                | 302                                    | 302       | 86        | 86        |                         | 2                                       | 315       | 315       | 43        | 43                      |     |
| 43,7             | 10,0                  | 1                | 222                                    | 388       | 222       | 57        | 32                      | 1                                       | 183       | 464       | 183       | 0                       | 99  |
|                  |                       | 2                | 340                                    | 340       | 105       | 105       |                         | 2                                       | 371       | 371       | 43        | 43                      |     |
| 48,2             | 22,5                  | 1                | 257                                    | 437       | 257       | 77        | 33                      | 1                                       | 209       | 552       | 209       | 0                       | 105 |
|                  |                       | 2                | 384                                    | 384       | 130       | 130       |                         | 2                                       | 437       | 437       | 47        | 47                      |     |
| 52,7             | 37,5                  | 1                | 299                                    | 494       | 299       | 104       | 35                      | 1                                       | 245       | 647       | 245       | 0                       | 112 |
|                  |                       | 2                | 437                                    | 437       | 161       | 161       |                         | 2                                       | 513       | 513       | 56        | 56                      |     |
| 57,2             | 52,5                  | 1                | 341                                    | 553       | 341       | 130       | 36                      | 1                                       | 277       | 752       | 277       | 0                       | 119 |
|                  |                       | 2                | 491                                    | 491       | 192       | 192       |                         | 2                                       | 592       | 592       | 60        | 60                      |     |
| 61,7             | 70,0                  | 1                | 392                                    | 620       | 392       | 164       | 38                      | 1                                       | 322       | 865       | 322       | 0                       | 127 |
|                  |                       | 2                | 553                                    | 553       | 231       | 231       |                         | 2                                       | 683       | 683       | 71        | 71                      |     |
| 66,2             | 87,5                  | 1                | 443                                    | 690       | 443       | 196       | 40                      | 1                                       | 362       | 988       | 362       | 0                       | 135 |
|                  |                       | 2                | 617                                    | 617       | 268       | 268       |                         | 2                                       | 777       | 777       | 79        | 79                      |     |
| 70,7             | 107,5                 | 1                | 500                                    | 767       | 500       | 233       | 42                      | 1                                       | 408       | 1124      | 408       | 0                       | 143 |
|                  |                       | 2                | 689                                    | 689       | 311       | 311       |                         | 2                                       | 882       | 882       | 88        | 88                      |     |
| 75,2             | 127,5                 | 1                | 558                                    | 845       | 558       | 271       | 44                      | 1                                       | 454       | 1264      | 454       | 0                       | 152 |
|                  |                       | 2                | 761                                    | 761       | 355       | 355       |                         | 2                                       | 990       | 990       | 96        | 96                      |     |

3.2.6.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80** Eckabstand 8,0 m x 8,0 m **Ausleger 30 m**

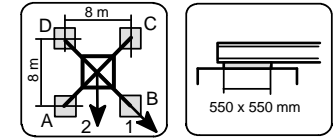
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 140              | 1                                      | 595    | 914    | 595    | 275                     | 52               | 1                                       | 488    | 1304   | 488    | 0                       | 169 |
|                  |                       |                  | 2                                      | 820    | 820    | 369    | 369                     |                  | 2                                       | 1031   | 1031   | 109    | 109                     |     |
| 82,1             | 82,5                  | 145              | 1                                      | 621    | 947    | 621    | 294                     | 53               | 1                                       | 513    | 1357   | 513    | 0                       | 171 |
|                  |                       |                  | 2                                      | 851    | 851    | 390    | 390                     |                  | 2                                       | 1076   | 1076   | 116    | 116                     |     |
| 86,6             | 87,0                  | 165              | 1                                      | 679    | 1028   | 679    | 329                     | 56               | 1                                       | 550    | 1515   | 550    | 0                       | 181 |
|                  |                       |                  | 2                                      | 926    | 926    | 431    | 431                     |                  | 2                                       | 1190   | 1190   | 118    | 118                     |     |
| 91,1             | 91,5                  | 190              | 1                                      | 753    | 1126   | 753    | 379                     | 58               | 1                                       | 614    | 1684   | 614    | 0                       | 192 |
|                  |                       |                  | 2                                      | 1017   | 1017   | 488    | 488                     |                  | 2                                       | 1323   | 1323   | 132    | 132                     |     |
| 95,6             | 96,0                  | 215              | 1                                      | 827    | 1226   | 827    | 427                     | 61               | 1                                       | 669    | 1870   | 669    | 0                       | 204 |
|                  |                       |                  | 2                                      | 1109   | 1109   | 544    | 544                     |                  | 2                                       | 1463   | 1463   | 141    | 141                     |     |
| 100,1            | 100,5                 | 265              | 1                                      | 963    | 1390   | 963    | 536                     | 63               | 1                                       | 782    | 2190   | 782    | 0                       | 221 |
|                  |                       |                  | 2                                      | 1265   | 1265   | 661    | 661                     |                  | 2                                       | 1713   | 1713   | 164    | 164                     |     |
| 104,6            | 105,0                 | 305              | 1                                      | 1075   | 1531   | 1075   | 619                     | 66               | 1                                       | 886    | 2427   | 887    | 0                       | 233 |
|                  |                       |                  | 2                                      | 1398   | 1398   | 752    | 752                     |                  | 2                                       | 1908   | 1908   | 192    | 192                     |     |

3.2.6.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80** Eckabstand 8,0 m x 8,0 m **Ausleger 35 m**

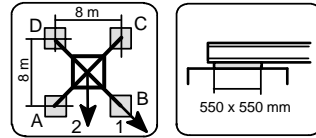
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 140              | 1                                      | 602    | 917    | 602    | 288                     | 52               | 1                                       | 492    | 1326   | 492    | 0                       | 170 |
|                  |                       |                  | 2                                      | 825    | 825    | 380    | 380                     |                  | 2                                       | 1047   | 1047   | 108    | 108                     |     |
| 82,1             | 82,5                  | 145              | 1                                      | 628    | 950    | 628    | 307                     | 53               | 1                                       | 517    | 1380   | 517    | 0                       | 172 |
|                  |                       |                  | 2                                      | 856    | 856    | 401    | 401                     |                  | 2                                       | 1091   | 1091   | 115    | 115                     |     |
| 86,6             | 87,0                  | 165              | 1                                      | 686    | 1032   | 686    | 341                     | 56               | 1                                       | 553    | 1540   | 553    | 0                       | 182 |
|                  |                       |                  | 2                                      | 930    | 930    | 442    | 442                     |                  | 2                                       | 1206   | 1206   | 117    | 117                     |     |
| 91,1             | 91,5                  | 190              | 1                                      | 760    | 1130   | 761    | 391                     | 58               | 1                                       | 616    | 1710   | 616    | 0                       | 192 |
|                  |                       |                  | 2                                      | 1022   | 1022   | 499    | 499                     |                  | 2                                       | 1340   | 1340   | 131    | 131                     |     |
| 95,6             | 96,0                  | 220              | 1                                      | 847    | 1242   | 847    | 452                     | 61               | 1                                       | 695    | 1898   | 695    | 0                       | 204 |
|                  |                       |                  | 2                                      | 1127   | 1127   | 567    | 567                     |                  | 2                                       | 1493   | 1493   | 151    | 151                     |     |
| 100,1            | 100,5                 | 270              | 1                                      | 984    | 1407   | 984    | 560                     | 63               | 1                                       | 805    | 2224   | 806    | 0                       | 222 |
|                  |                       |                  | 2                                      | 1283   | 1283   | 684    | 684                     |                  | 2                                       | 1745   | 1745   | 172    | 172                     |     |
| 104,6            | 105,0                 | 305              | 1                                      | 1083   | 1536   | 1083   | 630                     | 66               | 1                                       | 884    | 2464   | 884    | 0                       | 234 |
|                  |                       |                  | 2                                      | 1403   | 1403   | 762    | 762                     |                  | 2                                       | 1929   | 1929   | 186    | 186                     |     |

3.2.6.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den WOLFF 5520.6 ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80** Eckabstand 8,0 m x 8,0 m **Ausleger 40 m**

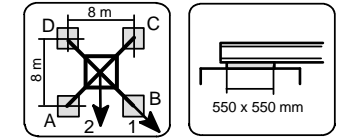
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 145              | 1                                      | 618    | 941    | 618    | 296                     | 52               | 1                                       | 504    | 1366   | 504    | 0                       | 171 |
|                  |                       |                  | 2                                      | 847    | 847    | 390    | 390                     |                  | 2                                       | 1076   | 1076   | 110    | 110                     |     |
| 82,1             | 82,5                  | 150              | 1                                      | 644    | 974    | 644    | 315                     | 54               | 1                                       | 529    | 1419   | 530    | 0                       | 172 |
|                  |                       |                  | 2                                      | 877    | 877    | 411    | 411                     |                  | 2                                       | 1121   | 1121   | 118    | 118                     |     |
| 86,6             | 87,0                  | 170              | 1                                      | 702    | 1056   | 702    | 349                     | 56               | 1                                       | 565    | 1580   | 565    | 0                       | 182 |
|                  |                       |                  | 2                                      | 952    | 952    | 452    | 452                     |                  | 2                                       | 1236   | 1236   | 118    | 118                     |     |
| 91,1             | 91,5                  | 195              | 1                                      | 776    | 1154   | 776    | 398                     | 58               | 1                                       | 627    | 1752   | 627    | 0                       | 193 |
|                  |                       |                  | 2                                      | 1044   | 1044   | 509    | 509                     |                  | 2                                       | 1371   | 1371   | 132    | 132                     |     |
| 95,6             | 96,0                  | 225              | 1                                      | 863    | 1267   | 863    | 459                     | 61               | 1                                       | 705    | 1942   | 705    | 0                       | 205 |
|                  |                       |                  | 2                                      | 1149   | 1149   | 577    | 577                     |                  | 2                                       | 1525   | 1525   | 151    | 151                     |     |
| 100,1            | 100,5                 | 275              | 1                                      | 999    | 1432   | 1000   | 567                     | 63               | 1                                       | 813    | 2273   | 813    | 0                       | 223 |
|                  |                       |                  | 2                                      | 1305   | 1305   | 694    | 694                     |                  | 2                                       | 1778   | 1778   | 171    | 171                     |     |

3.2.6.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den WOLFF 5520.6 ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80** Eckabstand 8,0 m x 8,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 145              | 1                                      | 626    | 956    | 626    | 297                     | 52               | 1                                       | 502    | 1400   | 502    | 0                       | 171 |
|                  |                       |                  | 2                                      | 859    | 859    | 393    | 393                     |                  | 2                                       | 1096   | 1096   | 106    | 106                     |     |
| 82,1             | 82,5                  | 150              | 1                                      | 652    | 988    | 652    | 316                     | 54               | 1                                       | 528    | 1453   | 528    | 0                       | 173 |
|                  |                       |                  | 2                                      | 890    | 890    | 414    | 414                     |                  | 2                                       | 1141   | 1141   | 113    | 113                     |     |
| 86,6             | 87,0                  | 175              | 1                                      | 723    | 1083   | 723    | 362                     | 56               | 1                                       | 587    | 1617   | 587    | 0                       | 183 |
|                  |                       |                  | 2                                      | 977    | 977    | 468    | 468                     |                  | 2                                       | 1269   | 1269   | 126    | 126                     |     |
| 91,1             | 91,5                  | 200              | 1                                      | 797    | 1182   | 797    | 411                     | 59               | 1                                       | 648    | 1791   | 648    | 0                       | 194 |
|                  |                       |                  | 2                                      | 1069   | 1069   | 524    | 524                     |                  | 2                                       | 1405   | 1405   | 138    | 138                     |     |
| 95,6             | 96,0                  | 230              | 1                                      | 883    | 1296   | 883    | 471                     | 61               | 1                                       | 725    | 1983   | 725    | 0                       | 206 |
|                  |                       |                  | 2                                      | 1175   | 1175   | 592    | 592                     |                  | 2                                       | 1559   | 1559   | 157    | 157                     |     |
| 100,1            | 100,5                 | 280              | 1                                      | 1020   | 1461   | 1020   | 579                     | 64               | 1                                       | 829    | 2321   | 829    | 0                       | 224 |
|                  |                       |                  | 2                                      | 1332   | 1332   | 708    | 708                     |                  | 2                                       | 1815   | 1815   | 174    | 174                     |     |

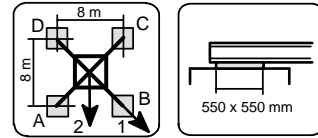


3.2.6.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80**      Eckabstand 8,0 m x 8,0 m      **Ausleger 50 m**

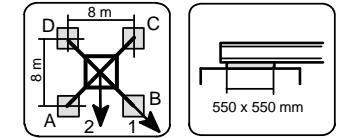
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 150              | 1                                      | 641    | 971    | 641    | 312                     | 52               | 1                                       | 518    | 1429   | 519    | 0                       | 172 |
|                  |                       |                  | 2                                      | 874    | 874    | 408    | 408                     |                  | 2                                       | 1122   | 1122   | 111    | 111                     |     |
| 82,1             | 82,5                  | 155              | 1                                      | 667    | 1003   | 667    | 331                     | 54               | 1                                       | 544    | 1481   | 544    | 0                       | 174 |
|                  |                       |                  | 2                                      | 905    | 905    | 430    | 430                     |                  | 2                                       | 1166   | 1166   | 118    | 118                     |     |
| 86,6             | 87,0                  | 180              | 1                                      | 738    | 1099   | 738    | 377                     | 56               | 1                                       | 602    | 1647   | 603    | 0                       | 184 |
|                  |                       |                  | 2                                      | 993    | 993    | 483    | 483                     |                  | 2                                       | 1295   | 1295   | 130    | 130                     |     |
| 91,1             | 91,5                  | 205              | 1                                      | 812    | 1198   | 812    | 426                     | 59               | 1                                       | 663    | 1822   | 663    | 0                       | 195 |
|                  |                       |                  | 2                                      | 1085   | 1085   | 539    | 539                     |                  | 2                                       | 1431   | 1431   | 143    | 143                     |     |
| 95,6             | 96,0                  | 230              | 1                                      | 886    | 1299   | 886    | 473                     | 61               | 1                                       | 714    | 2016   | 715    | 0                       | 207 |
|                  |                       |                  | 2                                      | 1178   | 1178   | 594    | 594                     |                  | 2                                       | 1574   | 1574   | 148    | 148                     |     |
| 100,1            | 100,5                 | 285              | 1                                      | 1035   | 1477   | 1035   | 593                     | 64               | 1                                       | 841    | 2358   | 841    | 0                       | 225 |
|                  |                       |                  | 2                                      | 1348   | 1348   | 723    | 723                     |                  | 2                                       | 1844   | 1844   | 176    | 176                     |     |

3.2.6.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 80**      Eckabstand 8,0 m x 8,0 m      **Ausleger 55 m**

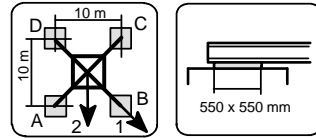
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 155              | 1                                      | 662    | 991    | 662    | 332                     | 52               | 1                                       | 538    | 1472   | 538    | 0                       | 173 |
|                  |                       |                  | 2                                      | 894    | 894    | 429    | 429                     |                  | 2                                       | 1157   | 1157   | 116    | 116                     |     |
| 82,1             | 82,5                  | 155              | 1                                      | 675    | 1011   | 675    | 340                     | 54               | 1                                       | 539    | 1523   | 539    | 0                       | 175 |
|                  |                       |                  | 2                                      | 912    | 912    | 438    | 438                     |                  | 2                                       | 1189   | 1189   | 111    | 111                     |     |
| 86,6             | 87,0                  | 180              | 1                                      | 746    | 1106   | 746    | 385                     | 56               | 1                                       | 596    | 1692   | 596    | 0                       | 185 |
|                  |                       |                  | 2                                      | 1001   | 1001   | 491    | 491                     |                  | 2                                       | 1319   | 1319   | 122    | 122                     |     |
| 91,1             | 91,5                  | 210              | 1                                      | 832    | 1218   | 832    | 446                     | 59               | 1                                       | 680    | 1869   | 680    | 0                       | 195 |
|                  |                       |                  | 2                                      | 1105   | 1105   | 559    | 559                     |                  | 2                                       | 1468   | 1468   | 146    | 146                     |     |
| 95,6             | 96,0                  | 235              | 1                                      | 906    | 1320   | 906    | 493                     | 61               | 1                                       | 730    | 2065   | 730    | 0                       | 208 |
|                  |                       |                  | 2                                      | 1199   | 1199   | 614    | 614                     |                  | 2                                       | 1612   | 1612   | 151    | 151                     |     |
| 100,1            | 100,5                 | 290              | 1                                      | 1055   | 1498   | 1055   | 612                     | 64               | 1                                       | 853    | 2416   | 853    | 0                       | 225 |
|                  |                       |                  | 2                                      | 1368   | 1368   | 742    | 742                     |                  | 2                                       | 1885   | 1885   | 176    | 176                     |     |

3.2.7.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 100**      Eckabstand 10,0 m x 10,0 m      Ausleger 30 m

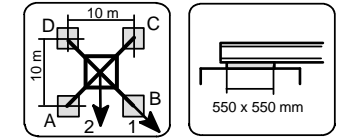
| Hakenhöhe<br>[m] | Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 79,9             | 80,3             | 90                    | 1                | 475                                    | 730    | 475    | 219    | 52                      | 1                | 378                                     | 1043   | 378    | 0      | 169                     |
|                  |                  |                       | 2                | 655                                    | 655    | 294    | 294    |                         | 2                | 818                                     | 818    | 81     | 81     |                         |
| 82,1             | 82,5             | 95                    | 1                | 501                                    | 762    | 501    | 240    | 53                      | 1                | 409                                     | 1086   | 409    | 0      | 171                     |
|                  |                  |                       | 2                | 685                                    | 685    | 316    | 316    |                         | 2                | 860                                     | 860    | 92     | 92     |                         |
| 86,6             | 87,0             | 110                   | 1                | 546                                    | 826    | 546    | 266    | 56                      | 1                | 436                                     | 1212   | 436    | 0      | 181                     |
|                  |                  |                       | 2                | 744                                    | 744    | 348    | 348    |                         | 2                | 950                                     | 950    | 92     | 92     |                         |
| 91,1             | 91,5             | 130                   | 1                | 608                                    | 907    | 608    | 309    | 58                      | 1                | 492                                     | 1347   | 492    | 0      | 192                     |
|                  |                  |                       | 2                | 819                                    | 819    | 396    | 396    |                         | 2                | 1059                                    | 1059   | 106    | 106    |                         |
| 95,6             | 96,0             | 150                   | 1                | 669                                    | 989    | 669    | 350    | 61                      | 1                | 541                                     | 1496   | 541    | 0      | 204                     |
|                  |                  |                       | 2                | 895                                    | 895    | 443    | 443    |                         | 2                | 1173                                    | 1173   | 115    | 115    |                         |
| 100,1            | 100,5            | 190                   | 1                | 781                                    | 1122   | 781    | 439    | 63                      | 1                | 636                                     | 1752   | 636    | 0      | 221                     |
|                  |                  |                       | 2                | 1022                                   | 1022   | 539    | 539    |                         | 2                | 1375                                    | 1375   | 136    | 136    |                         |
| 104,6            | 105,0            | 220                   | 1                | 867                                    | 1232   | 867    | 502    | 66                      | 1                | 714                                     | 1941   | 714    | 0      | 233                     |
|                  |                  |                       | 2                | 1126                                   | 1126   | 609    | 609    |                         | 2                | 1529                                    | 1529   | 156    | 156    |                         |

3.2.7.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 100**      Eckabstand 10,0 m x 10,0 m      Ausleger 35 m

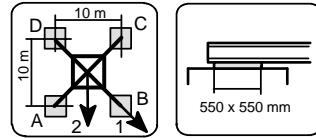
| Hakenhöhe<br>[m] | Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 79,9             | 80,3             | 90                    | 1                | 482                                    | 734    | 482    | 231    | 52                      | 1                | 384                                     | 1061   | 385    | 0      | 170                     |
|                  |                  |                       | 2                | 660                                    | 660    | 304    | 304    |                         | 2                | 833                                     | 833    | 82     | 82     |                         |
| 82,1             | 82,5             | 95                    | 1                | 508                                    | 766    | 508    | 251    | 53                      | 1                | 415                                     | 1104   | 415    | 0      | 172                     |
|                  |                  |                       | 2                | 690                                    | 690    | 327    | 327    |                         | 2                | 874                                     | 874    | 93     | 93     |                         |
| 86,6             | 87,0             | 110                   | 1                | 554                                    | 830    | 554    | 278    | 56                      | 1                | 442                                     | 1232   | 442    | 0      | 182                     |
|                  |                  |                       | 2                | 749                                    | 749    | 359    | 359    |                         | 2                | 965                                     | 965    | 93     | 93     |                         |
| 91,1             | 91,5             | 130                   | 1                | 615                                    | 911    | 615    | 320    | 58                      | 1                | 497                                     | 1368   | 497    | 0      | 192                     |
|                  |                  |                       | 2                | 824                                    | 824    | 406    | 406    |                         | 2                | 1074                                    | 1074   | 107    | 107    |                         |
| 95,6             | 96,0             | 150                   | 1                | 677                                    | 993    | 677    | 361    | 61                      | 1                | 545                                     | 1518   | 545    | 0      | 204                     |
|                  |                  |                       | 2                | 901                                    | 901    | 453    | 453    |                         | 2                | 1189                                    | 1189   | 115    | 115    |                         |
| 100,1            | 100,5            | 190                   | 1                | 789                                    | 1127   | 789    | 450    | 63                      | 1                | 638                                     | 1779   | 638    | 0      | 222                     |
|                  |                  |                       | 2                | 1028                                   | 1028   | 549    | 549    |                         | 2                | 1393                                    | 1393   | 134    | 134    |                         |
| 104,6            | 105,0            | 220                   | 1                | 875                                    | 1238   | 875    | 513    | 66                      | 1                | 715                                     | 1971   | 715    | 0      | 234                     |
|                  |                  |                       | 2                | 1131                                   | 1131   | 619    | 619    |                         | 2                | 1547                                    | 1547   | 153    | 153    |                         |

3.2.7.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 100** Eckabstand 10,0 m x 10,0 m **Ausleger 40 m**

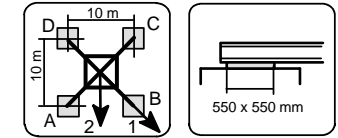
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 95               | 1                                      | 498    | 757    | 498    | 240                     | 52               | 1                                       | 401    | 1092   | 401    | 0                       | 171 |
|                  |                       |                  | 2                                      | 681    | 681    | 316    | 316                     |                  | 2                                       | 860    | 860    | 87     | 87                      |     |
| 82,1             | 82,5                  | 95               | 1                                      | 512    | 775    | 512    | 248                     | 54               | 1                                       | 406    | 1135   | 406    | 0                       | 172 |
|                  |                       |                  | 2                                      | 698    | 698    | 325    | 325                     |                  | 2                                       | 888    | 888    | 85     | 85                      |     |
| 86,6             | 87,0                  | 115              | 1                                      | 570    | 853    | 570    | 287                     | 56               | 1                                       | 458    | 1264   | 458    | 0                       | 182 |
|                  |                       |                  | 2                                      | 770    | 770    | 370    | 370                     |                  | 2                                       | 992    | 992    | 98     | 98                      |     |
| 91,1             | 91,5                  | 135              | 1                                      | 631    | 934    | 631    | 329                     | 58               | 1                                       | 512    | 1402   | 512    | 0                       | 193 |
|                  |                       |                  | 2                                      | 845    | 845    | 418    | 418                     |                  | 2                                       | 1102   | 1102   | 111    | 111                     |     |
| 95,6             | 96,0                  | 155              | 1                                      | 693    | 1016   | 693    | 369                     | 61               | 1                                       | 559    | 1553   | 560    | 0                       | 205 |
|                  |                       |                  | 2                                      | 922    | 922    | 464    | 464                     |                  | 2                                       | 1217   | 1217   | 119    | 119                     |     |
| 100,1            | 100,5                 | 195              | 1                                      | 804    | 1151   | 805    | 458                     | 63               | 1                                       | 650    | 1818   | 650    | 0                       | 223 |
|                  |                       |                  | 2                                      | 1049   | 1049   | 560    | 560                     |                  | 2                                       | 1422   | 1422   | 137    | 137                     |     |
| 104,6            | 105,0                 | 225              | 1                                      | 891    | 1261   | 891    | 521                     | 66               | 1                                       | 726    | 2012   | 727    | 0                       | 235 |
|                  |                       |                  | 2                                      | 1153   | 1153   | 629    | 629                     |                  | 2                                       | 1578   | 1578   | 155    | 155                     |     |

3.2.7.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 100** Eckabstand 10,0 m x 10,0 m **Ausleger 45 m**

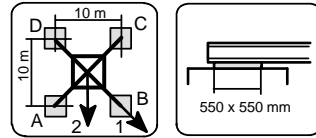
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 95               | 1                                      | 506    | 770    | 506    | 242                     | 52               | 1                                       | 402    | 1120   | 402    | 0                       | 171 |
|                  |                       |                  | 2                                      | 692    | 692    | 320    | 320                     |                  | 2                                       | 877    | 877    | 85     | 85                      |     |
| 82,1             | 82,5                  | 100              | 1                                      | 532    | 801    | 532    | 263                     | 54               | 1                                       | 433    | 1162   | 433    | 0                       | 173 |
|                  |                       |                  | 2                                      | 722    | 722    | 342    | 342                     |                  | 2                                       | 918    | 918    | 96     | 96                      |     |
| 86,6             | 87,0                  | 115              | 1                                      | 578    | 866    | 578    | 289                     | 56               | 1                                       | 459    | 1293   | 459    | 0                       | 183 |
|                  |                       |                  | 2                                      | 781    | 781    | 374    | 374                     |                  | 2                                       | 1010   | 1010   | 95     | 95                      |     |
| 91,1             | 91,5                  | 135              | 1                                      | 639    | 948    | 639    | 331                     | 59               | 1                                       | 512    | 1433   | 512    | 0                       | 194 |
|                  |                       |                  | 2                                      | 857    | 857    | 421    | 421                     |                  | 2                                       | 1121   | 1121   | 107    | 107                     |     |
| 95,6             | 96,0                  | 160              | 1                                      | 713    | 1043   | 713    | 383                     | 61               | 1                                       | 584    | 1586   | 584    | 0                       | 206 |
|                  |                       |                  | 2                                      | 946    | 946    | 480    | 480                     |                  | 2                                       | 1249   | 1249   | 127    | 127                     |     |
| 100,1            | 100,5                 | 200              | 1                                      | 825    | 1178   | 825    | 472                     | 64               | 1                                       | 671    | 1857   | 672    | 0                       | 224 |
|                  |                       |                  | 2                                      | 1074   | 1074   | 575    | 575                     |                  | 2                                       | 1456   | 1456   | 143    | 143                     |     |
| 104,6            | 105,0                 | 230              | 1                                      | 911    | 1289   | 911    | 534                     | 66               | 1                                       | 746    | 2053   | 746    | 0                       | 236 |
|                  |                       |                  | 2                                      | 1178   | 1178   | 644    | 644                     |                  | 2                                       | 1612   | 1612   | 160    | 160                     |     |

3.2.7.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.



**KR 16 - 100** Eckabstand 10,0 m x 10,0 m **Ausleger 50 m**

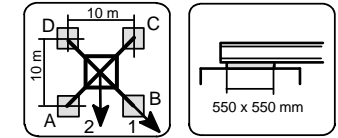
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 100              | 1                                      | 521    | 785    | 521    | 258                     | 52               | 1                                       | 421    | 1143   | 421    | 0                       | 172 |
|                  |                       |                  | 2                                      | 708    | 708    | 335    | 335                     |                  | 2                                       | 901    | 901    | 92     | 92                      |     |
| 82,1             | 82,5                  | 100              | 1                                      | 535    | 804    | 535    | 266                     | 54               | 1                                       | 427    | 1185   | 428    | 0                       | 174 |
|                  |                       |                  | 2                                      | 725    | 725    | 345    | 345                     |                  | 2                                       | 929    | 929    | 91     | 91                      |     |
| 86,6             | 87,0                  | 120              | 1                                      | 593    | 881    | 593    | 304                     | 56               | 1                                       | 477    | 1317   | 477    | 0                       | 184 |
|                  |                       |                  | 2                                      | 797    | 797    | 389    | 389                     |                  | 2                                       | 1034   | 1034   | 102    | 102                     |     |
| 91,1             | 91,5                  | 140              | 1                                      | 654    | 963    | 654    | 346                     | 59               | 1                                       | 530    | 1458   | 530    | 0                       | 195 |
|                  |                       |                  | 2                                      | 873    | 873    | 436    | 436                     |                  | 2                                       | 1145   | 1145   | 114    | 114                     |     |
| 95,6             | 96,0                  | 160              | 1                                      | 716    | 1046   | 716    | 386                     | 61               | 1                                       | 576    | 1612   | 576    | 0                       | 207 |
|                  |                       |                  | 2                                      | 950    | 950    | 482    | 482                     |                  | 2                                       | 1261   | 1261   | 121    | 121                     |     |
| 100,1            | 100,5                 | 205              | 1                                      | 840    | 1194   | 840    | 486                     | 64               | 1                                       | 687    | 1887   | 687    | 0                       | 225 |
|                  |                       |                  | 2                                      | 1090   | 1090   | 590    | 590                     |                  | 2                                       | 1482   | 1482   | 148    | 148                     |     |
| 104,6            | 105,0                 | 230              | 1                                      | 914    | 1292   | 914    | 536                     | 66               | 1                                       | 736    | 2085   | 736    | 0                       | 237 |
|                  |                       |                  | 2                                      | 1182   | 1182   | 647    | 647                     |                  | 2                                       | 1626   | 1626   | 152    | 152                     |     |

3.2.7.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmen ohne Kletterwerk

**Achtung!**

Für den **WOLFF 5520.6** ist nur die Spalte für die Hakenhöhe gültig.

