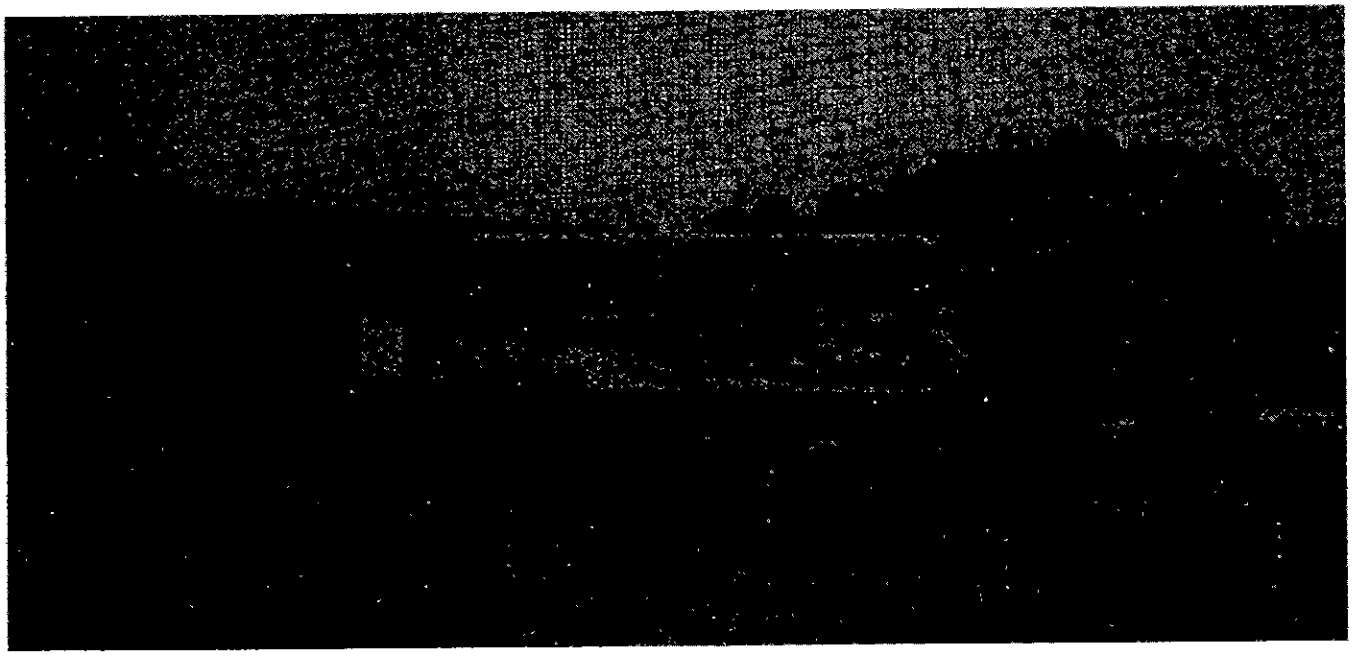
MANNESMANN
DEMAG

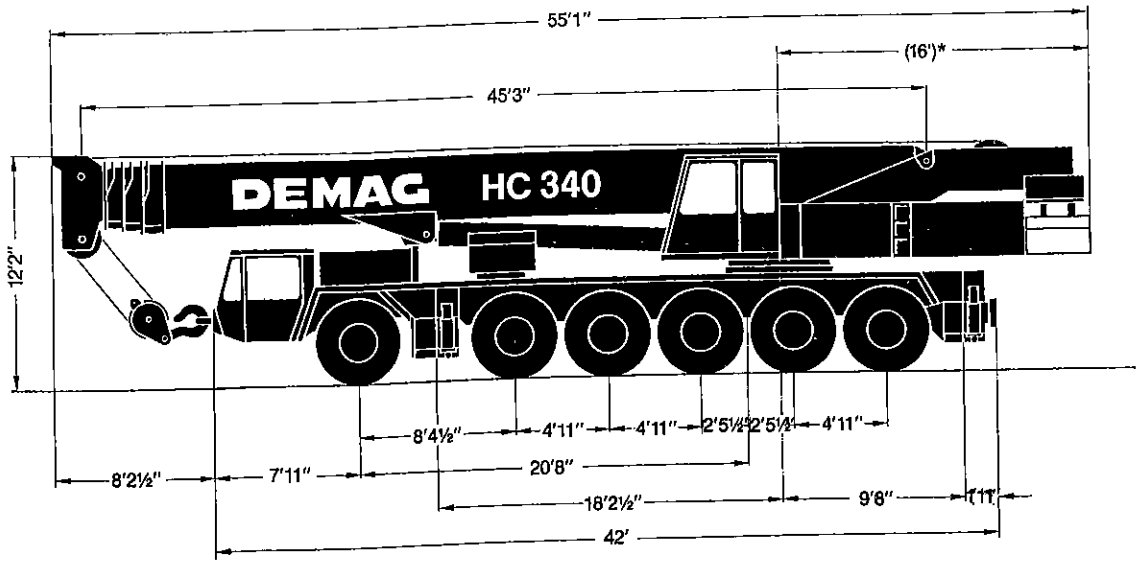
Baumaschinen

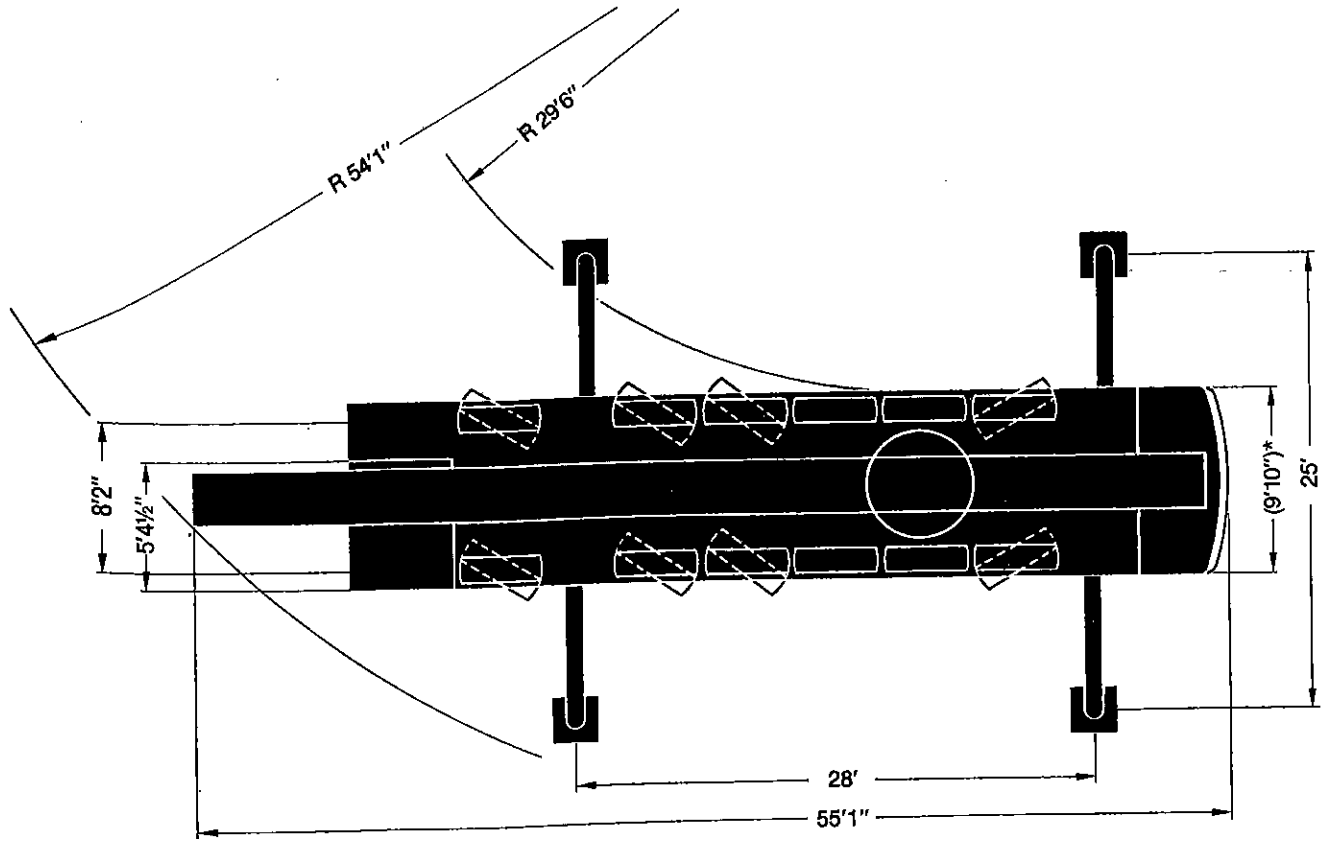
Telescopic Crane

HC 340



Dimension Chart





* Width with more than 31,000 lb counterweight: 11'6", tall swing: 16'5"

Specifications

Axle Loads

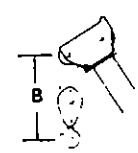
Crane with Main Boom and Hook Block and 31,000 lb Counterweight	
Front Axle	1 x 26,400 lb
Rear Axles	5 x 26,400 lb
Total Axle Load	158,800 lb

Working Speeds (infinitely variable)

Units	Line Speed	Rope Pull, Single Line	Length of Hoist Rope
Main Hoist	max. 394 ft/min	18,302 lb	984 ft
Secondary Hoist	max. 394 ft/min	18,302 lb	591 ft
Swing			max. 2 RPM
Telescoping from 45 ft to 148 ft			80 s
Boom Elevation from —2° to 82°			62 s

Carrier Performance.

Travel Speeds	0 . . . 40.4 mph



Hook-Blocks/Crane Hook

