



TEREX | COMEDIL

CTT 561-32 HD23

Technical Specifications

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4	WORK ENVIRONMENT
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5.1	DRIVE ASSEMBLIES (GENERAL INFORMATION)

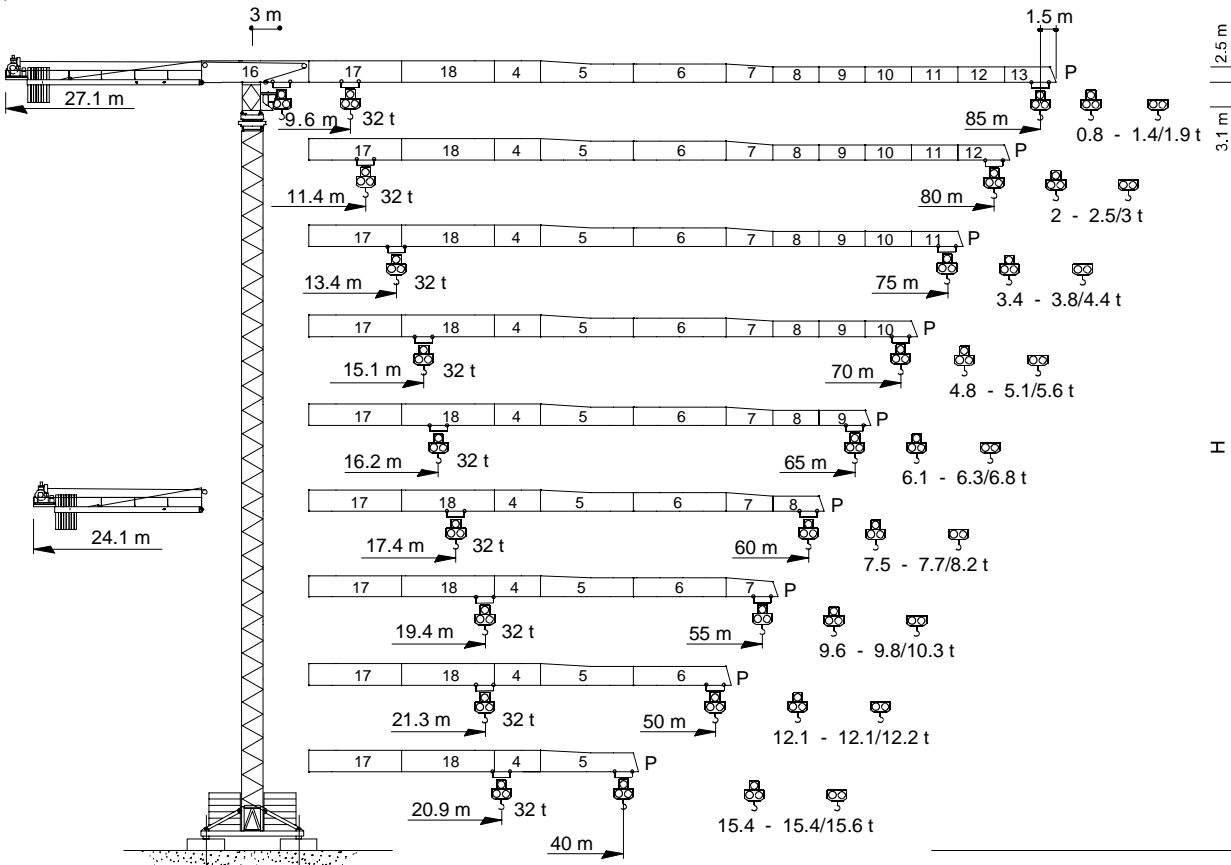
Chapter 2



Gru a torre "Flat Top"

"Flat Top" Tower Crane • Grue à tour "Flat Top"

"Flat Top" Turmdrehkran • Grua torre "Flat Top"