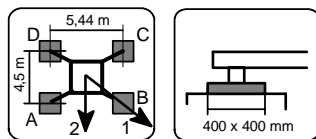


**KR 16 - 100** Eckabstand 10,0 m x 10,0 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |     |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |     |
| 79,9             | 80,3                  | 100              | 1                                      | 529    | 792    | 529    | 266                     | 52               | 1                                       | 420    | 1177   | 420    | 0                       | 173 |
|                  |                       |                  | 2                                      | 715    | 715    | 343    | 343                     |                  | 2                                       | 920    | 920    | 88     | 88                      |     |
| 82,1             | 82,5                  | 105              | 1                                      | 555    | 823    | 555    | 287                     | 54               | 1                                       | 451    | 1218   | 451    | 0                       | 175 |
|                  |                       |                  | 2                                      | 745    | 745    | 365    | 365                     |                  | 2                                       | 961    | 961    | 99     | 99                      |     |
| 86,6             | 87,0                  | 125              | 1                                      | 613    | 902    | 613    | 325                     | 56               | 1                                       | 500    | 1353   | 500    | 0                       | 185 |
|                  |                       |                  | 2                                      | 817    | 817    | 409    | 409                     |                  | 2                                       | 1067   | 1067   | 110    | 110                     |     |
| 91,1             | 91,5                  | 140              | 1                                      | 662    | 971    | 662    | 353                     | 59               | 1                                       | 527    | 1495   | 527    | 0                       | 195 |
|                  |                       |                  | 2                                      | 881    | 881    | 444    | 444                     |                  | 2                                       | 1166   | 1166   | 108    | 108                     |     |
| 95,6             | 96,0                  | 165              | 1                                      | 736    | 1067   | 736    | 405                     | 61               | 1                                       | 597    | 1652   | 597    | 0                       | 208 |
|                  |                       |                  | 2                                      | 970    | 970    | 502    | 502                     |                  | 2                                       | 1296   | 1296   | 127    | 127                     |     |
| 100,1            | 100,5                 | 205              | 1                                      | 848    | 1202   | 848    | 494                     | 64               | 1                                       | 680    | 1932   | 680    | 0                       | 225 |
|                  |                       |                  | 2                                      | 1098   | 1098   | 597    | 597                     |                  | 2                                       | 1506   | 1506   | 139    | 139                     |     |
| 104,6            | 105,0                 | 235              | 1                                      | 934    | 1314   | 934    | 555                     | 66               | 1                                       | 752    | 2134   | 752    | 0                       | 238 |
|                  |                       |                  | 2                                      | 1203   | 1203   | 666    | 666                     |                  | 2                                       | 1664   | 1664   | 155    | 155                     |     |

3.3.1.1 Zentralballaste und Ecklasten nach DIN 15019

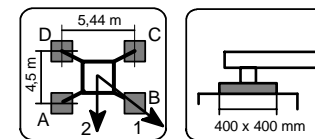
für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



| KRE 250          |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  | Eckabstand 4,5 m x 5,44 m |  |  |  |  | Ausleger 30 m |  |  |  |  |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|--|---------------------------|--|--|--|--|---------------|--|--|--|--|
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 15,0             | 45,0                  | 1                | 256                                    | 399       | 191       | 48        | 21                      | 1                | 194                                     | 309       | 140       | 25        | 47                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 359                                    | 359       | 88        | 88        |                         | 2                | 276                                     | 276       | 58        | 58        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 19,5             | 45,0                  | 1                | 263                                    | 415       | 193       | 41        | 22                      | 1                | 199                                     | 321       | 143       | 21        | 60                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 372                                    | 372       | 84        | 84        |                         | 2                | 287                                     | 287       | 56        | 56        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 24,0             | 45,0                  | 1                | 269                                    | 432       | 195       | 32        | 23                      | 1                | 205                                     | 335       | 146       | 16        | 64                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 386                                    | 386       | 78        | 78        |                         | 2                | 298                                     | 298       | 53        | 53        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 28,5             | 45,0                  | 1                | 276                                    | 450       | 196       | 22        | 25                      | 1                | 212                                     | 350       | 148       | 10        | 70                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 401                                    | 401       | 71        | 71        |                         | 2                | 311                                     | 311       | 49        | 49        |                         |  |                           |  |  |  |  |               |  |  |  |  |

3.3.1.2 Zentralballaste und Ecklasten nach DIN 15019

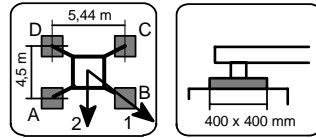
für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



| KRE 250          |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |  | Eckabstand 4,5 m x 5,44 m |  |  |  |  | Ausleger 35 m |  |  |  |  |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|--|---------------------------|--|--|--|--|---------------|--|--|--|--|
| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 15,0             | 40,0                  | 1                | 250                                    | 384       | 188       | 53        | 21                      | 1                | 181                                     | 296       | 128       | 13        | 47                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 346                                    | 346       | 91        | 91        |                         | 2                | 264                                     | 264       | 45        | 45        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 19,5             | 40,0                  | 1                | 256                                    | 400       | 190       | 46        | 22                      | 1                | 187                                     | 309       | 131       | 8         | 61                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 359                                    | 359       | 87        | 87        |                         | 2                | 275                                     | 275       | 43        | 43        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 24,0             | 40,0                  | 1                | 263                                    | 417       | 192       | 38        | 23                      | 1                | 193                                     | 323       | 133       | 3         | 65                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 373                                    | 373       | 81        | 81        |                         | 2                | 286                                     | 286       | 40        | 40        |                         |  |                           |  |  |  |  |               |  |  |  |  |
| 28,5             | 40,0                  | 1                | 270                                    | 436       | 193       | 27        | 25                      | 1                | 196                                     | 341       | 132       | 0         | 71                      |  |                           |  |  |  |  |               |  |  |  |  |
|                  |                       | 2                | 389                                    | 389       | 74        | 74        |                         | 2                | 310                                     | 310       | 123       | 123       |                         |  |                           |  |  |  |  |               |  |  |  |  |

3.3.1.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

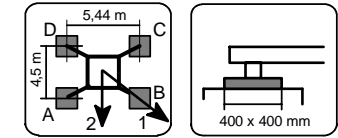


**KRE 250** Eckabstand 4,5 m x 5,44 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 40,0                  | 1                | 255                                    | 396    | 190    | 49     | 21                      | 1                | 181                                     | 297    | 128    | 12     | 47                      |
|                  |                       | 2                | 356                                    | 356    | 88     | 88     | 2                       | 264              | 264                                     | 45     | 45     |        |                         |
| 19,5             | 40,0                  | 1                | 261                                    | 411    | 192    | 42     | 22                      | 1                | 187                                     | 310    | 130    | 8      | 61                      |
|                  |                       | 2                | 369                                    | 369    | 84     | 84     | 2                       | 275              | 275                                     | 43     | 43     |        |                         |
| 24,0             | 40,0                  | 1                | 268                                    | 429    | 194    | 33     | 24                      | 1                | 193                                     | 324    | 133    | 3      | 66                      |
|                  |                       | 2                | 383                                    | 383    | 78     | 78     | 2                       | 288              | 288                                     | 143    | 143    |        |                         |
| 28,5             | 40,0                  | 1                | 275                                    | 448    | 195    | 22     | 25                      | 1                | 246                                     | 359    | 194    | 81     | 71                      |
|                  |                       | 2                | 399                                    | 399    | 71     | 71     | 2                       | 327              | 327                                     | 113    | 113    |        |                         |

3.3.1.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

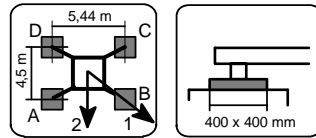


**KRE 250** Eckabstand 4,5 m x 5,44 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 37,5                  | 1                | 256                                    | 398    | 191    | 49     | 21                      | 1                | 197                                     | 309    | 145    | 32     | 48                      |
|                  |                       | 2                | 358                                    | 358    | 89     | 89     | 2                       | 278              | 278                                     | 64     | 64     |        |                         |
| 19,5             | 37,5                  | 1                | 263                                    | 414    | 193    | 42     | 22                      | 1                | 203                                     | 324    | 147    | 26     | 62                      |
|                  |                       | 2                | 372                                    | 372    | 84     | 84     | 2                       | 290              | 290                                     | 60     | 60     |        |                         |
| 24,0             | 37,5                  | 1                | 270                                    | 432    | 195    | 33     | 24                      | 1                | 209                                     | 339    | 149    | 19     | 66                      |
|                  |                       | 2                | 386                                    | 386    | 78     | 78     | 2                       | 303              | 303                                     | 56     | 56     |        |                         |
| 28,5             | 37,5                  | 1                | 277                                    | 451    | 196    | 22     | 25                      | 1                | 250                                     | 372    | 193    | 71     | 72                      |
|                  |                       | 2                | 402                                    | 402    | 71     | 71     | 2                       | 337              | 337                                     | 106    | 106    |        |                         |

3.3.1.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



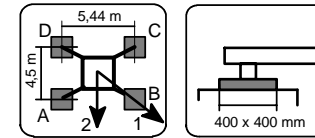
**KRE 250** Eckabstand 4,5 m x 5,44 m Ausleger 50 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 37,5                  | 1                | 259                                    | 402    | 194    | 51     | 21                      | 1                | 201                                     | 328    | 142    | 15     | 49                      |
|                  |                       | 2                | 362                                    | 362    | 91     | 91     |                         | 2                | 292                                     | 292    | 51     | 51     |                         |
| 19,5             | 37,5                  | 1                | 266                                    | 418    | 196    | 43     | 23                      | 1                | 207                                     | 342    | 144    | 9      | 63                      |
|                  |                       | 2                | 375                                    | 375    | 86     | 86     |                         | 2                | 304                                     | 304    | 47     | 47     |                         |
| 24,0             | 37,5                  | 1                | 273                                    | 436    | 197    | 34     | 24                      | 1                | 213                                     | 358    | 146    | 1      | 67                      |
|                  |                       | 2                | 390                                    | 390    | 80     | 80     |                         | 2                | 317                                     | 317    | 42     | 42     |                         |
| 28,5             | 37,5                  | 1                | 280                                    | 456    | 199    | 23     | 25                      | 1                | 254                                     | 385    | 194    | 64     | 73                      |
|                  |                       | 2                | 406                                    | 406    | 73     | 73     |                         | 2                | 348                                     | 348    | 100    | 100    |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |

962-4-026493-5

3.3.1.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



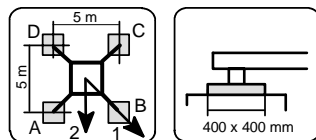
**KRE 250** Eckabstand 4,5 m x 5,44 m Ausleger 55 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 35,0                  | 1                | 260                                    | 399    | 196    | 57     | 21                      | 1                | 170                                     | 402    | 94     | 0      | 49                      |
|                  |                       | 2                | 360                                    | 360    | 96     | 96     |                         | 2                | 321                                     | 321    | 12     | 12     |                         |
| 19,5             | 37,5                  | 1                | 273                                    | 421    | 204    | 56     | 23                      | 1                | 182                                     | 423    | 103    | 0      | 64                      |
|                  |                       | 2                | 379                                    | 379    | 98     | 98     |                         | 2                | 340                                     | 340    | 14     | 14     |                         |
| 24,0             | 40,0                  | 1                | 286                                    | 445    | 212    | 53     | 24                      | 1                | 193                                     | 447    | 110    | 0      | 68                      |
|                  |                       | 2                | 400                                    | 400    | 98     | 98     |                         | 2                | 360                                     | 360    | 15     | 15     |                         |
| 28,5             | 42,5                  | 1                | 299                                    | 472    | 220    | 47     | 25                      | 1                | 204                                     | 474    | 115    | 0      | 74                      |
|                  |                       | 2                | 423                                    | 423    | 96     | 96     |                         | 2                | 381                                     | 381    | 108    | 108    |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |

962-4-026493-6

3.3.2.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

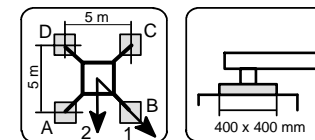


**KRE 250** Eckabstand 5 m x 5 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 37,5                  | 1                | 205                                    | 377       | 205       | 32        | 21                      | 1                | 148                                     | 287       | 148       | 9         | 47                      |
|                  |                       | 2                | 327                                    | 327       | 83        | 83        | 2                       | 246              | 246                                     | 50        | 50        |           |                         |
| 19,5             | 37,5                  | 1                | 209                                    | 392       | 209       | 26        | 22                      | 1                | 153                                     | 300       | 153       | 5         | 60                      |
|                  |                       | 2                | 339                                    | 339       | 79        | 79        | 2                       | 256              | 256                                     | 49        | 49        |           |                         |
| 24,0             | 37,5                  | 1                | 213                                    | 409       | 213       | 18        | 23                      | 1                | 157                                     | 313       | 157       | 0         | 64                      |
|                  |                       | 2                | 352                                    | 352       | 75        | 75        | 2                       | 267              | 267                                     | 46        | 46        |           |                         |
| 28,5             | 37,5                  | 1                | 218                                    | 427       | 218       | 8         | 25                      | 1                | 155                                     | 333       | 155       | 0         | 70                      |
|                  |                       | 2                | 366                                    | 366       | 69        | 69        | 2                       | 283              | 283                                     | 122       | 122       |           |                         |
| 33,0             | 40,0                  | 1                | 228                                    | 454       | 228       | 2         | 26                      | 1                | 213                                     | 374       | 213       | 52        | 76                      |
|                  |                       | 2                | 388                                    | 388       | 69        | 69        | 2                       | 327              | 327                                     | 99        | 99        |           |                         |

3.3.2.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



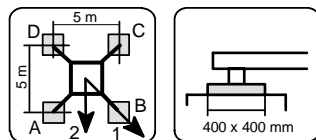
**KRE 250** Eckabstand 5 m x 5 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 30,0                  | 1                | 194                                    | 356       | 194       | 31        | 21                      | 1                | 120                                     | 278       | 120       | 0         | 47                      |
|                  |                       | 2                | 309                                    | 309       | 79        | 79        | 2                       | 228              | 228                                     | 31        | 31        |           |                         |
| 19,5             | 30,0                  | 1                | 198                                    | 372       | 198       | 25        | 22                      | 1                | 120                                     | 295       | 120       | 0         | 61                      |
|                  |                       | 2                | 321                                    | 321       | 75        | 75        | 2                       | 238              | 238                                     | 30        | 30        |           |                         |
| 24,0             | 30,0                  | 1                | 202                                    | 388       | 202       | 16        | 23                      | 1                | 119                                     | 314       | 119       | 0         | 65                      |
|                  |                       | 2                | 334                                    | 334       | 71        | 71        | 2                       | 249              | 249                                     | 27        | 27        |           |                         |
| 28,5             | 30,0                  | 1                | 207                                    | 407       | 207       | 6         | 25                      | 1                | 117                                     | 335       | 117       | 0         | 71                      |
|                  |                       | 2                | 348                                    | 348       | 65        | 65        | 2                       | 275              | 275                                     | 108       | 108       |           |                         |
| 33,0             | 37,5                  | 1                | 230                                    | 446       | 230       | 13        | 26                      | 1                | 215                                     | 381       | 215       | 48        | 77                      |
|                  |                       | 2                | 383                                    | 383       | 77        | 77        | 2                       | 332              | 332                                     | 97        | 97        |           |                         |



3.3.2.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

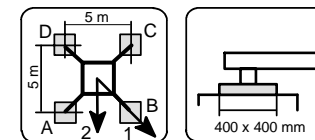


**KRE 250** Eckabstand 5 m x 5 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 32,5                  | 1                | 203                                    | 374       | 203       | 33        | 21                      | 1                | 132                                     | 279       | 132       | 0         | 47                      |
|                  |                       | 2                | 324                                    | 324       | 83        | 83        |                         | 2                | 234                                     | 234       | 37        | 37        |                         |
| 19,5             | 32,5                  | 1                | 208                                    | 389       | 208       | 26        | 22                      | 1                | 132                                     | 296       | 132       | 0         | 61                      |
|                  |                       | 2                | 336                                    | 336       | 79        | 79        |                         | 2                | 245                                     | 245       | 35        | 35        |                         |
| 24,0             | 32,5                  | 1                | 212                                    | 406       | 212       | 18        | 24                      | 1                | 131                                     | 315       | 131       | 0         | 66                      |
|                  |                       | 2                | 349                                    | 349       | 75        | 75        |                         | 2                | 262                                     | 262       | 132       | 132       |                         |
| 28,5             | 32,5                  | 1                | 216                                    | 425       | 216       | 8         | 25                      | 1                | 201                                     | 337       | 201       | 65        | 71                      |
|                  |                       | 2                | 364                                    | 364       | 69        | 69        |                         | 2                | 298                                     | 298       | 105       | 105       |                         |
| 33,0             | 32,5                  | 1                | 216                                    | 450       | 216       | 0         | 26                      | 1                | 206                                     | 390       | 206       | 21        | 77                      |
|                  |                       | 2                | 380                                    | 380       | 61        | 61        |                         | 2                | 336                                     | 336       | 75        | 75        |                         |

3.3.2.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

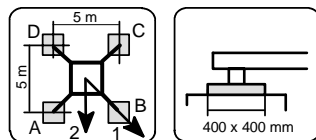


**KRE 250** Eckabstand 5 m x 5 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 30,0                  | 1                | 205                                    | 376       | 205       | 34        | 21                      | 1                | 152                                     | 288       | 152       | 16        | 48                      |
|                  |                       | 2                | 326                                    | 326       | 84        | 84        |                         | 2                | 248                                     | 248       | 56        | 56        |                         |
| 19,5             | 30,0                  | 1                | 209                                    | 392       | 209       | 27        | 22                      | 1                | 156                                     | 302       | 156       | 10        | 62                      |
|                  |                       | 2                | 338                                    | 338       | 80        | 80        |                         | 2                | 259                                     | 259       | 53        | 53        |                         |
| 24,0             | 30,0                  | 1                | 214                                    | 409       | 214       | 18        | 24                      | 1                | 161                                     | 318       | 161       | 3         | 66                      |
|                  |                       | 2                | 352                                    | 352       | 75        | 75        |                         | 2                | 272                                     | 272       | 49        | 49        |                         |
| 28,5             | 30,0                  | 1                | 218                                    | 428       | 218       | 7         | 25                      | 1                | 203                                     | 350       | 203       | 56        | 72                      |
|                  |                       | 2                | 367                                    | 367       | 69        | 69        |                         | 2                | 307                                     | 307       | 99        | 99        |                         |
| 33,0             | 30,0                  | 1                | 217                                    | 455       | 217       | 0         | 26                      | 1                | 207                                     | 404       | 207       | 10        | 78                      |
|                  |                       | 2                | 383                                    | 383       | 61        | 61        |                         | 2                | 346                                     | 346       | 68        | 68        |                         |

3.3.2.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

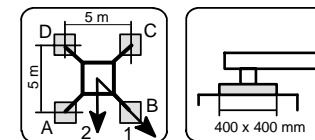


**KRE 250** Eckabstand 5 m x 5 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 27,5                  | 1                | 201                                    | 374       | 201       | 29        | 21                      | 1                | 139                                     | 307       | 139       | 0         | 49                      |
|                  |                       | 2                | 323                                    | 323       | 80        | 80        | 2                       | 255              | 255                                     | 38        | 38        |           |                         |
| 19,5             | 27,5                  | 1                | 206                                    | 389       | 206       | 22        | 23                      | 1                | 137                                     | 327       | 137       | 0         | 63                      |
|                  |                       | 2                | 336                                    | 336       | 76        | 76        | 2                       | 266              | 266                                     | 35        | 35        |           |                         |
| 24,0             | 27,5                  | 1                | 210                                    | 407       | 210       | 13        | 24                      | 1                | 135                                     | 350       | 135       | 0         | 67                      |
|                  |                       | 2                | 349                                    | 349       | 71        | 71        | 2                       | 278              | 278                                     | 31        | 31        |           |                         |
| 28,5             | 27,5                  | 1                | 214                                    | 426       | 214       | 2         | 25                      | 1                | 131                                     | 375       | 131       | 0         | 73                      |
|                  |                       | 2                | 364                                    | 364       | 64        | 64        | 2                       | 311              | 311                                     | 88        | 88        |           |                         |
| 33,0             | 27,5                  | 1                | 208                                    | 458       | 208       | 0         | 27                      | 1                | 199                                     | 416       | 199       | 0         | 79                      |
|                  |                       | 2                | 381                                    | 381       | 56        | 56        | 2                       | 350              | 350                                     | 57        | 57        |           |                         |

3.3.2.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

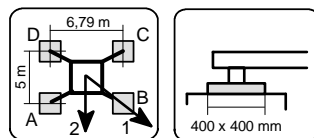


**KRE 250** Eckabstand 5 m x 5 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 27,5                  | 1                | 209                                    | 377       | 209       | 42        | 21                      | 1                | 98                                      | 394       | 98        | 0         | 49                      |
|                  |                       | 2                | 328                                    | 328       | 91        | 91        | 2                       | 287              | 287                                     | 8         | 8         |           |                         |
| 19,5             | 30,0                  | 1                | 220                                    | 399       | 220       | 41        | 23                      | 1                | 109                                     | 415       | 109       | 0         | 64                      |
|                  |                       | 2                | 346                                    | 346       | 93        | 93        | 2                       | 305              | 305                                     | 12        | 12        |           |                         |
| 24,0             | 32,5                  | 1                | 230                                    | 423       | 230       | 38        | 24                      | 1                | 118                                     | 438       | 118       | 0         | 68                      |
|                  |                       | 2                | 367                                    | 367       | 94        | 94        | 2                       | 324              | 324                                     | 14        | 14        |           |                         |
| 28,5             | 35,0                  | 1                | 241                                    | 449       | 241       | 33        | 25                      | 1                | 126                                     | 465       | 126       | 0         | 74                      |
|                  |                       | 2                | 388                                    | 388       | 94        | 94        | 2                       | 348              | 348                                     | 103       | 103       |           |                         |
| 33,0             | 37,5                  | 1                | 251                                    | 477       | 251       | 26        | 27                      | 1                | 132                                     | 494       | 132       | 0         | 80                      |
|                  |                       | 2                | 411                                    | 411       | 92        | 92        | 2                       | 395              | 395                                     | 78        | 78        |           |                         |

3.3.3.1 **Zentralballaste und Ecklasten nach DIN 15019**

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

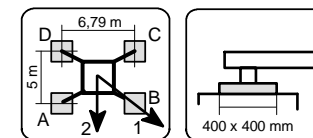


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 10,5             | 35,0                  | 1                | 244                                    | 345    | 159    | 58     | 21                      | 1                | 180                                     | 261    | 111    | 29     | 45                      |
|                  |                       | 2                | 317                                    | 317    | 86     | 86     |                         | 2                | 239                                     | 239    | 52     | 52     |                         |
| 15,0             | 35,0                  | 1                | 252                                    | 358    | 161    | 55     | 22                      | 1                | 186                                     | 273    | 114    | 28     | 50                      |
|                  |                       | 2                | 329                                    | 329    | 84     | 84     |                         | 2                | 249                                     | 249    | 51     | 51     |                         |
| 19,5             | 35,0                  | 1                | 258                                    | 371    | 162    | 49     | 24                      | 1                | 192                                     | 283    | 115    | 24     | 64                      |
|                  |                       | 2                | 340                                    | 340    | 80     | 80     |                         | 2                | 258                                     | 258    | 49     | 49     |                         |
| 24,0             | 35,0                  | 1                | 264                                    | 385    | 163    | 42     | 25                      | 1                | 198                                     | 295    | 116    | 19     | 69                      |
|                  |                       | 2                | 352                                    | 352    | 75     | 75     |                         | 2                | 268                                     | 268    | 46     | 46     |                         |
| 28,5             | 35,0                  | 1                | 271                                    | 400    | 163    | 34     | 27                      | 1                | 204                                     | 307    | 117    | 14     | 75                      |
|                  |                       | 2                | 365                                    | 365    | 69     | 69     |                         | 2                | 285                                     | 285    | 119    | 119    |                         |
| 33,0             | 40,0                  | 1                | 291                                    | 430    | 175    | 36     | 28                      | 1                | 261                                     | 363    | 175    | 73     | 81                      |
|                  |                       | 2                | 391                                    | 391    | 75     | 75     |                         | 2                | 335                                     | 335    | 101    | 101    |                         |
| 37,5             | 50,0                  | 1                | 324                                    | 473    | 199    | 50     | 30                      | 1                | 303                                     | 438    | 190    | 55     | 87                      |
|                  |                       | 2                | 431                                    | 431    | 92     | 92     |                         | 2                | 401                                     | 401    | 92     | 92     |                         |
| 42,0             | 62,5                  | 1                | 364                                    | 524    | 229    | 69     | 31                      | 1                | 353                                     | 524    | 209    | 39     | 93                      |
|                  |                       | 2                | 479                                    | 479    | 113    | 113    |                         | 2                | 477                                     | 477    | 86     | 86     |                         |
| 46,5             | 75,0                  | 1                | 405                                    | 576    | 260    | 88     | 33                      | 1                | 406                                     | 615    | 229    | 19     | 100                     |
|                  |                       | 2                | 529                                    | 529    | 135    | 135    |                         | 2                | 557                                     | 557    | 77     | 77     |                         |

3.3.3.2 **Zentralballaste und Ecklasten nach DIN 15019**

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

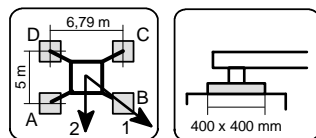


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 10,5             | 30,0                  | 1                | 237                                    | 332    | 157    | 62     | 21                      | 1                | 167                                     | 249    | 98     | 16     | 46                      |
|                  |                       | 2                | 305                                    | 305    | 88     | 88     |                         | 2                | 226                                     | 226    | 39     | 39     |                         |
| 15,0             | 30,0                  | 1                | 244                                    | 345    | 159    | 59     | 23                      | 1                | 174                                     | 260    | 101    | 15     | 51                      |
|                  |                       | 2                | 317                                    | 317    | 87     | 87     |                         | 2                | 236                                     | 236    | 39     | 39     |                         |
| 19,5             | 30,0                  | 1                | 251                                    | 358    | 160    | 53     | 24                      | 1                | 180                                     | 271    | 102    | 11     | 65                      |
|                  |                       | 2                | 328                                    | 328    | 83     | 83     |                         | 2                | 246                                     | 246    | 36     | 36     |                         |
| 24,0             | 30,0                  | 1                | 257                                    | 372    | 160    | 46     | 25                      | 1                | 186                                     | 283    | 103    | 6      | 69                      |
|                  |                       | 2                | 340                                    | 340    | 78     | 78     |                         | 2                | 256                                     | 256    | 33     | 33     |                         |
| 28,5             | 30,0                  | 1                | 264                                    | 387    | 160    | 37     | 27                      | 1                | 229                                     | 305    | 165    | 90     | 75                      |
|                  |                       | 2                | 353                                    | 353    | 71     | 71     |                         | 2                | 284                                     | 284    | 111    | 111    |                         |
| 33,0             | 35,0                  | 1                | 284                                    | 416    | 172    | 40     | 28                      | 1                | 258                                     | 363    | 169    | 63     | 82                      |
|                  |                       | 2                | 380                                    | 380    | 77     | 77     |                         | 2                | 334                                     | 334    | 92     | 92     |                         |
| 37,5             | 47,5                  | 1                | 323                                    | 466    | 203    | 60     | 30                      | 1                | 307                                     | 445    | 190    | 51     | 88                      |
|                  |                       | 2                | 426                                    | 426    | 100    | 100    |                         | 2                | 407                                     | 407    | 89     | 89     |                         |
| 42,0             | 60,0                  | 1                | 363                                    | 517    | 233    | 79     | 31                      | 1                | 357                                     | 531    | 209    | 34     | 94                      |
|                  |                       | 2                | 474                                    | 474    | 121    | 121    |                         | 2                | 483                                     | 483    | 83     | 83     |                         |
| 46,5             | 72,5                  | 1                | 404                                    | 570    | 263    | 97     | 33                      | 1                | 409                                     | 623    | 228    | 14     | 101                     |
|                  |                       | 2                | 524                                    | 524    | 143    | 143    |                         | 2                | 564                                     | 564    | 73     | 73     |                         |

3.3.3.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

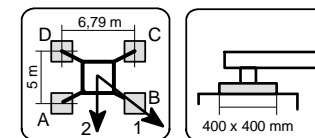


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 30,0                  | 1                | 242                                    | 342       | 158       | 59        | 21                      | 1                | 167                                     | 249       | 98        | 16        | 46                      |
|                  |                       | 2                | 314                                    | 314       | 87        | 87        |                         | 2                | 226                                     | 226       | 39        | 39        |                         |
| 15,0             | 30,0                  | 1                | 250                                    | 355       | 161       | 55        | 23                      | 1                | 174                                     | 261       | 101       | 14        | 51                      |
|                  |                       | 2                | 326                                    | 326       | 85        | 85        |                         | 2                | 237                                     | 237       | 38        | 38        |                         |
| 19,5             | 30,0                  | 1                | 256                                    | 368       | 161       | 49        | 24                      | 1                | 180                                     | 272       | 102       | 10        | 65                      |
|                  |                       | 2                | 337                                    | 337       | 80        | 80        |                         | 2                | 246                                     | 246       | 36        | 36        |                         |
| 24,0             | 30,0                  | 1                | 263                                    | 382       | 162       | 42        | 26                      | 1                | 186                                     | 283       | 103       | 6         | 70                      |
|                  |                       | 2                | 349                                    | 349       | 75        | 75        |                         | 2                | 265                                     | 265       | 130       | 130       |                         |
| 28,5             | 30,0                  | 1                | 270                                    | 398       | 162       | 34        | 27                      | 1                | 237                                     | 323       | 164       | 78        | 76                      |
|                  |                       | 2                | 362                                    | 362       | 69        | 69        |                         | 2                | 300                                     | 300       | 102       | 102       |                         |
| 33,0             | 32,5                  | 1                | 284                                    | 421       | 167       | 30        | 28                      | 1                | 260                                     | 376       | 161       | 44        | 82                      |
|                  |                       | 2                | 383                                    | 383       | 68        | 68        |                         | 2                | 344                                     | 344       | 77        | 77        |                         |
| 37,5             | 42,5                  | 1                | 316                                    | 465       | 191       | 43        | 30                      | 1                | 302                                     | 453       | 176       | 25        | 89                      |
|                  |                       | 2                | 424                                    | 424       | 84        | 84        |                         | 2                | 411                                     | 411       | 67        | 67        |                         |
| 42,0             | 55,0                  | 1                | 356                                    | 516       | 221       | 61        | 31                      | 1                | 353                                     | 540       | 195       | 8         | 95                      |
|                  |                       | 2                | 472                                    | 472       | 106       | 106       |                         | 2                | 488                                     | 488       | 60        | 60        |                         |
| 46,5             | 75,0                  | 1                | 416                                    | 588       | 270       | 98        | 33                      | 1                | 424                                     | 651       | 232       | 5         | 101                     |
|                  |                       | 2                | 541                                    | 541       | 146       | 146       |                         | 2                | 588                                     | 588       | 68        | 68        |                         |

3.3.3.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

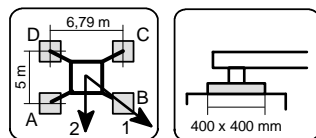


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 27,5                  | 1                | 244                                    | 344       | 160       | 60        | 21                      | 1                | 182                                     | 261       | 115       | 37        | 47                      |
|                  |                       | 2                | 316                                    | 316       | 87        | 87        |                         | 2                | 239                                     | 239       | 58        | 58        |                         |
| 15,0             | 27,5                  | 1                | 251                                    | 357       | 162       | 56        | 23                      | 1                | 189                                     | 274       | 118       | 34        | 52                      |
|                  |                       | 2                | 328                                    | 328       | 85        | 85        |                         | 2                | 250                                     | 250       | 57        | 57        |                         |
| 19,5             | 27,5                  | 1                | 258                                    | 371       | 163       | 50        | 24                      | 1                | 195                                     | 286       | 119       | 29        | 66                      |
|                  |                       | 2                | 339                                    | 339       | 81        | 81        |                         | 2                | 261                                     | 261       | 54        | 54        |                         |
| 24,0             | 27,5                  | 1                | 265                                    | 385       | 163       | 42        | 26                      | 1                | 202                                     | 299       | 120       | 22        | 71                      |
|                  |                       | 2                | 352                                    | 352       | 76        | 76        |                         | 2                | 273                                     | 273       | 124       | 124       |                         |
| 28,5             | 27,5                  | 1                | 272                                    | 401       | 163       | 33        | 27                      | 1                | 241                                     | 334       | 163       | 70        | 77                      |
|                  |                       | 2                | 365                                    | 365       | 69        | 69        |                         | 2                | 309                                     | 309       | 96        | 96        |                         |
| 33,0             | 27,5                  | 1                | 279                                    | 418       | 162       | 23        | 29                      | 1                | 258                                     | 382       | 153       | 30        | 83                      |
|                  |                       | 2                | 380                                    | 380       | 62        | 62        |                         | 2                | 348                                     | 348       | 64        | 64        |                         |
| 37,5             | 40,0                  | 1                | 319                                    | 468       | 192       | 43        | 30                      | 1                | 307                                     | 465       | 174       | 16        | 89                      |
|                  |                       | 2                | 427                                    | 427       | 84        | 84        |                         | 2                | 421                                     | 421       | 60        | 60        |                         |
| 42,0             | 55,0                  | 1                | 365                                    | 527       | 228       | 66        | 31                      | 1                | 364                                     | 559       | 199       | 4         | 96                      |
|                  |                       | 2                | 482                                    | 482       | 111       | 111       |                         | 2                | 505                                     | 505       | 58        | 58        |                         |
| 46,5             | 75,0                  | 1                | 425                                    | 599       | 277       | 103       | 33                      | 1                | 436                                     | 672       | 236       | 0         | 102                     |
|                  |                       | 2                | 551                                    | 551       | 151       | 151       |                         | 2                | 606                                     | 606       | 66        | 66        |                         |

