

Grove GHC130 Preliminary Product Guide

ASME B30.5
Metric 75% and Imperial 75%



Features

- 120 t (132 USt) capacity
- 12,6 - 40,2 m (41 ft 4 in - 131 ft 11 in) four-section full power boom
- 15 m (49 ft 3 in) offsettable boom extension
- Two 5,6 m (18 ft 4 in) lattice inserts with 0,8 m (2 ft 8 in) boom head
- 100% pick and carry load charts at 360°
- Cummins QSB 6.7L Tier 4 final compliant engine

GROVE GHC130

The GHC130 delivers heavy-duty lifting power and exceptional mid-range and maximum reach, with a boom length of 12,6 m - 40,2 m (41 ft 4 in – 131 ft 11 in).

Features

> Comfort redefined

Operators cab is designed to deliver maximum comfort while incorporating conveniently located joystick controls for precise operation. Cab comes equipped with an integrated rated capacity limiter, air suspension seat, color monitor for up to four cameras, and precise climate control. The cab can tilt up to 20° providing the operator additional comfort when working at long boom and extension lengths.



> Travel made easy

Transportation to the job site can easily be accomplished in 3-5 loads. Set up time is minimal thanks to the GHC130's quick self-assembly system for both the counterweight and side frames. Once assembled the strong undercarriage provides 100% pick and carry capability and work up to 4° of inclination. The hydraulically extendable tracks allow for three working gauges for maximum flexibility on the job.



> Strong telescopic boom

The GHC130 comes equipped with a robust full-power four-section boom that allows for telescoping under load. The main boom offers 12,6 m – 40,2 m (41 ft 4 in – 131 ft 11 in) of reach. This paired with the standard 8 m (26 ft 3 in) offsettable swingaway extension provides a tip height of 51 m (167 ft 4 in). If additional reach is required, two pieces of 5,6 m (18 ft 4 in) lattice inserts with 0,8 m (2 ft 8 in) boom head as well as a 7 m (23 ft) fly extension are available to reach a maximum tip height of 70 m (229 ft 8 in).



CraneSTAR

> CraneSTAR is an exclusive and innovative crane asset management system

that helps improve your profitability and reduce costs by remotely monitoring critical crane data. Visit www.cranestar.com for more information.

Job site benefits

More productive in more places on the job site

The GHC130 delivers unsurpassed maneuverability and versatility.

- Telescoping boom, plus heavy-duty crawler tracks for all-terrain productivity
- Superior gradeability
- High visibility cabs with up to 20° tilt
- Two-speed hydrostatic drive allows for skid steering and counter rotation capability
- Compact design allows you to work in more places

Rugged durability to tackle all terrain

The GHC130 comes equipped with a durable, powerful crawler system.

- Hydraulically extendable and retractable crawlers
- Heavy-duty, 900 mm (36 in) triple bar, maintenance-free track shoes
- Easy self-assembling crawlers
- Cummins QSB Tier 3 or Tier 4 Final diesel engines power through terrain challenges

Easy transport to the job site and quick assembly

The GHC130 helps you spend less time on the truck and more time on the job.

- Transports to the job site in one to five loads, depending on model
- Retracted gauge for transport width
- Self-assembly counterweight
- Undercarriage frame with jacks for easy self assembly of crawlers
- Excellent serviceability keeps you up and running



Manitowoc Crane Care when you need it.

The assurance of the world's most advanced crane service and support to get you back to work fast.



Manitowoc Finance helps you get right to work generating profits for your business.

Financial tools that help you capitalize on opportunity with solutions that fit your needs.

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Specifications

Upper carriage



Standard boom

12,6 m – 40,2 m (41 ft 4 in – 131 ft 11 in) four-section, full power, sequenced-synchronized, telescopic boom.

Maximum tip height: 43 m (141 ft)



Boom extension

8 m (26 ft 3 in) offsettable, solid, one piece swingaway extension. Extension can be offset at 0°, 20°, and 40°

Maximum tip height: 51 m (167 ft 4 in)



*Optional boom extension

7 m (23 ft) offsettable fly jib extension that must be used in conjunction with standard 8 m (26 ft 3 in) boom extension. Provides a total of 15 m (49 ft 3 in) of additional reach. The optional fly jib extension can not be stowed on boom.

Maximum tip height: 57,5 m (188 ft 8 in)

Boom extension can be offset 0°, 20°, and 40°



*Optional Lattice inserts

One 5,6 m (18 ft 4 in) lattice insert with 0,8 m (2 ft 8 in) boom head for a total length of 6,4 m (21 ft) or two 5,6 m (18 ft 4 in) lattice inserts with 0,8 m (2 ft 8 in) boom head for a total length of 12 m (39 ft 4 in).

Non-stowable on boom.

Maximum tip height: 70 m (229 ft 8 in)



Boom nose

Five nylon sheaves on heavy duty roller bearings with removable rope guards. Quick reeve type boom nose.

Equipped with removable auxiliary boom nose.



Boom elevation

One double-acting hydraulic cylinder with integral holding valves.

Elevation: -4.5° to 82°



Counterweight

33 320 kg (73,458 lb) total (5 pieces). Hydraulically installed and removed.



Rated Capacity Limiter and anti-two block system

Graphical display of load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of crane configuration, boom angle, length, radius, tip height, maximum permissible load, momentary load and warning of impending two-block condition. Includes advanced diagnostics system that increases the performance of the machine, simplifies and accelerates troubleshooting, and lowers operating costs. Equipped with event recorder.