Capacity max.	Capacity 85%	Number of Sheaves	Number of Lines	Weight	"B"
353,000 lb	330,000 lb	9*	18	3,087 lb	8 ft
221,000 lb	201,000 lb	5	11	2,681 lb	8 ft
139,000 lb	128,000 lb	3	7	2,326 lb	8 ft
71,000 lb	55,000 lb	1	3	1,676 lb	8 ft
28,000 lb	18,000 lb	Crane Hook	1	816 lb	6 ft

* requires modification of boom head

Lifting Capacities without Superlift in 1,000 lb

with outriggers — 360° — 85%

64,000 lb Counterweight

Radius (ft)	Main Boom (ft)				Main Boom 148 ft, Fixed Fly Jib						Radius (ft)
	45	79	114	148	49 ft/3°	49 ft/20°	69 ft/3°	69 ft/20°	89 ft/3°	89 ft/20°	
10	330.0[1]	—	—	—	—	—	—	—	—	—	10
11	269.0	—	—	—	—	—	—	—	—	—	11
13	240.0	123.0	—	—	—	—	—	—	—	—	13
15	212.0	123.0	—	—	—	—	—	—	—	—	15
16	193.0	123.0	—	—	—	—	—	—	—	—	16
20	159.0	123.0	80.0	—	—	—	—	—	—	—	20
23	139.0	123.0	73.4	—	—	—	—	—	—	—	23
26	119.0	119.0	67.4	—	—	—	—	—	—	—	26
29	103.0	103.0	62.1	45.0	—	—	—	—	—	—	29