3.3.3.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

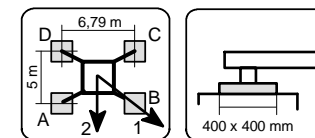


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 27,5                  | 1                | 247                                    | 347       | 162       | 62        | 22                      | 1                | 187                                     | 277       | 111       | 22        | 47                      |
|                  |                       | 2                | 319                                    | 319       | 90        | 90        |                         | 2                | 252                                     | 252       | 47        | 47        |                         |
| 15,0             | 27,5                  | 1                | 254                                    | 361       | 165       | 58        | 23                      | 1                | 194                                     | 289       | 114       | 19        | 52                      |
|                  |                       | 2                | 331                                    | 331       | 88        | 88        |                         | 2                | 263                                     | 263       | 45        | 45        |                         |
| 19,5             | 27,5                  | 1                | 261                                    | 374       | 165       | 52        | 25                      | 1                | 200                                     | 302       | 115       | 14        | 67                      |
|                  |                       | 2                | 343                                    | 343       | 83        | 83        |                         | 2                | 274                                     | 274       | 42        | 42        |                         |
| 24,0             | 27,5                  | 1                | 268                                    | 389       | 165       | 44        | 26                      | 1                | 207                                     | 315       | 116       | 7         | 71                      |
|                  |                       | 2                | 355                                    | 355       | 78        | 78        |                         | 2                | 285                                     | 285       | 37        | 37        |                         |
| 28,5             | 27,5                  | 1                | 275                                    | 405       | 165       | 35        | 27                      | 1                | 247                                     | 346       | 163       | 64        | 78                      |
|                  |                       | 2                | 369                                    | 369       | 71        | 71        |                         | 2                | 319                                     | 319       | 91        | 91        |                         |
| 33,0             | 27,5                  | 1                | 282                                    | 422       | 164       | 25        | 29                      | 1                | 264                                     | 394       | 153       | 23        | 84                      |
|                  |                       | 2                | 384                                    | 384       | 63        | 63        |                         | 2                | 358                                     | 358       | 59        | 59        |                         |
| 37,5             | 37,5                  | 1                | 316                                    | 466       | 188       | 37        | 30                      | 1                | 307                                     | 472       | 167       | 2         | 90                      |
|                  |                       | 2                | 425                                    | 425       | 79        | 79        |                         | 2                | 426                                     | 426       | 48        | 48        |                         |
| 42,0             | 57,5                  | 1                | 374                                    | 537       | 237       | 74        | 32                      | 1                | 376                                     | 579       | 205       | 2         | 96                      |
|                  |                       | 2                | 492                                    | 492       | 119       | 119       |                         | 2                | 523                                     | 523       | 58        | 58        |                         |
| 46,5             | 80,0                  | 1                | 441                                    | 616       | 292       | 116       | 33                      | 1                | 454                                     | 699       | 248       | 4         | 103                     |
|                  |                       | 2                | 568                                    | 568       | 165       | 165       |                         | 2                | 631                                     | 631       | 72        | 72        |                         |

3.3.3.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

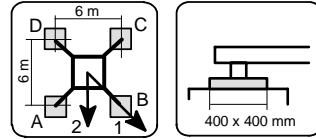


**KRE 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 25,0                  | 1                | 247                                    | 345       | 165       | 68        | 22                      | 1                | 173                                     | 331       | 75        | 0         | 48                      |
|                  |                       | 2                | 318                                    | 318       | 95        | 95        |                         | 2                | 278                                     | 278       | 11        | 11        |                         |
| 15,0             | 25,0                  | 1                | 255                                    | 358       | 167       | 64        | 23                      | 1                | 177                                     | 347       | 74        | 0         | 53                      |
|                  |                       | 2                | 330                                    | 330       | 92        | 92        |                         | 2                | 289                                     | 289       | 10        | 10        |                         |
| 19,5             | 27,5                  | 1                | 267                                    | 378       | 174       | 63        | 25                      | 1                | 190                                     | 365       | 82        | 0         | 68                      |
|                  |                       | 2                | 347                                    | 347       | 94        | 94        |                         | 2                | 306                                     | 306       | 12        | 12        |                         |
| 24,0             | 30,0                  | 1                | 281                                    | 399       | 180       | 62        | 26                      | 1                | 203                                     | 385       | 88        | 0         | 72                      |
|                  |                       | 2                | 366                                    | 366       | 95        | 95        |                         | 2                | 324                                     | 324       | 14        | 14        |                         |
| 28,5             | 32,5                  | 1                | 294                                    | 421       | 186       | 59        | 28                      | 1                | 214                                     | 408       | 93        | 0         | 78                      |
|                  |                       | 2                | 386                                    | 386       | 94        | 94        |                         | 2                | 350                                     | 350       | 101       | 101       |                         |
| 33,0             | 35,0                  | 1                | 308                                    | 445       | 192       | 55        | 29                      | 1                | 294                                     | 435       | 176       | 35        | 85                      |
|                  |                       | 2                | 407                                    | 407       | 93        | 93        |                         | 2                | 396                                     | 396       | 74        | 74        |                         |
| 37,5             | 40,0                  | 1                | 329                                    | 477       | 203       | 55        | 30                      | 1                | 325                                     | 501       | 177       | 1         | 91                      |
|                  |                       | 2                | 436                                    | 436       | 96        | 96        |                         | 2                | 452                                     | 452       | 50        | 50        |                         |
| 42,0             | 60,0                  | 1                | 387                                    | 548       | 252       | 90        | 32                      | 1                | 395                                     | 610       | 214       | 0         | 97                      |
|                  |                       | 2                | 504                                    | 504       | 135       | 135       |                         | 2                | 550                                     | 550       | 59        | 59        |                         |
| 46,5             | 82,5                  | 1                | 454                                    | 628       | 307       | 133       | 33                      | 1                | 474                                     | 730       | 257       | 1         | 104                     |
|                  |                       | 2                | 580                                    | 580       | 181       | 181       |                         | 2                | 659                                     | 659       | 72        | 72        |                         |

3.3.4.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

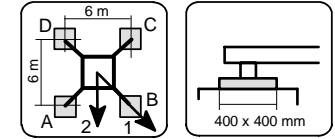


**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 20,0                  | 1                | 164                                    | 300       | 164       | 28        | 21                      | 1                | 105                                     | 220       | 105       | 0         | 45                      |
|                  |                       | 2                | 260                                    | 260       | 68        | 68        |                         | 2                | 185                                     | 185       | 30        | 30        |                         |
| 15,0             | 20,0                  | 1                | 169                                    | 313       | 169       | 25        | 22                      | 1                | 109                                     | 232       | 109       | 0         | 50                      |
|                  |                       | 2                | 271                                    | 271       | 67        | 67        |                         | 2                | 195                                     | 195       | 30        | 30        |                         |
| 19,5             | 20,0                  | 1                | 173                                    | 325       | 173       | 20        | 24                      | 1                | 109                                     | 246       | 109       | 0         | 64                      |
|                  |                       | 2                | 281                                    | 281       | 64        | 64        |                         | 2                | 203                                     | 203       | 29        | 29        |                         |
| 24,0             | 20,0                  | 1                | 176                                    | 339       | 176       | 13        | 25                      | 1                | 108                                     | 262       | 108       | 0         | 69                      |
|                  |                       | 2                | 291                                    | 291       | 61        | 61        |                         | 2                | 212                                     | 212       | 27        | 27        |                         |
| 28,5             | 20,0                  | 1                | 180                                    | 354       | 180       | 5         | 27                      | 1                | 107                                     | 279       | 107       | 0         | 75                      |
|                  |                       | 2                | 303                                    | 303       | 56        | 56        |                         | 2                | 234                                     | 234       | 95        | 95        |                         |
| 33,0             | 25,0                  | 1                | 196                                    | 382       | 196       | 9         | 28                      | 1                | 181                                     | 319       | 181       | 42        | 81                      |
|                  |                       | 2                | 327                                    | 327       | 64        | 64        |                         | 2                | 278                                     | 278       | 83        | 83        |                         |
| 37,5             | 32,5                  | 1                | 218                                    | 418       | 218       | 17        | 30                      | 1                | 203                                     | 385       | 203       | 21        | 87                      |
|                  |                       | 2                | 359                                    | 359       | 76        | 76        |                         | 2                | 331                                     | 331       | 74        | 74        |                         |
| 42,0             | 45,0                  | 1                | 253                                    | 468       | 253       | 37        | 31                      | 1                | 238                                     | 468       | 238       | 7         | 93                      |
|                  |                       | 2                | 405                                    | 405       | 100       | 100       |                         | 2                | 400                                     | 400       | 75        | 75        |                         |
| 46,5             | 55,0                  | 1                | 282                                    | 514       | 282       | 50        | 33                      | 1                | 251                                     | 566       | 251       | 0         | 100                     |
|                  |                       | 2                | 446                                    | 446       | 118       | 118       |                         | 2                | 467                                     | 467       | 67        | 67        |                         |

3.3.4.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

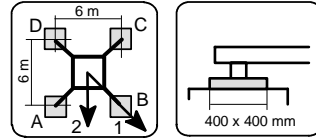


**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 15,0                  | 1                | 159                                    | 287       | 159       | 32        | 21                      | 1                | 80                                      | 221       | 80        | 0         | 46                      |
|                  |                       | 2                | 250                                    | 250       | 69        | 69        |                         | 2                | 173                                     | 173       | 17        | 17        |                         |
| 15,0             | 15,0                  | 1                | 164                                    | 300       | 164       | 29        | 23                      | 1                | 84                                      | 233       | 84        | 0         | 51                      |
|                  |                       | 2                | 260                                    | 260       | 68        | 68        |                         | 2                | 182                                     | 182       | 18        | 18        |                         |
| 19,5             | 15,0                  | 1                | 168                                    | 312       | 168       | 23        | 24                      | 1                | 84                                      | 247       | 84        | 0         | 65                      |
|                  |                       | 2                | 270                                    | 270       | 66        | 66        |                         | 2                | 191                                     | 191       | 16        | 16        |                         |
| 24,0             | 15,0                  | 1                | 171                                    | 326       | 171       | 17        | 25                      | 1                | 83                                      | 263       | 83        | 0         | 69                      |
|                  |                       | 2                | 281                                    | 281       | 62        | 62        |                         | 2                | 203                                     | 203       | 110       | 110       |                         |
| 28,5             | 15,0                  | 1                | 175                                    | 341       | 175       | 9         | 27                      | 1                | 81                                      | 280       | 81        | 0         | 75                      |
|                  |                       | 2                | 292                                    | 292       | 57        | 57        |                         | 2                | 232                                     | 232       | 88        | 88        |                         |
| 33,0             | 22,5                  | 1                | 197                                    | 376       | 197       | 18        | 28                      | 1                | 182                                     | 325       | 182       | 40        | 82                      |
|                  |                       | 2                | 323                                    | 323       | 71        | 71        |                         | 2                | 283                                     | 283       | 81        | 81        |                         |
| 37,5             | 30,0                  | 1                | 219                                    | 412       | 219       | 27        | 30                      | 1                | 204                                     | 391       | 204       | 17        | 88                      |
|                  |                       | 2                | 355                                    | 355       | 83        | 83        |                         | 2                | 337                                     | 337       | 72        | 72        |                         |
| 42,0             | 42,5                  | 1                | 254                                    | 462       | 254       | 46        | 31                      | 1                | 239                                     | 475       | 239       | 3         | 94                      |
|                  |                       | 2                | 401                                    | 401       | 107       | 107       |                         | 2                | 406                                     | 406       | 72        | 72        |                         |
| 46,5             | 52,5                  | 1                | 284                                    | 508       | 284       | 59        | 33                      | 1                | 248                                     | 578       | 248       | 0         | 101                     |
|                  |                       | 2                | 442                                    | 442       | 125       | 125       |                         | 2                | 473                                     | 473       | 64        | 64        |                         |

3.3.4.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

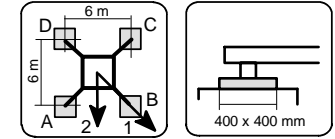


**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 17,5                  | 1                | 169                                    | 303       | 169       | 35        | 21                      | 1                | 92                                      | 221       | 92        | 0         | 46                      |
|                  |                       | 2                | 264                                    | 264       | 74        | 74        |                         | 2                | 180                                     | 180       | 23        | 23        |                         |
| 15,0             | 17,5                  | 1                | 174                                    | 316       | 174       | 32        | 23                      | 1                | 96                                      | 234       | 96        | 0         | 51                      |
|                  |                       | 2                | 274                                    | 274       | 73        | 73        |                         | 2                | 189                                     | 189       | 24        | 24        |                         |
| 19,5             | 17,5                  | 1                | 177                                    | 329       | 177       | 26        | 24                      | 1                | 96                                      | 248       | 96        | 0         | 65                      |
|                  |                       | 2                | 284                                    | 284       | 71        | 71        |                         | 2                | 198                                     | 198       | 127       | 127       |                         |
| 24,0             | 17,5                  | 1                | 181                                    | 342       | 181       | 20        | 26                      | 1                | 95                                      | 264       | 95        | 0         | 70                      |
|                  |                       | 2                | 295                                    | 295       | 67        | 67        |                         | 2                | 222                                     | 222       | 110       | 110       |                         |
| 28,5             | 17,5                  | 1                | 184                                    | 357       | 184       | 12        | 27                      | 1                | 169                                     | 286       | 169       | 53        | 76                      |
|                  |                       | 2                | 307                                    | 307       | 62        | 62        |                         | 2                | 252                                     | 252       | 87        | 87        |                         |
| 33,0             | 17,5                  | 1                | 188                                    | 374       | 188       | 2         | 28                      | 1                | 173                                     | 330       | 173       | 15        | 82                      |
|                  |                       | 2                | 319                                    | 319       | 57        | 57        |                         | 2                | 284                                     | 284       | 62        | 62        |                         |
| 37,5             | 27,5                  | 1                | 216                                    | 416       | 216       | 16        | 30                      | 1                | 200                                     | 405       | 200       | 0         | 89                      |
|                  |                       | 2                | 358                                    | 358       | 75        | 75        |                         | 2                | 345                                     | 345       | 58        | 58        |                         |
| 42,0             | 37,5                  | 1                | 245                                    | 461       | 245       | 29        | 31                      | 1                | 208                                     | 505       | 208       | 0         | 95                      |
|                  |                       | 2                | 398                                    | 398       | 92        | 92        |                         | 2                | 408                                     | 408       | 51        | 51        |                         |
| 46,5             | 52,5                  | 1                | 287                                    | 520       | 287       | 54        | 33                      | 1                | 237                                     | 613       | 237       | 0         | 101                     |
|                  |                       | 2                | 451                                    | 451       | 123       | 123       |                         | 2                | 489                                     | 489       | 55        | 55        |                         |

3.3.4.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

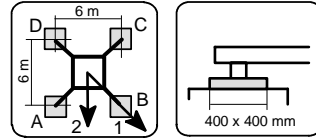


**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 15,0                  | 1                | 171                                    | 305       | 171       | 36        | 21                      | 1                | 118                                     | 224       | 118       | 11        | 47                      |
|                  |                       | 2                | 266                                    | 266       | 75        | 75        |                         | 2                | 193                                     | 193       | 42        | 42        |                         |
| 15,0             | 15,0                  | 1                | 175                                    | 318       | 175       | 32        | 23                      | 1                | 122                                     | 236       | 122       | 9         | 52                      |
|                  |                       | 2                | 277                                    | 277       | 74        | 74        |                         | 2                | 203                                     | 203       | 42        | 42        |                         |
| 19,5             | 15,0                  | 1                | 179                                    | 331       | 179       | 27        | 24                      | 1                | 83                                      | 249       | 83        | 0         | 66                      |
|                  |                       | 2                | 287                                    | 287       | 71        | 71        |                         | 2                | 212                                     | 212       | 40        | 40        |                         |
| 24,0             | 15,0                  | 1                | 182                                    | 345       | 182       | 20        | 26                      | 1                | 82                                      | 265       | 82        | 0         | 71                      |
|                  |                       | 2                | 297                                    | 297       | 67        | 67        |                         | 2                | 230                                     | 230       | 105       | 105       |                         |
| 28,5             | 15,0                  | 1                | 186                                    | 360       | 186       | 12        | 27                      | 1                | 171                                     | 296       | 171       | 45        | 77                      |
|                  |                       | 2                | 309                                    | 309       | 63        | 63        |                         | 2                | 260                                     | 260       | 82        | 82        |                         |
| 33,0             | 15,0                  | 1                | 189                                    | 377       | 189       | 2         | 29                      | 1                | 174                                     | 342       | 174       | 7         | 83                      |
|                  |                       | 2                | 322                                    | 322       | 57        | 57        |                         | 2                | 293                                     | 293       | 56        | 56        |                         |
| 37,5             | 22,5                  | 1                | 212                                    | 414       | 212       | 10        | 30                      | 1                | 180                                     | 426       | 180       | 0         | 89                      |
|                  |                       | 2                | 355                                    | 355       | 69        | 69        |                         | 2                | 347                                     | 347       | 46        | 46        |                         |
| 42,0             | 37,5                  | 1                | 253                                    | 471       | 253       | 34        | 31                      | 1                | 212                                     | 527       | 212       | 0         | 96                      |
|                  |                       | 2                | 407                                    | 407       | 98        | 98        |                         | 2                | 424                                     | 424       | 51        | 51        |                         |
| 46,5             | 52,5                  | 1                | 295                                    | 530       | 295       | 59        | 33                      | 1                | 241                                     | 637       | 241       | 0         | 102                     |
|                  |                       | 2                | 461                                    | 461       | 128       | 128       |                         | 2                | 505                                     | 505       | 54        | 54        |                         |

3.3.4.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

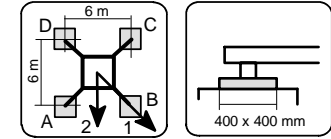


**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 12,5                  | 1                | 167                                    | 303       | 167       | 32        | 22                      | 1                | 103                                     | 242       | 103       | 0         | 47                      |
|                  |                       | 2                | 263                                    | 263       | 71        | 71        |                         | 2                | 197                                     | 197       | 26        | 26        |                         |
| 15,0             | 12,5                  | 1                | 172                                    | 316       | 172       | 28        | 23                      | 1                | 105                                     | 257       | 105       | 0         | 52                      |
|                  |                       | 2                | 274                                    | 274       | 70        | 70        |                         | 2                | 207                                     | 207       | 26        | 26        |                         |
| 19,5             | 12,5                  | 1                | 175                                    | 329       | 175       | 22        | 25                      | 1                | 104                                     | 273       | 104       | 0         | 67                      |
|                  |                       | 2                | 284                                    | 284       | 67        | 67        |                         | 2                | 217                                     | 217       | 24        | 24        |                         |
| 24,0             | 12,5                  | 1                | 179                                    | 343       | 179       | 15        | 26                      | 1                | 101                                     | 292       | 101       | 0         | 71                      |
|                  |                       | 2                | 295                                    | 295       | 63        | 63        |                         | 2                | 232                                     | 232       | 96        | 96        |                         |
| 28,5             | 15,0                  | 1                | 189                                    | 364       | 189       | 13        | 27                      | 1                | 111                                     | 313       | 111       | 0         | 78                      |
|                  |                       | 2                | 313                                    | 313       | 65        | 65        |                         | 2                | 268                                     | 268       | 79        | 79        |                         |
| 33,0             | 15,0                  | 1                | 192                                    | 381       | 192       | 4         | 29                      | 1                | 177                                     | 353       | 177       | 1         | 84                      |
|                  |                       | 2                | 326                                    | 326       | 59        | 59        |                         | 2                | 302                                     | 302       | 53        | 53        |                         |
| 37,5             | 22,5                  | 1                | 214                                    | 418       | 214       | 11        | 30                      | 1                | 176                                     | 445       | 176       | 0         | 90                      |
|                  |                       | 2                | 358                                    | 358       | 71        | 71        |                         | 2                | 357                                     | 357       | 42        | 42        |                         |
| 42,0             | 37,5                  | 1                | 255                                    | 475       | 255       | 35        | 32                      | 1                | 207                                     | 548       | 207       | 0         | 96                      |
|                  |                       | 2                | 411                                    | 411       | 100       | 100       |                         | 2                | 434                                     | 434       | 47        | 47        |                         |
| 46,5             | 55,0                  | 1                | 304                                    | 541       | 304       | 66        | 33                      | 1                | 248                                     | 659       | 248       | 0         | 103                     |
|                  |                       | 2                | 472                                    | 472       | 136       | 136       |                         | 2                | 522                                     | 522       | 56        | 56        |                         |

3.3.4.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk



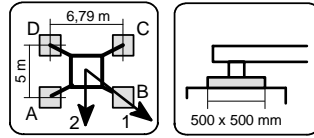
**KRE 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 10,5             | 15,0                  | 1                | 181                                    | 312       | 181       | 50        | 22                      | 1                | 82                                      | 314       | 82        | 0         | 48                      |
|                  |                       | 2                | 274                                    | 274       | 88        | 88        |                         | 2                | 231                                     | 231       | 9         | 9         |                         |
| 15,0             | 15,0                  | 1                | 186                                    | 326       | 186       | 46        | 23                      | 1                | 84                                      | 329       | 84        | 0         | 53                      |
|                  |                       | 2                | 285                                    | 285       | 87        | 87        |                         | 2                | 241                                     | 241       | 8         | 8         |                         |
| 19,5             | 17,5                  | 1                | 196                                    | 345       | 196       | 46        | 25                      | 1                | 95                                      | 346       | 95        | 0         | 68                      |
|                  |                       | 2                | 301                                    | 301       | 90        | 90        |                         | 2                | 257                                     | 257       | 12        | 12        |                         |
| 24,0             | 17,5                  | 1                | 199                                    | 359       | 199       | 39        | 26                      | 1                | 93                                      | 365       | 93        | 0         | 72                      |
|                  |                       | 2                | 312                                    | 312       | 86        | 86        |                         | 2                | 267                                     | 267       | 9         | 9         |                         |
| 28,5             | 20,0                  | 1                | 209                                    | 381       | 209       | 37        | 28                      | 1                | 102                                     | 387       | 102       | 0         | 78                      |
|                  |                       | 2                | 331                                    | 331       | 87        | 87        |                         | 2                | 298                                     | 298       | 90        | 90        |                         |
| 33,0             | 22,5                  | 1                | 219                                    | 404       | 219       | 33        | 29                      | 1                | 109                                     | 410       | 109       | 0         | 85                      |
|                  |                       | 2                | 350                                    | 350       | 88        | 88        |                         | 2                | 338                                     | 338       | 70        | 70        |                         |
| 37,5             | 25,0                  | 1                | 228                                    | 429       | 228       | 28        | 30                      | 1                | 190                                     | 474       | 190       | 0         | 91                      |
|                  |                       | 2                | 370                                    | 370       | 87        | 87        |                         | 2                | 381                                     | 381       | 46        | 46        |                         |
| 42,0             | 40,0                  | 1                | 269                                    | 487       | 269       | 52        | 32                      | 1                | 220                                     | 579       | 220       | 0         | 97                      |
|                  |                       | 2                | 423                                    | 423       | 116       | 116       |                         | 2                | 459                                     | 459       | 50        | 50        |                         |
| 46,5             | 57,5                  | 1                | 318                                    | 553       | 318       | 83        | 33                      | 1                | 259                                     | 692       | 259       | 0         | 104                     |
|                  |                       | 2                | 484                                    | 484       | 152       | 152       |                         | 2                | 548                                     | 548       | 58        | 58        |                         |



3.3.5.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

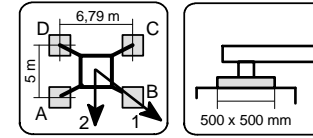


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 30,0                  | 1                | 248                                    | 355    | 158    | 51     | 23                      | 1                | 183                                     | 269    | 110    | 23     | 51                      |
|                  |                       | 2                | 325                                    | 325    | 80     | 80     |                         | 2                | 245                                     | 245    | 47     | 47     |                         |
| 19,5             | 30,0                  | 1                | 255                                    | 369    | 160    | 46     | 24                      | 1                | 190                                     | 281    | 112    | 21     | 65                      |
|                  |                       | 2                | 337                                    | 337    | 78     | 78     |                         | 2                | 256                                     | 256    | 46     | 46     |                         |
| 24,0             | 30,0                  | 1                | 262                                    | 383    | 160    | 39     | 26                      | 1                | 196                                     | 293    | 114    | 16     | 69                      |
|                  |                       | 2                | 349                                    | 349    | 73     | 73     |                         | 2                | 266                                     | 266    | 43     | 43     |                         |
| 28,5             | 30,0                  | 1                | 269                                    | 398    | 160    | 31     | 27                      | 1                | 202                                     | 305    | 114    | 11     | 76                      |
|                  |                       | 2                | 362                                    | 362    | 67     | 67     |                         | 2                | 284                                     | 284    | 115    | 115    |                         |
| 33,0             | 35,0                  | 1                | 289                                    | 427    | 172    | 35     | 29                      | 1                | 259                                     | 362    | 172    | 69     | 82                      |
|                  |                       | 2                | 388                                    | 388    | 73     | 73     |                         | 2                | 333                                     | 333    | 98     | 98     |                         |
| 37,5             | 45,0                  | 1                | 321                                    | 469    | 197    | 49     | 30                      | 1                | 301                                     | 436    | 187    | 52     | 88                      |
|                  |                       | 2                | 428                                    | 428    | 90     | 90     |                         | 2                | 399                                     | 399    | 89     | 89     |                         |
| 42,0             | 57,5                  | 1                | 361                                    | 520    | 227    | 68     | 31                      | 1                | 351                                     | 522    | 207    | 36     | 94                      |
|                  |                       | 2                | 476                                    | 476    | 112    | 112    |                         | 2                | 474                                     | 474    | 83     | 83     |                         |
| 46,5             | 72,5                  | 1                | 407                                    | 578    | 263    | 91     | 33                      | 1                | 408                                     | 618    | 231    | 22     | 101                     |
|                  |                       | 2                | 531                                    | 531    | 139    | 139    |                         | 2                | 560                                     | 560    | 80     | 80     |                         |
| 51,0             | 87,5                  | 1                | 454                                    | 638    | 298    | 113    | 34                      | 1                | 467                                     | 719    | 255    | 3      | 107                     |
|                  |                       | 2                | 587                                    | 587    | 164    | 164    |                         | 2                | 649                                     | 649    | 73     | 73     |                         |
| 55,5             | 112,5                 | 1                | 527                                    | 726    | 359    | 160    | 36                      | 1                | 553                                     | 851    | 302    | 5      | 113                     |
|                  |                       | 2                | 671                                    | 671    | 215    | 215    |                         | 2                | 768                                     | 768    | 87     | 87     |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |

3.3.5.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

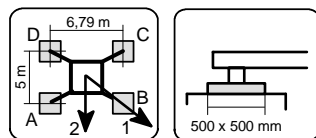


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,0             | 22,5                  | 1                | 234                                    | 335    | 149    | 48     | 23                      | 1                | 164                                     | 250    | 91     | 4      | 51                      |
|                  |                       | 2                | 307                                    | 307    | 76     | 76     |                         | 2                | 226                                     | 226    | 28     | 28     |                         |
| 19,5             | 22,5                  | 1                | 242                                    | 349    | 151    | 44     | 24                      | 1                | 171                                     | 263    | 94     | 2      | 65                      |
|                  |                       | 2                | 319                                    | 319    | 74     | 74     |                         | 2                | 237                                     | 237    | 27     | 27     |                         |
| 24,0             | 22,5                  | 1                | 248                                    | 363    | 152    | 37     | 26                      | 1                | 174                                     | 277    | 92     | 0      | 70                      |
|                  |                       | 2                | 331                                    | 331    | 69     | 69     |                         | 2                | 247                                     | 247    | 24     | 24     |                         |
| 28,5             | 22,5                  | 1                | 255                                    | 378    | 152    | 29     | 27                      | 1                | 221                                     | 297    | 156    | 80     | 76                      |
|                  |                       | 2                | 344                                    | 344    | 63     | 63     |                         | 2                | 276                                     | 276    | 101    | 101    |                         |
| 33,0             | 32,5                  | 1                | 288                                    | 420    | 176    | 44     | 29                      | 1                | 262                                     | 368    | 172    | 66     | 82                      |
|                  |                       | 2                | 383                                    | 383    | 81     | 81     |                         | 2                | 339                                     | 339    | 96     | 96     |                         |
| 37,5             | 42,5                  | 1                | 321                                    | 463    | 201    | 59     | 30                      | 1                | 304                                     | 443    | 187    | 48     | 89                      |
|                  |                       | 2                | 423                                    | 423    | 98     | 98     |                         | 2                | 405                                     | 405    | 87     | 87     |                         |
| 42,0             | 55,0                  | 1                | 360                                    | 513    | 231    | 77     | 32                      | 1                | 354                                     | 529    | 207    | 32     | 95                      |
|                  |                       | 2                | 471                                    | 471    | 120    | 120    |                         | 2                | 480                                     | 480    | 80     | 80     |                         |
| 46,5             | 70,0                  | 1                | 406                                    | 572    | 266    | 101    | 33                      | 1                | 412                                     | 626    | 231    | 17     | 101                     |
|                  |                       | 2                | 526                                    | 526    | 147    | 147    |                         | 2                | 566                                     | 566    | 76     | 76     |                         |
| 51,0             | 87,5                  | 1                | 459                                    | 639    | 308    | 128    | 34                      | 1                | 477                                     | 734    | 260    | 3      | 107                     |
|                  |                       | 2                | 589                                    | 589    | 178    | 178    |                         | 2                | 663                                     | 663    | 75     | 75     |                         |
| 55,5             | 112,5                 | 1                | 532                                    | 726    | 369    | 175    | 36                      | 1                | 564                                     | 867    | 308    | 4      | 114                     |
|                  |                       | 2                | 673                                    | 673    | 229    | 229    |                         | 2                | 783                                     | 783    | 88     | 88     |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |

3.3.5.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

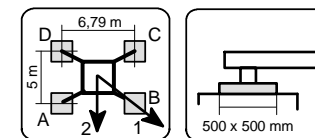


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 25,0                  | 1                | 246                                    | 351       | 157       | 51        | 23                      | 1                | 170                                     | 257       | 97        | 10        | 52                      |
|                  |                       | 2                | 322                                    | 322       | 81        | 81        |                         | 2                | 233                                     | 233       | 34        | 34        |                         |
| 19,5             | 25,0                  | 1                | 254                                    | 366       | 159       | 47        | 25                      | 1                | 177                                     | 270       | 100       | 8         | 66                      |
|                  |                       | 2                | 335                                    | 335       | 78        | 78        |                         | 2                | 244                                     | 244       | 33        | 33        |                         |
| 24,0             | 25,0                  | 1                | 260                                    | 380       | 159       | 40        | 26                      | 1                | 183                                     | 281       | 101       | 3         | 71                      |
|                  |                       | 2                | 347                                    | 347       | 73        | 73        |                         | 2                | 263                                     | 263       | 126       | 126       |                         |
| 28,5             | 25,0                  | 1                | 267                                    | 395       | 159       | 31        | 27                      | 1                | 235                                     | 322       | 162       | 74        | 77                      |
|                  |                       | 2                | 360                                    | 360       | 67        | 67        |                         | 2                | 298                                     | 298       | 99        | 99        |                         |
| 33,0             | 27,5                  | 1                | 281                                    | 418       | 165       | 28        | 29                      | 1                | 257                                     | 375       | 159       | 41        | 83                      |
|                  |                       | 2                | 380                                    | 380       | 66        | 66        |                         | 2                | 342                                     | 342       | 74        | 74        |                         |
| 37,5             | 37,5                  | 1                | 314                                    | 461       | 189       | 42        | 30                      | 1                | 300                                     | 450       | 173       | 23        | 89                      |
|                  |                       | 2                | 420                                    | 420       | 83        | 83        |                         | 2                | 409                                     | 409       | 64        | 64        |                         |
| 42,0             | 52,5                  | 1                | 360                                    | 518       | 225       | 66        | 32                      | 1                | 356                                     | 543       | 199       | 12        | 96                      |
|                  |                       | 2                | 474                                    | 474       | 110       | 110       |                         | 2                | 491                                     | 491       | 64        | 64        |                         |
| 46,5             | 70,0                  | 1                | 412                                    | 584       | 267       | 96        | 33                      | 1                | 420                                     | 647       | 229       | 2         | 102                     |
|                  |                       | 2                | 536                                    | 536       | 143       | 143       |                         | 2                | 584                                     | 584       | 65        | 65        |                         |
| 51,0             | 92,5                  | 1                | 478                                    | 664       | 321       | 135       | 35                      | 1                | 499                                     | 769       | 270       | 0         | 108                     |
|                  |                       | 2                | 612                                    | 612       | 187       | 187       |                         | 2                | 694                                     | 694       | 75        | 75        |                         |
| 55,5             | 117,5                 | 1                | 551                                    | 752       | 382       | 181       | 36                      | 1                | 585                                     | 903       | 318       | 0         | 115                     |
|                  |                       | 2                | 696                                    | 696       | 237       | 237       |                         | 2                | 815                                     | 815       | 88        | 88        |                         |