Cab

Large capacity operator's compartment that includes an air suspended operator's seat with intervertebral disc support, heated seat, headrest, three inch safety belt, ergonomic control panels, load sensing electric dual axis joystick controls, travel pedals and levers, exceptional sound insulation, sliding door (includes sliding window), excellent all around visibility,

tinted safety glass, front tiltable window, large skylight w/ sun protection, windshield and roof wiper/washer system, radio w/ CD player, climate control (A/C, heat, and defrost), fire extinguisher, and 20° tilt capability for improved overhead vision and ergonomic posture. Also equipped with a seven inch monitor in cab for rear view, right side, and hoist cameras.



Swing

Three speed, compact planetary gear with axial piston hydraulic motor and integrated brake valves. Sealed, externally geared slewing ring that allows for 360° of continuous rotation. Electronically applied service brake operated via foot pedal. Spring applied, hydraulically released parking brake. Two position, hydraulically pinned house lock.

Swing speed: 0-2 rpm, variable



Hydraulic system

Load sensing / LUDV hydraulic system with hydraulic and pilot controlled work functions, and load limit sensing control.

Single variable-displacement piston pump with a three section gear pump.

Maximum output: 500 LPM (132 GPM)

Maximum operating pressure: 330 bar (4786 psi)

1125 L (297 gal) steel hydraulic reservoir with sight level gauge.

High performance, 3 micron filtration system with water absorption contamination indicator for higher oil purity and extended oil service life.



Hoist (main and auxiliary)

Two speed hoists driven via a axial piston hydraulic motor with compact planetary gear. Spring loaded disc brake. Grooved drum with drum rotation indicator for both hoists that is located in the joystick controls.

Maximum hoist pull (first layer): 18 365 kg (40,488 lb)

Maximum permissible single line pull: 12 519 kg (27,600 lb)

Maximum single line speed: 115 m/min (377 ft/min)

Rope construction: 35 X 7 Rotation Resistant

Rope diameter: 26 mm

Rope length: 175 m (574 ft)



Engine (Tier 4)

Cummins QSB 6.7 L diesel, six cylinders, turbocharged with Cummins Compact Catalytic exhaust and Selective Catalytic Reduction.

Meets U.S.E.P.A Tier 4 final requirements.

168kW (228 bhp) at 2000 rpm.

Fuel requirements: Maximum of 15 ppm sulphur content (Ultra Low Diesel Fuel). DEF (Diesel exhaust fluid) required for SCR (selective catalytic reduction).

NOTE: Tier 4 engine Required for sale in North America.

Specifications



Engine (Tier 3)

Cummins QSB 6,7 L diesel, six cylinders, turbocharged rated at 164 kW (218 bhp) at 2000 rpm.

NOTE: Required for sale outside of North America.



Fuel tank capacity

Diesel Fuel: 540 L (143 gal)

DEF (Diesel Exhaust Fluid): 38 L (10 gal)



Electrical system

24 Volt with two 12-volt maintenance free batteries.

Includes battery disconnect switch.



Lights

Lighting package includes two halogen lights integrated into the front side of the cab roof and one LED headlight on the upper carriage, right side.

Lower carriage



Frame

Durable all steel welded construction with extendable axles and jacks for side frame installation and removal.



Side frames

Steel frames that can be hydraulically extended or retracted via controls in the cab. 900 mm (36 in) triple bar maintenance free track shoes.

Retracted gauge: 3,05 m (10 ft)

Intermediate gauge: 4,20 m (13 ft 9 in)

Extended gauge: 5,40 m (17 ft 9 in)

*Note: These widths are from centerline to centerline of crawlers.



Travel

Two-speed hydrostatic drive operated via lever/pedal controls in cab. Allows for excellent maneuverability with skid steering and counter-rotation. Both side frames are hydraulically driven thru a two stage hydraulic traction motor. Spring-loaded, hydraulically release multi disk brake activated via foot pedal in cab.

Travel Speed: 0-2,5 kmh (0-1.55 mph)

Gradeability (theoretical): 63%

Operating weight

113 780 kg (250,840 lb) base machine configuration that includes 40,2 m (131 ft 11 in) boom, 8 m (26 ft 3 in) extension, 60 t (66.1 USt) hook block, 900 mm (36 in) triple bar crawlers, main and auxiliary hoist, and 33 320 kg (73,458 lb) counterweight.

Ground bearing pressure (no load): 0,90 kg/cm² (12.8 psi)

Miscellaneous standard equipment

- Central, easily accessible lubricating strip
- Grated platforms in front and on the side of the cab, as well as catwalks on both sides of the upper carriage. Foldable handrails included for upper carriage.
- Service friendly engine and hydraulic compartment with decoupled engine suspension, sound proofing, and lighting.
- 60 t (66.1 USt) 2 sheave quick reeve hook block
- External RCL light bar
- CraneStar asset management system
- Storage box attached to crawler side frame