CTT 561-32 HD23



THE ULTIMATE CRANE™

Dati illustrativi non impegnativi
Con riserva di modifica senza preavviso

Specifications and data not binding
Subject to modification without notice

Données techniques seulement indicatives
Modifications réservées sans préavis

Angaben und Beschreibung unverbindlich
Änderungen vorbehalten ohne weitere Mitteilung

Dibujos y datos sin compromiso
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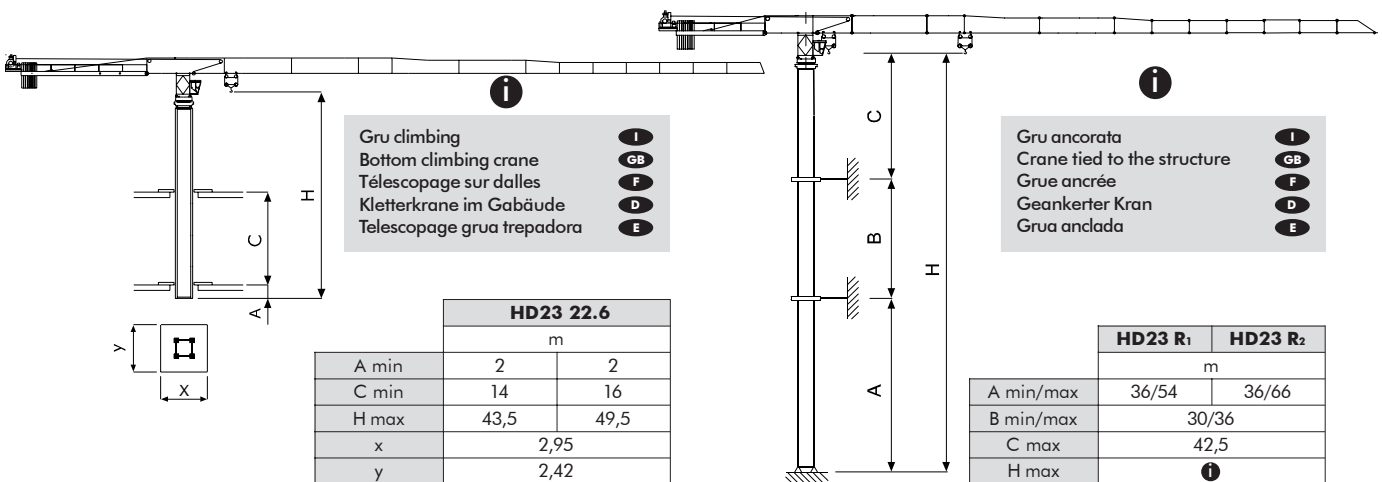
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Diagramma di portata **I** Courbes de charges **F** Curvas de cargas **E**
 Load Diagram **GB** Lastkurven **D**