33	91.5	91.5	57.3	43.0	19.8	—	—	—	—	—	33
39	—	73.4	49.1	37.4	18.5	—	13.0	—	—	—	39
46	—	60.4	43.0	33.0	17.2	—	12.3	—	—	—	46
52	—	50.9	37.7	29.5	16.3	—	11.6	—	8.8	—	52
59	—	43.4	33.3	26.4	15.2	—	11.0	—	8.1	—	59
66	—	37.7	30.0	24.0	13.9	11.7	10.1	—	7.7	—	66
72	—	—	26.9	21.3	13.0	11.2	9.7	7.9	7.2	—	72
79	—	—	24.5	19.4	11.9	11.0	9.0	7.5	6.6	—	79
85	—	—	21.8	17.4	11.2	10.6	8.1	7.3	6.1	5.3	85
92	—	—	19.8	15.6	10.3	10.1	7.7	7.0	5.5	5.1	92
98	—	—	17.4	14.1	9.7	9.7	7.0	6.6	5.0	4.6	98
105	—	—	—	12.5	9.0	9.0	6.6	6.2	4.8	4.2	105
112	—	—	—	11.6	8.6	8.6	6.4	5.7	4.6	4.0	112
118	—	—	—	10.5	7.9	7.9	6.1	5.5	4.4	3.7	118
125	—	—	—	9.4	7.7	7.7	5.7	5.1	4.2	3.5	125
131	—	—	—	8.1	7.0	7.0	5.5	4.4	4.0	3.3	131
138	—	—	—	—	6.8	6.6	5.0	4.2	3.7	3.1	138
144	—	—	—	—	6.4	5.7	4.6	4.0	3.5	2.9	144
151	—	—	—	—	5.7	5.3	4.4	3.7	3.3	2.7	151
157	—	—	—	—	5.0	4.4	4.2	3.5	3.0	2.6	157
164	—	—	—	—	4.0	4.0	2.8	2.9	2.8	2.4	164