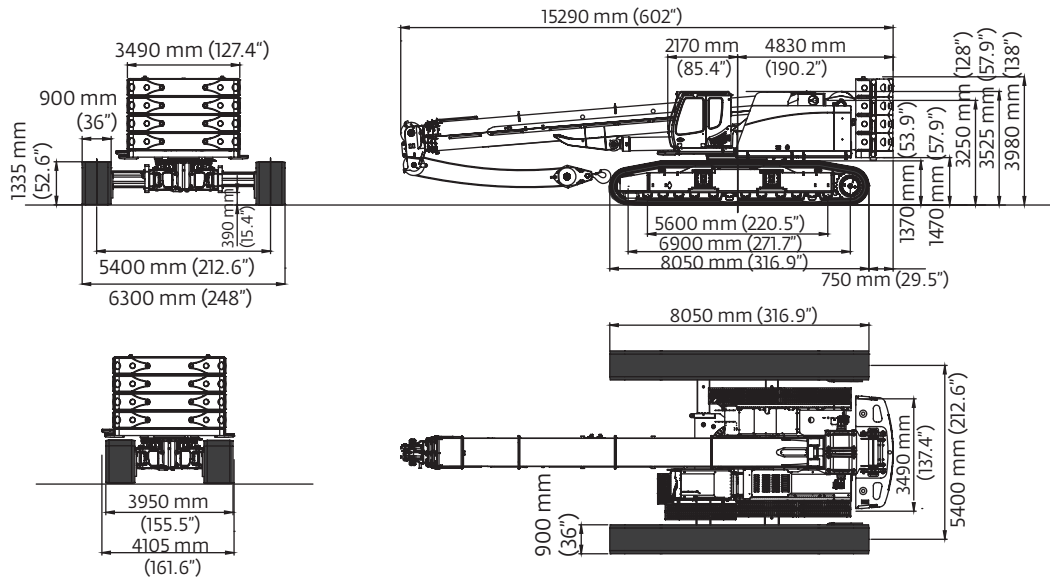
*Optional equipment

- Basket: Yoke style, 72 in x 36 in (1829 mm x 914 mm) steel basket, gravity hung with cylinder brake lock (does not side stow). Includes quick-attach boom attachment. Basket capacities: 544,3 kg (1200 lb) main boom and 226,7 kg (500 lb) on jib
- Radio Remote Control Package
- Automatic Lube system
- Cold Weather Packages up to -40° C / 40° F
- Maintenance free flat track shoes

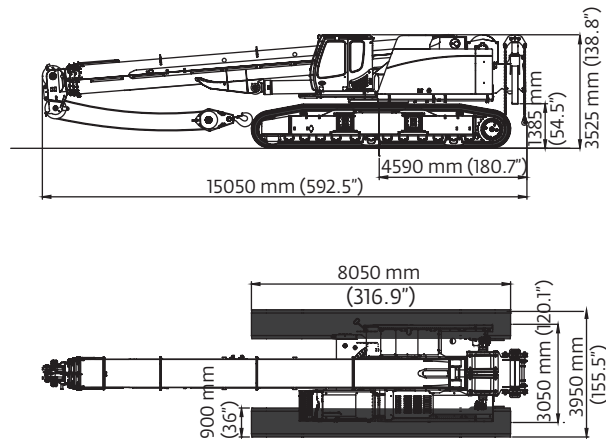
Dimensions

Transport dimensions and weights

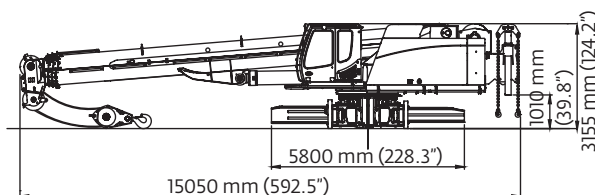
Operating weight: approximately 113 780 kg (250,840 lb) (with two hoists, 8 m (26 ft 3 in) boom extension, 60 t (66.1 USt) hook block, 33 320 kg (73,458 lb) counterweight, and 900 mm (36 in) triple bar shoes.



Operating weight: approximately 80 460 kg (177,382 lb) (with two hoists, 8 m (26 ft 3 in) boom extension, 60 t (66.1 USt) hook block, 900 mm (36 in) triple bar shoes, and no counterweight.

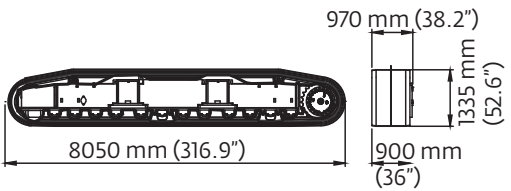
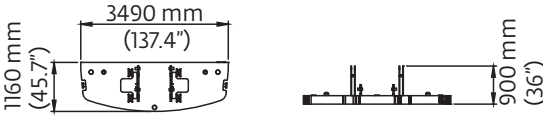
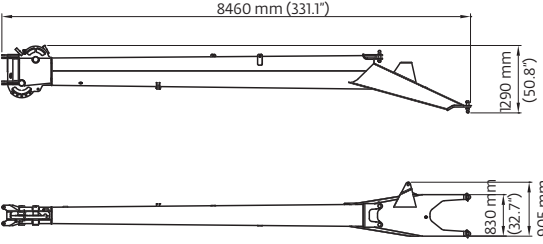
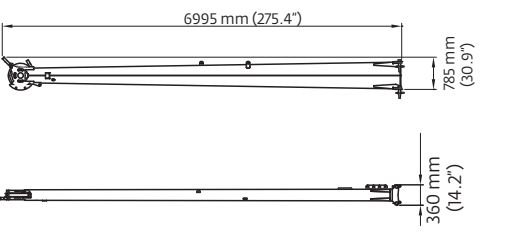
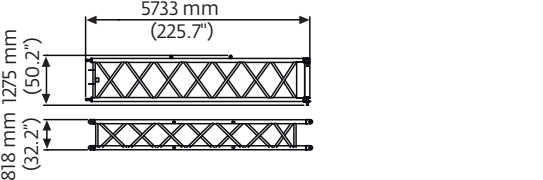
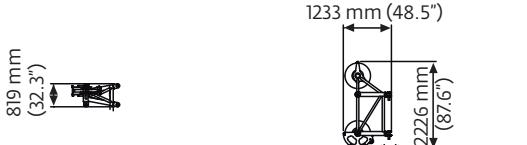