CTT 561 - 32

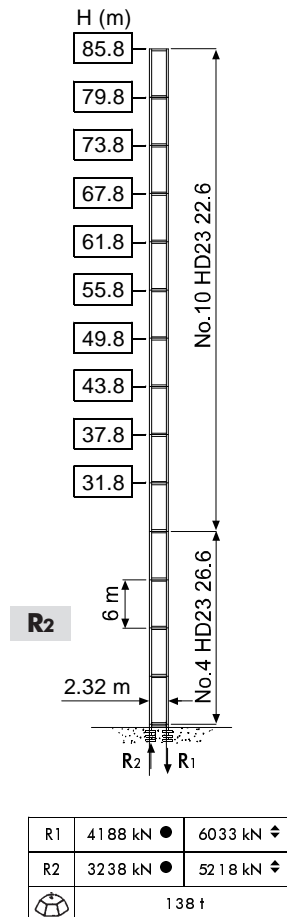
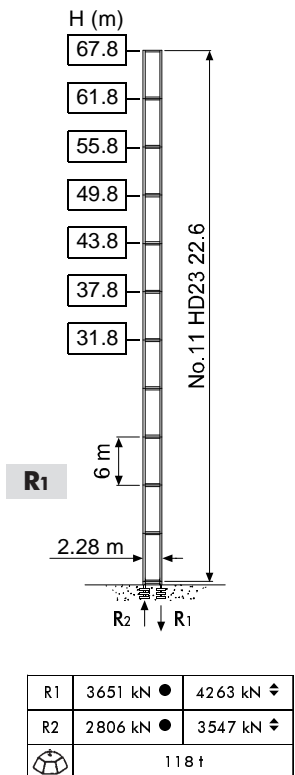
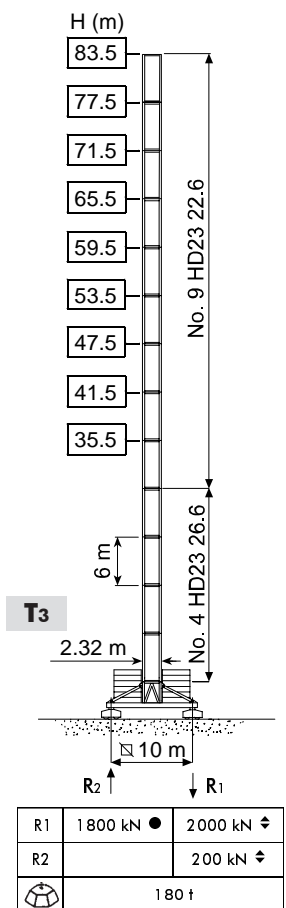
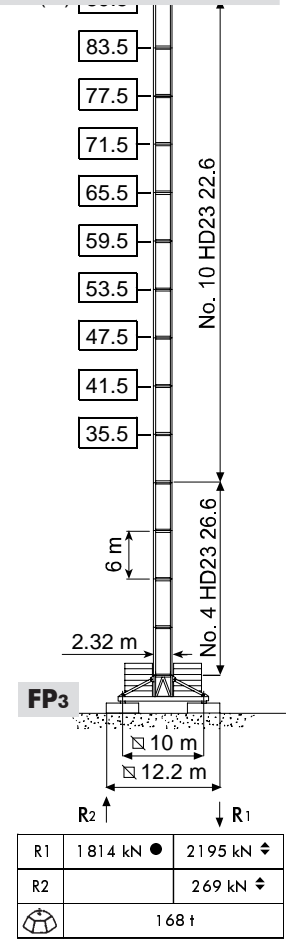
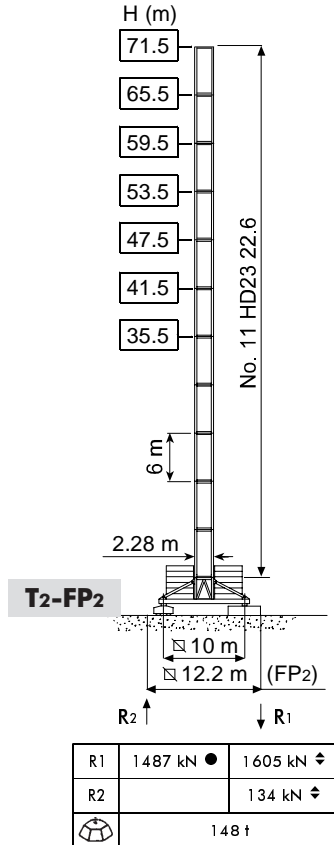
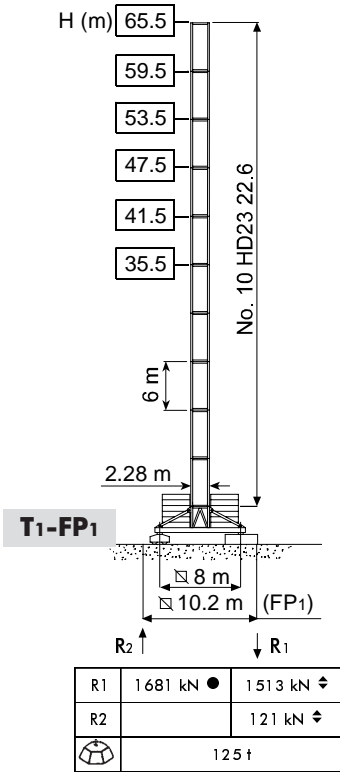
		m	20	25	30	35	40	45	50	55	60	65	70	75	80	85
16 t	- 17,8 m	t	13,94	10,70	8,58	7,08	5,96	5,10	4,41	3,86	3,39	3,00	2,67	2,38	2,12	1,90
16 t	- 17,1 m	t	13,27	10,08	7,98	6,50	5,40	4,55	3,88	3,33	2,87	2,48	2,15	1,87	1,62	1,40
32 t	- 9,6 m	t	13,01	9,73	7,57	6,05	4,92	4,05	3,35	2,78	2,31	1,92	1,58	1,28	1,03	0,80
16 t	- 21,4 m	t	16,00	13,36	10,79	8,98	7,64	6,60	5,77	5,09	4,53	4,06	3,66	3,31	3,00	
16 t	- 20,7 m	t	16,00	12,74	10,21	8,42	7,08	6,06	5,24	4,57	4,02	3,55	3,15	2,80	2,50	
32 t	- 11,4 m	t	16,43	12,47	9,88	8,05	6,69	5,64	4,80	4,12	3,55	3,07	2,66	2,31	2,00	
16 t	- 25,7 m	t	16,00	16,00	13,43	11,25	9,62	8,37	7,37	6,56	5,88	5,31	4,82	4,40		
16 t	- 24,5 m	t	16,00	15,61	12,60	10,47	8,89	7,67	6,69	5,90	5,24	4,69	4,21	3,80		
32 t	- 13,4 m	t	20,10	15,42	12,35	10,19	8,58	7,33	6,34	5,54	4,87	4,30	3,82	3,40		
16 t	- 28,6 m	t	16,00	16,00	15,14	12,72	10,92	9,53	8,42	7,52	6,77	6,14	5,60			