1 requires special attachment

31,000 lb Counterweight

Radius (ft)	Main Boom (ft)						Main Boom 148 ft, Fixed Fly Jib						Radius (ft)
	45	79	114*	114	148*	148	49 ft/3°	49 ft/20°	69 ft/3°	69 ft/20°	89 ft/3°	89 ft/20°	
10	298.0	—	—	—	—	—	—	—	—	—	—	—	10
11	253.0	—	—	—	—	—	—	—	—	—	—	—	11
13	227.0	123.0	—	—	—	—	—	—	—	—	—	—	13
15	198.7	123.0	—	—	—	—	—	—	—	—	—	—	15
16	174.0	123.0	—	—	—	—	—	—	—	—	—	—	16
20	141.0	123.0	80.0*	80.0	—	—	—	—	—	—	—	—	20
23	117.0	117.0	73.4*	73.4	—	—	—	—	—	—	—	—	23
26	100.0	100.0	67.4*	67.4	—	—	—	—	—	—	—	—	26
29	87.3	87.3	62.1*	62.1	45.0*	45.0	—	—	—	—	—	—	29
33	76.5	76.5	57.3*	57.4	43.0*	43.0	19.8	—	—	—	—	—	33
39	—	59.5	49.1*	49.1	37.4*	37.4	18.5	—	13.0	—	—	—	39
46	—	45.2	43.0*	43.0	33.0*	33.0	17.2	—	12.3	—	—	—	46
52	—	35.5	36.8*	35.5	29.5*	29.5	16.3	—	11.6	—	8.8	—	52
59	—	28.6	30.0*	28.6	26.4*	26.4	15.2	—	11.0	—	8.1	—	59
66	—	23.3	24.7*	23.3	24.0*	23.3	13.9	11.7	10.1	—	7.7	—	66
72	—	—	20.5*	19.1	20.5*	19.1	13.0	11.2	9.7	7.9	7.2	—	72
79	—	—	17.0*	15.6	17.0*	15.6	11.9	11.0	9.0	7.5	6.6	—	79
85	—	—	14.3*	13.0	14.3*	13.0	11.2	10.6	8.1	7.3	6.1	5.3	85
92	—	—	11.9*	10.3	11.9*	10.3	10.3	10.1	7.7	7.0	5.5	5.1	92
98	—	—	9.9*	8.8	9.9*	8.3	9.7	9.7	7.0	6.6	5.0	4.6	98
105	—	—	—	—	8.1*	6.6	9.0	9.0	6.6	6.2	4.8	4.2	105
112	—	—	—	—	6.6*	5.3	7.9	8.6	6.4	5.7	4.6	4.0	112
118	—	—	—	—	5.0*	3.9	6.8	8.1	6.1	5.5	4.4	3.7	118
125	—	—	—	—	3.9*	2.8	5.5	6.8	5.7	5.1	4.2	3.5	125
131	—	—	—	—	3.0*	2.0	4.4	5.5	5.3	4.4	4.0	3.3	131
138	—	—	—	—	—	—	3.5	4.4	4.2	4.2	3.7	3.1	138
144	—	—	—	—	—	—	2.4	3.5	3.3	4.0	3.3	2.9	144
151	—	—	—	—	—	—	1.7	2.6	2.4	3.7	2.8	2.7	151
157	—	—	—	—	—	—	—	2.0	1.7	2.9	2.2	2.6	157
164	—	—	—	—	—	—	—	—	—	2.2	1.7	2.4	164