Transport weight: approximately 49 060 kg (108,156 lb) (with two hoists, 8 m (26 ft 3 in) boom extension, 60 t (66.1 USt) hook block, no side frames, and no counterweight)



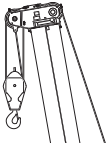
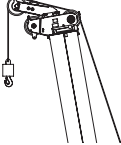
Dimensions

Transport dimensions and weights

	Crawler	2x	15 700 kg (34,613 lb)
	Base plate for counterweight	1x	5400 kg (11,906 lb)
	Counterweight	4x	6980 kg (15,388 lb)
	Boom extension - 8 m (26 ft 3 in)		900 kg (1984 lb)
	Fly jib extension - 7 m (23 ft)		300 kg (661 lb)
	Auxiliary boom nose		160 kg (353 lb)
	Lattice insert - 5,6 m (18 ft 4 in)		573 kg (1263 lb)
	Boom head for insert - 0,8 m (2 ft 8 in)		391 kg (862 lb)

Load programs

Working load programs

	Main boom			Auxiliary boom nose			Inserts 6,2 m (21 ft) or 12 m (39 ft 4 in)		
									
Undercarriage track width (centerline to centerline of crawlers)	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')
Counterweight									
 33 t (73,458 lb)	360° 	360° 	—	360° 	360° 	—	360° 	—	—
 19,2 t (42,682 lb)	360° 	360° 	360° 	360° 	360° 	360° 	—	—	—
 0 t	360° 	360° 	360° 	360° 	360° 	360° 	—	—	—

	Boom Extension 8 m (26 ft 3 in)			Boom Extension with optional fly jib 15 m (49 ft 3 in)			Inserts: 6,2 m (21 ft) or 12 m (39 ft 4 in) and boom extension 8 m (26 ft 3 in)			Inserts: 6,2 m (21 ft) or 12 m (39 ft 4 in) and boom extension 15 m (49 ft 3 in)		
												
Undercarriage track width (centerline to centerline of crawlers)	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')	 5,4 m (17' 9")	 4,2 m (13' 9")	 3,05 m (10')
Counterweight												
 33 t (73,458 lb)	360° 	—	—	360° 	—	—	360° 	—	—	360° 	—	—

Note:

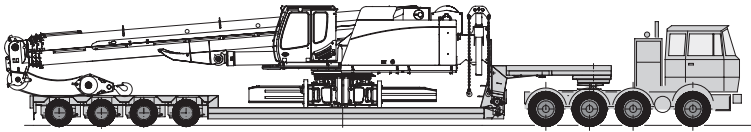
Additional safe working loads are also available for 2° and 4° inclines.

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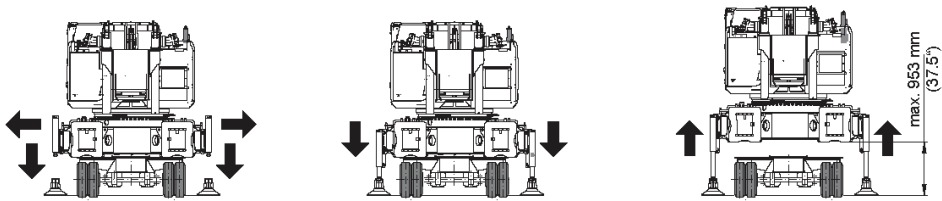
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Transportation / assembly