16 t	- 27,7 m	t	16,00	16,00	14,58	12,17	10,38	9,00	7,90	7,01	6,26	5,64	5,10			
32 t	- 15,1 m	t	23,14	17,87	14,41	11,98	10,16	8,76	7,64	6,74	5,98	5,34	4,80			
16 t	- 30,8 m	t	16,00	16,00	16,00	13,88	11,94	10,45	9,26	8,29	7,48	6,80				
16 t	- 29,9 m	t	16,00	16,00	15,92	13,33	11,41	9,92	8,74	7,78	6,98	6,30				
32 t	- 16,2 m	t	25,21	19,55	15,84	13,22	11,27	9,77	8,57	7,59	6,78	6,10				
16 t	- 33,3 m	t	16,00	16,00	16,00	15,13	13,03	11,41	10,12	9,07	8,20					
16 t	- 32,3 m	t	16,00	16,00	16,00	14,59	12,51	10,89	9,61	8,57	7,70					
32 t	- 17,4 m	t	27,44	21,31	17,30	14,46	12,36	10,73	9,43	8,38	7,50					
16 t	- 37,1 m	t	16,00	16,00	16,00	16,00	14,73	12,92	11,48	10,30						
16 t	- 36,1 m	t	16,00	16,00	16,00	16,00	14,21	12,41	10,97	9,80						
32 t	- 19,4 m	t	30,91	24,06	19,57	16,41	14,05	12,23	10,78	9,60						
16 t	- 39,2 m	t	16,00	16,00	16,00	16,00	15,64	13,73	12,20							
16 t	- 39,2 m	t	16,00	16,00	16,00	16,00	15,63	13,66	12,10							
32 t	- 21,3 m	t	32,00	26,76	21,80	18,31	15,71	13,70	12,10							
16 t	- 40,2 m	t	16,00	16,00	16,00	16,00	15,60									
16 t	- 39,1 m	t	16,00	16,00	16,00	16,00	15,40									
32 t	- 20,9 m	t	32,00	26,26	21,39	17,95	15,40									