* only 2 x 10° over rear

Lifting Capacities without Superlift in 1,000 lb

with outriggers — 360° — 85%

64,000 lb Counterweight (148 ft Main Boom)

Radius (ft)	Fold-away Extensions 39 ft 0°	39 ft 20°	66 ft 0°	66 ft 20°	Radius (ft)
39	22.7	—	—	—	39
46	20.9	15.4	13.9	—	46
52	18.9	15.0	13.4	—	52
59	17.2	14.1	13.0	7.9	59
66	15.4	13.2	12.5	7.7	66
72	13.8	12.1	11.6	7.5	72
79	12.3	11.2	10.5	6.8	79
85	11.2	10.1	9.0	6.6	85
92	9.9	9.2	8.3	6.3	92
98	8.8	8.3	7.5	5.9	98
105	7.7	7.5	6.6	5.5	105
112	6.6	6.6	5.9	5.0	112
118	5.7	5.9	5.0	4.8	118
125	4.8	5.0	4.4	4.4	125
131	4.1	4.4	3.9	4.0	131
138	3.3	4.0	3.3	3.3	138
144	2.6	3.3	2.8	2.8	144
151	2.2	2.8	2.4	2.4	151
157	—	2.4	2.2	2.2	157

31,000 lb Counterweight (148 ft Main Boom)