3.3.5.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

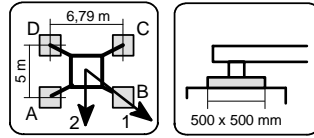


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 22,5                  | 1                | 248                                    | 354       | 158       | 52        | 23                      | 1                | 186                                     | 270       | 114       | 30        | 52                      |
|                  |                       | 2                | 324                                    | 324       | 81        | 81        |                         | 2                | 247                                     | 247       | 53        | 53        |                         |
| 19,5             | 22,5                  | 1                | 255                                    | 368       | 160       | 47        | 25                      | 1                | 193                                     | 284       | 116       | 26        | 67                      |
|                  |                       | 2                | 337                                    | 337       | 78        | 78        |                         | 2                | 259                                     | 259       | 51        | 51        |                         |
| 24,0             | 22,5                  | 1                | 262                                    | 383       | 160       | 40        | 26                      | 1                | 199                                     | 297       | 117       | 20        | 72                      |
|                  |                       | 2                | 349                                    | 349       | 73        | 73        |                         | 2                | 272                                     | 272       | 121       | 121       |                         |
| 28,5             | 22,5                  | 1                | 269                                    | 398       | 160       | 31        | 28                      | 1                | 239                                     | 333       | 160       | 67        | 78                      |
|                  |                       | 2                | 362                                    | 362       | 67        | 67        |                         | 2                | 307                                     | 307       | 93        | 93        |                         |
| 33,0             | 22,5                  | 1                | 277                                    | 415       | 160       | 21        | 29                      | 1                | 256                                     | 380       | 151       | 27        | 84                      |
|                  |                       | 2                | 377                                    | 377       | 60        | 60        |                         | 2                | 346                                     | 346       | 61        | 61        |                         |
| 37,5             | 35,0                  | 1                | 316                                    | 465       | 190       | 41        | 30                      | 1                | 305                                     | 463       | 171       | 13        | 90                      |
|                  |                       | 2                | 424                                    | 424       | 82        | 82        |                         | 2                | 419                                     | 419       | 57        | 57        |                         |
| 42,0             | 50,0                  | 1                | 362                                    | 522       | 226       | 66        | 32                      | 1                | 361                                     | 556       | 197       | 2         | 96                      |
|                  |                       | 2                | 478                                    | 478       | 110       | 110       |                         | 2                | 502                                     | 502       | 56        | 56        |                         |
| 46,5             | 72,5                  | 1                | 427                                    | 601       | 280       | 107       | 33                      | 1                | 438                                     | 674       | 239       | 4         | 103                     |
|                  |                       | 2                | 553                                    | 553       | 155       | 155       |                         | 2                | 608                                     | 608       | 69        | 69        |                         |
| 51,0             | 95,0                  | 1                | 493                                    | 681       | 334       | 146       | 35                      | 1                | 517                                     | 797       | 280       | 0         | 109                     |
|                  |                       | 2                | 629                                    | 629       | 198       | 198       |                         | 2                | 719                                     | 719       | 78        | 78        |                         |
| 55,5             | 120,0                 | 1                | 566                                    | 770       | 395       | 191       | 36                      | 1                | 603                                     | 933       | 326       | 0         | 115                     |
|                  |                       | 2                | 713                                    | 713       | 248       | 248       |                         | 2                | 841                                     | 841       | 90        | 90        |                         |

3.3.5.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

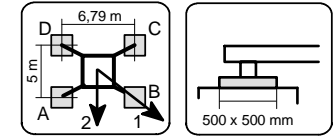


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 20,0                  | 1                | 244                                    | 351       | 154       | 48        | 23                      | 1                | 184                                     | 280       | 104       | 9         | 53                      |
|                  |                       | 2                | 321                                    | 321       | 77        | 77        |                         | 2                | 253                                     | 253       | 35        | 35        |                         |
| 19,5             | 20,0                  | 1                | 252                                    | 366       | 156       | 43        | 25                      | 1                | 192                                     | 293       | 106       | 5         | 68                      |
|                  |                       | 2                | 334                                    | 334       | 74        | 74        |                         | 2                | 265                                     | 265       | 33        | 33        |                         |
| 24,0             | 20,0                  | 1                | 259                                    | 380       | 157       | 35        | 26                      | 1                | 197                                     | 308       | 105       | 0         | 72                      |
|                  |                       | 2                | 346                                    | 346       | 69        | 69        |                         | 2                | 277                                     | 277       | 28        | 28        |                         |
| 28,5             | 20,0                  | 1                | 266                                    | 396       | 157       | 27        | 28                      | 1                | 238                                     | 338       | 154       | 54        | 78                      |
|                  |                       | 2                | 360                                    | 360       | 63        | 63        |                         | 2                | 311                                     | 311       | 82        | 82        |                         |
| 33,0             | 22,5                  | 1                | 280                                    | 419       | 162       | 23        | 29                      | 1                | 261                                     | 392       | 151       | 20        | 85                      |
|                  |                       | 2                | 381                                    | 381       | 61        | 61        |                         | 2                | 356                                     | 356       | 56        | 56        |                         |
| 37,5             | 35,0                  | 1                | 319                                    | 469       | 192       | 42        | 31                      | 1                | 310                                     | 476       | 171       | 6         | 91                      |
|                  |                       | 2                | 427                                    | 427       | 84        | 84        |                         | 2                | 430                                     | 430       | 52        | 52        |                         |
| 42,0             | 52,5                  | 1                | 371                                    | 533       | 235       | 73        | 32                      | 1                | 373                                     | 576       | 203       | 0         | 97                      |
|                  |                       | 2                | 488                                    | 488       | 118       | 118       |                         | 2                | 520                                     | 520       | 56        | 56        |                         |
| 46,5             | 75,0                  | 1                | 437                                    | 612       | 289       | 114       | 33                      | 1                | 451                                     | 694       | 245       | 1         | 103                     |
|                  |                       | 2                | 563                                    | 563       | 162       | 162       |                         | 2                | 627                                     | 627       | 69        | 69        |                         |
| 51,0             | 97,5                  | 1                | 503                                    | 692       | 342       | 153       | 35                      | 1                | 526                                     | 821       | 283       | 0         | 110                     |
|                  |                       | 2                | 640                                    | 640       | 205       | 205       |                         | 2                | 738                                     | 738       | 77        | 77        |                         |
| 55,5             | 122,5                 | 1                | 576                                    | 781       | 403       | 198       | 36                      | 1                | 612                                     | 959       | 327       | 0         | 116                     |
|                  |                       | 2                | 724                                    | 724       | 255       | 255       |                         | 2                | 861                                     | 861       | 88        | 88        |                         |

3.3.5.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

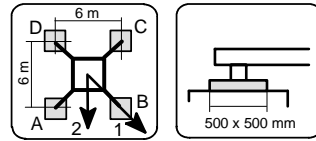


**KRE 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0             | 22,5                  | 1                | 257                                    | 361       | 170       | 66        | 24                      | 1                | 182                                     | 347       | 79        | 0         | 53                      |
|                  |                       | 2                | 332                                    | 332       | 95        | 95        |                         | 2                | 292                                     | 292       | 12        | 12        |                         |
| 19,5             | 22,5                  | 1                | 265                                    | 376       | 172       | 61        | 25                      | 1                | 185                                     | 365       | 77        | 0         | 69                      |
|                  |                       | 2                | 345                                    | 345       | 92        | 92        |                         | 2                | 304                                     | 304       | 10        | 10        |                         |
| 24,0             | 25,0                  | 1                | 278                                    | 396       | 178       | 60        | 27                      | 1                | 198                                     | 385       | 83        | 0         | 73                      |
|                  |                       | 2                | 364                                    | 364       | 92        | 92        |                         | 2                | 322                                     | 322       | 11        | 11        |                         |
| 28,5             | 27,5                  | 1                | 291                                    | 419       | 184       | 57        | 28                      | 1                | 209                                     | 407       | 88        | 0         | 79                      |
|                  |                       | 2                | 383                                    | 383       | 92        | 92        |                         | 2                | 348                                     | 348       | 98        | 98        |                         |
| 33,0             | 30,0                  | 1                | 305                                    | 442       | 190       | 53        | 29                      | 1                | 292                                     | 433       | 173       | 32        | 86                      |
|                  |                       | 2                | 404                                    | 404       | 91        | 91        |                         | 2                | 394                                     | 394       | 71        | 71        |                         |
| 37,5             | 37,5                  | 1                | 332                                    | 480       | 207       | 60        | 31                      | 1                | 329                                     | 505       | 181       | 5         | 92                      |
|                  |                       | 2                | 439                                    | 439       | 101       | 101       |                         | 2                | 456                                     | 456       | 54        | 54        |                         |
| 42,0             | 55,0                  | 1                | 384                                    | 544       | 250       | 90        | 32                      | 1                | 390                                     | 608       | 210       | 0         | 98                      |
|                  |                       | 2                | 500                                    | 500       | 134       | 134       |                         | 2                | 547                                     | 547       | 57        | 57        |                         |
| 46,5             | 77,5                  | 1                | 450                                    | 623       | 304       | 130       | 34                      | 1                | 468                                     | 727       | 252       | 0         | 104                     |
|                  |                       | 2                | 575                                    | 575       | 178       | 178       |                         | 2                | 655                                     | 655       | 69        | 69        |                         |
| 51,0             | 102,5                 | 1                | 522                                    | 710       | 363       | 175       | 35                      | 1                | 554                                     | 858       | 299       | 0         | 110                     |
|                  |                       | 2                | 658                                    | 658       | 227       | 227       |                         | 2                | 773                                     | 773       | 82        | 82        |                         |
| 55,5             | 127,5                 | 1                | 596                                    | 800       | 424       | 220       | 37                      | 1                | 638                                     | 999       | 342       | 0         | 117                     |
|                  |                       | 2                | 743                                    | 743       | 276       | 276       |                         | 2                | 897                                     | 897       | 92        | 92        |                         |

3.3.6.1 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

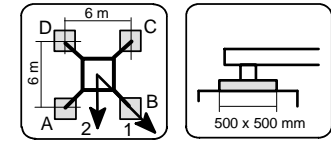


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 30 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 15,0                  | 1                | 165                                    | 309       | 165       | 21        | 23                      | 1                | 101                                     | 233       | 101       | 0         | 51                      |
|                 |                       | 2                | 267                                    | 267       | 63        | 63        |                         | 2                | 191                                     | 191       | 26        | 26        |                         |
| 19,5            | 15,0                  | 1                | 170                                    | 323       | 170       | 17        | 24                      | 1                | 104                                     | 247       | 104       | 0         | 65                      |
|                 |                       | 2                | 278                                    | 278       | 62        | 62        |                         | 2                | 201                                     | 201       | 26        | 26        |                         |
| 24,0            | 15,0                  | 1                | 174                                    | 336       | 174       | 11        | 26                      | 1                | 103                                     | 262       | 103       | 0         | 69                      |
|                 |                       | 2                | 289                                    | 289       | 58        | 58        |                         | 2                | 210                                     | 210       | 24        | 24        |                         |
| 28,5            | 15,0                  | 1                | 177                                    | 351       | 177       | 3         | 27                      | 1                | 101                                     | 279       | 101       | 0         | 76                      |
|                 |                       | 2                | 300                                    | 300       | 54        | 54        |                         | 2                | 232                                     | 232       | 92        | 92        |                         |
| 33,0            | 20,0                  | 1                | 193                                    | 379       | 193       | 7         | 29                      | 1                | 178                                     | 317       | 178       | 39        | 82                      |
|                 |                       | 2                | 325                                    | 325       | 62        | 62        |                         | 2                | 276                                     | 276       | 80        | 80        |                         |
| 37,5            | 30,0                  | 1                | 222                                    | 421       | 222       | 22        | 30                      | 1                | 207                                     | 389       | 207       | 24        | 88                      |
|                 |                       | 2                | 363                                    | 363       | 80        | 80        |                         | 2                | 336                                     | 336       | 77        | 77        |                         |
| 42,0            | 40,0                  | 1                | 250                                    | 465       | 250       | 36        | 31                      | 1                | 235                                     | 465       | 235       | 5         | 94                      |
|                 |                       | 2                | 402                                    | 402       | 98        | 98        |                         | 2                | 398                                     | 398       | 72        | 72        |                         |
| 46,5            | 50,0                  | 1                | 279                                    | 510       | 279       | 48        | 33                      | 1                | 244                                     | 565       | 244       | 0         | 101                     |
|                 |                       | 2                | 442                                    | 442       | 115       | 115       |                         | 2                | 463                                     | 463       | 64        | 64        |                         |
| 51,0            | 65,0                  | 1                | 320                                    | 569       | 320       | 70        | 34                      | 1                | 269                                     | 679       | 269       | 0         | 107                     |
|                 |                       | 2                | 496                                    | 496       | 143       | 143       |                         | 2                | 545                                     | 545       | 64        | 64        |                         |
| 55,5            | 82,5                  | 1                | 368                                    | 636       | 368       | 99        | 36                      | 1                | 304                                     | 803       | 304       | 0         | 113                     |
|                 |                       | 2                | 558                                    | 558       | 178       | 178       |                         | 2                | 637                                     | 637       | 69        | 69        |                         |
| 60,0            | 102,5                 | 1                | 425                                    | 713       | 425       | 137       | 38                      | 1                | 352                                     | 937       | 352       | 0         | 121                     |
|                 |                       | 2                | 629                                    | 629       | 221       | 221       |                         | 2                | 741                                     | 741       | 79        | 79        |                         |
| 64,5            | 125,0                 | 1                | 488                                    | 798       | 488       | 178       | 40                      | 1                | 405                                     | 1083      | 405       | 0         | 129                     |
|                 |                       | 2                | 707                                    | 707       | 269       | 269       |                         | 2                | 856                                     | 856       | 90        | 90        |                         |

3.3.6.2 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

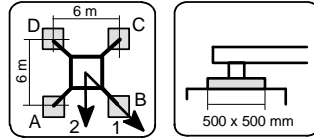


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 35 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 10,0                  | 1                | 160                                    | 296       | 160       | 24        | 23                      | 1                | 75                                      | 234       | 75        | 0         | 51                      |
|                 |                       | 2                | 257                                    | 257       | 64        | 64        |                         | 2                | 179                                     | 179       | 14        | 14        |                         |
| 19,5            | 10,0                  | 1                | 165                                    | 310       | 165       | 21        | 24                      | 1                | 78                                      | 248       | 78        | 0         | 65                      |
|                 |                       | 2                | 268                                    | 268       | 63        | 63        |                         | 2                | 189                                     | 189       | 13        | 13        |                         |
| 24,0            | 10,0                  | 1                | 169                                    | 324       | 169       | 14        | 26                      | 1                | 78                                      | 263       | 78        | 0         | 70                      |
|                 |                       | 2                | 278                                    | 278       | 59        | 59        |                         | 2                | 201                                     | 201       | 107       | 107       |                         |
| 28,5            | 10,0                  | 1                | 172                                    | 338       | 172       | 7         | 27                      | 1                | 76                                      | 280       | 76        | 0         | 76                      |
|                 |                       | 2                | 290                                    | 290       | 55        | 55        |                         | 2                | 230                                     | 230       | 84        | 84        |                         |
| 33,0            | 17,5                  | 1                | 195                                    | 373       | 195       | 17        | 29                      | 1                | 180                                     | 323       | 180       | 36        | 82                      |
|                 |                       | 2                | 320                                    | 320       | 69        | 69        |                         | 2                | 281                                     | 281       | 78        | 78        |                         |
| 37,5            | 27,5                  | 1                | 223                                    | 415       | 223       | 31        | 30                      | 1                | 208                                     | 395       | 208       | 21        | 89                      |
|                 |                       | 2                | 359                                    | 359       | 88        | 88        |                         | 2                | 341                                     | 341       | 76        | 76        |                         |
| 42,0            | 37,5                  | 1                | 252                                    | 458       | 252       | 45        | 32                      | 1                | 237                                     | 472       | 237       | 1         | 95                      |
|                 |                       | 2                | 398                                    | 398       | 105       | 105       |                         | 2                | 403                                     | 403       | 70        | 70        |                         |
| 46,5            | 47,5                  | 1                | 280                                    | 504       | 280       | 57        | 33                      | 1                | 241                                     | 577       | 241       | 0         | 101                     |
|                 |                       | 2                | 438                                    | 438       | 122       | 122       |                         | 2                | 469                                     | 469       | 61        | 61        |                         |
| 51,0            | 62,5                  | 1                | 321                                    | 563       | 321       | 79        | 34                      | 1                | 266                                     | 693       | 266       | 0         | 107                     |
|                 |                       | 2                | 492                                    | 492       | 150       | 150       |                         | 2                | 551                                     | 551       | 61        | 61        |                         |
| 55,5            | 82,5                  | 1                | 376                                    | 637       | 376       | 114       | 36                      | 1                | 312                                     | 818       | 312       | 0         | 114                     |
|                 |                       | 2                | 561                                    | 561       | 191       | 191       |                         | 2                | 650                                     | 650       | 71        | 71        |                         |
| 60,0            | 102,5                 | 1                | 433                                    | 714       | 433       | 151       | 38                      | 1                | 358                                     | 954       | 358       | 0         | 122                     |
|                 |                       | 2                | 632                                    | 632       | 234       | 234       |                         | 2                | 755                                     | 755       | 80        | 80        |                         |
| 64,5            | 125,0                 | 1                | 496                                    | 800       | 496       | 193       | 40                      | 1                | 411                                     | 1102      | 411       | 0         | 130                     |
|                 |                       | 2                | 711                                    | 711       | 281       | 281       |                         | 2                | 871                                     | 871       | 91        | 91        |                         |

3.3.6.3 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

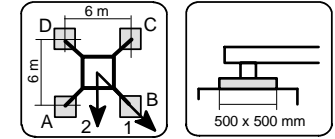


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 12,5                  | 1                | 170                                    | 312       | 170       | 28        | 23                      | 1                | 88                                      | 234       | 88        | 0         | 52                      |
|                 |                       | 2                | 271                                    | 271       | 69        | 69        |                         | 2                | 185                                     | 185       | 20        | 20        |                         |
| 19,5            | 12,5                  | 1                | 175                                    | 326       | 175       | 24        | 25                      | 1                | 90                                      | 249       | 90        | 0         | 66                      |
|                 |                       | 2                | 282                                    | 282       | 68        | 68        |                         | 2                | 196                                     | 196       | 124       | 124       |                         |
| 24,0            | 12,5                  | 1                | 178                                    | 340       | 178       | 17        | 26                      | 1                | 89                                      | 264       | 89        | 0         | 71                      |
|                 |                       | 2                | 293                                    | 293       | 64        | 64        |                         | 2                | 220                                     | 220       | 107       | 107       |                         |
| 28,5            | 12,5                  | 1                | 182                                    | 355       | 182       | 9         | 27                      | 1                | 167                                     | 284       | 167       | 50        | 77                      |
|                 |                       | 2                | 304                                    | 304       | 60        | 60        |                         | 2                | 250                                     | 250       | 84        | 84        |                         |
| 33,0            | 15,0                  | 1                | 192                                    | 377       | 192       | 7         | 29                      | 1                | 177                                     | 335       | 177       | 19        | 83                      |
|                 |                       | 2                | 323                                    | 323       | 61        | 61        |                         | 2                | 289                                     | 289       | 65        | 65        |                         |
| 37,5            | 22,5                  | 1                | 214                                    | 413       | 214       | 15        | 30                      | 1                | 195                                     | 406       | 195       | 0         | 89                      |
|                 |                       | 2                | 355                                    | 355       | 73        | 73        |                         | 2                | 343                                     | 343       | 55        | 55        |                         |
| 42,0            | 32,5                  | 1                | 242                                    | 457       | 242       | 28        | 32                      | 1                | 203                                     | 504       | 203       | 0         | 96                      |
|                 |                       | 2                | 394                                    | 394       | 91        | 91        |                         | 2                | 406                                     | 406       | 49        | 49        |                         |
| 46,5            | 50,0                  | 1                | 290                                    | 521       | 290       | 58        | 33                      | 1                | 244                                     | 612       | 244       | 0         | 102                     |
|                 |                       | 2                | 453                                    | 453       | 126       | 126       |                         | 2                | 491                                     | 491       | 58        | 58        |                         |
| 51,0            | 67,5                  | 1                | 337                                    | 588       | 337       | 86        | 35                      | 1                | 279                                     | 729       | 279       | 0         | 108                     |
|                 |                       | 2                | 514                                    | 514       | 160       | 160       |                         | 2                | 580                                     | 580       | 64        | 64        |                         |
| 55,5            | 87,5                  | 1                | 392                                    | 662       | 392       | 121       | 36                      | 1                | 325                                     | 857       | 325       | 0         | 115                     |
|                 |                       | 2                | 583                                    | 583       | 200       | 200       |                         | 2                | 679                                     | 679       | 74        | 74        |                         |
| 60,0            | 107,5                 | 1                | 449                                    | 740       | 449       | 158       | 38                      | 1                | 370                                     | 994       | 370       | 0         | 123                     |
|                 |                       | 2                | 654                                    | 654       | 243       | 243       |                         | 2                | 785                                     | 785       | 82        | 82        |                         |
| 64,5            | 130,0                 | 1                | 512                                    | 825       | 512       | 199       | 40                      | 1                | 422                                     | 1144      | 422       | 0         | 131                     |
|                 |                       | 2                | 733                                    | 733       | 290       | 290       |                         | 2                | 902                                     | 902       | 92        | 92        |                         |

3.3.6.4 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

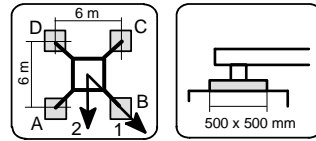


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 10,0                  | 1                | 172                                    | 315       | 172       | 28        | 23                      | 1                | 75                                      | 235       | 75        | 0         | 52                      |
|                 |                       | 2                | 273                                    | 273       | 70        | 70        |                         | 2                | 199                                     | 199       | 38        | 38        |                         |
| 19,5            | 10,0                  | 1                | 177                                    | 329       | 177       | 24        | 25                      | 1                | 77                                      | 249       | 77        | 0         | 67                      |
|                 |                       | 2                | 284                                    | 284       | 69        | 69        |                         | 2                | 210                                     | 210       | 37        | 37        |                         |
| 24,0            | 10,0                  | 1                | 180                                    | 343       | 180       | 17        | 26                      | 1                | 76                                      | 265       | 76        | 0         | 72                      |
|                 |                       | 2                | 295                                    | 295       | 65        | 65        |                         | 2                | 228                                     | 228       | 102       | 102       |                         |
| 28,5            | 10,0                  | 1                | 184                                    | 357       | 184       | 10        | 28                      | 1                | 169                                     | 295       | 169       | 42        | 78                      |
|                 |                       | 2                | 307                                    | 307       | 60        | 60        |                         | 2                | 258                                     | 258       | 79        | 79        |                         |
| 33,0            | 12,5                  | 1                | 193                                    | 380       | 193       | 6         | 29                      | 1                | 178                                     | 346       | 178       | 11        | 84                      |
|                 |                       | 2                | 325                                    | 325       | 61        | 61        |                         | 2                | 297                                     | 297       | 60        | 60        |                         |
| 37,5            | 20,0                  | 1                | 216                                    | 417       | 216       | 15        | 30                      | 1                | 188                                     | 426       | 188       | 0         | 90                      |
|                 |                       | 2                | 358                                    | 358       | 73        | 73        |                         | 2                | 351                                     | 351       | 50        | 50        |                         |
| 42,0            | 32,5                  | 1                | 250                                    | 467       | 250       | 33        | 32                      | 1                | 207                                     | 526       | 207       | 0         | 96                      |
|                 |                       | 2                | 404                                    | 404       | 97        | 97        |                         | 2                | 421                                     | 421       | 49        | 49        |                         |
| 46,5            | 50,0                  | 1                | 298                                    | 532       | 298       | 63        | 33                      | 1                | 247                                     | 636       | 247       | 0         | 103                     |
|                 |                       | 2                | 463                                    | 463       | 132       | 132       |                         | 2                | 507                                     | 507       | 58        | 58        |                         |
| 51,0            | 67,5                  | 1                | 345                                    | 599       | 345       | 91        | 35                      | 1                | 282                                     | 756       | 282       | 0         | 109                     |
|                 |                       | 2                | 524                                    | 524       | 165       | 165       |                         | 2                | 597                                     | 597       | 63        | 63        |                         |
| 55,5            | 90,0                  | 1                | 406                                    | 680       | 406       | 131       | 36                      | 1                | 338                                     | 885       | 338       | 0         | 115                     |
|                 |                       | 2                | 600                                    | 600       | 211       | 211       |                         | 2                | 704                                     | 704       | 78        | 78        |                         |
| 60,0            | 110,0                 | 1                | 463                                    | 758       | 463       | 167       | 38                      | 1                | 383                                     | 1025      | 383       | 0         | 123                     |
|                 |                       | 2                | 671                                    | 671       | 254       | 254       |                         | 2                | 810                                     | 810       | 85        | 85        |                         |
| 64,5            | 132,5                 | 1                | 526                                    | 844       | 526       | 208       | 40                      | 1                | 433                                     | 1178      | 433       | 0         | 132                     |
|                 |                       | 2                | 751                                    | 751       | 301       | 301       |                         | 2                | 927                                     | 927       | 94        | 94        |                         |

3.3.6.5 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

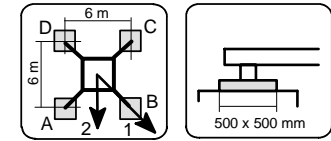


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 50 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 7,5                   | 1                | 168                                    | 312       | 168       | 24        | 23                      | 1                | 97                                      | 257       | 97        | 0         | 53                      |
|                 |                       | 2                | 270                                    | 270       | 66        | 66        |                         | 2                | 204                                     | 204       | 22        | 22        |                         |
| 19,5            | 7,5                   | 1                | 173                                    | 326       | 173       | 20        | 25                      | 1                | 98                                      | 274       | 98        | 0         | 68                      |
|                 |                       | 2                | 281                                    | 281       | 65        | 65        |                         | 2                | 215                                     | 215       | 21        | 21        |                         |
| 24,0            | 10,0                  | 1                | 183                                    | 346       | 183       | 19        | 26                      | 1                | 109                                     | 292       | 109       | 0         | 72                      |
|                 |                       | 2                | 298                                    | 298       | 67        | 67        |                         | 2                | 236                                     | 236       | 99        | 99        |                         |
| 28,5            | 10,0                  | 1                | 186                                    | 361       | 186       | 11        | 28                      | 1                | 106                                     | 313       | 106       | 0         | 78                      |
|                 |                       | 2                | 310                                    | 310       | 62        | 62        |                         | 2                | 267                                     | 267       | 76        | 76        |                         |
| 33,0            | 12,5                  | 1                | 196                                    | 384       | 196       | 8         | 29                      | 1                | 181                                     | 358       | 181       | 4         | 85                      |
|                 |                       | 2                | 329                                    | 329       | 63        | 63        |                         | 2                | 306                                     | 306       | 56        | 56        |                         |
| 37,5            | 17,5                  | 1                | 212                                    | 414       | 212       | 10        | 31                      | 1                | 171                                     | 446       | 171       | 0         | 91                      |
|                 |                       | 2                | 355                                    | 355       | 69        | 69        |                         | 2                | 355                                     | 355       | 39        | 39        |                         |
| 42,0            | 35,0                  | 1                | 259                                    | 478       | 259       | 41        | 32                      | 1                | 215                                     | 547       | 215       | 0         | 97                      |
|                 |                       | 2                | 414                                    | 414       | 105       | 105       |                         | 2                | 438                                     | 438       | 51        | 51        |                         |
| 46,5            | 52,5                  | 1                | 307                                    | 543       | 307       | 70        | 33                      | 1                | 254                                     | 657       | 254       | 0         | 103                     |
|                 |                       | 2                | 474                                    | 474       | 139       | 139       |                         | 2                | 524                                     | 524       | 59        | 59        |                         |
| 51,0            | 70,0                  | 1                | 354                                    | 610       | 354       | 98        | 35                      | 1                | 288                                     | 779       | 288       | 0         | 110                     |
|                 |                       | 2                | 535                                    | 535       | 173       | 173       |                         | 2                | 614                                     | 614       | 63        | 63        |                         |
| 55,5            | 92,5                  | 1                | 415                                    | 691       | 415       | 138       | 36                      | 1                | 344                                     | 910       | 344       | 0         | 116                     |
|                 |                       | 2                | 610                                    | 610       | 219       | 219       |                         | 2                | 721                                     | 721       | 78        | 78        |                         |
| 60,0            | 112,5                 | 1                | 472                                    | 770       | 472       | 174       | 38                      | 1                | 387                                     | 1052      | 387       | 0         | 124                     |
|                 |                       | 2                | 682                                    | 682       | 261       | 261       |                         | 2                | 828                                     | 828       | 85        | 85        |                         |
| 64,5            | 137,5                 | 1                | 541                                    | 862       | 541       | 220       | 40                      | 1                | 449                                     | 1206      | 449       | 0         | 132                     |
|                 |                       | 2                | 768                                    | 768       | 314       | 314       |                         | 2                | 953                                     | 953       | 100       | 100       |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.3.6.6 Zentralballaste und Ecklasten nach DIN 15019

für stationären Turmdrehkran auf Kreuzrahmenelement ohne Kletterwerk

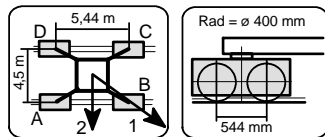


**KRE 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 55 m**

| Turmhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|-----------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                 |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                 |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,0            | 12,5                  | 1                | 188                                    | 328       | 188       | 48        | 24                      | 1                | 89                                      | 329       | 89        | 0         | 53                      |
|                 |                       | 2                | 287                                    | 287       | 89        | 89        |                         | 2                | 243                                     | 243       | 10        | 10        |                         |
| 19,5            | 12,5                  | 1                | 193                                    | 343       | 193       | 44        | 25                      | 1                | 90                                      | 347       | 90        | 0         | 69                      |
|                 |                       | 2                | 299                                    | 299       | 88        | 88        |                         | 2                | 254                                     | 254       | 9         | 9         |                         |
| 24,0            | 15,0                  | 1                | 203                                    | 363       | 203       | 43        | 27                      | 1                | 100                                     | 366       | 100       | 0         | 73                      |
|                 |                       | 2                | 316                                    | 316       | 90        | 90        |                         | 2                | 271                                     | 271       | 12        | 12        |                         |
| 28,5            | 15,0                  | 1                | 207                                    | 378       | 207       | 35        | 28                      | 1                | 97                                      | 387       | 97        | 0         | 79                      |
|                 |                       | 2                | 328                                    | 328       | 85        | 85        |                         | 2                | 296                                     | 296       | 87        | 87        |                         |
| 33,0            | 17,5                  | 1                | 216                                    | 401       | 216       | 32        | 29                      | 1                | 105                                     | 410       | 105       | 0         | 86                      |
|                 |                       | 2                | 347                                    | 347       | 86        | 86        |                         | 2                | 336                                     | 336       | 67        | 67        |                         |
| 37,5            | 20,0                  | 1                | 226                                    | 425       | 226       | 27        | 31                      | 1                | 185                                     | 474       | 185       | 0         | 92                      |
|                 |                       | 2                | 367                                    | 367       | 85        | 85        |                         | 2                | 379                                     | 379       | 43        | 43        |                         |
| 42,0            | 35,0                  | 1                | 267                                    | 483       | 267       | 51        | 32                      | 1                | 216                                     | 577       | 216       | 0         | 98                      |
|                 |                       | 2                | 419                                    | 419       | 115       | 115       |                         | 2                | 456                                     | 456       | 48        | 48        |                         |
| 46,5            | 52,5                  | 1                | 314                                    | 548       | 314       | 81        | 34                      | 1                | 254                                     | 690       | 254       | 0         | 104                     |
|                 |                       | 2                | 480                                    | 480       | 149       | 149       |                         | 2                | 543                                     | 543       | 55        | 55        |                         |
| 51,0            | 72,5                  | 1                | 368                                    | 622       | 368       | 114       | 35                      | 1                | 298                                     | 814       | 298       | 0         | 110                     |
|                 |                       | 2                | 547                                    | 547       | 188       | 188       |                         | 2                | 641                                     | 641       | 65        | 65        |                         |
| 55,5            | 95,0                  | 1                | 429                                    | 704       | 429       | 153       | 37                      | 1                | 353                                     | 948       | 353       | 0         | 117                     |
|                 |                       | 2                | 623                                    | 623       | 234       | 234       |                         | 2                | 749                                     | 749       | 78        | 78        |                         |
| 60,0            | 115,0                 | 1                | 486                                    | 782       | 486       | 189       | 38                      | 1                | 395                                     | 1092      | 395       | 0         | 125                     |
|                 |                       | 2                | 695                                    | 695       | 276       | 276       |                         | 2                | 857                                     | 857       | 84        | 84        |                         |
| 64,5            | 140,0                 | 1                | 555                                    | 876       | 555       | 235       | 40                      | 1                | 455                                     | 1250      | 455       | 0         | 133                     |
|                 |                       | 2                | 782                                    | 782       | 329       | 329       |                         | 2                | 982                                     | 982       | 98        | 98        |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
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|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                 |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.1.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

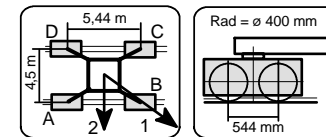


**UW 250** Eckabstand 4,5 m x 5,44 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 45,0                  | 1                | 264                                    | 408       | 198       | 54        | 21                      | 1                | 201                                     | 317       | 148       | 32        | 47                      |
|                  |                       | 2                | 368                                    | 368       | 95        | 95        |                         | 2                | 285                                     | 285       | 65        | 65        |                         |
| 20,0             | 45,0                  | 1                | 271                                    | 424       | 200       | 47        | 22                      | 1                | 207                                     | 330       | 151       | 28        | 60                      |
|                  |                       | 2                | 381                                    | 381       | 90        | 90        |                         | 2                | 295                                     | 295       | 63        | 63        |                         |
| 24,5             | 45,0                  | 1                | 278                                    | 441       | 202       | 39        | 24                      | 1                | 213                                     | 344       | 153       | 23        | 66                      |
|                  |                       | 2                | 395                                    | 395       | 85        | 85        |                         | 2                | 307                                     | 307       | 60        | 60        |                         |
| 29,0             | 45,0                  | 1                | 285                                    | 460       | 204       | 28        | 25                      | 1                | 220                                     | 359       | 155       | 16        | 72                      |
|                  |                       | 2                | 410                                    | 410       | 78        | 78        |                         | 2                | 326                                     | 326       | 133       | 133       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
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|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.1.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

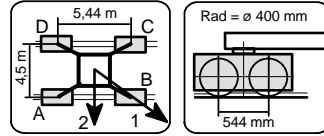


**UW 250** Eckabstand 4,5 m x 5,44 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 40,0                  | 1                | 258                                    | 394       | 195       | 59        | 21                      | 1                | 189                                     | 305       | 135       | 19        | 47                      |
|                  |                       | 2                | 355                                    | 355       | 98        | 98        |                         | 2                | 272                                     | 272       | 52        | 52        |                         |
| 20,0             | 40,0                  | 1                | 264                                    | 409       | 197       | 52        | 22                      | 1                | 195                                     | 318       | 138       | 15        | 61                      |
|                  |                       | 2                | 368                                    | 368       | 93        | 93        |                         | 2                | 283                                     | 283       | 50        | 50        |                         |
| 24,5             | 40,0                  | 1                | 271                                    | 426       | 199       | 44        | 24                      | 1                | 201                                     | 332       | 141       | 10        | 66                      |
|                  |                       | 2                | 382                                    | 382       | 88        | 88        |                         | 2                | 295                                     | 295       | 47        | 47        |                         |
| 29,0             | 40,0                  | 1                | 278                                    | 445       | 201       | 33        | 25                      | 1                | 249                                     | 355       | 200       | 94        | 72                      |
|                  |                       | 2                | 398                                    | 398       | 81        | 81        |                         | 2                | 325                                     | 325       | 124       | 124       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.1.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

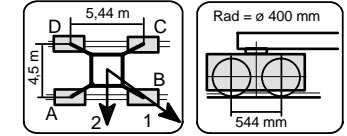


UW 250 Eckabstand 4,5 m x 5,44 m Ausleger 40 m

Table with columns: Hakenhöhe [m], Zentralballast [t], Auslegerstellung, Kran in Betrieb Drehmoment: 190 kNm (Ecklasten A, B, C, D), Horizontalkraft [kN], Kran außer Betrieb Drehmoment: 0 kNm (Ecklasten A, B, C, D), Horizontalkraft [kN].