Altre installazioni **I** Autres implantations **F** Otras implantaciones **E**
 Other configurations **GB** Aufstellmöglichkeiten **D**



Torre	I	Tour	F	Torre	E
Tower	GB	Turm	D		

HD23



- H Altezza massima sotto gancio **I**
- In servizio
- ◄ Fuori servizio
- A vuoto, senza zavorra, braccio max., altezza max.
- H Max. under hook height **GB**
- In service
- ◄ Out of service
- Without load, without ballast, max. jib and max. height
- H Hauteur maxi. sous crochet **F**
- En service
- ◄ Hors service
- A vide, sans lest, avec flèche et hauteur maximum
- H Höchste Hackenhöhe **D**
- In Betrieb
- ◄ Außer Betrieb
- Ohne Last und Ballast, mit Maximalausleger und Maximalhöhe
- H Maxima altura bajo gancho **E**
- En servicio
- ◄ Fuera de servicio
- Sin carga, sin lastre, con pluma y altura máxima

Meccanismi **I** Mechanisms **GB** Mécanismes **F** Antriebe **D** Mecanismos **E**

	SRWB 102 160/5	220 * kVA	400 V - 50 Hz
	SRWB 122 160/5	240 * kVA	460 V - 60 Hz
	110 AWL 160	216 * kVA	400 V - 50 Hz / 460 V - 60 Hz
			2000/14/CE

* Gru senza traslazione / Crane without travelling equipment / Grue sans translation / Krane ohne Schienenfahren / Grúa sin traslación

		m/min	t	kW	
SRWB 102 160/5 50 Hz		0 ⇌ 32	16	102	600 m
		0 ⇌ 50	10		
		0 ⇌ 80	6		
		0 ⇌ 125	3.5		
		0 ⇌ 16	32		
		0 ⇌ 25	20		
		0 ⇌ 40	12		
		0 ⇌ 63	7		
SRWB 122 160/5 60 Hz		0 ⇌ 38	16	122	600 m
		0 ⇌ 60	10		
		0 ⇌ 96	6		
		0 ⇌ 150	3.5		
		0 ⇌ 19	32		
		0 ⇌ 30	20		
		0 ⇌ 48	12		
		0 ⇌ 76	7		
110 AWL 160 LLC D1		0 ⇌ 26	16	110	340 m
		0 ⇌ 36	11.3		
		0 ⇌ 50	8.1		
		0 ⇌ 69	5.6		
		0 ⇌ 80	0.8		
		0 ⇌ 13	32		
		0 ⇌ 18	22.6		
		0 ⇌ 25	16.2		
		0 ⇌ 35	11.2		
		0 ⇌ 40	1.6		

				Max. H [m]	
	DCC 5 112 D1	0 ⇌ 80 m/min	11 kW	T ₁	53.5 > 53.5
	SSR 4 4 80	0.73 r.p.m.	4 × 80 Nm	T ₂	65.5 > 65.5
	▲ TSR 2RG 4M8	12 ⇌ 24 m/min (50 Hz)	4 × 80 Nm	T ₃	- 83.5
	● TSR 4RG 4M8	14 ⇌ 28 m/min (60 Hz)			

	Sollevamento	I Hoisting	GB Levage	F Heben	D Elevación	E
	Marcia velocità	Gear	Rapport	Gang	Velocidad	
	Traslazione carrello	Trolleying	Distribution	Katzfahren	Distribución	
	Rotazione	Slewing	Orientation	Schwenken	Orientación	
	Traslazione	Travelling	Translation	Schienenfahren	Traslación	
	Direttiva sul livello acustico	Directive on noise level	Directive sur le niveau acoustique	Richtlinie für den Schall-Leistungspegel	Directiva sobre el nivel acustico	
	Consultateci	Consult us	Nous consulter	Auf Anfrage	Consultarnos	
	Potenza totale richiesta	Power requirements	Puissance totale nécessaire	Geforderte Stromstärke	Potencia necesaria	
	Alimentazione	Power supply	Alimentation	Stromversorgung	Alimentación	

Gru Comedil s.r.l.
A Terex Company
SISTEMA QUALITÀ AZIENDALE
certificato in accordo alla norma iso 9001:2000

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2

CRANE CLASSIFICATION

Standards for structural calculations of the crane: FEM 1.001

Machine grade: A3 (A2 for the jib ranges)

Standards for the electrical components: CEI - EN 60204 - 1

3

LOAD HANDLING DEVICES

32 t (70560 lbs) - hooks UNI 946 S / DIN 15401 .