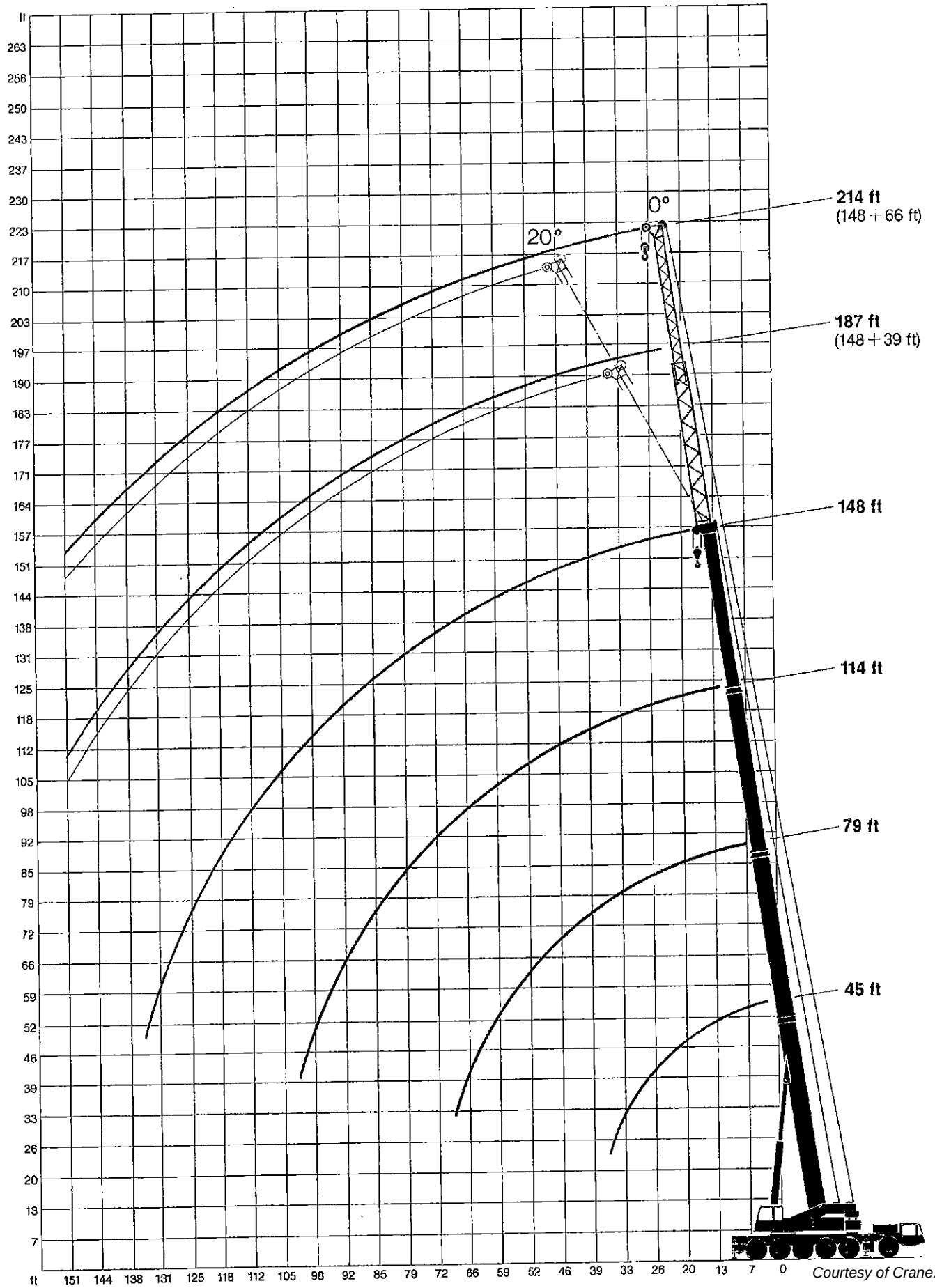
Radius (ft)	Fold-away Extensions 39 ft* 0°	39 ft* 20°	39 ft 0°	39 ft 20°	66 ft* 0°	66 ft* 20°	66 ft 0°	66 ft 20°	Radius (ft)
39	22.7*	—	22.7	—	—	—	—	—	39
46	20.9*	15.4*	20.9	15.4	13.9*	—	13.9	—	46
52	18.9*	15.0*	18.9	15.0	13.4*	—	13.4	—	52
59	17.2*	14.1*	17.2	14.1	13.0*	7.9*	13.0	7.9	59
66	15.4*	13.2*	15.4	13.2	12.5*	7.7*	12.5	7.7	66
72	13.8*	12.1*	13.8	12.1	11.6*	7.5*	11.6	7.5	72
79	12.3*	11.2*	12.3	11.2	10.5*	6.8*	10.5	6.8	79
85	11.2*	10.1*	11.2	10.1	9.0*	6.6*	9.0	6.6	85
92	9.9*	9.2*	9.9	9.2	8.3*	6.3*	8.3	6.3	92
98	8.8*	8.3*	8.6	8.3	7.5*	5.9*	7.5	5.9	98
105	7.7*	7.5*	6.8	7.5	6.6*	5.5*	6.6	5.5	105
112	6.6*	6.6*	5.5	6.6	5.9*	5.0*	5.9	5.0	112
118	5.7*	5.9*	4.1	5.3	5.0*	4.8*	5.0	4.8	118
125	4.6*	5.0*	2.8	4.0	4.4*	4.4*	4.4	4.4	125
131	3.3*	4.4*	2.0	2.8	3.9*	4.0*	3.7	4.0	131
138	2.4*	3.0*	—	2.0	3.3*	3.3*	2.8	3.3	138
144	1.7*	2.2*	—	—	2.8*	2.8*	2.0	2.8	144
151	—	—	—	—	2.4*	2.4*	—	2.4	151
157	—	—	—	—	1.7*	2.2*	—	1.7	157