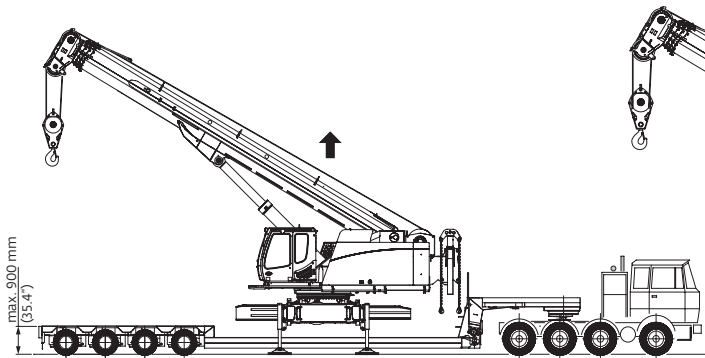
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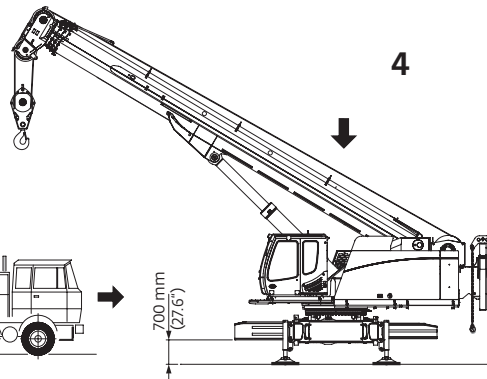
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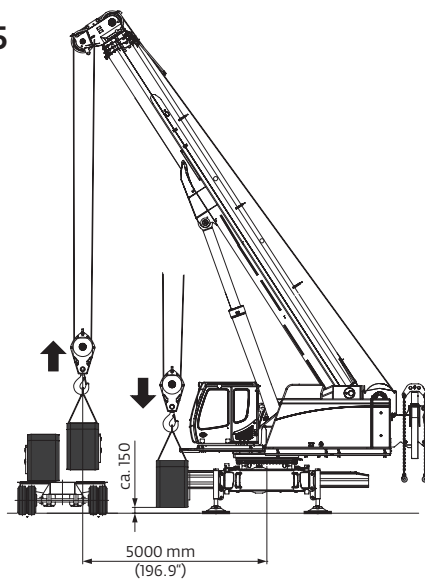
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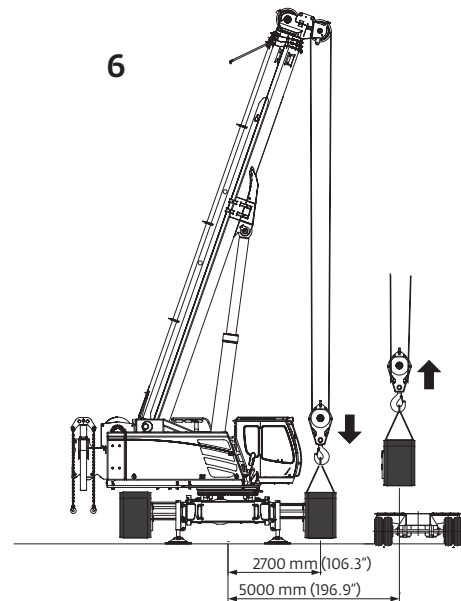
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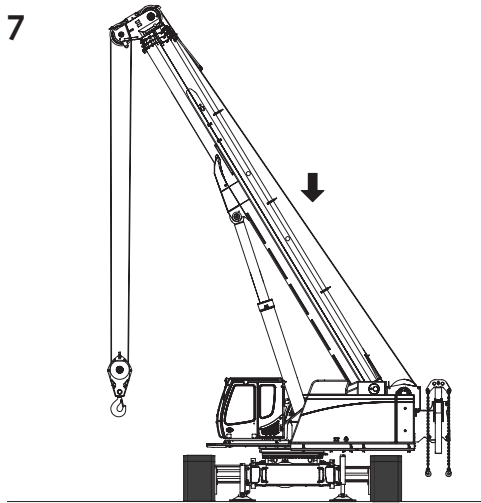


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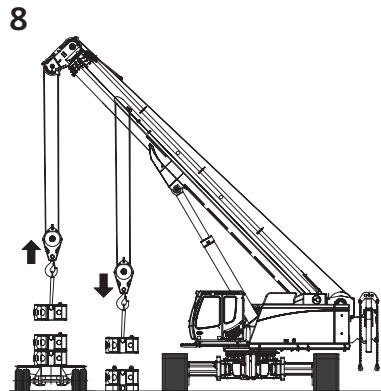