3.4.1.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk



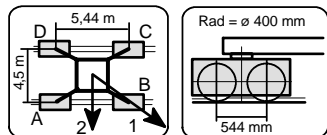
UW 250 Eckabstand 4,5 m x 5,44 m Ausleger 45 m

Table with columns: Hakenhöhe [m], Zentralballast [t], Auslegerstellung, Kran in Betrieb Drehmoment: 190 kNm (Ecklasten A, B, C, D), Horizontalkraft [kN], Kran außer Betrieb Drehmoment: 0 kNm (Ecklasten A, B, C, D), Horizontalkraft [kN].



3.4.1.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

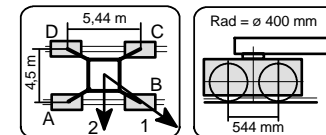


**UW 250** Eckabstand 4,5 m x 5,44 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 37,5                  | 1                | 267                                    | 411       | 201       | 57        | 21                      | 1                | 209                                     | 337       | 149       | 21        | 49                      |
|                  |                       | 2                | 371                                    | 371       | 98        | 98        |                         | 2                | 300                                     | 300       | 57        | 57        |                         |
| 20,0             | 37,5                  | 1                | 274                                    | 427       | 203       | 50        | 23                      | 1                | 215                                     | 351       | 152       | 15        | 63                      |
|                  |                       | 2                | 384                                    | 384       | 93        | 93        |                         | 2                | 313                                     | 313       | 54        | 54        |                         |
| 24,5             | 37,5                  | 1                | 281                                    | 445       | 205       | 40        | 24                      | 1                | 221                                     | 367       | 154       | 8         | 69                      |
|                  |                       | 2                | 399                                    | 399       | 87        | 87        |                         | 2                | 326                                     | 326       | 49        | 49        |                         |
| 29,0             | 37,5                  | 1                | 288                                    | 465       | 206       | 29        | 26                      | 1                | 264                                     | 402       | 200       | 62        | 75                      |
|                  |                       | 2                | 415                                    | 415       | 79        | 79        |                         | 2                | 363                                     | 363       | 101       | 101       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
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|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.1.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

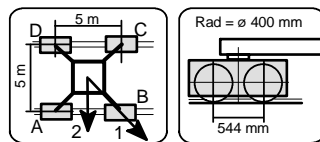


**UW 250** Eckabstand 4,5 m x 5,44 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 35,0                  | 1                | 268                                    | 408       | 203       | 64        | 22                      | 1                | 177                                     | 412       | 101       | 8         | 49                      |
|                  |                       | 2                | 368                                    | 368       | 103       | 103       |                         | 2                | 330                                     | 330       | 19        | 19        |                         |
| 20,0             | 37,5                  | 1                | 281                                    | 431       | 212       | 62        | 23                      | 1                | 189                                     | 433       | 109       | 8         | 64                      |
|                  |                       | 2                | 388                                    | 388       | 104       | 104       |                         | 2                | 349                                     | 349       | 21        | 21        |                         |
| 24,5             | 40,0                  | 1                | 294                                    | 455       | 220       | 59        | 24                      | 1                | 200                                     | 458       | 116       | 8         | 69                      |
|                  |                       | 2                | 409                                    | 409       | 104       | 104       |                         | 2                | 369                                     | 369       | 22        | 22        |                         |
| 29,0             | 42,5                  | 1                | 307                                    | 481       | 227       | 53        | 26                      | 1                | 210                                     | 485       | 121       | 8         | 75                      |
|                  |                       | 2                | 432                                    | 432       | 102       | 102       |                         | 2                | 396                                     | 396       | 109       | 109       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
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|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
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|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.2.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

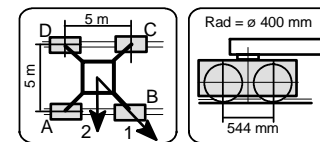


**UW 250** Eckabstand 5 m x 5 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 37,5                  | 1                | 213                                    | 386       | 213       | 39        | 21                      | 1                | 156                                     | 296       | 156       | 16        | 47                      |
|                  |                       | 2                | 335                                    | 335       | 90        | 90        |                         | 2                | 255                                     | 255       | 57        | 57        |                         |
| 20,0             | 37,5                  | 1                | 217                                    | 402       | 217       | 32        | 22                      | 1                | 160                                     | 308       | 160       | 12        | 60                      |
|                  |                       | 2                | 347                                    | 347       | 86        | 86        |                         | 2                | 265                                     | 265       | 56        | 56        |                         |
| 24,5             | 37,5                  | 1                | 221                                    | 418       | 221       | 24        | 24                      | 1                | 164                                     | 323       | 164       | 8         | 66                      |
|                  |                       | 2                | 361                                    | 361       | 81        | 81        |                         | 2                | 276                                     | 276       | 53        | 53        |                         |
| 29,0             | 37,5                  | 1                | 225                                    | 437       | 225       | 14        | 25                      | 1                | 162                                     | 344       | 162       | 8         | 72                      |
|                  |                       | 2                | 375                                    | 375       | 76        | 76        |                         | 2                | 297                                     | 297       | 123       | 123       |                         |
| 33,5             | 42,5                  | 1                | 242                                    | 470       | 242       | 14        | 26                      | 1                | 227                                     | 398       | 227       | 57        | 78                      |
|                  |                       | 2                | 403                                    | 403       | 81        | 81        |                         | 2                | 348                                     | 348       | 107       | 107       |                         |

3.4.2.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

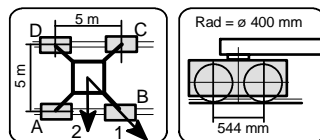


**UW 250** Eckabstand 5 m x 5 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 30,0                  | 1                | 202                                    | 365       | 202       | 38        | 21                      | 1                | 127                                     | 288       | 127       | 8         | 47                      |
|                  |                       | 2                | 317                                    | 317       | 86        | 86        |                         | 2                | 236                                     | 236       | 38        | 38        |                         |
| 20,0             | 30,0                  | 1                | 206                                    | 381       | 206       | 31        | 22                      | 1                | 127                                     | 305       | 127       | 8         | 61                      |
|                  |                       | 2                | 330                                    | 330       | 82        | 82        |                         | 2                | 247                                     | 247       | 36        | 36        |                         |
| 24,5             | 30,0                  | 1                | 210                                    | 398       | 210       | 22        | 24                      | 1                | 126                                     | 324       | 126       | 8         | 66                      |
|                  |                       | 2                | 343                                    | 343       | 77        | 77        |                         | 2                | 258                                     | 258       | 34        | 34        |                         |
| 29,0             | 30,0                  | 1                | 214                                    | 416       | 214       | 12        | 25                      | 1                | 124                                     | 345       | 124       | 8         | 72                      |
|                  |                       | 2                | 357                                    | 357       | 71        | 71        |                         | 2                | 290                                     | 290       | 109       | 109       |                         |
| 33,5             | 40,0                  | 1                | 244                                    | 462       | 244       | 25        | 26                      | 1                | 229                                     | 405       | 229       | 53        | 78                      |
|                  |                       | 2                | 398                                    | 398       | 89        | 89        |                         | 2                | 353                                     | 353       | 104       | 104       |                         |

3.4.2.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

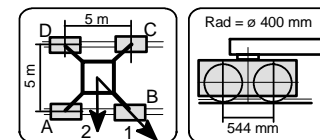


**UW 250** Eckabstand 5 m x 5 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 32,5                  | 1                | 211                                    | 383       | 211       | 40        | 21                      | 1                | 139                                     | 289       | 139       | 8         | 47                      |
|                  |                       | 2                | 332                                    | 332       | 90        | 90        | 2                       | 243              | 243                                     | 44        | 44        |           |                         |
| 20,0             | 32,5                  | 1                | 215                                    | 398       | 215       | 33        | 22                      | 1                | 139                                     | 306       | 139       | 8         | 61                      |
|                  |                       | 2                | 345                                    | 345       | 86        | 86        | 2                       | 253              | 253                                     | 42        | 42        |           |                         |
| 24,5             | 32,5                  | 1                | 220                                    | 416       | 220       | 24        | 24                      | 1                | 138                                     | 325       | 138       | 8         | 67                      |
|                  |                       | 2                | 358                                    | 358       | 81        | 81        | 2                       | 276              | 276                                     | 133       | 133       |           |                         |
| 29,0             | 32,5                  | 1                | 224                                    | 435       | 224       | 13        | 25                      | 1                | 209                                     | 354       | 209       | 64        | 73                      |
|                  |                       | 2                | 373                                    | 373       | 75        | 75        | 2                       | 312              | 312                                     | 106       | 106       |           |                         |
| 33,5             | 35,0                  | 1                | 234                                    | 462       | 234       | 8         | 27                      | 1                | 220                                     | 414       | 220       | 25        | 79                      |
|                  |                       | 2                | 395                                    | 395       | 74        | 74        | 2                       | 357              | 357                                     | 82        | 82        |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.2.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

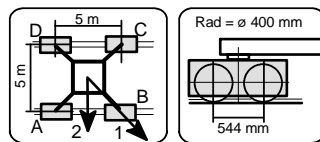


**UW 250** Eckabstand 5 m x 5 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 30,0                  | 1                | 213                                    | 385       | 213       | 40        | 21                      | 1                | 160                                     | 297       | 160       | 22        | 48                      |
|                  |                       | 2                | 335                                    | 335       | 91        | 91        | 2                       | 257              | 257                                     | 63        | 63        |           |                         |
| 20,0             | 30,0                  | 1                | 217                                    | 401       | 217       | 33        | 23                      | 1                | 164                                     | 311       | 164       | 17        | 62                      |
|                  |                       | 2                | 347                                    | 347       | 87        | 87        | 2                       | 268              | 268                                     | 60        | 60        |           |                         |
| 24,5             | 30,0                  | 1                | 221                                    | 419       | 221       | 24        | 24                      | 1                | 168                                     | 327       | 168       | 10        | 68                      |
|                  |                       | 2                | 361                                    | 361       | 82        | 82        | 2                       | 285              | 285                                     | 127       | 127       |           |                         |
| 29,0             | 30,0                  | 1                | 226                                    | 438       | 226       | 13        | 25                      | 1                | 211                                     | 367       | 211       | 54        | 74                      |
|                  |                       | 2                | 376                                    | 376       | 75        | 75        | 2                       | 321              | 321                                     | 100       | 100       |           |                         |
| 33,5             | 32,5                  | 1                | 235                                    | 467       | 235       | 8         | 27                      | 1                | 221                                     | 427       | 221       | 15        | 80                      |
|                  |                       | 2                | 398                                    | 398       | 74        | 74        | 2                       | 367              | 367                                     | 75        | 75        |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.2.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

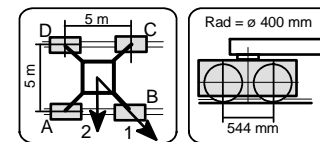


**UW 250** Eckabstand 5 m x 5 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 27,5                  | 1                | 209                                    | 383       | 209       | 36        | 21                      | 1                | 145                                     | 317       | 145       | 8         | 49                      |
|                  |                       | 2                | 332                                    | 332       | 87        | 87        |                         | 2                | 263                                     | 263       | 45        | 45        |                         |
| 20,0             | 27,5                  | 1                | 213                                    | 399       | 213       | 28        | 23                      | 1                | 144                                     | 337       | 144       | 8         | 63                      |
|                  |                       | 2                | 344                                    | 344       | 82        | 82        |                         | 2                | 275                                     | 275       | 42        | 42        |                         |
| 24,5             | 27,5                  | 1                | 218                                    | 416       | 218       | 19        | 24                      | 1                | 141                                     | 360       | 141       | 8         | 69                      |
|                  |                       | 2                | 358                                    | 358       | 77        | 77        |                         | 2                | 289                                     | 289       | 117       | 117       |                         |
| 29,0             | 27,5                  | 1                | 222                                    | 436       | 222       | 8         | 26                      | 1                | 137                                     | 386       | 137       | 8         | 75                      |
|                  |                       | 2                | 373                                    | 373       | 71        | 71        |                         | 2                | 325                                     | 325       | 89        | 89        |                         |
| 33,5             | 30,0                  | 1                | 226                                    | 470       | 226       | 8         | 27                      | 1                | 210                                     | 443       | 210       | 8         | 80                      |
|                  |                       | 2                | 396                                    | 396       | 69        | 69        |                         | 2                | 371                                     | 371       | 64        | 64        |                         |

3.4.2.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

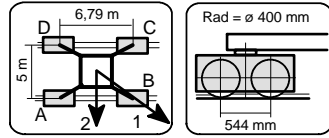


**UW 250** Eckabstand 5 m x 5 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 30,0                  | 1                | 223                                    | 392       | 223       | 54        | 22                      | 1                | 118                                     | 404       | 118       | 8         | 49                      |
|                  |                       | 2                | 343                                    | 343       | 104       | 104       |                         | 2                | 302                                     | 302       | 22        | 22        |                         |
| 20,0             | 30,0                  | 1                | 228                                    | 408       | 228       | 47        | 23                      | 1                | 116                                     | 425       | 116       | 8         | 64                      |
|                  |                       | 2                | 355                                    | 355       | 100       | 100       |                         | 2                | 314                                     | 314       | 18        | 18        |                         |
| 24,5             | 32,5                  | 1                | 238                                    | 432       | 238       | 44        | 24                      | 1                | 125                                     | 449       | 125       | 8         | 69                      |
|                  |                       | 2                | 375                                    | 375       | 101       | 101       |                         | 2                | 332                                     | 332       | 21        | 21        |                         |
| 29,0             | 35,0                  | 1                | 249                                    | 458       | 249       | 39        | 26                      | 1                | 132                                     | 476       | 132       | 8         | 75                      |
|                  |                       | 2                | 397                                    | 397       | 100       | 100       |                         | 2                | 363                                     | 363       | 104       | 104       |                         |
| 33,5             | 37,5                  | 1                | 259                                    | 487       | 259       | 31        | 27                      | 1                | 139                                     | 505       | 139       | 8         | 81                      |
|                  |                       | 2                | 420                                    | 420       | 98        | 98        |                         | 2                | 410                                     | 410       | 78        | 78        |                         |

3.4.3.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

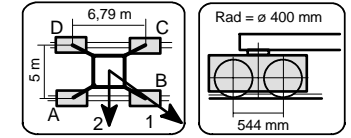


**UW 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 35,0                  | 1                | 252                                    | 354       | 166       | 65        | 21                      | 1                | 188                                     | 270       | 118       | 36        | 45                      |
|                  |                       | 2                | 326                                    | 326       | 93        | 93        |                         | 2                | 247                                     | 247       | 59        | 59        |                         |
| 15,5             | 35,0                  | 1                | 260                                    | 367       | 169       | 61        | 22                      | 1                | 194                                     | 281       | 121       | 34        | 50                      |
|                  |                       | 2                | 337                                    | 337       | 91        | 91        |                         | 2                | 257                                     | 257       | 58        | 58        |                         |
| 20,0             | 35,0                  | 1                | 266                                    | 380       | 170       | 55        | 24                      | 1                | 200                                     | 292       | 122       | 31        | 63                      |
|                  |                       | 2                | 349                                    | 349       | 87        | 87        |                         | 2                | 267                                     | 267       | 56        | 56        |                         |
| 24,5             | 35,0                  | 1                | 273                                    | 394       | 170       | 48        | 25                      | 1                | 206                                     | 304       | 124       | 26        | 70                      |
|                  |                       | 2                | 361                                    | 361       | 82        | 82        |                         | 2                | 277                                     | 277       | 53        | 53        |                         |
| 29,0             | 35,0                  | 1                | 280                                    | 410       | 170       | 40        | 27                      | 1                | 243                                     | 321       | 177       | 98        | 76                      |
|                  |                       | 2                | 374                                    | 374       | 76        | 76        |                         | 2                | 300                                     | 300       | 120       | 120       |                         |
| 33,5             | 40,0                  | 1                | 300                                    | 439       | 182       | 42        | 28                      | 1                | 272                                     | 380       | 180       | 72        | 82                      |
|                  |                       | 2                | 400                                    | 400       | 81        | 81        |                         | 2                | 350                                     | 350       | 102       | 102       |                         |
| 38,0             | 52,5                  | 1                | 339                                    | 489       | 212       | 62        | 30                      | 1                | 320                                     | 461       | 201       | 60        | 88                      |
|                  |                       | 2                | 447                                    | 447       | 104       | 104       |                         | 2                | 422                                     | 422       | 99        | 99        |                         |
| 42,5             | 65,0                  | 1                | 378                                    | 540       | 242       | 81        | 31                      | 1                | 370                                     | 548       | 220       | 43        | 95                      |
|                  |                       | 2                | 495                                    | 495       | 126       | 126       |                         | 2                | 498                                     | 498       | 92        | 92        |                         |

3.4.3.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

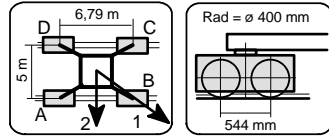


**UW 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 30,0                  | 1                | 245                                    | 340       | 164       | 69        | 21                      | 1                | 175                                     | 257       | 106       | 23        | 45                      |
|                  |                       | 2                | 314                                    | 314       | 95        | 95        |                         | 2                | 235                                     | 235       | 46        | 46        |                         |
| 15,5             | 30,0                  | 1                | 252                                    | 354       | 167       | 65        | 23                      | 1                | 182                                     | 269       | 109       | 22        | 50                      |
|                  |                       | 2                | 326                                    | 326       | 93        | 93        |                         | 2                | 245                                     | 245       | 46        | 46        |                         |
| 20,0             | 30,0                  | 1                | 259                                    | 367       | 167       | 59        | 24                      | 1                | 188                                     | 280       | 110       | 18        | 64                      |
|                  |                       | 2                | 337                                    | 337       | 89        | 89        |                         | 2                | 254                                     | 254       | 43        | 43        |                         |
| 24,5             | 30,0                  | 1                | 265                                    | 381       | 168       | 52        | 25                      | 1                | 194                                     | 292       | 111       | 13        | 70                      |
|                  |                       | 2                | 349                                    | 349       | 84        | 84        |                         | 2                | 264                                     | 264       | 40        | 40        |                         |
| 29,0             | 30,0                  | 1                | 272                                    | 397       | 168       | 44        | 27                      | 1                | 239                                     | 321       | 171       | 89        | 77                      |
|                  |                       | 2                | 362                                    | 362       | 78        | 78        |                         | 2                | 298                                     | 298       | 112       | 112       |                         |
| 33,5             | 37,5                  | 1                | 299                                    | 432       | 186       | 52        | 28                      | 1                | 274                                     | 386       | 180       | 68        | 83                      |
|                  |                       | 2                | 395                                    | 395       | 89        | 89        |                         | 2                | 355                                     | 355       | 99        | 99        |                         |
| 38,0             | 50,0                  | 1                | 338                                    | 482       | 216       | 72        | 30                      | 1                | 323                                     | 468       | 201       | 56        | 89                      |
|                  |                       | 2                | 442                                    | 442       | 112       | 112       |                         | 2                | 428                                     | 428       | 96        | 96        |                         |
| 42,5             | 62,5                  | 1                | 378                                    | 533       | 246       | 90        | 31                      | 1                | 373                                     | 555       | 220       | 39        | 95                      |
|                  |                       | 2                | 490                                    | 490       | 133       | 133       |                         | 2                | 505                                     | 505       | 89        | 89        |                         |

3.4.3.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

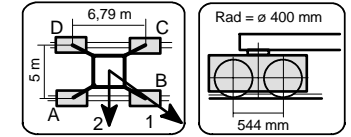


UW 260.1 Eckabstand 5,0 m x 6,79 m Ausleger 40 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 30,0                  | 1                | 250                                    | 350       | 166       | 66        | 21                      | 1                | 175                                     | 258       | 106       | 23        | 46                      |
|                  |                       | 2                | 323                                    | 323       | 93        | 93        |                         | 2                | 235                                     | 235       | 46        | 46        |                         |
| 15,5             | 30,0                  | 1                | 258                                    | 364       | 168       | 62        | 23                      | 1                | 182                                     | 269       | 108       | 21        | 51                      |
|                  |                       | 2                | 334                                    | 334       | 91        | 91        |                         | 2                | 245                                     | 245       | 45        | 45        |                         |
| 20,0             | 30,0                  | 1                | 264                                    | 377       | 169       | 56        | 24                      | 1                | 188                                     | 280       | 110       | 17        | 65                      |
|                  |                       | 2                | 346                                    | 346       | 87        | 87        |                         | 2                | 255                                     | 255       | 43        | 43        |                         |
| 24,5             | 30,0                  | 1                | 271                                    | 391       | 169       | 48        | 26                      | 1                | 232                                     | 297       | 178       | 113       | 71                      |
|                  |                       | 2                | 358                                    | 358       | 82        | 82        |                         | 2                | 279                                     | 279       | 131       | 131       |                         |
| 29,0             | 30,0                  | 1                | 278                                    | 407       | 169       | 40        | 27                      | 1                | 247                                     | 340       | 170       | 77        | 77                      |
|                  |                       | 2                | 371                                    | 371       | 75        | 75        |                         | 2                | 314                                     | 314       | 103       | 103       |                         |
| 33,5             | 35,0                  | 1                | 298                                    | 437       | 181       | 42        | 28                      | 1                | 276                                     | 399       | 173       | 50        | 84                      |
|                  |                       | 2                | 398                                    | 398       | 80        | 80        |                         | 2                | 365                                     | 365       | 84        | 84        |                         |
| 38,0             | 45,0                  | 1                | 331                                    | 481       | 205       | 55        | 30                      | 1                | 319                                     | 476       | 187       | 30        | 90                      |
|                  |                       | 2                | 439                                    | 439       | 97        | 97        |                         | 2                | 432                                     | 432       | 73        | 73        |                         |
| 42,5             | 57,5                  | 1                | 371                                    | 532       | 235       | 73        | 31                      | 1                | 369                                     | 563       | 206       | 12        | 96                      |
|                  |                       | 2                | 488                                    | 488       | 118       | 118       |                         | 2                | 510                                     | 510       | 66        | 66        |                         |

3.4.3.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

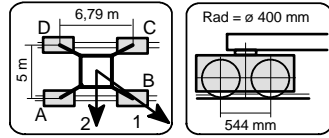


UW 260.1 Eckabstand 5,0 m x 6,79 m Ausleger 45 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 27,5                  | 1                | 252                                    | 353       | 167       | 66        | 21                      | 1                | 190                                     | 270       | 123       | 43        | 46                      |
|                  |                       | 2                | 325                                    | 325       | 94        | 94        |                         | 2                | 248                                     | 248       | 65        | 65        |                         |
| 15,5             | 27,5                  | 1                | 260                                    | 366       | 169       | 63        | 23                      | 1                | 197                                     | 283       | 126       | 40        | 51                      |
|                  |                       | 2                | 337                                    | 337       | 92        | 92        |                         | 2                | 259                                     | 259       | 64        | 64        |                         |
| 20,0             | 27,5                  | 1                | 266                                    | 380       | 170       | 56        | 24                      | 1                | 203                                     | 295       | 126       | 35        | 66                      |
|                  |                       | 2                | 348                                    | 348       | 88        | 88        |                         | 2                | 269                                     | 269       | 60        | 60        |                         |
| 24,5             | 27,5                  | 1                | 273                                    | 394       | 170       | 49        | 26                      | 1                | 210                                     | 308       | 127       | 29        | 72                      |
|                  |                       | 2                | 361                                    | 361       | 82        | 82        |                         | 2                | 287                                     | 287       | 126       | 126       |                         |
| 29,0             | 27,5                  | 1                | 280                                    | 410       | 170       | 40        | 27                      | 1                | 252                                     | 351       | 168       | 69        | 78                      |
|                  |                       | 2                | 374                                    | 374       | 76        | 76        |                         | 2                | 323                                     | 323       | 97        | 97        |                         |
| 33,5             | 30,0                  | 1                | 294                                    | 434       | 176       | 35        | 29                      | 1                | 275                                     | 405       | 165       | 35        | 84                      |
|                  |                       | 2                | 395                                    | 395       | 74        | 74        |                         | 2                | 369                                     | 369       | 71        | 71        |                         |
| 38,0             | 42,5                  | 1                | 333                                    | 484       | 206       | 54        | 30                      | 1                | 324                                     | 488       | 185       | 21        | 91                      |
|                  |                       | 2                | 443                                    | 443       | 96        | 96        |                         | 2                | 443                                     | 443       | 66        | 66        |                         |
| 42,5             | 60,0                  | 1                | 386                                    | 549       | 248       | 84        | 32                      | 1                | 387                                     | 589       | 216       | 14        | 97                      |
|                  |                       | 2                | 504                                    | 504       | 130       | 130       |                         | 2                | 533                                     | 533       | 70        | 70        |                         |

3.4.3.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

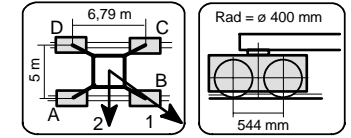


**UW 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 27,5                  | 1                | 255                                    | 356       | 170       | 68        | 21                      | 1                | 195                                     | 285       | 119       | 29        | 47                      |
|                  |                       | 2                | 328                                    | 328       | 96        | 96        |                         | 2                | 260                                     | 260       | 54        | 54        |                         |
| 15,5             | 27,5                  | 1                | 263                                    | 370       | 172       | 65        | 23                      | 1                | 202                                     | 298       | 122       | 26        | 52                      |
|                  |                       | 2                | 340                                    | 340       | 94        | 94        |                         | 2                | 272                                     | 272       | 52        | 52        |                         |
| 20,0             | 27,5                  | 1                | 269                                    | 383       | 172       | 58        | 24                      | 1                | 209                                     | 311       | 122       | 20        | 66                      |
|                  |                       | 2                | 352                                    | 352       | 90        | 90        |                         | 2                | 282                                     | 282       | 49        | 49        |                         |
| 24,5             | 27,5                  | 1                | 276                                    | 398       | 173       | 50        | 26                      | 1                | 215                                     | 324       | 123       | 14        | 73                      |
|                  |                       | 2                | 364                                    | 364       | 84        | 84        |                         | 2                | 297                                     | 297       | 121       | 121       |                         |
| 29,0             | 27,5                  | 1                | 283                                    | 414       | 172       | 41        | 27                      | 1                | 257                                     | 362       | 168       | 63        | 79                      |
|                  |                       | 2                | 378                                    | 378       | 78        | 78        |                         | 2                | 333                                     | 333       | 92        | 92        |                         |
| 33,5             | 27,5                  | 1                | 291                                    | 432       | 172       | 31        | 29                      | 1                | 274                                     | 411       | 158       | 22        | 85                      |
|                  |                       | 2                | 393                                    | 393       | 70        | 70        |                         | 2                | 373                                     | 373       | 60        | 60        |                         |
| 38,0             | 42,5                  | 1                | 336                                    | 489       | 208       | 56        | 30                      | 1                | 330                                     | 501       | 185       | 13        | 91                      |
|                  |                       | 2                | 447                                    | 447       | 98        | 98        |                         | 2                | 454                                     | 454       | 61        | 61        |                         |
| 42,5             | 62,5                  | 1                | 395                                    | 560       | 256       | 92        | 32                      | 1                | 399                                     | 609       | 222       | 12        | 97                      |
|                  |                       | 2                | 514                                    | 514       | 137       | 137       |                         | 2                | 551                                     | 551       | 70        | 70        |                         |

3.4.3.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

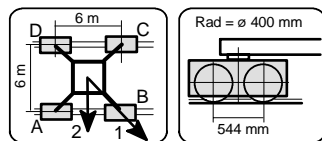


**UW 260.1** Eckabstand 5,0 m x 6,79 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 25,0                  | 1                | 255                                    | 353       | 172       | 74        | 22                      | 1                | 180                                     | 340       | 81        | 8         | 48                      |
|                  |                       | 2                | 326                                    | 326       | 101       | 101       |                         | 2                | 286                                     | 286       | 18        | 18        |                         |
| 15,5             | 25,0                  | 1                | 263                                    | 367       | 175       | 70        | 23                      | 1                | 184                                     | 357       | 81        | 8         | 52                      |
|                  |                       | 2                | 338                                    | 338       | 99        | 99        |                         | 2                | 298                                     | 298       | 17        | 17        |                         |
| 20,0             | 27,5                  | 1                | 276                                    | 387       | 181       | 70        | 25                      | 1                | 197                                     | 375       | 88        | 8         | 67                      |
|                  |                       | 2                | 356                                    | 356       | 101       | 101       |                         | 2                | 315                                     | 315       | 19        | 19        |                         |
| 24,5             | 30,0                  | 1                | 289                                    | 408       | 188       | 68        | 26                      | 1                | 209                                     | 395       | 94        | 8         | 73                      |
|                  |                       | 2                | 375                                    | 375       | 101       | 101       |                         | 2                | 333                                     | 333       | 21        | 21        |                         |
| 29,0             | 32,5                  | 1                | 302                                    | 431       | 194       | 65        | 28                      | 1                | 221                                     | 418       | 99        | 8         | 80                      |
|                  |                       | 2                | 395                                    | 395       | 101       | 101       |                         | 2                | 365                                     | 365       | 101       | 101       |                         |
| 33,5             | 35,0                  | 1                | 316                                    | 455       | 199       | 60        | 29                      | 1                | 305                                     | 452       | 181       | 34        | 86                      |
|                  |                       | 2                | 417                                    | 417       | 99        | 99        |                         | 2                | 411                                     | 411       | 74        | 74        |                         |
| 38,0             | 45,0                  | 1                | 350                                    | 500       | 223       | 73        | 30                      | 1                | 348                                     | 531       | 194       | 12        | 92                      |
|                  |                       | 2                | 458                                    | 458       | 114       | 114       |                         | 2                | 480                                     | 480       | 62        | 62        |                         |
| 42,5             | 65,0                  | 1                | 408                                    | 571       | 271       | 108       | 32                      | 1                | 418                                     | 640       | 231       | 10        | 98                      |
|                  |                       | 2                | 526                                    | 526       | 154       | 154       |                         | 2                | 578                                     | 578       | 71        | 71        |                         |