4

WORK ENVIRONMENT



- Working temperature: **0 °C ➔ 40 °C** (upon the customer's request, cranes withstanding temperatures up to -20 °C can be supplied)
- Maximum relative humidity: **90%**
- Maximum wind speed:

<u>during assembly</u>	14	m/s	(~50 km/h)
<u>in service</u>	20	m/s	(~72 km/h)
<u>out of service</u>	42	m/s	(~150 km/h)



U.S. Customery units

- Working temperature: **32 °F ➔ 104 °F** (upon the customer's request, cranes withstanding temperatures up to -4 °F can be supplied)
- Maximum relative humidity: **90%**
- Maximum wind speed:

<u>during assembly</u>	46	ft/s	(~31 mph)
<u>in service</u>	66	ft/s	(~45 mph)
<u>out of service</u>	138	ft/s	(~93 mph)

- Maximum front surface:

the maximum admitted surface exposed to the wind in corrispondence of the full load allowed at a certain jib length during hoisting is obtained by the ratio:

$$A = \frac{0.03 \times P}{q \times 1.2} \quad \text{where}$$

A = Front surface exposed to the wind [m²]
P = Weight of the load hanging from the hook [daN]
q = Pressure factor = $\frac{v^2}{16}$ [daN/m²]
v = Wind speed [m/s]