Transportation / assembly

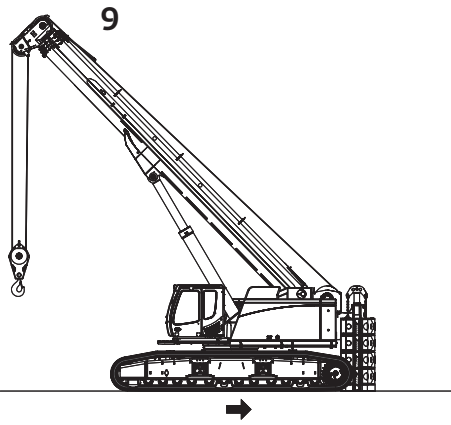
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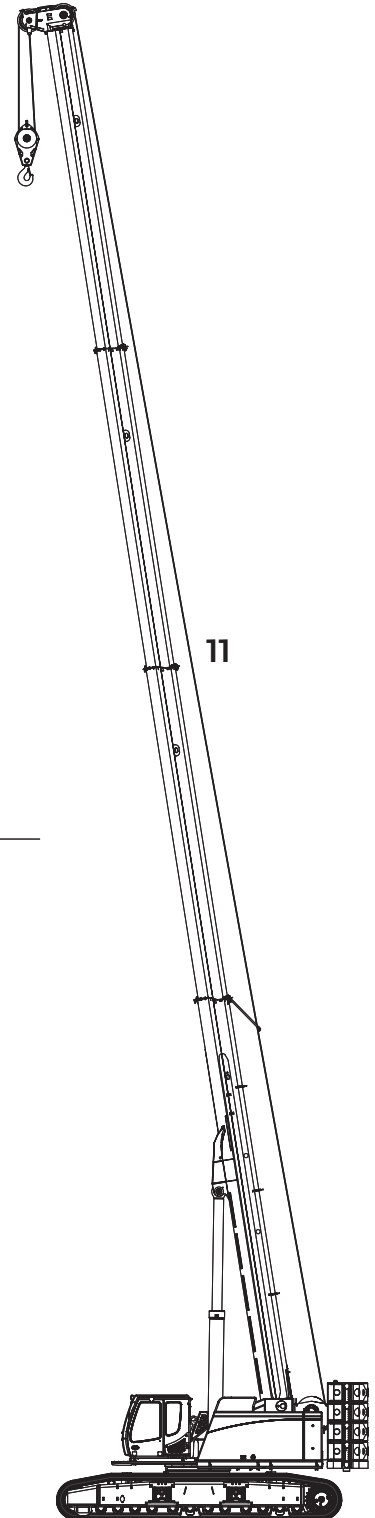
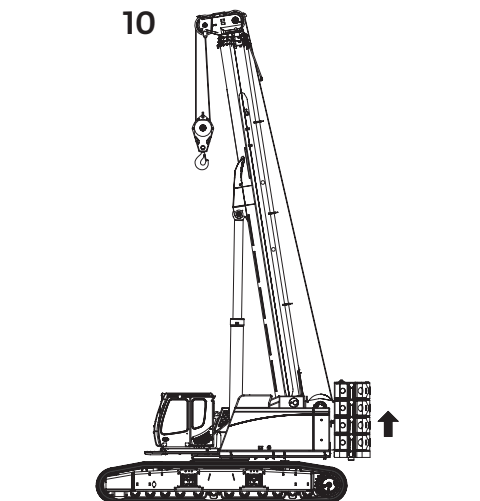
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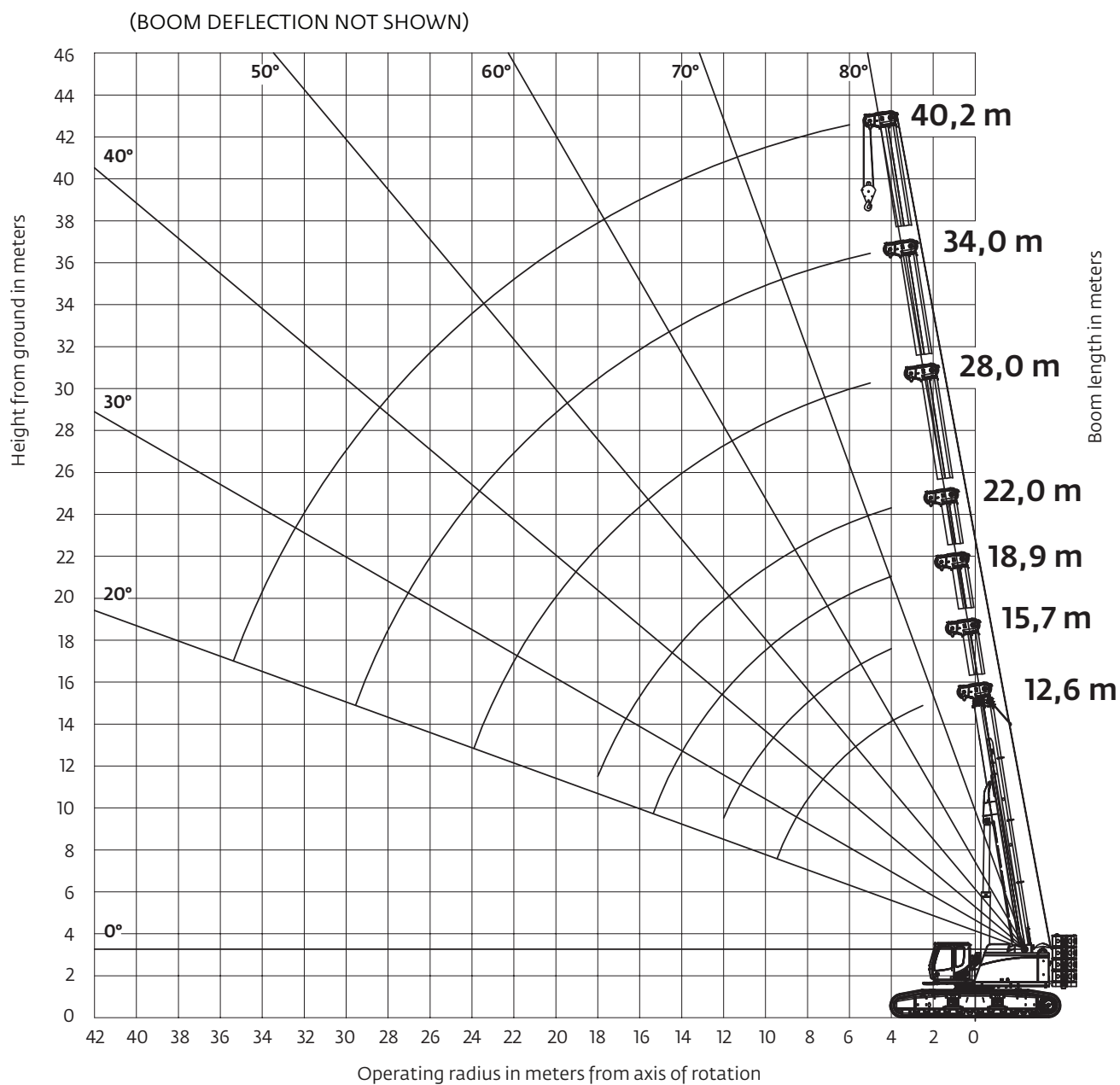
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Working range