3.4.4.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

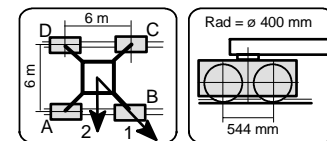


**UW 260.1** Eckabstand 6,0 m x 6,0 m Ausleger 30 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |  |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|--|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |  |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |  |
| 11,0             | 20,0                  | 1                | 172                                    | 309    | 172    | 35     | 21                      | 1                | 112                                     | 230    | 112    | 8      | 45                      |  |
|                  |                       | 2                | 269                                    | 269    | 75     | 75     |                         | 2                | 194                                     | 194    | 37     | 37     |                         |  |
| 15,5             | 20,0                  | 1                | 177                                    | 322    | 177    | 32     | 22                      | 1                | 116                                     | 242    | 116    | 8      | 50                      |  |
|                  |                       | 2                | 279                                    | 279    | 74     | 74     |                         | 2                | 203                                     | 203    | 37     | 37     |                         |  |
| 20,0             | 20,0                  | 1                | 180                                    | 334    | 180    | 26     | 24                      | 1                | 116                                     | 256    | 116    | 8      | 63                      |  |
|                  |                       | 2                | 289                                    | 289    | 71     | 71     |                         | 2                | 211                                     | 211    | 36     | 36     |                         |  |
| 24,5             | 20,0                  | 1                | 184                                    | 348    | 184    | 20     | 25                      | 1                | 115                                     | 271    | 115    | 8      | 70                      |  |
|                  |                       | 2                | 300                                    | 300    | 68     | 68     |                         | 2                | 220                                     | 220    | 34     | 34     |                         |  |
| 29,0             | 20,0                  | 1                | 187                                    | 363    | 187    | 12     | 27                      | 1                | 113                                     | 289    | 113    | 8      | 76                      |  |
|                  |                       | 2                | 311                                    | 311    | 63     | 63     |                         | 2                | 247                                     | 247    | 97     | 97     |                         |  |
| 33,5             | 27,5                  | 1                | 210                                    | 398    | 210    | 21     | 28                      | 1                | 195                                     | 341    | 195    | 48     | 82                      |  |
|                  |                       | 2                | 343                                    | 343    | 76     | 76     |                         | 2                | 298                                     | 298    | 91     | 91     |                         |  |
| 38,0             | 35,0                  | 1                | 232                                    | 434    | 232    | 30     | 30                      | 1                | 217                                     | 407    | 217    | 26     | 88                      |  |
|                  |                       | 2                | 375                                    | 375    | 89     | 89     |                         | 2                | 352                                     | 352    | 82     | 82     |                         |  |
| 42,5             | 45,0                  | 1                | 260                                    | 478    | 260    | 43     | 31                      | 1                | 243                                     | 487    | 243    | 8      | 95                      |  |
|                  |                       | 2                | 414                                    | 414    | 106    | 106    |                         | 2                | 415                                     | 415    | 76     | 76     |                         |  |
| 47,0             | 57,5                  | 1                | 296                                    | 530    | 296    | 62     | 33                      | 1                | 262                                     | 593    | 262    | 8      | 101                     |  |
|                  |                       | 2                | 462                                    | 462    | 130    | 130    |                         | 2                | 488                                     | 488    | 74     | 74     |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |

3.4.4.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk



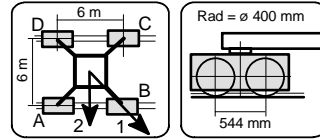
**UW 260.1** Eckabstand 6,0 m x 6,0 m Ausleger 35 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |  |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|--|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |  |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |  |
| 11,0             | 15,0                  | 1                | 167                                    | 296    | 167    | 38     | 21                      | 1                | 87                                      | 230    | 87     | 8      | 45                      |  |
|                  |                       | 2                | 258                                    | 258    | 76     | 76     |                         | 2                | 181                                     | 181    | 24     | 24     |                         |  |
| 15,5             | 15,0                  | 1                | 172                                    | 309    | 172    | 35     | 23                      | 1                | 90                                      | 242    | 90     | 8      | 50                      |  |
|                  |                       | 2                | 269                                    | 269    | 75     | 75     |                         | 2                | 191                                     | 191    | 25     | 25     |                         |  |
| 20,0             | 15,0                  | 1                | 176                                    | 321    | 176    | 30     | 24                      | 1                | 90                                      | 257    | 90     | 8      | 64                      |  |
|                  |                       | 2                | 279                                    | 279    | 72     | 72     |                         | 2                | 199                                     | 199    | 23     | 23     |                         |  |
| 24,5             | 15,0                  | 1                | 179                                    | 335    | 179    | 23     | 25                      | 1                | 90                                      | 272    | 90     | 8      | 70                      |  |
|                  |                       | 2                | 289                                    | 289    | 69     | 69     |                         | 2                | 216                                     | 216    | 112    | 112    |                         |  |
| 29,0             | 15,0                  | 1                | 183                                    | 350    | 183    | 15     | 27                      | 1                | 88                                      | 290    | 88     | 8      | 77                      |  |
|                  |                       | 2                | 301                                    | 301    | 64     | 64     |                         | 2                | 245                                     | 245    | 90     | 90     |                         |  |
| 33,5             | 22,5                  | 1                | 205                                    | 385    | 205    | 25     | 28                      | 1                | 190                                     | 341    | 190    | 39     | 83                      |  |
|                  |                       | 2                | 332                                    | 332    | 77     | 77     |                         | 2                | 296                                     | 296    | 83     | 83     |                         |  |
| 38,0             | 32,5                  | 1                | 233                                    | 428    | 233    | 39     | 30                      | 1                | 218                                     | 414    | 218    | 23     | 89                      |  |
|                  |                       | 2                | 371                                    | 371    | 96     | 96     |                         | 2                | 357                                     | 357    | 80     | 80     |                         |  |
| 42,5             | 42,5                  | 1                | 262                                    | 472    | 262    | 52     | 31                      | 1                | 241                                     | 498    | 241    | 8      | 95                      |  |
|                  |                       | 2                | 410                                    | 410    | 113    | 113    |                         | 2                | 420                                     | 420    | 74     | 74     |                         |  |
| 47,0             | 55,0                  | 1                | 298                                    | 524    | 298    | 71     | 33                      | 1                | 259                                     | 605    | 259    | 8      | 102                     |  |
|                  |                       | 2                | 458                                    | 458    | 137    | 137    |                         | 2                | 494                                     | 494    | 71     | 71     |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |
|                  |                       |                  |  |        |        |        |                         |                  |   |        |        |        |                         |  |



3.4.4.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

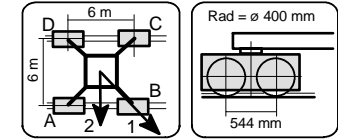


**UW 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 17,5                  | 1                | 177                                    | 312       | 177       | 42        | 21                      | 1                | 99                                      | 231       | 99        | 8         | 46                      |
|                  |                       | 2                | 272                                    | 272       | 81        | 81        |                         | 2                | 188                                     | 188       | 30        | 30        |                         |
| 15,5             | 17,5                  | 1                | 182                                    | 325       | 182       | 38        | 23                      | 1                | 103                                     | 243       | 103       | 8         | 51                      |
|                  |                       | 2                | 283                                    | 283       | 80        | 80        |                         | 2                | 197                                     | 197       | 31        | 31        |                         |
| 20,0             | 17,5                  | 1                | 185                                    | 338       | 185       | 33        | 24                      | 1                | 102                                     | 257       | 102       | 8         | 65                      |
|                  |                       | 2                | 293                                    | 293       | 77        | 77        |                         | 2                | 208                                     | 208       | 133       | 133       |                         |
| 24,5             | 17,5                  | 1                | 189                                    | 351       | 189       | 26        | 26                      | 1                | 101                                     | 273       | 101       | 8         | 71                      |
|                  |                       | 2                | 304                                    | 304       | 74        | 74        |                         | 2                | 235                                     | 235       | 112       | 112       |                         |
| 29,0             | 17,5                  | 1                | 192                                    | 367       | 192       | 18        | 27                      | 1                | 177                                     | 302       | 177       | 53        | 77                      |
|                  |                       | 2                | 316                                    | 316       | 69        | 69        |                         | 2                | 265                                     | 265       | 89        | 89        |                         |
| 33,5             | 20,0                  | 1                | 202                                    | 389       | 202       | 15        | 28                      | 1                | 187                                     | 353       | 187       | 21        | 84                      |
|                  |                       | 2                | 334                                    | 334       | 69        | 69        |                         | 2                | 304                                     | 304       | 70        | 70        |                         |
| 38,0             | 30,0                  | 1                | 230                                    | 432       | 230       | 29        | 30                      | 1                | 212                                     | 431       | 212       | 8         | 90                      |
|                  |                       | 2                | 373                                    | 373       | 88        | 88        |                         | 2                | 365                                     | 365       | 66        | 66        |                         |
| 42,5             | 40,0                  | 1                | 259                                    | 477       | 259       | 41        | 31                      | 1                | 219                                     | 531       | 219       | 8         | 96                      |
|                  |                       | 2                | 413                                    | 413       | 105       | 105       |                         | 2                | 429                                     | 429       | 59        | 59        |                         |
| 47,0             | 55,0                  | 1                | 301                                    | 536       | 301       | 66        | 33                      | 1                | 248                                     | 640       | 248       | 8         | 103                     |
|                  |                       | 2                | 467                                    | 467       | 135       | 135       |                         | 2                | 510                                     | 510       | 62        | 62        |                         |

3.4.4.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

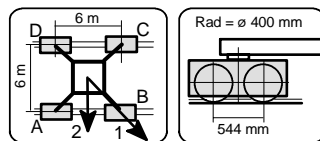


**UW 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 11,0             | 15,0                  | 1                | 178                                    | 314       | 178       | 42        | 21                      | 1                | 125                                     | 233       | 125       | 18        | 46                      |
|                  |                       | 2                | 274                                    | 274       | 82        | 82        |                         | 2                | 201                                     | 201       | 49        | 49        |                         |
| 15,5             | 15,0                  | 1                | 183                                    | 327       | 183       | 39        | 23                      | 1                | 130                                     | 245       | 130       | 15        | 51                      |
|                  |                       | 2                | 285                                    | 285       | 81        | 81        |                         | 2                | 211                                     | 211       | 49        | 49        |                         |
| 20,0             | 15,0                  | 1                | 187                                    | 340       | 187       | 33        | 24                      | 1                | 89                                      | 258       | 89        | 8         | 66                      |
|                  |                       | 2                | 295                                    | 295       | 78        | 78        |                         | 2                | 221                                     | 221       | 47        | 47        |                         |
| 24,5             | 15,0                  | 1                | 190                                    | 354       | 190       | 26        | 26                      | 1                | 88                                      | 275       | 88        | 8         | 72                      |
|                  |                       | 2                | 306                                    | 306       | 74        | 74        |                         | 2                | 243                                     | 243       | 108       | 108       |                         |
| 29,0             | 15,0                  | 1                | 194                                    | 370       | 194       | 18        | 27                      | 1                | 179                                     | 312       | 179       | 45        | 78                      |
|                  |                       | 2                | 318                                    | 318       | 69        | 69        |                         | 2                | 273                                     | 273       | 84        | 84        |                         |
| 33,5             | 15,0                  | 1                | 197                                    | 386       | 197       | 8         | 29                      | 1                | 181                                     | 359       | 181       | 8         | 84                      |
|                  |                       | 2                | 331                                    | 331       | 63        | 63        |                         | 2                | 306                                     | 306       | 58        | 58        |                         |
| 38,0             | 25,0                  | 1                | 226                                    | 430       | 226       | 22        | 30                      | 1                | 192                                     | 452       | 192       | 8         | 91                      |
|                  |                       | 2                | 370                                    | 370       | 81        | 81        |                         | 2                | 368                                     | 368       | 54        | 54        |                         |
| 42,5             | 40,0                  | 1                | 267                                    | 487       | 267       | 46        | 32                      | 1                | 223                                     | 553       | 223       | 8         | 97                      |
|                  |                       | 2                | 423                                    | 423       | 111       | 111       |                         | 2                | 445                                     | 445       | 59        | 59        |                         |
| 47,0             | 57,5                  | 1                | 315                                    | 553       | 315       | 77        | 33                      | 1                | 264                                     | 664       | 264       | 8         | 103                     |
|                  |                       | 2                | 483                                    | 483       | 147       | 147       |                         | 2                | 532                                     | 532       | 68        | 68        |                         |

3.4.4.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf  
Unterwagen ohne Kletterwerk

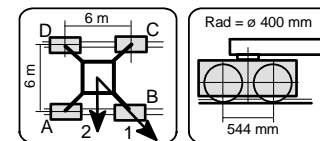


**UW 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 11,0             | 12,5                  | 1                | 175                                    | 311       | 175       | 38        | 21                      | 1                                       | 110       | 251       | 110       | 8                       | 47  |
|                  |                       | 2                | 271                                    | 271       | 78        | 78        |                         | 2                                       | 206       | 206       | 33        | 33                      |     |
| 15,5             | 12,5                  | 1                | 180                                    | 325       | 180       | 35        | 23                      | 1                                       | 112       | 266       | 112       | 8                       | 52  |
|                  |                       | 2                | 282                                    | 282       | 77        | 77        |                         | 2                                       | 216       | 216       | 33        | 33                      |     |
| 20,0             | 12,5                  | 1                | 183                                    | 338       | 183       | 29        | 24                      | 1                                       | 110       | 283       | 110       | 8                       | 66  |
|                  |                       | 2                | 292                                    | 292       | 74        | 74        |                         | 2                                       | 225       | 225       | 31        | 31                      |     |
| 24,5             | 12,5                  | 1                | 187                                    | 352       | 187       | 22        | 26                      | 1                                       | 108       | 302       | 108       | 8                       | 73  |
|                  |                       | 2                | 303                                    | 303       | 70        | 70        |                         | 2                                       | 245       | 245       | 99        | 99                      |     |
| 29,0             | 15,0                  | 1                | 196                                    | 373       | 196       | 19        | 27                      | 1                                       | 181       | 324       | 181       | 39                      | 79  |
|                  |                       | 2                | 322                                    | 322       | 71        | 71        |                         | 2                                       | 282       | 282       | 81        | 81                      |     |
| 33,5             | 17,5                  | 1                | 206                                    | 397       | 206       | 16        | 29                      | 1                                       | 190       | 377       | 190       | 8                       | 85  |
|                  |                       | 2                | 341                                    | 341       | 72        | 72        |                         | 2                                       | 322       | 322       | 61        | 61                      |     |
| 38,0             | 25,0                  | 1                | 228                                    | 434       | 228       | 23        | 30                      | 1                                       | 188       | 471       | 188       | 8                       | 91  |
|                  |                       | 2                | 374                                    | 374       | 83        | 83        |                         | 2                                       | 377       | 377       | 50        | 50                      |     |
| 42,5             | 42,5                  | 1                | 276                                    | 498       | 276       | 54        | 32                      | 1                                       | 230       | 574       | 230       | 8                       | 97  |
|                  |                       | 2                | 433                                    | 433       | 119       | 119       |                         | 2                                       | 461       | 461       | 60        | 60                      |     |
| 47,0             | 60,0                  | 1                | 324                                    | 564       | 324       | 84        | 33                      | 1                                       | 271       | 687       | 271       | 8                       | 104 |
|                  |                       | 2                | 494                                    | 494       | 154       | 154       |                         | 2                                       | 549       | 549       | 69        | 69                      |     |

3.4.4.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf  
Unterwagen ohne Kletterwerk

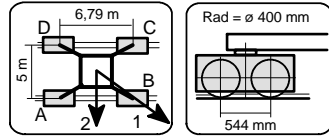


**UW 260.1** Eckabstand 6,0 m x 6,0 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |     |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|---|-----------|-----------|-----------|-------------------------|-----|
|                  |                       |                  | Ecklasten                              |           |           |           |                         | Ecklasten                               |           |           |           |                         |     |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |     |
| 11,0             | 15,0                  | 1                | 189                                    | 321       | 189       | 56        | 22                      | 1                                       | 89        | 323       | 89        | 8                       | 48  |
|                  |                       | 2                | 282                                    | 282       | 95        | 95        |                         | 2                                       | 239       | 239       | 16        | 16                      |     |
| 15,5             | 15,0                  | 1                | 194                                    | 335       | 194       | 53        | 23                      | 1                                       | 91        | 339       | 91        | 8                       | 52  |
|                  |                       | 2                | 293                                    | 293       | 94        | 94        |                         | 2                                       | 249       | 249       | 15        | 15                      |     |
| 20,0             | 17,5                  | 1                | 203                                    | 354       | 203       | 53        | 25                      | 1                                       | 102       | 356       | 102       | 8                       | 67  |
|                  |                       | 2                | 310                                    | 310       | 97        | 97        |                         | 2                                       | 265       | 265       | 19        | 19                      |     |
| 24,5             | 17,5                  | 1                | 207                                    | 368       | 207       | 46        | 26                      | 1                                       | 99        | 375       | 99        | 8                       | 73  |
|                  |                       | 2                | 321                                    | 321       | 93        | 93        |                         | 2                                       | 275       | 275       | 15        | 15                      |     |
| 29,0             | 20,0                  | 1                | 217                                    | 390       | 217       | 43        | 28                      | 1                                       | 108       | 397       | 108       | 8                       | 80  |
|                  |                       | 2                | 339                                    | 339       | 94        | 94        |                         | 2                                       | 311       | 311       | 92        | 92                      |     |
| 33,5             | 22,5                  | 1                | 226                                    | 414       | 226       | 39        | 29                      | 1                                       | 116       | 421       | 116       | 8                       | 86  |
|                  |                       | 2                | 359                                    | 359       | 94        | 94        |                         | 2                                       | 352       | 352       | 71        | 71                      |     |
| 38,0             | 27,5                  | 1                | 242                                    | 445       | 242       | 40        | 30                      | 1                                       | 201       | 500       | 201       | 8                       | 92  |
|                  |                       | 2                | 386                                    | 386       | 99        | 99        |                         | 2                                       | 402       | 402       | 53        | 53                      |     |
| 42,5             | 42,5                  | 1                | 283                                    | 503       | 283       | 64        | 32                      | 1                                       | 230       | 605       | 230       | 8                       | 98  |
|                  |                       | 2                | 439                                    | 439       | 128       | 128       |                         | 2                                       | 480       | 480       | 57        | 57                      |     |
| 47,0             | 60,0                  | 1                | 332                                    | 569       | 332       | 94        | 33                      | 1                                       | 270       | 720       | 270       | 8                       | 105 |
|                  |                       | 2                | 500                                    | 500       | 164       | 164       |                         | 2                                       | 568       | 568       | 65        | 65                      |     |

3.4.5.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

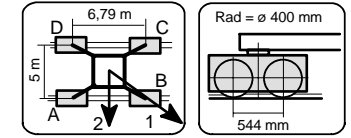


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 30,0                  | 1                | 256                                    | 364       | 165       | 57        | 23                      | 1                | 191                                     | 278       | 117       | 30        | 51                      |
|                  |                       | 2                | 334                                    | 334       | 87        | 87        |                         | 2                | 254                                     | 254       | 54        | 54        |                         |
| 20,0             | 30,0                  | 1                | 264                                    | 378       | 167       | 53        | 25                      | 1                | 198                                     | 290       | 120       | 28        | 65                      |
|                  |                       | 2                | 346                                    | 346       | 84        | 84        |                         | 2                | 264                                     | 264       | 53        | 53        |                         |
| 24,5             | 30,0                  | 1                | 270                                    | 392       | 167       | 46        | 26                      | 1                | 204                                     | 302       | 121       | 23        | 71                      |
|                  |                       | 2                | 358                                    | 358       | 79        | 79        |                         | 2                | 275                                     | 275       | 50        | 50        |                         |
| 29,0             | 30,0                  | 1                | 277                                    | 407       | 167       | 37        | 27                      | 1                | 241                                     | 320       | 174       | 94        | 77                      |
|                  |                       | 2                | 371                                    | 371       | 73        | 73        |                         | 2                | 298                                     | 298       | 116       | 116       |                         |
| 33,5             | 37,5                  | 1                | 303                                    | 442       | 186       | 47        | 29                      | 1                | 276                                     | 385       | 183       | 74        | 84                      |
|                  |                       | 2                | 404                                    | 404       | 85        | 85        |                         | 2                | 355                                     | 355       | 105       | 105       |                         |
| 38,0             | 47,5                  | 1                | 336                                    | 485       | 210       | 61        | 30                      | 1                | 318                                     | 460       | 198       | 56        | 90                      |
|                  |                       | 2                | 444                                    | 444       | 102       | 102       |                         | 2                | 420                                     | 420       | 96        | 96        |                         |
| 42,5             | 60,0                  | 1                | 376                                    | 536       | 240       | 79        | 32                      | 1                | 368                                     | 545       | 218       | 40        | 96                      |
|                  |                       | 2                | 492                                    | 492       | 124       | 124       |                         | 2                | 496                                     | 496       | 89        | 89        |                         |
| 47,0             | 75,0                  | 1                | 422                                    | 595       | 276       | 103       | 33                      | 1                | 425                                     | 642       | 242       | 26        | 102                     |
|                  |                       | 2                | 547                                    | 547       | 151       | 151       |                         | 2                | 582                                     | 582       | 86        | 86        |                         |
| 51,5             | 92,5                  | 1                | 475                                    | 662       | 317       | 131       | 35                      | 1                | 490                                     | 750       | 272       | 13        | 109                     |
|                  |                       | 2                | 610                                    | 610       | 182       | 182       |                         | 2                | 678                                     | 678       | 84        | 84        |                         |

3.4.5.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

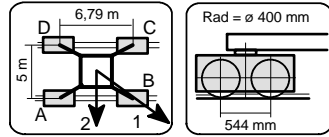


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 242                                    | 344       | 157       | 55        | 23                      | 1                | 172                                     | 259       | 98        | 11        | 51                      |
|                  |                       | 2                | 316                                    | 316       | 83        | 83        |                         | 2                | 235                                     | 235       | 35        | 35        |                         |
| 20,0             | 22,5                  | 1                | 250                                    | 358       | 159       | 50        | 25                      | 1                | 179                                     | 272       | 101       | 8         | 65                      |
|                  |                       | 2                | 328                                    | 328       | 80        | 80        |                         | 2                | 246                                     | 246       | 34        | 34        |                         |
| 24,5             | 22,5                  | 1                | 257                                    | 372       | 159       | 43        | 26                      | 1                | 181                                     | 287       | 98        | 8         | 72                      |
|                  |                       | 2                | 340                                    | 340       | 75        | 75        |                         | 2                | 256                                     | 256       | 31        | 31        |                         |
| 29,0             | 25,0                  | 1                | 270                                    | 394       | 165       | 41        | 28                      | 1                | 237                                     | 320       | 168       | 85        | 78                      |
|                  |                       | 2                | 360                                    | 360       | 76        | 76        |                         | 2                | 297                                     | 297       | 108       | 108       |                         |
| 33,5             | 35,0                  | 1                | 302                                    | 436       | 190       | 57        | 29                      | 1                | 279                                     | 391       | 184       | 71        | 84                      |
|                  |                       | 2                | 399                                    | 399       | 93        | 93        |                         | 2                | 360                                     | 360       | 102       | 102       |                         |
| 38,0             | 45,0                  | 1                | 335                                    | 479       | 214       | 70        | 30                      | 1                | 321                                     | 466       | 198       | 53        | 90                      |
|                  |                       | 2                | 439                                    | 439       | 110       | 110       |                         | 2                | 426                                     | 426       | 93        | 93        |                         |
| 42,5             | 57,5                  | 1                | 375                                    | 530       | 244       | 89        | 32                      | 1                | 371                                     | 553       | 218       | 36        | 97                      |
|                  |                       | 2                | 487                                    | 487       | 132       | 132       |                         | 2                | 502                                     | 502       | 86        | 86        |                         |
| 47,0             | 72,5                  | 1                | 421                                    | 588       | 280       | 112       | 33                      | 1                | 429                                     | 650       | 242       | 21        | 103                     |
|                  |                       | 2                | 542                                    | 542       | 159       | 159       |                         | 2                | 589                                     | 589       | 82        | 82        |                         |
| 51,5             | 92,5                  | 1                | 480                                    | 662       | 327       | 146       | 35                      | 1                | 500                                     | 765       | 277       | 13        | 109                     |
|                  |                       | 2                | 612                                    | 612       | 196       | 196       |                         | 2                | 692                                     | 692       | 86        | 86        |                         |

3.4.5.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

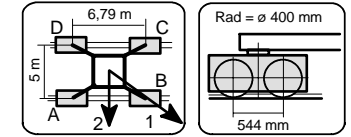


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 25,0                  | 1                | 254                                    | 360       | 164       | 58        | 23                      | 1                | 178                                     | 266       | 104       | 17        | 52                      |
|                  |                       | 2                | 331                                    | 331       | 87        | 87        |                         | 2                | 242                                     | 242       | 41        | 41        |                         |
| 20,0             | 25,0                  | 1                | 262                                    | 375       | 166       | 53        | 25                      | 1                | 185                                     | 278       | 107       | 14        | 66                      |
|                  |                       | 2                | 344                                    | 344       | 84        | 84        |                         | 2                | 253                                     | 253       | 40        | 40        |                         |
| 24,5             | 25,0                  | 1                | 268                                    | 389       | 167       | 46        | 26                      | 1                | 230                                     | 295       | 175       | 110       | 72                      |
|                  |                       | 2                | 356                                    | 356       | 79        | 79        |                         | 2                | 277                                     | 277       | 128       | 128       |                         |
| 29,0             | 25,0                  | 1                | 275                                    | 405       | 166       | 37        | 28                      | 1                | 245                                     | 338       | 167       | 74        | 79                      |
|                  |                       | 2                | 369                                    | 369       | 73        | 73        |                         | 2                | 313                                     | 313       | 99        | 99        |                         |
| 33,5             | 30,0                  | 1                | 295                                    | 434       | 179       | 40        | 29                      | 1                | 274                                     | 398       | 170       | 46        | 85                      |
|                  |                       | 2                | 396                                    | 396       | 78        | 78        |                         | 2                | 363                                     | 363       | 80        | 80        |                         |
| 38,0             | 40,0                  | 1                | 328                                    | 477       | 203       | 54        | 31                      | 1                | 317                                     | 474       | 184       | 27        | 91                      |
|                  |                       | 2                | 436                                    | 436       | 95        | 95        |                         | 2                | 430                                     | 430       | 71        | 71        |                         |
| 42,5             | 55,0                  | 1                | 374                                    | 535       | 239       | 78        | 32                      | 1                | 373                                     | 567       | 210       | 16        | 97                      |
|                  |                       | 2                | 490                                    | 490       | 123       | 123       |                         | 2                | 513                                     | 513       | 70        | 70        |                         |
| 47,0             | 75,0                  | 1                | 433                                    | 607       | 287       | 113       | 33                      | 1                | 444                                     | 678       | 246       | 12        | 104                     |
|                  |                       | 2                | 559                                    | 559       | 161       | 161       |                         | 2                | 613                                     | 613       | 77        | 77        |                         |
| 51,5             | 97,5                  | 1                | 499                                    | 687       | 341       | 153       | 35                      | 1                | 522                                     | 800       | 287       | 10        | 110                     |
|                  |                       | 2                | 635                                    | 635       | 205       | 205       |                         | 2                | 723                                     | 723       | 87        | 87        |                         |

3.4.5.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

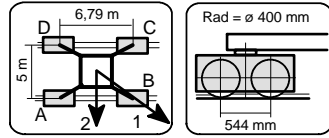


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 256                                    | 363       | 165       | 58        | 23                      | 1                | 194                                     | 279       | 122       | 36        | 52                      |
|                  |                       | 2                | 333                                    | 333       | 88        | 88        |                         | 2                | 255                                     | 255       | 60        | 60        |                         |
| 20,0             | 22,5                  | 1                | 264                                    | 377       | 167       | 54        | 25                      | 1                | 201                                     | 293       | 124       | 32        | 67                      |
|                  |                       | 2                | 346                                    | 346       | 85        | 85        |                         | 2                | 267                                     | 267       | 58        | 58        |                         |
| 24,5             | 22,5                  | 1                | 270                                    | 392       | 168       | 46        | 26                      | 1                | 234                                     | 306       | 174       | 102       | 73                      |
|                  |                       | 2                | 358                                    | 358       | 80        | 80        |                         | 2                | 286                                     | 286       | 122       | 122       |                         |
| 29,0             | 22,5                  | 1                | 277                                    | 408       | 168       | 37        | 28                      | 1                | 250                                     | 349       | 165       | 66        | 79                      |
|                  |                       | 2                | 372                                    | 372       | 73        | 73        |                         | 2                | 322                                     | 322       | 93        | 93        |                         |
| 33,5             | 25,0                  | 1                | 291                                    | 431       | 173       | 33        | 29                      | 1                | 272                                     | 403       | 162       | 31        | 86                      |
|                  |                       | 2                | 392                                    | 392       | 72        | 72        |                         | 2                | 367                                     | 367       | 68        | 68        |                         |
| 38,0             | 37,5                  | 1                | 331                                    | 481       | 203       | 53        | 31                      | 1                | 322                                     | 486       | 183       | 18        | 92                      |
|                  |                       | 2                | 439                                    | 439       | 95        | 95        |                         | 2                | 441                                     | 441       | 63        | 63        |                         |
| 42,5             | 55,0                  | 1                | 383                                    | 545       | 246       | 83        | 32                      | 1                | 384                                     | 586       | 214       | 12        | 98                      |
|                  |                       | 2                | 500                                    | 500       | 128       | 128       |                         | 2                | 531                                     | 531       | 68        | 68        |                         |
| 47,0             | 75,0                  | 1                | 442                                    | 617       | 294       | 118       | 34                      | 1                | 455                                     | 698       | 250       | 8         | 104                     |
|                  |                       | 2                | 569                                    | 569       | 167       | 167       |                         | 2                | 631                                     | 631       | 75        | 75        |                         |
| 51,5             | 100,0                 | 1                | 514                                    | 704       | 353       | 163       | 35                      | 1                | 540                                     | 828       | 297       | 10        | 111                     |
|                  |                       | 2                | 652                                    | 652       | 216       | 216       |                         | 2                | 748                                     | 748       | 89        | 89        |                         |

3.4.5.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

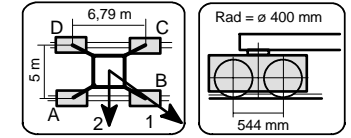


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 20,0                  | 1                | 252                                    | 360       | 162       | 54        | 24                      | 1                | 192                                     | 288       | 111       | 15        | 53                      |
|                  |                       | 2                | 330                                    | 330       | 84        | 84        |                         | 2                | 262                                     | 262       | 42        | 42        |                         |
| 20,0             | 20,0                  | 1                | 260                                    | 375       | 164       | 49        | 25                      | 1                | 200                                     | 302       | 114       | 11        | 68                      |
|                  |                       | 2                | 343                                    | 343       | 81        | 81        |                         | 2                | 274                                     | 274       | 40        | 40        |                         |
| 24,5             | 20,0                  | 1                | 267                                    | 389       | 164       | 42        | 27                      | 1                | 203                                     | 319       | 111       | 8         | 74                      |
|                  |                       | 2                | 356                                    | 356       | 75        | 75        |                         | 2                | 289                                     | 289       | 112       | 112       |                         |
| 29,0             | 20,0                  | 1                | 274                                    | 405       | 164       | 33        | 28                      | 1                | 249                                     | 355       | 159       | 53        | 80                      |
|                  |                       | 2                | 369                                    | 369       | 69        | 69        |                         | 2                | 325                                     | 325       | 83        | 83        |                         |
| 33,5             | 22,5                  | 1                | 288                                    | 429       | 169       | 29        | 29                      | 1                | 272                                     | 409       | 156       | 18        | 86                      |
|                  |                       | 2                | 390                                    | 390       | 68        | 68        |                         | 2                | 371                                     | 371       | 56        | 56        |                         |
| 38,0             | 37,5                  | 1                | 334                                    | 485       | 206       | 54        | 31                      | 1                | 327                                     | 499       | 182       | 10        | 93                      |
|                  |                       | 2                | 443                                    | 443       | 96        | 96        |                         | 2                | 451                                     | 451       | 58        | 58        |                         |
| 42,5             | 57,5                  | 1                | 392                                    | 556       | 254       | 91        | 32                      | 1                | 397                                     | 606       | 220       | 10        | 99                      |
|                  |                       | 2                | 511                                    | 511       | 136       | 136       |                         | 2                | 548                                     | 548       | 68        | 68        |                         |
| 47,0             | 80,0                  | 1                | 458                                    | 635       | 308       | 131       | 34                      | 1                | 474                                     | 725       | 262       | 11        | 105                     |
|                  |                       | 2                | 586                                    | 586       | 180       | 180       |                         | 2                | 655                                     | 655       | 81        | 81        |                         |
| 51,5             | 102,5                 | 1                | 524                                    | 715       | 362       | 170       | 35                      | 1                | 551                                     | 850       | 301       | 8         | 111                     |
|                  |                       | 2                | 662                                    | 662       | 223       | 223       |                         | 2                | 767                                     | 767       | 88        | 88        |                         |