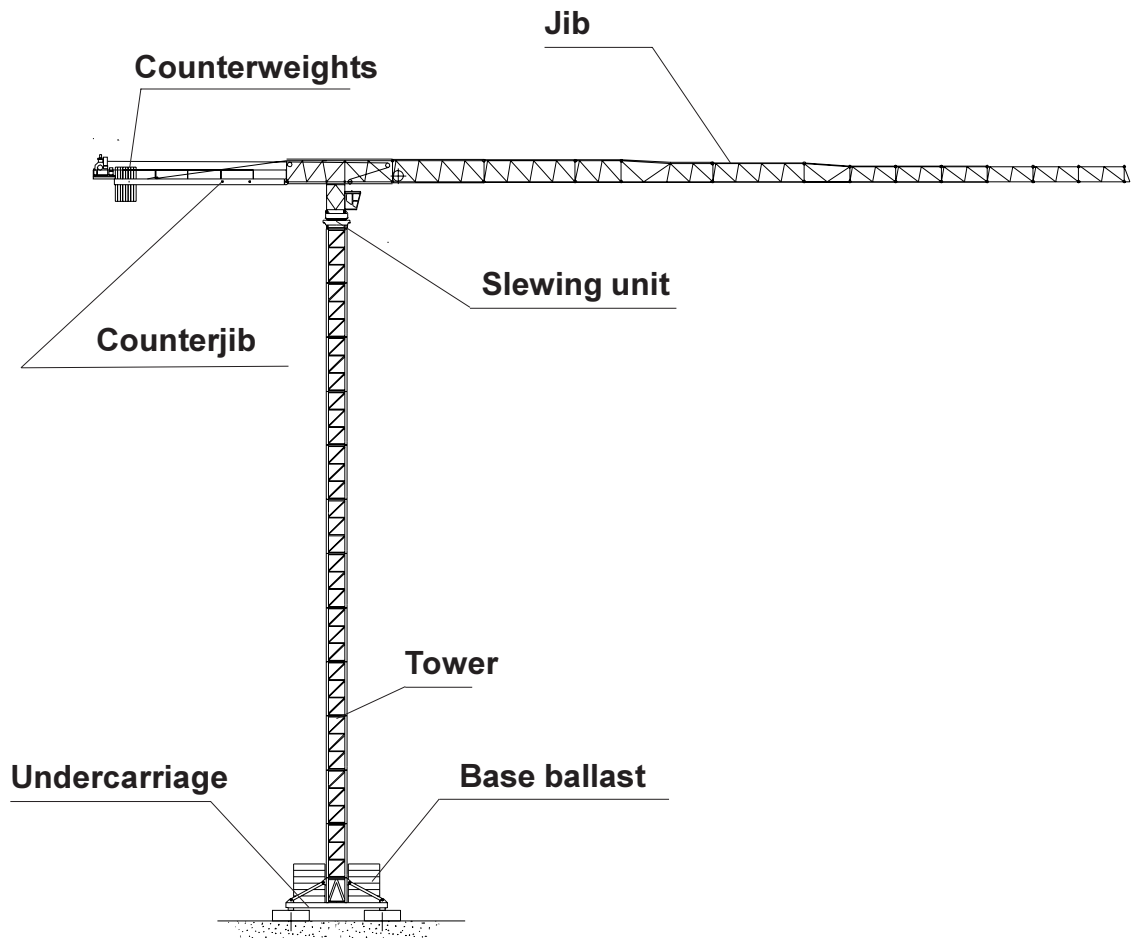
Important



The crane cannot be used in an explosive work environment or a work environment subject to fire risks. Also it cannot be operated in a work environment where flameproof devices are required.

5

MAIN CRANE COMPONENTS



Picture 5.1

Undercarriage

Found in the following configurations:

- “FP”** fixed base on 4 ballast blocks connected to the undercarriage edges and additional base ballast on the undercarriage;
- “T”** ballasted travelling platform mounted on trucks that ride along rails.

The 8×8 m (26×26 ft) and 10×10 m (33×33 ft) undercarriages are made of a strut mounting tower section, of 4 struts, of 4 short sleepers and 4 long sleepers.

Base ballast

Made of self-supporting reinforced concrete blocks, which uniformly distribute their own weight on the undercarriage structure and, therefore, on the supports.

HD23 Tower

All tower sections are made of different HEM-sectioned stanchions depending on the tower type (HD23 22 or 26). Lugs are welded externally on one side, specifically designed for the tower raising by top climbing unit.



The tower denominations must be interpreted as follows:

example:

HD 23 22.6 : HD type tower element > width 23 dm (8 ft) > stanchion thickness = 22 mm (0.87in.)
> height 6 m (20 ft) approx.

Counterjib and counterweight

It is a platform on which the hoist winch and the counterweights are placed.

It is equipped with platforms with handrails so that the operators can move about safely.

There are two types of counterweights (all made of self-supporting reinforced concrete blocks or, on request, contained by a steel frame). The quantity and composition vary depending on the jib length, as specified in **chapter 3B “Counterweights”** of the crane operation manual.

Slewing unit

It consists of a lower slewing ring support (connected to the tower) and a motorized upper slewing ring support (which rotates together with the upper part of the crane) with the slewing ring placed in the middle.

The cab section is placed above the upper slewing ring support.