Main boom - metric 75%

Main boom



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The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

Load chart

Main boom - metric 75%



Radius [m]	Main boom length [m]						
	12,6	15,7	18,9	22,0	28,0	34,0	40,2
2,5	120 000						
3	100 000						
4	84 000	69 000	66 000	52 000			
5	75 000	69 000	61 400	52 000	37 000	30 000	
6	70 000	67 000	54 000	48 400	37 000	29 800	21 000
7	60 000	59 000	48 300	43 300	36 200	28 500	21 000
8	52 000	50 000	43 400	38 800	33 700	27 000	20 000
9	45 000	45 000	39 300	35 200	31 000	25 200	19 400
10	40 000	39 900	36 000	32 100	28 200	23 400	18 600
12		30 800	30 500	27 100	24 400	20 400	16 600
14			23 900	23 200	21 100	17 900	14 800
16			19 300	19 100	18 400	15 900	13 300
18				15 700	16 200	14 300	12 000
20					14 000	12 900	10 800
22					12 000	11 600	9800
24					10 300	10 700	9000
26						9400	8200
28						8200	7600
30						7200	7000
32							6400
34							5700
36							5100
Parts reeving	10	8	8	7	5	4	3
When 8 m extension is in stowed position, the rated loads must be reduced as follows:							
Reduction of load (kg)	538	436	370	321	256	214	185

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Load chart

Auxiliary boom nose - metric 75%



40,2 m



With auxiliary
boom nose



33 t



100%



360°



Kilograms

Radius [m]	Main boom length [m]						
	12,6	15,7	18,9	22,0	28,0	34,0	40,2
3	12 500	12 500					
4	12 500	12 500	12 500	12 500			
5	12 500	12 500	12 500	12 500	12 500	12 500	
6	12 500	12 500	12 500	12 500	12 500	12 300	
7	12 500	12 500	12 500	12 500	12 500	12 200	11 800
8	12 500	12 500	12 500	12 500	12 500	12 100	11 700
9	12 500	12 500	12 500	12 500	12 400	12 000	11 500
10	12 500	12 500	12 500	12 500	12 300	11 900	11 400
12		12 500	12 500	12 500	12 300	11 800	11 300
14			12 500	12 500	12 300	11 800	11 100
16			12 500	12 500	12 300	11 700	10 800
18				12 500	12 300	11 700	10 300
20					12 300	11 500	9500
22					12 100	10 600	8700
24					10 400	800	8000
26						9000	7400
28						8300	6900
30						7200	6400
32							5900
34							5500
36							5100
Parts reeving	1	1	1	1	1	1	1
When 8 m extension is in stowed position, the rated loads must be reduced as follows:							
Reduction of load (kg)	538	436	370	321	256	214	185

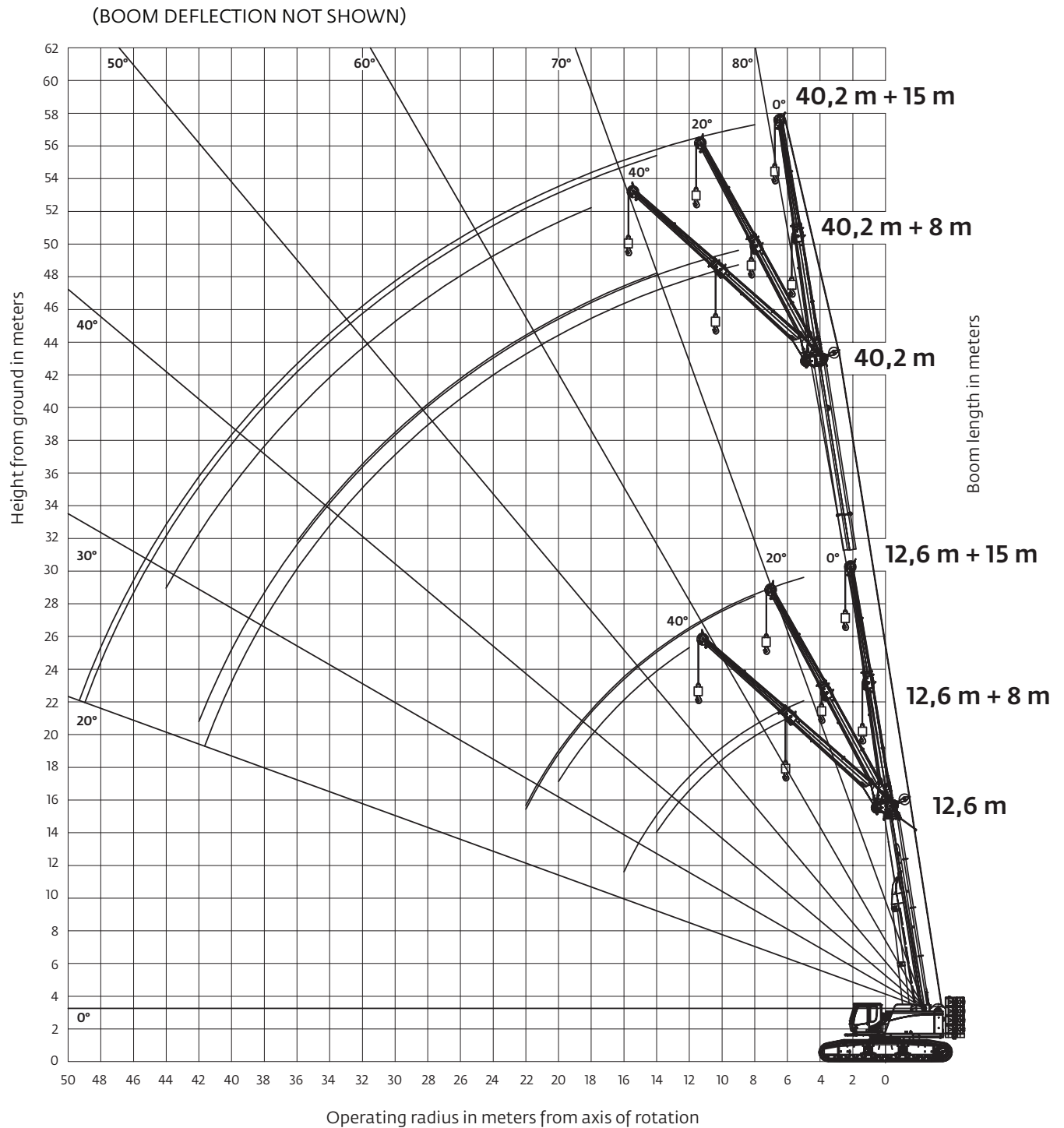
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Working range