3.4.5.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

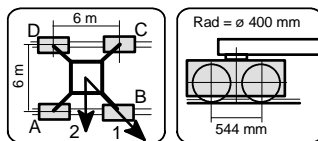


**UW 260.2** Eckabstand 5,0 m x 6,79 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 265                                    | 370       | 177       | 72        | 24                      | 1                | 189                                     | 357       | 85        | 8         | 53                      |
|                  |                       | 2                | 341                                    | 341       | 101       | 101       |                         | 2                | 300                                     | 300       | 19        | 19        |                         |
| 20,0             | 22,5                  | 1                | 273                                    | 385       | 179       | 67        | 25                      | 1                | 192                                     | 376       | 83        | 8         | 69                      |
|                  |                       | 2                | 354                                    | 354       | 98        | 98        |                         | 2                | 313                                     | 313       | 16        | 16        |                         |
| 24,5             | 25,0                  | 1                | 286                                    | 406       | 185       | 66        | 27                      | 1                | 204                                     | 396       | 89        | 8         | 75                      |
|                  |                       | 2                | 373                                    | 373       | 99        | 99        |                         | 2                | 330                                     | 330       | 18        | 18        |                         |
| 29,0             | 27,5                  | 1                | 300                                    | 428       | 191       | 63        | 28                      | 1                | 216                                     | 418       | 94        | 8         | 81                      |
|                  |                       | 2                | 393                                    | 393       | 99        | 99        |                         | 2                | 363                                     | 363       | 98        | 98        |                         |
| 33,5             | 30,0                  | 1                | 314                                    | 452       | 197       | 59        | 30                      | 1                | 302                                     | 450       | 178       | 31        | 87                      |
|                  |                       | 2                | 414                                    | 414       | 97        | 97        |                         | 2                | 409                                     | 409       | 72        | 72        |                         |
| 38,0             | 40,0                  | 1                | 347                                    | 496       | 221       | 72        | 31                      | 1                | 346                                     | 528       | 192       | 9         | 93                      |
|                  |                       | 2                | 455                                    | 455       | 113       | 113       |                         | 2                | 478                                     | 478       | 60        | 60        |                         |
| 42,5             | 60,0                  | 1                | 405                                    | 567       | 269       | 108       | 33                      | 1                | 415                                     | 636       | 229       | 8         | 100                     |
|                  |                       | 2                | 522                                    | 522       | 152       | 152       |                         | 2                | 575                                     | 575       | 69        | 69        |                         |
| 47,0             | 82,5                  | 1                | 471                                    | 646       | 323       | 148       | 34                      | 1                | 493                                     | 756       | 271       | 8         | 106                     |
|                  |                       | 2                | 598                                    | 598       | 197       | 197       |                         | 2                | 683                                     | 683       | 81        | 81        |                         |

3.4.6.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

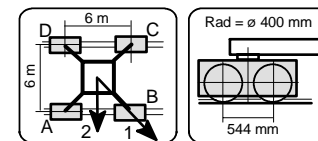


UW 260.2 Eckabstand 6,0 m x 6,0 m Ausleger 30 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,5             | 15,0                  | 1                | 173                                    | 318    | 173    | 27     | 23                      | 1                | 108                                     | 243    | 108    | 8      | 51                      |
|                  |                       | 2                | 276                                    | 276    | 70     | 70     |                         | 2                | 199                                     | 199    | 33     | 33     |                         |
| 20,0             | 15,0                  | 1                | 178                                    | 332    | 178    | 23     | 25                      | 1                | 110                                     | 257    | 110    | 8      | 65                      |
|                  |                       | 2                | 287                                    | 287    | 69     | 69     |                         | 2                | 209                                     | 209    | 33     | 33     |                         |
| 24,5             | 15,0                  | 1                | 181                                    | 346    | 181    | 17     | 26                      | 1                | 110                                     | 272    | 110    | 8      | 71                      |
|                  |                       | 2                | 298                                    | 298    | 65     | 65     |                         | 2                | 218                                     | 218    | 31     | 31     |                         |
| 29,0             | 15,0                  | 1                | 185                                    | 360    | 185    | 9      | 27                      | 1                | 108                                     | 290    | 108    | 8      | 77                      |
|                  |                       | 2                | 309                                    | 309    | 61     | 61     |                         | 2                | 246                                     | 246    | 94     | 94     |                         |
| 33,5             | 22,5                  | 1                | 207                                    | 395    | 207    | 19     | 29                      | 1                | 192                                     | 339    | 192    | 45     | 84                      |
|                  |                       | 2                | 340                                    | 340    | 74     | 74     |                         | 2                | 296                                     | 296    | 88     | 88     |                         |
| 38,0             | 32,5                  | 1                | 236                                    | 437    | 236    | 34     | 30                      | 1                | 221                                     | 412    | 221    | 29     | 90                      |
|                  |                       | 2                | 378                                    | 378    | 93     | 93     |                         | 2                | 356                                     | 356    | 85     | 85     |                         |
| 42,5             | 42,5                  | 1                | 264                                    | 481    | 264    | 47     | 32                      | 1                | 249                                     | 489    | 249    | 9      | 96                      |
|                  |                       | 2                | 417                                    | 417    | 111    | 111    |                         | 2                | 418                                     | 418    | 80     | 80     |                         |
| 47,0             | 52,5                  | 1                | 293                                    | 526    | 293    | 59     | 33                      | 1                | 255                                     | 592    | 255    | 8      | 102                     |
|                  |                       | 2                | 458                                    | 458    | 127    | 127    |                         | 2                | 484                                     | 484    | 71     | 71     |                         |
| 51,5             | 67,5                  | 1                | 334                                    | 585    | 334    | 82     | 35                      | 1                | 280                                     | 707    | 280    | 8      | 109                     |
|                  |                       | 2                | 512                                    | 512    | 155    | 155    |                         | 2                | 566                                     | 566    | 71     | 71     |                         |
| 56,0             | 87,5                  | 1                | 388                                    | 660    | 388    | 117    | 36                      | 1                | 327                                     | 831    | 327    | 8      | 115                     |
|                  |                       | 2                | 580                                    | 580    | 196    | 196    |                         | 2                | 664                                     | 664    | 82     | 82     |                         |

3.4.6.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

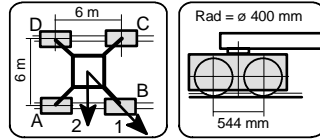


UW 260.2 Eckabstand 6,0 m x 6,0 m Ausleger 35 m

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |        |        |        | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |        |        |        | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|--------|--------|--------|-------------------------|------------------|---|--------|--------|--------|-------------------------|
|                  |                       |                  | Ecklasten                              |        |        |        |                         |                  | Ecklasten                               |        |        |        |                         |
|                  |                       |                  | A [kN]                                 | B [kN] | C [kN] | D [kN] |                         |                  | A [kN]                                  | B [kN] | C [kN] | D [kN] |                         |
| 15,5             | 10,0                  | 1                | 168                                    | 305    | 168    | 31     | 23                      | 1                | 82                                      | 243    | 82     | 8      | 51                      |
|                  |                       | 2                | 265                                    | 265    | 71     | 71     |                         | 2                | 187                                     | 187    | 21     | 21     |                         |
| 20,0             | 10,0                  | 1                | 173                                    | 319    | 173    | 27     | 25                      | 1                | 85                                      | 257    | 85     | 8      | 65                      |
|                  |                       | 2                | 276                                    | 276    | 70     | 70     |                         | 2                | 197                                     | 197    | 21     | 21     |                         |
| 24,5             | 10,0                  | 1                | 177                                    | 333    | 177    | 20     | 26                      | 1                | 84                                      | 273    | 84     | 8      | 72                      |
|                  |                       | 2                | 287                                    | 287    | 66     | 66     |                         | 2                | 214                                     | 214    | 109    | 109    |                         |
| 29,0             | 12,5                  | 1                | 186                                    | 354    | 186    | 19     | 28                      | 1                | 95                                      | 291    | 95     | 8      | 78                      |
|                  |                       | 2                | 305                                    | 305    | 68     | 68     |                         | 2                | 250                                     | 250    | 93     | 93     |                         |
| 33,5             | 20,0                  | 1                | 209                                    | 388    | 209    | 29     | 29                      | 1                | 194                                     | 345    | 194    | 42     | 84                      |
|                  |                       | 2                | 336                                    | 336    | 81     | 81     |                         | 2                | 301                                     | 301    | 86     | 86     |                         |
| 38,0             | 30,0                  | 1                | 237                                    | 431    | 237    | 43     | 30                      | 1                | 222                                     | 418    | 222    | 26     | 90                      |
|                  |                       | 2                | 374                                    | 374    | 100    | 100    |                         | 2                | 361                                     | 361    | 83     | 83     |                         |
| 42,5             | 40,0                  | 1                | 266                                    | 475    | 266    | 57     | 32                      | 1                | 248                                     | 498    | 248    | 8      | 97                      |
|                  |                       | 2                | 413                                    | 413    | 118    | 118    |                         | 2                | 424                                     | 424    | 77     | 77     |                         |
| 47,0             | 50,0                  | 1                | 294                                    | 520    | 294    | 68     | 33                      | 1                | 252                                     | 605    | 252    | 8      | 103                     |
|                  |                       | 2                | 454                                    | 454    | 134    | 134    |                         | 2                | 490                                     | 490    | 68     | 68     |                         |
| 51,5             | 67,5                  | 1                | 341                                    | 586    | 341    | 97     | 35                      | 1                | 288                                     | 721    | 288    | 8      | 109                     |
|                  |                       | 2                | 514                                    | 514    | 168    | 168    |                         | 2                | 579                                     | 579    | 74     | 74     |                         |
| 56,0             | 87,5                  | 1                | 396                                    | 660    | 396    | 131    | 36                      | 1                | 334                                     | 847    | 334    | 8      | 116                     |
|                  |                       | 2                | 583                                    | 583    | 209    | 209    |                         | 2                | 678                                     | 678    | 84     | 84     |                         |

3.4.6.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

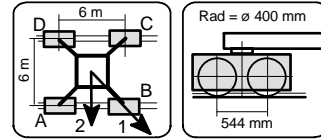


**UW 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 12,5                  | 1                | 178                                    | 321       | 178       | 34        | 23                      | 1                | 94                                      | 244       | 94        | 8         | 52                      |
|                  |                       | 2                | 279                                    | 279       | 76        | 76        |                         | 2                | 194                                     | 194       | 27        | 27        |                         |
| 20,0             | 12,5                  | 1                | 183                                    | 335       | 183       | 30        | 25                      | 1                | 97                                      | 258       | 97        | 8         | 66                      |
|                  |                       | 2                | 291                                    | 291       | 75        | 75        |                         | 2                | 206                                     | 206       | 129       | 129       |                         |
| 24,5             | 12,5                  | 1                | 186                                    | 349       | 186       | 23        | 26                      | 1                | 96                                      | 274       | 96        | 8         | 72                      |
|                  |                       | 2                | 301                                    | 301       | 71        | 71        |                         | 2                | 234                                     | 234       | 109       | 109       |                         |
| 29,0             | 12,5                  | 1                | 190                                    | 364       | 190       | 16        | 28                      | 1                | 175                                     | 300       | 175       | 49        | 79                      |
|                  |                       | 2                | 313                                    | 313       | 67        | 67        |                         | 2                | 264                                     | 264       | 86        | 86        |                         |
| 33,5             | 15,0                  | 1                | 199                                    | 386       | 199       | 13        | 29                      | 1                | 184                                     | 351       | 184       | 18        | 85                      |
|                  |                       | 2                | 332                                    | 332       | 67        | 67        |                         | 2                | 302                                     | 302       | 67        | 67        |                         |
| 38,0             | 25,0                  | 1                | 228                                    | 429       | 228       | 27        | 31                      | 1                | 206                                     | 432       | 206       | 8         | 91                      |
|                  |                       | 2                | 370                                    | 370       | 86        | 86        |                         | 2                | 363                                     | 363       | 63        | 63        |                         |
| 42,5             | 35,0                  | 1                | 256                                    | 473       | 256       | 40        | 32                      | 1                | 214                                     | 531       | 214       | 8         | 97                      |
|                  |                       | 2                | 410                                    | 410       | 103       | 103       |                         | 2                | 426                                     | 426       | 57        | 57        |                         |
| 47,0             | 52,5                  | 1                | 304                                    | 538       | 304       | 70        | 33                      | 1                | 254                                     | 639       | 254       | 8         | 104                     |
|                  |                       | 2                | 469                                    | 469       | 138       | 138       |                         | 2                | 512                                     | 512       | 66        | 66        |                         |
| 51,5             | 70,0                  | 1                | 351                                    | 604       | 351       | 98        | 35                      | 1                | 289                                     | 757       | 289       | 8         | 110                     |
|                  |                       | 2                | 530                                    | 530       | 172       | 172       |                         | 2                | 601                                     | 601       | 71        | 71        |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.6.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

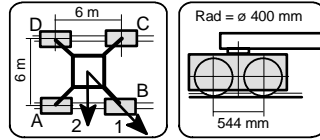


**UW 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 10,0                  | 1                | 179                                    | 324       | 179       | 35        | 23                      | 1                | 82                                      | 245       | 82        | 8         | 52                      |
|                  |                       | 2                | 281                                    | 281       | 77        | 77        |                         | 2                | 208                                     | 208       | 45        | 45        |                         |
| 20,0             | 10,0                  | 1                | 184                                    | 338       | 184       | 31        | 25                      | 1                | 84                                      | 259       | 84        | 8         | 67                      |
|                  |                       | 2                | 293                                    | 293       | 76        | 76        |                         | 2                | 219                                     | 219       | 44        | 44        |                         |
| 24,5             | 10,0                  | 1                | 188                                    | 352       | 188       | 24        | 26                      | 1                | 83                                      | 275       | 83        | 8         | 73                      |
|                  |                       | 2                | 304                                    | 304       | 72        | 72        |                         | 2                | 241                                     | 241       | 104       | 104       |                         |
| 29,0             | 10,0                  | 1                | 191                                    | 367       | 191       | 16        | 28                      | 1                | 176                                     | 311       | 176       | 42        | 79                      |
|                  |                       | 2                | 315                                    | 315       | 67        | 67        |                         | 2                | 271                                     | 271       | 81        | 81        |                         |
| 33,5             | 12,5                  | 1                | 201                                    | 390       | 201       | 12        | 29                      | 1                | 186                                     | 362       | 186       | 10        | 86                      |
|                  |                       | 2                | 334                                    | 334       | 68        | 68        |                         | 2                | 311                                     | 311       | 61        | 61        |                         |
| 38,0             | 22,5                  | 1                | 230                                    | 433       | 230       | 26        | 31                      | 1                | 199                                     | 452       | 199       | 8         | 92                      |
|                  |                       | 2                | 373                                    | 373       | 86        | 86        |                         | 2                | 372                                     | 372       | 57        | 57        |                         |
| 42,5             | 35,0                  | 1                | 264                                    | 483       | 264       | 45        | 32                      | 1                | 218                                     | 553       | 218       | 8         | 98                      |
|                  |                       | 2                | 419                                    | 419       | 109       | 109       |                         | 2                | 442                                     | 442       | 57        | 57        |                         |
| 47,0             | 52,5                  | 1                | 312                                    | 548       | 312       | 75        | 34                      | 1                | 258                                     | 663       | 258       | 8         | 104                     |
|                  |                       | 2                | 479                                    | 479       | 144       | 144       |                         | 2                | 528                                     | 528       | 65        | 65        |                         |
| 51,5             | 72,5                  | 1                | 365                                    | 622       | 365       | 108       | 35                      | 1                | 304                                     | 784       | 304       | 8         | 111                     |
|                  |                       | 2                | 547                                    | 547       | 183       | 183       |                         | 2                | 624                                     | 624       | 76        | 76        |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

3.4.6.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

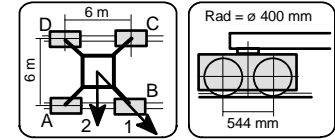


**UW 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 7,5                   | 1                | 176                                    | 321       | 176       | 31        | 24                      | 1                | 104                                     | 267       | 104       | 8         | 53                      |
|                  |                       | 2                | 278                                    | 278       | 73        | 73        | 2                       | 212              | 212                                     | 29        | 29        |           |                         |
| 20,0             | 7,5                   | 1                | 181                                    | 335       | 181       | 26        | 25                      | 1                | 105                                     | 284       | 105       | 8         | 68                      |
|                  |                       | 2                | 290                                    | 290       | 71        | 71        | 2                       | 223              | 223                                     | 28        | 28        |           |                         |
| 24,5             | 10,0                  | 1                | 191                                    | 356       | 191       | 25        | 27                      | 1                | 115                                     | 303       | 115       | 8         | 74                      |
|                  |                       | 2                | 307                                    | 307       | 74        | 74        | 2                       | 250              | 250                                     | 101       | 101       |           |                         |
| 29,0             | 10,0                  | 1                | 194                                    | 371       | 194       | 17        | 28                      | 1                | 112                                     | 323       | 112       | 8         | 80                      |
|                  |                       | 2                | 319                                    | 319       | 69        | 69        | 2                       | 280              | 280                                     | 78        | 78        |           |                         |
| 33,5             | 12,5                  | 1                | 204                                    | 394       | 204       | 14        | 29                      | 1                | 184                                     | 379       | 184       | 8         | 86                      |
|                  |                       | 2                | 338                                    | 338       | 70        | 70        | 2                       | 320              | 320                                     | 58        | 58        |           |                         |
| 38,0             | 22,5                  | 1                | 232                                    | 437       | 232       | 28        | 31                      | 1                | 195                                     | 471       | 195       | 8         | 93                      |
|                  |                       | 2                | 377                                    | 377       | 88        | 88        | 2                       | 381              | 381                                     | 53        | 53        |           |                         |
| 42,5             | 37,5                  | 1                | 273                                    | 494       | 273       | 53        | 32                      | 1                | 226                                     | 573       | 226       | 8         | 99                      |
|                  |                       | 2                | 429                                    | 429       | 117       | 117       | 2                       | 458              | 458                                     | 58        | 58        |           |                         |
| 47,0             | 55,0                  | 1                | 321                                    | 559       | 321       | 82        | 34                      | 1                | 265                                     | 685       | 265       | 8         | 105                     |
|                  |                       | 2                | 489                                    | 489       | 152       | 152       | 2                       | 545              | 545                                     | 66        | 66        |           |                         |
| 51,5             | 75,0                  | 1                | 374                                    | 633       | 374       | 115       | 35                      | 1                | 310                                     | 807       | 310       | 8         | 111                     |
|                  |                       | 2                | 557                                    | 557       | 191       | 191       | 2                       | 642              | 642                                     | 76        | 76        |           |                         |

3.4.6.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk



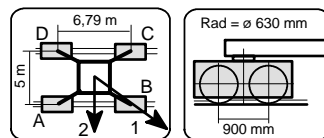
**UW 260.2** Eckabstand 6,0 m x 6,0 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 12,5                  | 1                | 196                                    | 337       | 196       | 55        | 24                      | 1                | 96                                      | 339       | 96        | 8         | 53                      |
|                  |                       | 2                | 296                                    | 296       | 96        | 96        | 2                       | 252              | 252                                     | 17        | 17        |           |                         |
| 20,0             | 12,5                  | 1                | 201                                    | 352       | 201       | 50        | 25                      | 1                | 97                                      | 357       | 97        | 8         | 69                      |
|                  |                       | 2                | 308                                    | 308       | 94        | 94        | 2                       | 263              | 263                                     | 16        | 16        |           |                         |
| 24,5             | 15,0                  | 1                | 211                                    | 372       | 211       | 49        | 27                      | 1                | 107                                     | 376       | 107       | 8         | 75                      |
|                  |                       | 2                | 325                                    | 325       | 97        | 97        | 2                       | 279              | 279                                     | 19        | 19        |           |                         |
| 29,0             | 15,0                  | 1                | 214                                    | 388       | 214       | 41        | 28                      | 1                | 103                                     | 397       | 103       | 8         | 81                      |
|                  |                       | 2                | 337                                    | 337       | 92        | 92        | 2                       | 310              | 310                                     | 89        | 89        |           |                         |
| 33,5             | 17,5                  | 1                | 224                                    | 411       | 224       | 37        | 30                      | 1                | 111                                     | 421       | 111       | 8         | 87                      |
|                  |                       | 2                | 356                                    | 356       | 92        | 92        | 2                       | 350              | 350                                     | 68        | 68        |           |                         |
| 38,0             | 22,5                  | 1                | 240                                    | 441       | 240       | 39        | 31                      | 1                | 196                                     | 500       | 196       | 8         | 93                      |
|                  |                       | 2                | 382                                    | 382       | 98        | 98        | 2                       | 399              | 399                                     | 51        | 51        |           |                         |
| 42,5             | 40,0                  | 1                | 287                                    | 505       | 287       | 69        | 33                      | 1                | 239                                     | 604       | 239       | 8         | 100                     |
|                  |                       | 2                | 441                                    | 441       | 133       | 133       | 2                       | 483              | 483                                     | 62        | 62        |           |                         |
| 47,0             | 57,5                  | 1                | 335                                    | 571       | 335       | 98        | 34                      | 1                | 276                                     | 718       | 276       | 8         | 106                     |
|                  |                       | 2                | 502                                    | 502       | 167       | 167       | 2                       | 571              | 571                                     | 69        | 69        |           |                         |
| 51,5             | 77,5                  | 1                | 388                                    | 645       | 388       | 131       | 35                      | 1                | 321                                     | 843       | 321       | 8         | 112                     |
|                  |                       | 2                | 570                                    | 570       | 206       | 206       | 2                       | 668              | 668                                     | 78        | 78        |           |                         |



3.4.7.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

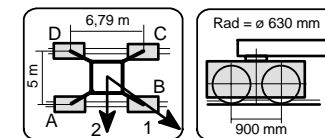


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 30,0                  | 1                | 264                                    | 371       | 173       | 65        | 23                      | 1                | 198                                     | 285       | 125       | 38        | 51                      |
|                  |                       | 2                | 342                                    | 342       | 95        | 95        |                         | 2                | 261                                     | 261       | 62        | 62        |                         |
| 20,0             | 30,0                  | 1                | 271                                    | 386       | 175       | 60        | 25                      | 1                | 205                                     | 298       | 128       | 35        | 65                      |
|                  |                       | 2                | 354                                    | 354       | 92        | 92        |                         | 2                | 272                                     | 272       | 61        | 61        |                         |
| 24,5             | 30,0                  | 1                | 278                                    | 400       | 175       | 53        | 26                      | 1                | 211                                     | 309       | 129       | 31        | 71                      |
|                  |                       | 2                | 366                                    | 366       | 87        | 87        |                         | 2                | 282                                     | 282       | 58        | 58        |                         |
| 29,0             | 30,0                  | 1                | 285                                    | 415       | 175       | 45        | 27                      | 1                | 249                                     | 328       | 182       | 102       | 77                      |
|                  |                       | 2                | 379                                    | 379       | 81        | 81        |                         | 2                | 306                                     | 306       | 124       | 124       |                         |
| 33,5             | 37,5                  | 1                | 311                                    | 450       | 194       | 54        | 29                      | 1                | 283                                     | 393       | 191       | 82        | 84                      |
|                  |                       | 2                | 412                                    | 412       | 93        | 93        |                         | 2                | 362                                     | 362       | 112       | 112       |                         |
| 38,0             | 47,5                  | 1                | 344                                    | 493       | 218       | 68        | 30                      | 1                | 326                                     | 468       | 206       | 64        | 90                      |
|                  |                       | 2                | 452                                    | 452       | 110       | 110       |                         | 2                | 428                                     | 428       | 103       | 103       |                         |
| 42,5             | 60,0                  | 1                | 383                                    | 544       | 248       | 87        | 32                      | 1                | 376                                     | 553       | 226       | 48        | 96                      |
|                  |                       | 2                | 499                                    | 499       | 132       | 132       |                         | 2                | 504                                     | 504       | 97        | 97        |                         |
| 47,0             | 75,0                  | 1                | 430                                    | 603       | 284       | 111       | 33                      | 1                | 433                                     | 650       | 250       | 34        | 102                     |
|                  |                       | 2                | 555                                    | 555       | 158       | 158       |                         | 2                | 590                                     | 590       | 94        | 94        |                         |
| 51,5             | 92,5                  | 1                | 483                                    | 669       | 325       | 138       | 35                      | 1                | 498                                     | 757       | 279       | 20        | 109                     |
|                  |                       | 2                | 618                                    | 618       | 190       | 190       |                         | 2                | 686                                     | 686       | 92        | 92        |                         |
| 56,0             | 115,0                 | 1                | 549                                    | 751       | 380       | 179       | 36                      | 1                | 578                                     | 884       | 321       | 16        | 115                     |
|                  |                       | 2                | 695                                    | 695       | 234       | 234       |                         | 2                | 799                                     | 799       | 100       | 100       |                         |

3.4.7.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

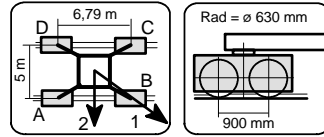


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 250                                    | 352       | 164       | 63        | 23                      | 1                | 180                                     | 267       | 106       | 19        | 51                      |
|                  |                       | 2                | 323                                    | 323       | 91        | 91        |                         | 2                | 243                                     | 243       | 43        | 43        |                         |
| 20,0             | 22,5                  | 1                | 258                                    | 366       | 166       | 58        | 25                      | 1                | 187                                     | 279       | 109       | 16        | 65                      |
|                  |                       | 2                | 336                                    | 336       | 88        | 88        |                         | 2                | 254                                     | 254       | 42        | 42        |                         |
| 24,5             | 22,5                  | 1                | 264                                    | 380       | 167       | 51        | 26                      | 1                | 189                                     | 295       | 106       | 16        | 72                      |
|                  |                       | 2                | 348                                    | 348       | 83        | 83        |                         | 2                | 264                                     | 264       | 39        | 39        |                         |
| 29,0             | 25,0                  | 1                | 278                                    | 402       | 173       | 49        | 28                      | 1                | 245                                     | 327       | 176       | 93        | 78                      |
|                  |                       | 2                | 367                                    | 367       | 83        | 83        |                         | 2                | 305                                     | 305       | 116       | 116       |                         |
| 33,5             | 35,0                  | 1                | 310                                    | 443       | 198       | 64        | 29                      | 1                | 286                                     | 399       | 191       | 79        | 84                      |
|                  |                       | 2                | 406                                    | 406       | 101       | 101       |                         | 2                | 368                                     | 368       | 110       | 110       |                         |
| 38,0             | 45,0                  | 1                | 343                                    | 486       | 222       | 78        | 30                      | 1                | 329                                     | 474       | 206       | 60        | 90                      |
|                  |                       | 2                | 447                                    | 447       | 118       | 118       |                         | 2                | 434                                     | 434       | 101       | 101       |                         |
| 42,5             | 57,5                  | 1                | 382                                    | 537       | 252       | 97        | 32                      | 1                | 379                                     | 560       | 225       | 44        | 97                      |
|                  |                       | 2                | 494                                    | 494       | 140       | 140       |                         | 2                | 510                                     | 510       | 94        | 94        |                         |
| 47,0             | 72,5                  | 1                | 429                                    | 596       | 287       | 120       | 33                      | 1                | 436                                     | 658       | 250       | 29        | 103                     |
|                  |                       | 2                | 550                                    | 550       | 166       | 166       |                         | 2                | 596                                     | 596       | 90        | 90        |                         |
| 51,5             | 92,5                  | 1                | 488                                    | 670       | 335       | 154       | 35                      | 1                | 508                                     | 772       | 285       | 21        | 109                     |
|                  |                       | 2                | 619                                    | 619       | 204       | 204       |                         | 2                | 699                                     | 699       | 94        | 94        |                         |
| 56,0             | 115,0                 | 1                | 555                                    | 751       | 390       | 194       | 36                      | 1                | 588                                     | 900       | 326       | 16        | 116                     |
|                  |                       | 2                | 697                                    | 697       | 248       | 248       |                         | 2                | 814                                     | 814       | 101       | 101       |                         |

3.4.7.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

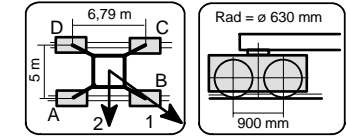


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 25,0                  | 1                | 262                                    | 368       | 172       | 66        | 23                      | 1                | 186                                     | 274       | 112       | 25        | 52                      |
|                  |                       | 2                | 339                                    | 339       | 95        | 95        |                         | 2                | 249                                     | 249       | 49        | 49        |                         |
| 20,0             | 25,0                  | 1                | 269                                    | 383       | 174       | 61        | 25                      | 1                | 193                                     | 286       | 115       | 22        | 66                      |
|                  |                       | 2                | 351                                    | 351       | 92        | 92        |                         | 2                | 260                                     | 260       | 48        | 48        |                         |
| 24,5             | 25,0                  | 1                | 276                                    | 397       | 174       | 54        | 26                      | 1                | 238                                     | 303       | 183       | 117       | 72                      |
|                  |                       | 2                | 363                                    | 363       | 87        | 87        |                         | 2                | 285                                     | 285       | 135       | 135       |                         |
| 29,0             | 25,0                  | 1                | 283                                    | 412       | 174       | 45        | 28                      | 1                | 253                                     | 346       | 174       | 81        | 79                      |
|                  |                       | 2                | 377                                    | 377       | 81        | 81        |                         | 2                | 320                                     | 320       | 107       | 107       |                         |
| 33,5             | 30,0                  | 1                | 303                                    | 442       | 186       | 48        | 29                      | 1                | 282                                     | 405       | 178       | 54        | 85                      |
|                  |                       | 2                | 403                                    | 403       | 86        | 86        |                         | 2                | 371                                     | 371       | 88        | 88        |                         |
| 38,0             | 40,0                  | 1                | 336                                    | 485       | 210       | 61        | 31                      | 1                | 325                                     | 482       | 192       | 35        | 91                      |
|                  |                       | 2                | 444                                    | 444       | 103       | 103       |                         | 2                | 438                                     | 438       | 78        | 78        |                         |
| 42,5             | 55,0                  | 1                | 382                                    | 543       | 246       | 86        | 32                      | 1                | 381                                     | 575       | 217       | 24        | 97                      |
|                  |                       | 2                | 498                                    | 498       | 130       | 130       |                         | 2                | 521                                     | 521       | 77        | 77        |                         |
| 47,0             | 75,0                  | 1                | 441                                    | 614       | 295       | 121       | 33                      | 1                | 451                                     | 685       | 254       | 20        | 104                     |
|                  |                       | 2                | 566                                    | 566       | 169       | 169       |                         | 2                | 621                                     | 621       | 85        | 85        |                         |
| 51,5             | 97,5                  | 1                | 507                                    | 694       | 348       | 161       | 35                      | 1                | 530                                     | 808       | 295       | 17        | 110                     |
|                  |                       | 2                | 642                                    | 642       | 213       | 213       |                         | 2                | 731                                     | 731       | 94        | 94        |                         |
| 56,0             | 122,5                 | 1                | 580                                    | 783       | 409       | 206       | 36                      | 1                | 617                                     | 942       | 342       | 17        | 116                     |
|                  |                       | 2                | 727                                    | 727       | 262       | 262       |                         | 2                | 852                                     | 852       | 107       | 107       |                         |