* only 2 x 10° over rear

Working Ranges

— Main boom
— Foldaway extension

45 ft — 148 ft
39 ft — 66 ft



Carrier

Truck-Type Carrier	Make: Demag. Drive: 12x6
Frame	Demag-built monobox main frame with outrigger boxes integral, of high-grade close-grained steel.
Outriggers	Four telescoping hydraulic outrigger beams with hydraulic jack legs.
Engine	Daimler-Benz OM-424 water-cooled 12-cylinder Diesel Engine. Output to DIN 70020: 309 kW (420 HP). Fuel-Tank Capacity: 400 l.
Transmission	ZF-Transmatic 8-speed forward, 1-reverse synchromesh torque-converter main transmission plus transfer case with longitudinal differential and lock-out control.
Axles	1st and 3rd: steering, non-driving; 4th: non-driving; 5th: driving, with through-drive differential and lock-out control; 2nd and 6th: steering and driving. All axles with single wheels, and driving axles with planetary hubs.
Wheels and Tyres	Disk-type wheels 10.0 x 24 fitted with 12 tyres 14.00 x 24, PR 22, plus 1 spare.
Steering	ZF semibloc mechanical steering with hydraulic booster.
Brakes	to EC standards.
Electrical Equipment	24-volt system.
Cab	Rubber-mounted low-line two-man all-steel cab,1.64-m wide.

Superstructure

Upper Frame	Demag-built weldment of high-grade close-grain steel.
Paneling	Sectional side panels, which are removable for service accessibility.
Turntable Mounting	3-row roller-bearing swing circle with external ring gear.
Engine	Daimler-Benz OM-352 A water-cooled 6-cylinder Diesel Engine. Output to DIN 70020: 112 kW (152 HP). Fuel-Tank Capacity: 300 l.
Hydraulic System	2 variable-displacement axial-piston pumps with automatic power control and 1 fixed-displacement tandem pump (enable the operator to engage three motions at the same time). 1 fixed-displacement pump for the low-pressure control circuits.
Hoist	Axial-piston hydraulic motor with planetary reduction, and spring-loaded multi-disk brake.
Swing	Axial-piston hydraulic motor and planetary drive. Foot-pedal operated swing brake and spring-loaded holding brake.
Boom Elevation	1 hydraulic cylinder with pilot controlled lowering brake valve.
Control	Four self-centering levers control all crane operations through hydraulic power and pilot valves.
Cab	Comfortable all-steel cab with large folding-out front and roof windows, sliding door, hot-air heating unit, and ventilation system.
Boom	Four-section power-telescoping boom, fabricated from high-grade close-grain plate stock, featuring the familiar DEMAG "ovaloid" design of rectangular box members with rounded-off corners. Each center section slides on self-centering diagonally arranged plastic shoes. Boom head with brackets and mounts for extension booms and luffing fly jib.
Safety Devices	Electronic overload cut-out (load limiting device) of Demag design, with safe-load and radius indicator; hoist and load lowering limit switches; relief and safety holding valves.

Optional Equipment

Superlift Attachment

The Superlift attachment is a simple means to increase the lifting capacity of the normal crane. It essentially consists of a boom-suspension mast with guy ropes, which provides for an automatic rope-length adjustment for boom telescoping, and a 15-ton Superlift counterweight. The suspension mast is lowered to the main boom when not needed, or for road transport. To mount and remove the Superlift counterweight when setting up the crane for Superlift duty, an auxiliary crane can be dispensed with.

2nd Hoist Drum

Permits tandem lifts and avoids re-reeving of hoist line when using an optional extension or luffing fly jib. It is indispensable for jib-luffing. The drum is powered by a fixed-displacement axial-piston hydraulic motor, through a planetary gear train, and equipped with a spring-loaded multi-disk brake.

Extension Booms

Version 1: Telescoping 39—66 ft side-folding 2-part lattice-type extension boom with adapter to permit an angular adjustment to 20°.

Version 2: Non-folding, non-adjustable lattice-type extension boom, using components of the luffing fly jib, in lengths of 49 ft, 69 ft, and 89 ft (angular adjustment to 3° and 20°).

Luffing Fly Jib

Lattice-type, with luffing mast, ropes, and safetydevices, in lengths from 49 ft to 108 ft (the second hoist drum is required when using the luffing fly jib).