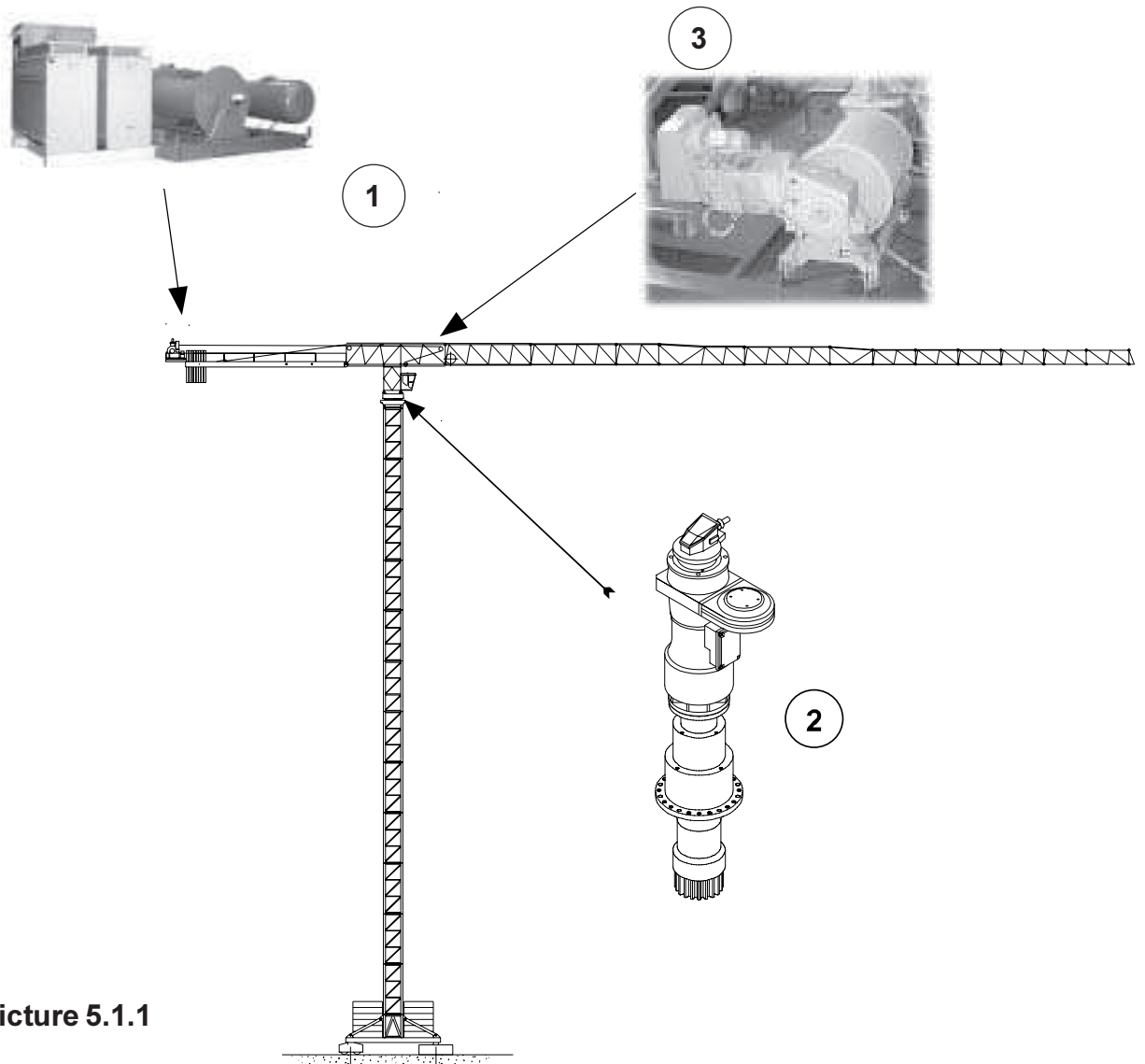
Jib

Self-supporting type, it does not need tie-bars and it is made of 13 triangular-section elements and a jib tip (for maximum jib extension 85 m / 279 ft).

The diagonals are made of round-hollow bars; the upper and lower longitudinal spars are made of square-hollow bars or of square-hollow section

It is equipped with a safety cable (for the whole length of the jib) thus allowing the crane operators and maintenance engineers to fasten themselves with the special safety belt when walking along it.

5.1 DRIVE ASSEMBLIES (GENERAL INFORMATION)



Picture 5.1.1

- 1) HOIST WINCH
- 2) SLEWING UNIT
- 3) TROLLEY TRAVERSING WINCH
- 4) TRAVELLING UNIT

- ➔ See **Chapter 9** for technical specifications.
- ➔ See **Chapter 13** for technical specifications.
- ➔ See **Chapter 10** for technical specifications.
- ➔ See **Chapter 12** for technical specifications.