3.4.7.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

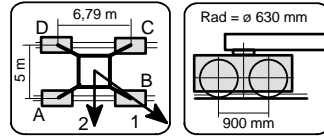


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 263                                    | 370       | 173       | 66        | 23                      | 1                | 201                                     | 287       | 129       | 44        | 52                      |
|                  |                       | 2                | 341                                    | 341       | 96        | 96        |                         | 2                | 263                                     | 263       | 68        | 68        |                         |
| 20,0             | 22,5                  | 1                | 271                                    | 385       | 175       | 61        | 25                      | 1                | 209                                     | 300       | 132       | 40        | 67                      |
|                  |                       | 2                | 354                                    | 354       | 93        | 93        |                         | 2                | 275                                     | 275       | 65        | 65        |                         |
| 24,5             | 22,5                  | 1                | 278                                    | 400       | 175       | 54        | 26                      | 1                | 242                                     | 314       | 182       | 110       | 73                      |
|                  |                       | 2                | 366                                    | 366       | 88        | 88        |                         | 2                | 294                                     | 294       | 130       | 130       |                         |
| 29,0             | 22,5                  | 1                | 285                                    | 415       | 175       | 45        | 28                      | 1                | 257                                     | 357       | 173       | 73        | 79                      |
|                  |                       | 2                | 379                                    | 379       | 81        | 81        |                         | 2                | 329                                     | 329       | 101       | 101       |                         |
| 33,5             | 25,0                  | 1                | 299                                    | 439       | 181       | 41        | 29                      | 1                | 280                                     | 411       | 170       | 39        | 86                      |
|                  |                       | 2                | 400                                    | 400       | 80        | 80        |                         | 2                | 375                                     | 375       | 75        | 75        |                         |
| 38,0             | 37,5                  | 1                | 338                                    | 489       | 211       | 61        | 31                      | 1                | 329                                     | 494       | 190       | 26        | 92                      |
|                  |                       | 2                | 447                                    | 447       | 102       | 102       |                         | 2                | 448                                     | 448       | 71        | 71        |                         |
| 42,5             | 55,0                  | 1                | 391                                    | 553       | 253       | 91        | 32                      | 1                | 392                                     | 594       | 222       | 20        | 98                      |
|                  |                       | 2                | 508                                    | 508       | 136       | 136       |                         | 2                | 538                                     | 538       | 76        | 76        |                         |
| 47,0             | 75,0                  | 1                | 450                                    | 625       | 301       | 126       | 34                      | 1                | 463                                     | 706       | 258       | 16        | 104                     |
|                  |                       | 2                | 577                                    | 577       | 174       | 174       |                         | 2                | 639                                     | 639       | 82        | 82        |                         |
| 51,5             | 100,0                 | 1                | 522                                    | 712       | 361       | 171       | 35                      | 1                | 548                                     | 835       | 305       | 18        | 111                     |
|                  |                       | 2                | 659                                    | 659       | 224       | 224       |                         | 2                | 756                                     | 756       | 97        | 97        |                         |
| 56,0             | 125,0                 | 1                | 595                                    | 801       | 422       | 216       | 37                      | 1                | 635                                     | 971       | 352       | 16        | 117                     |
|                  |                       | 2                | 744                                    | 744       | 273       | 273       |                         | 2                | 878                                     | 878       | 109       | 109       |                         |

3.4.7.5 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

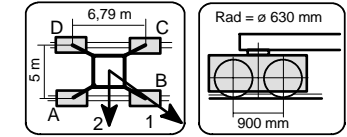


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 20,0                  | 1                | 260                                    | 368       | 169       | 62        | 24                      | 1                | 200                                     | 296       | 119       | 23        | 53                      |
|                  |                       | 2                | 338                                    | 338       | 92        | 92        |                         | 2                | 270                                     | 270       | 50        | 50        |                         |
| 20,0             | 20,0                  | 1                | 268                                    | 383       | 171       | 57        | 25                      | 1                | 208                                     | 310       | 121       | 19        | 68                      |
|                  |                       | 2                | 351                                    | 351       | 89        | 89        |                         | 2                | 282                                     | 282       | 47        | 47        |                         |
| 24,5             | 20,0                  | 1                | 275                                    | 397       | 172       | 49        | 27                      | 1                | 211                                     | 326       | 119       | 16        | 74                      |
|                  |                       | 2                | 363                                    | 363       | 83        | 83        |                         | 2                | 297                                     | 297       | 119       | 119       |                         |
| 29,0             | 20,0                  | 1                | 282                                    | 413       | 171       | 41        | 28                      | 1                | 257                                     | 363       | 167       | 61        | 80                      |
|                  |                       | 2                | 377                                    | 377       | 77        | 77        |                         | 2                | 333                                     | 333       | 90        | 90        |                         |
| 33,5             | 22,5                  | 1                | 296                                    | 437       | 177       | 36        | 29                      | 1                | 279                                     | 417       | 164       | 26        | 86                      |
|                  |                       | 2                | 398                                    | 398       | 75        | 75        |                         | 2                | 379                                     | 379       | 64        | 64        |                         |
| 38,0             | 37,5                  | 1                | 341                                    | 493       | 214       | 62        | 31                      | 1                | 335                                     | 507       | 190       | 18        | 93                      |
|                  |                       | 2                | 451                                    | 451       | 104       | 104       |                         | 2                | 459                                     | 459       | 66        | 66        |                         |
| 42,5             | 57,5                  | 1                | 400                                    | 564       | 262       | 98        | 32                      | 1                | 404                                     | 614       | 228       | 18        | 99                      |
|                  |                       | 2                | 518                                    | 518       | 144       | 144       |                         | 2                | 556                                     | 556       | 76        | 76        |                         |
| 47,0             | 80,0                  | 1                | 465                                    | 642       | 316       | 139       | 34                      | 1                | 482                                     | 733       | 270       | 19        | 105                     |
|                  |                       | 2                | 593                                    | 593       | 188       | 188       |                         | 2                | 663                                     | 663       | 88        | 88        |                         |
| 51,5             | 102,5                 | 1                | 531                                    | 723       | 370       | 178       | 35                      | 1                | 559                                     | 858       | 309       | 16        | 111                     |
|                  |                       | 2                | 670                                    | 670       | 231       | 231       |                         | 2                | 775                                     | 775       | 96        | 96        |                         |
| 56,0             | 127,5                 | 1                | 605                                    | 812       | 430       | 223       | 37                      | 1                | 644                                     | 998       | 353       | 16        | 118                     |
|                  |                       | 2                | 755                                    | 755       | 280       | 280       |                         | 2                | 898                                     | 898       | 107       | 107       |                         |

3.4.7.6 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

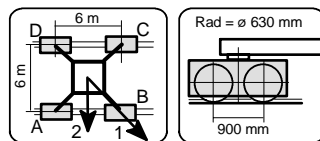


**UW 260.3** Eckabstand 5,0 m x 6,79 m **Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 22,5                  | 1                | 273                                    | 378       | 185       | 80        | 24                      | 1                | 196                                     | 365       | 93        | 16        | 53                      |
|                  |                       | 2                | 349                                    | 349       | 109       | 109       |                         | 2                | 308                                     | 308       | 27        | 27        |                         |
| 20,0             | 22,5                  | 1                | 281                                    | 393       | 187       | 75        | 25                      | 1                | 200                                     | 383       | 91        | 16        | 69                      |
|                  |                       | 2                | 362                                    | 362       | 106       | 106       |                         | 2                | 320                                     | 320       | 24        | 24        |                         |
| 24,5             | 25,0                  | 1                | 294                                    | 414       | 193       | 74        | 27                      | 1                | 212                                     | 403       | 97        | 16        | 75                      |
|                  |                       | 2                | 380                                    | 380       | 107       | 107       |                         | 2                | 338                                     | 338       | 26        | 26        |                         |
| 29,0             | 27,5                  | 1                | 307                                    | 436       | 199       | 71        | 28                      | 1                | 224                                     | 426       | 102       | 16        | 81                      |
|                  |                       | 2                | 400                                    | 400       | 106       | 106       |                         | 2                | 371                                     | 371       | 106       | 106       |                         |
| 33,5             | 30,0                  | 1                | 321                                    | 460       | 205       | 66        | 30                      | 1                | 310                                     | 458       | 186       | 38        | 87                      |
|                  |                       | 2                | 421                                    | 421       | 105       | 105       |                         | 2                | 417                                     | 417       | 79        | 79        |                         |
| 38,0             | 40,0                  | 1                | 355                                    | 504       | 229       | 79        | 31                      | 1                | 354                                     | 536       | 200       | 17        | 93                      |
|                  |                       | 2                | 462                                    | 462       | 121       | 121       |                         | 2                | 485                                     | 485       | 68        | 68        |                         |
| 42,5             | 60,0                  | 1                | 413                                    | 575       | 277       | 115       | 33                      | 1                | 423                                     | 644       | 237       | 16        | 100                     |
|                  |                       | 2                | 530                                    | 530       | 160       | 160       |                         | 2                | 583                                     | 583       | 77        | 77        |                         |
| 47,0             | 82,5                  | 1                | 479                                    | 654       | 331       | 156       | 34                      | 1                | 501                                     | 764       | 279       | 16        | 106                     |
|                  |                       | 2                | 605                                    | 605       | 204       | 204       |                         | 2                | 691                                     | 691       | 89        | 89        |                         |
| 51,5             | 105,0                 | 1                | 545                                    | 735       | 384       | 194       | 35                      | 1                | 574                                     | 896       | 313       | 16        | 112                     |
|                  |                       | 2                | 682                                    | 682       | 247       | 247       |                         | 2                | 804                                     | 804       | 95        | 95        |                         |
| 56,0             | 132,5                 | 1                | 625                                    | 831       | 451       | 245       | 37                      | 1                | 671                                     | 1038      | 367       | 16        | 119                     |
|                  |                       | 2                | 774                                    | 774       | 302       | 302       |                         | 2                | 934                                     | 934       | 111       | 111       |                         |

3.4.8.1 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

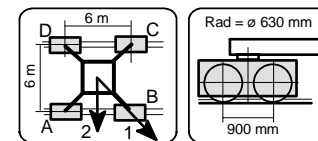


**UW 260.3** Eckabstand 6,0 m x 6,0 m **Ausleger 30 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 15,0                  | 1                | 181                                    | 326       | 181       | 35        | 23                      | 1                | 115                                     | 250       | 115       | 16        | 51                      |
|                  |                       | 2                | 283                                    | 283       | 78        | 78        |                         | 2                | 207                                     | 207       | 41        | 41        |                         |
| 20,0             | 15,0                  | 1                | 186                                    | 340       | 186       | 31        | 25                      | 1                | 118                                     | 265       | 118       | 16        | 65                      |
|                  |                       | 2                | 295                                    | 295       | 76        | 76        |                         | 2                | 217                                     | 217       | 41        | 41        |                         |
| 24,5             | 15,0                  | 1                | 189                                    | 353       | 189       | 25        | 26                      | 1                | 117                                     | 280       | 117       | 16        | 71                      |
|                  |                       | 2                | 305                                    | 305       | 73        | 73        |                         | 2                | 226                                     | 226       | 39        | 39        |                         |
| 29,0             | 15,0                  | 1                | 193                                    | 368       | 193       | 17        | 27                      | 1                | 116                                     | 297       | 116       | 16        | 77                      |
|                  |                       | 2                | 317                                    | 317       | 68        | 68        |                         | 2                | 253                                     | 253       | 102       | 102       |                         |
| 33,5             | 22,5                  | 1                | 215                                    | 403       | 215       | 27        | 29                      | 1                | 200                                     | 347       | 200       | 52        | 84                      |
|                  |                       | 2                | 348                                    | 348       | 82        | 82        |                         | 2                | 304                                     | 304       | 96        | 96        |                         |
| 38,0             | 32,5                  | 1                | 243                                    | 445       | 243       | 42        | 30                      | 1                | 228                                     | 420       | 228       | 37        | 90                      |
|                  |                       | 2                | 386                                    | 386       | 101       | 101       |                         | 2                | 364                                     | 364       | 93        | 93        |                         |
| 42,5             | 42,5                  | 1                | 272                                    | 488       | 272       | 55        | 32                      | 1                | 257                                     | 496       | 257       | 17        | 96                      |
|                  |                       | 2                | 425                                    | 425       | 119       | 119       |                         | 2                | 426                                     | 426       | 87        | 87        |                         |
| 47,0             | 52,5                  | 1                | 300                                    | 534       | 300       | 67        | 33                      | 1                | 263                                     | 600       | 263       | 16        | 102                     |
|                  |                       | 2                | 465                                    | 465       | 135       | 135       |                         | 2                | 492                                     | 492       | 79        | 79        |                         |
| 51,5             | 67,5                  | 1                | 341                                    | 593       | 341       | 89        | 35                      | 1                | 287                                     | 715       | 287       | 16        | 109                     |
|                  |                       | 2                | 519                                    | 519       | 163       | 163       |                         | 2                | 574                                     | 574       | 79        | 79        |                         |
| 56,0             | 87,5                  | 1                | 396                                    | 667       | 396       | 124       | 36                      | 1                | 334                                     | 839       | 334       | 16        | 115                     |
|                  |                       | 2                | 588                                    | 588       | 204       | 204       |                         | 2                | 672                                     | 672       | 90        | 90        |                         |
| 60,5             | 107,5                 | 1                | 453                                    | 744       | 453       | 161       | 38                      | 1                | 381                                     | 975       | 381       | 16        | 123                     |
|                  |                       | 2                | 659                                    | 659       | 247       | 247       |                         | 2                | 777                                     | 777       | 99        | 99        |                         |

3.4.8.2 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

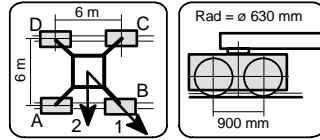


**UW 260.3** Eckabstand 6,0 m x 6,0 m **Ausleger 35 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 10,0                  | 1                | 176                                    | 313       | 176       | 39        | 23                      | 1                | 90                                      | 251       | 90        | 16        | 51                      |
|                  |                       | 2                | 273                                    | 273       | 79        | 79        |                         | 2                | 195                                     | 195       | 28        | 28        |                         |
| 20,0             | 10,0                  | 1                | 181                                    | 327       | 181       | 35        | 25                      | 1                | 93                                      | 265       | 93        | 16        | 65                      |
|                  |                       | 2                | 284                                    | 284       | 77        | 77        |                         | 2                | 205                                     | 205       | 28        | 28        |                         |
| 24,5             | 10,0                  | 1                | 184                                    | 341       | 184       | 28        | 26                      | 1                | 92                                      | 281       | 92        | 16        | 72                      |
|                  |                       | 2                | 295                                    | 295       | 74        | 74        |                         | 2                | 222                                     | 222       | 117       | 117       |                         |
| 29,0             | 12,5                  | 1                | 194                                    | 361       | 194       | 27        | 28                      | 1                | 103                                     | 298       | 103       | 16        | 78                      |
|                  |                       | 2                | 312                                    | 312       | 76        | 76        |                         | 2                | 258                                     | 258       | 100       | 100       |                         |
| 33,5             | 20,0                  | 1                | 216                                    | 396       | 216       | 36        | 29                      | 1                | 201                                     | 353       | 201       | 50        | 84                      |
|                  |                       | 2                | 343                                    | 343       | 89        | 89        |                         | 2                | 309                                     | 309       | 94        | 94        |                         |
| 38,0             | 30,0                  | 1                | 245                                    | 439       | 245       | 51        | 30                      | 1                | 230                                     | 426       | 230       | 34        | 90                      |
|                  |                       | 2                | 382                                    | 382       | 108       | 108       |                         | 2                | 369                                     | 369       | 91        | 91        |                         |
| 42,5             | 40,0                  | 1                | 273                                    | 482       | 273       | 64        | 32                      | 1                | 256                                     | 506       | 256       | 16        | 97                      |
|                  |                       | 2                | 421                                    | 421       | 126       | 126       |                         | 2                | 432                                     | 432       | 85        | 85        |                         |
| 47,0             | 50,0                  | 1                | 302                                    | 528       | 302       | 76        | 33                      | 1                | 260                                     | 612       | 260       | 16        | 103                     |
|                  |                       | 2                | 462                                    | 462       | 142       | 142       |                         | 2                | 498                                     | 498       | 76        | 76        |                         |
| 51,5             | 67,5                  | 1                | 349                                    | 594       | 349       | 104       | 35                      | 1                | 296                                     | 729       | 296       | 16        | 109                     |
|                  |                       | 2                | 522                                    | 522       | 176       | 176       |                         | 2                | 586                                     | 586       | 82        | 82        |                         |
| 56,0             | 87,5                  | 1                | 404                                    | 668       | 404       | 139       | 36                      | 1                | 342                                     | 855       | 342       | 16        | 116                     |
|                  |                       | 2                | 591                                    | 591       | 217       | 217       |                         | 2                | 685                                     | 685       | 92        | 92        |                         |
| 60,5             | 107,5                 | 1                | 461                                    | 746       | 461       | 176       | 38                      | 1                | 387                                     | 993       | 387       | 16        | 124                     |
|                  |                       | 2                | 662                                    | 662       | 259       | 259       |                         | 2                | 791                                     | 791       | 100       | 100       |                         |

3.4.8.3 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

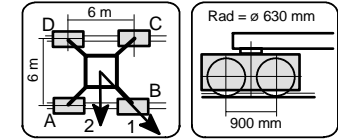


**UW 260.3** Eckabstand 6,0 m x 6,0 m **Ausleger 40 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 12,5                  | 1                | 186                                    | 329       | 186       | 42        | 23                      | 1                | 102                                     | 252       | 102       | 16        | 52                      |
|                  |                       | 2                | 287                                    | 287       | 84        | 84        |                         | 2                | 201                                     | 201       | 34        | 34        |                         |
| 20,0             | 12,5                  | 1                | 190                                    | 343       | 190       | 38        | 25                      | 1                | 105                                     | 266       | 105       | 16        | 66                      |
|                  |                       | 2                | 298                                    | 298       | 83        | 83        |                         | 2                | 214                                     | 214       | 137       | 137       |                         |
| 24,5             | 12,5                  | 1                | 194                                    | 357       | 194       | 31        | 26                      | 1                | 104                                     | 282       | 104       | 16        | 72                      |
|                  |                       | 2                | 309                                    | 309       | 79        | 79        |                         | 2                | 241                                     | 241       | 117       | 117       |                         |
| 29,0             | 12,5                  | 1                | 197                                    | 372       | 197       | 23        | 28                      | 1                | 182                                     | 308       | 182       | 57        | 79                      |
|                  |                       | 2                | 321                                    | 321       | 74        | 74        |                         | 2                | 271                                     | 271       | 94        | 94        |                         |
| 33,5             | 15,0                  | 1                | 207                                    | 394       | 207       | 20        | 29                      | 1                | 192                                     | 359       | 192       | 25        | 85                      |
|                  |                       | 2                | 339                                    | 339       | 75        | 75        |                         | 2                | 310                                     | 310       | 74        | 74        |                         |
| 38,0             | 25,0                  | 1                | 236                                    | 437       | 236       | 35        | 31                      | 1                | 214                                     | 439       | 214       | 16        | 91                      |
|                  |                       | 2                | 378                                    | 378       | 94        | 94        |                         | 2                | 371                                     | 371       | 71        | 71        |                         |
| 42,5             | 35,0                  | 1                | 264                                    | 481       | 264       | 48        | 32                      | 1                | 221                                     | 538       | 221       | 16        | 97                      |
|                  |                       | 2                | 417                                    | 417       | 111       | 111       |                         | 2                | 434                                     | 434       | 64        | 64        |                         |
| 47,0             | 52,5                  | 1                | 311                                    | 546       | 311       | 77        | 33                      | 1                | 262                                     | 647       | 262       | 16        | 104                     |
|                  |                       | 2                | 477                                    | 477       | 146       | 146       |                         | 2                | 520                                     | 520       | 73        | 73        |                         |
| 51,5             | 70,0                  | 1                | 359                                    | 612       | 359       | 105       | 35                      | 1                | 297                                     | 765       | 297       | 16        | 110                     |
|                  |                       | 2                | 538                                    | 538       | 180       | 180       |                         | 2                | 609                                     | 609       | 79        | 79        |                         |
| 56,0             | 90,0                  | 1                | 413                                    | 687       | 413       | 140       | 36                      | 1                | 342                                     | 893       | 342       | 16        | 116                     |
|                  |                       | 2                | 607                                    | 607       | 220       | 220       |                         | 2                | 709                                     | 709       | 88        | 88        |                         |
| 60,5             | 112,5                 | 1                | 477                                    | 771       | 477       | 182       | 38                      | 1                | 399                                     | 1033      | 399       | 16        | 125                     |
|                  |                       | 2                | 685                                    | 685       | 269       | 269       |                         | 2                | 821                                     | 821       | 102       | 102       |                         |

3.4.8.4 Zentralballaste und Ecklasten nach DIN 15019

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

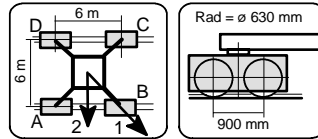


**UW 260.3** Eckabstand 6,0 m x 6,0 m **Ausleger 45 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 10,0                  | 1                | 187                                    | 331       | 187       | 43        | 23                      | 1                | 89                                      | 252       | 89        | 16        | 52                      |
|                  |                       | 2                | 289                                    | 289       | 85        | 85        |                         | 2                | 216                                     | 216       | 53        | 53        |                         |
| 20,0             | 10,0                  | 1                | 192                                    | 346       | 192       | 38        | 25                      | 1                | 92                                      | 267       | 92        | 16        | 67                      |
|                  |                       | 2                | 301                                    | 301       | 83        | 83        |                         | 2                | 226                                     | 226       | 52        | 52        |                         |
| 24,5             | 10,0                  | 1                | 196                                    | 360       | 196       | 31        | 26                      | 1                | 91                                      | 283       | 91        | 16        | 73                      |
|                  |                       | 2                | 312                                    | 312       | 79        | 79        |                         | 2                | 249                                     | 249       | 112       | 112       |                         |
| 29,0             | 10,0                  | 1                | 199                                    | 375       | 199       | 23        | 28                      | 1                | 184                                     | 319       | 184       | 49        | 79                      |
|                  |                       | 2                | 323                                    | 323       | 75        | 75        |                         | 2                | 279                                     | 279       | 89        | 89        |                         |
| 33,5             | 12,5                  | 1                | 209                                    | 397       | 209       | 20        | 29                      | 1                | 194                                     | 370       | 194       | 17        | 86                      |
|                  |                       | 2                | 342                                    | 342       | 75        | 75        |                         | 2                | 318                                     | 318       | 69        | 69        |                         |
| 38,0             | 22,5                  | 1                | 237                                    | 440       | 237       | 34        | 31                      | 1                | 207                                     | 460       | 207       | 16        | 92                      |
|                  |                       | 2                | 381                                    | 381       | 94        | 94        |                         | 2                | 379                                     | 379       | 65        | 65        |                         |
| 42,5             | 35,0                  | 1                | 272                                    | 491       | 272       | 53        | 32                      | 1                | 226                                     | 561       | 226       | 16        | 98                      |
|                  |                       | 2                | 427                                    | 427       | 117       | 117       |                         | 2                | 450                                     | 450       | 64        | 64        |                         |
| 47,0             | 52,5                  | 1                | 319                                    | 556       | 319       | 82        | 34                      | 1                | 265                                     | 671       | 265       | 16        | 104                     |
|                  |                       | 2                | 487                                    | 487       | 152       | 152       |                         | 2                | 536                                     | 536       | 73        | 73        |                         |
| 51,5             | 72,5                  | 1                | 373                                    | 629       | 373       | 116       | 35                      | 1                | 312                                     | 792       | 312       | 16        | 111                     |
|                  |                       | 2                | 554                                    | 554       | 191       | 191       |                         | 2                | 632                                     | 632       | 83        | 83        |                         |
| 56,0             | 92,5                  | 1                | 427                                    | 705       | 427       | 150       | 37                      | 1                | 356                                     | 922       | 356       | 16        | 117                     |
|                  |                       | 2                | 623                                    | 623       | 231       | 231       |                         | 2                | 733                                     | 733       | 92        | 92        |                         |
| 60,5             | 115,0                 | 1                | 491                                    | 789       | 491       | 192       | 39                      | 1                | 411                                     | 1064      | 411       | 16        | 125                     |
|                  |                       | 2                | 702                                    | 702       | 279       | 279       |                         | 2                | 846                                     | 846       | 105       | 105       |                         |

**3.4.8.5 Zentralballaste und Ecklasten nach DIN 15019**

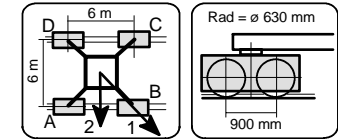
für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

**UW 260.3 Eckabstand 6,0 m x 6,0 m Ausleger 50 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 7,5                   | 1                | 184                                    | 329       | 184       | 38        | 24                      | 1                | 111                                     | 275       | 111       | 16        | 53                      |
|                  |                       | 2                | 286                                    | 286       | 81        | 81        |                         | 2                | 220                                     | 220       | 37        | 37        |                         |
| 20,0             | 7,5                   | 1                | 189                                    | 343       | 189       | 34        | 25                      | 1                | 113                                     | 292       | 113       | 16        | 68                      |
|                  |                       | 2                | 298                                    | 298       | 79        | 79        |                         | 2                | 231                                     | 231       | 36        | 36        |                         |
| 24,5             | 10,0                  | 1                | 198                                    | 363       | 198       | 33        | 27                      | 1                | 123                                     | 310       | 123       | 16        | 74                      |
|                  |                       | 2                | 315                                    | 315       | 82        | 82        |                         | 2                | 257                                     | 257       | 109       | 109       |                         |
| 29,0             | 10,0                  | 1                | 202                                    | 378       | 202       | 25        | 28                      | 1                | 120                                     | 331       | 120       | 16        | 80                      |
|                  |                       | 2                | 327                                    | 327       | 77        | 77        |                         | 2                | 288                                     | 288       | 86        | 86        |                         |
| 33,5             | 12,5                  | 1                | 212                                    | 401       | 212       | 22        | 29                      | 1                | 192                                     | 386       | 192       | 16        | 86                      |
|                  |                       | 2                | 346                                    | 346       | 77        | 77        |                         | 2                | 328                                     | 328       | 65        | 65        |                         |
| 38,0             | 22,5                  | 1                | 240                                    | 444       | 240       | 36        | 31                      | 1                | 203                                     | 479       | 203       | 16        | 93                      |
|                  |                       | 2                | 385                                    | 385       | 95        | 95        |                         | 2                | 389                                     | 389       | 61        | 61        |                         |
| 42,5             | 37,5                  | 1                | 281                                    | 502       | 281       | 60        | 32                      | 1                | 234                                     | 581       | 234       | 16        | 99                      |
|                  |                       | 2                | 437                                    | 437       | 125       | 125       |                         | 2                | 466                                     | 466       | 66        | 66        |                         |
| 47,0             | 55,0                  | 1                | 328                                    | 567       | 328       | 90        | 34                      | 1                | 272                                     | 693       | 272       | 16        | 105                     |
|                  |                       | 2                | 497                                    | 497       | 159       | 159       |                         | 2                | 553                                     | 553       | 74        | 74        |                         |
| 51,5             | 75,0                  | 1                | 382                                    | 641       | 382       | 123       | 35                      | 1                | 318                                     | 815       | 318       | 16        | 111                     |
|                  |                       | 2                | 565                                    | 565       | 199       | 199       |                         | 2                | 649                                     | 649       | 84        | 84        |                         |
| 56,0             | 95,0                  | 1                | 436                                    | 716       | 436       | 156       | 37                      | 1                | 361                                     | 947       | 361       | 16        | 118                     |
|                  |                       | 2                | 634                                    | 634       | 238       | 238       |                         | 2                | 751                                     | 751       | 92        | 92        |                         |
| 60,5             | 117,5                 | 1                | 500                                    | 801       | 500       | 198       | 39                      | 1                | 416                                     | 1091      | 416       | 16        | 126                     |
|                  |                       | 2                | 713                                    | 713       | 287       | 287       |                         | 2                | 865                                     | 865       | 104       | 104       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |

**3.4.8.6 Zentralballaste und Ecklasten nach DIN 15019**

für fahrbaren Turmdrehkran auf Unterwagen ohne Kletterwerk

**UW 260.3 Eckabstand 6,0 m x 6,0 m Ausleger 55 m**

| Hakenhöhe<br>[m] | Zentralballast<br>[t] | Auslegerstellung | Kran in Betrieb<br>Drehmoment: 190 kNm |           |           |           | Horizontalkraft<br>[kN] | Auslegerstellung | Kran außer Betrieb<br>Drehmoment: 0 kNm |           |           |           | Horizontalkraft<br>[kN] |
|------------------|-----------------------|------------------|--|-----------|-----------|-----------|-------------------------|------------------|---|-----------|-----------|-----------|-------------------------|
|                  |                       |                  | Ecklasten                              |           |           |           |                         |                  | Ecklasten                               |           |           |           |                         |
|                  |                       |                  | A<br>[kN]                              | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |                  | A<br>[kN]                               | B<br>[kN] | C<br>[kN] | D<br>[kN] |                         |
| 15,5             | 12,5                  | 1                | 204                                    | 345       | 204       | 63        | 24                      | 1                | 103                                     | 347       | 103       | 16        | 53                      |
|                  |                       | 2                | 304                                    | 304       | 104       | 104       |                         | 2                | 260                                     | 260       | 25        | 25        |                         |
| 20,0             | 12,5                  | 1                | 209                                    | 360       | 209       | 58        | 25                      | 1                | 105                                     | 365       | 105       | 16        | 69                      |
|                  |                       | 2                | 315                                    | 315       | 102       | 102       |                         | 2                | 271                                     | 271       | 24        | 24        |                         |
| 24,5             | 15,0                  | 1                | 219                                    | 380       | 219       | 57        | 27                      | 1                | 114                                     | 384       | 114       | 16        | 75                      |
|                  |                       | 2                | 333                                    | 333       | 104       | 104       |                         | 2                | 287                                     | 287       | 27        | 27        |                         |
| 29,0             | 15,0                  | 1                | 222                                    | 395       | 222       | 49        | 28                      | 1                | 111                                     | 405       | 111       | 16        | 81                      |
|                  |                       | 2                | 345                                    | 345       | 100       | 100       |                         | 2                | 317                                     | 317       | 97        | 97        |                         |
| 33,5             | 17,5                  | 1                | 232                                    | 418       | 232       | 45        | 30                      | 1                | 119                                     | 428       | 119       | 16        | 87                      |
|                  |                       | 2                | 364                                    | 364       | 100       | 100       |                         | 2                | 357                                     | 357       | 76        | 76        |                         |
| 38,0             | 22,5                  | 1                | 248                                    | 449       | 248       | 46        | 31                      | 1                | 204                                     | 508       | 204       | 16        | 93                      |
|                  |                       | 2                | 390                                    | 390       | 105       | 105       |                         | 2                | 407                                     | 407       | 59        | 59        |                         |
| 42,5             | 40,0                  | 1                | 295                                    | 513       | 295       | 77        | 33                      | 1                | 247                                     | 612       | 247       | 16        | 100                     |
|                  |                       | 2                | 449                                    | 449       | 141       | 141       |                         | 2                | 491                                     | 491       | 69        | 69        |                         |
| 47,0             | 57,5                  | 1                | 342                                    | 579       | 342       | 106       | 34                      | 1                | 284                                     | 725       | 284       | 16        | 106                     |
|                  |                       | 2                | 509                                    | 509       | 175       | 175       |                         | 2                | 578                                     | 578       | 76        | 76        |                         |
| 51,5             | 77,5                  | 1                | 396                                    | 653       | 396       | 139       | 35                      | 1                | 329                                     | 851       | 329       | 16        | 112                     |
|                  |                       | 2                | 577                                    | 577       | 214       | 214       |                         | 2                | 676                                     | 676       | 86        | 86        |                         |
| 56,0             | 97,5                  | 1                | 450                                    | 729       | 450       | 172       | 37                      | 1                | 370                                     | 986       | 370       | 16        | 119                     |
|                  |                       | 2                | 647                                    | 647       | 254       | 254       |                         | 2                | 778                                     | 778       | 92        | 92        |                         |
| 60,5             | 120,0                 | 1                | 514                                    | 814       | 514       | 214       | 39                      | 1                | 424                                     | 1132      | 424       | 16        | 127                     |
|                  |                       | 2                | 726                                    | 726       | 301       | 301       |                         | 2                | 893                                     | 893       | 104       | 104       |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |
|                  |                       |                  |  |           |           |           |                         |                  |   |           |           |           |                         |