Extensions - metric 75%

Main boom with extensions



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Load chart

Extensions - metric 75%



40,2 m



8 m



33 t



100%



360°



Kilograms

Radius [m]	Main boom length [m]														
	12,6			22,0			28,0			34,2			40,2		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
5	15 400	10 900		18 000			17 500								
6	14 000	10 200	8100	16 500			16 500								
7	12 800	9700	7800	15 500	10 500		15 600	10 300		14 200					
8	11 800	9200	7500	14 500	10 100	7 800	14 700	10 100		13 700					
9	10 900	8700	7200	13 600	9700	7600	14 000	9800	7600	13 100	9500		11 800		
10	10 200	8300	6900	12 800	9300	7400	13 300	9500	7400	12 600	9300	7300	11 400		
12	9000	7500	6400	11 500	8700	7000	12 100	8900	7100	11 700	8800	7000	10 800	8400	
14	8000	7100	6100	10 400	8200	6600	11 000	8400	6700	10 900	8300	6700	10 200	8000	6500
16	7200	6700		9500	7700	6300	10 200	8000	6500	10 200	8000	6400	9600	7700	6300
18				8700	7300	6100	9 500	7600	6300	9500	7600	6200	9100	7400	6100
20				8100	7000	5900	8800	7300	6000	9000	7300	6000	8500	7100	5900
22				7500	6700		8200	7000	5800	8400	7000	5800	8000	6900	5800
24				7000	6500		7700	6700	5700	8000	6800	5700	7400	6600	5600
26							7300	6500	5600	7500	6600	5500	6800	6400	5500
28							6900	6400		7200	6400	5400	6300	6200	5300
30							6600	6200		6800	6200	5300	5800	5800	5200
32							6400			6500	6100		5400	5500	5200
34										5900	6000		5000	5100	5100
36										5200	5400		4700	4700	4800
38										4600			4300	4400	
40													4000	4100	
42													3600	3700	
44													3200		
Parts reeving	2	2	1	2	2	1	2	2	1	2	2	1	2	2	1

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Load chart

Extensions - metric 75%



40,2 m



15 m



33 t



100%



360°



Kilograms

Radius [m]	Main boom length [m]														
	12,6			22,0			28,0			34,2			40,2		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
5	6000			6000											
6	5800			5800			5800			5300					
7	5600			5700			5600			5200					
8	5400			5600			5400			5100			4700		
9	5100	4100		5500			5300			5000			4700		
10	4800	4000		5300	4000		5200			4900			4600		
12	4400	3600	3100	5000	3900		5000	4000		4800			4500		
14	4000	3400	2900	4700	3700	3100	4800	3800	3100	4600	3800		4300		
16	3600	3200	2800	4300	3500	3000	4600	3600	3000	4400	3600	3000	4200	3500	
18	3300	3000	2700	4000	3300	2900	4300	3400	2900	4300	3400	2900	4100	3400	2800
20	3100	2800	2600	3700	3200	2800	4000	3300	2800	4100	3300	2800	4000	3200	2700
22	2900	2700		3500	3000	2700	3800	3100	2700	3900	3200	2700	3800	3100	2600
24				3300	2900	2600	3600	3000	2700	3700	3100	2700	3700	3000	2500
26				3100	2800	2600	3400	2900	2600	3500	2900	2600	3500	2900	2500
28				2900	2700	2500	3200	2800	2500	3300	2900	2500	3400	2800	2500
30				2800	2600		3100	2700	2500	3200	2800	2500	3200	2700	2500
32							2900	2700	2400	3100	2700	2400	3100	2700	2400
34							2800	2600		2900	2600	2400	3000	2600	2400
36							2700	2600		2800	2600	2400	2900	2600	2300
38							2600	2500		2700	2500	2300	2800	2500	2300
40										2600	2500		2700	2500	2300
42										2500	2500		2600	2400	2200
44													2500	2400	2200
46													2400	2400	
48													2400	2400	
50													2400	2400	
Parts reeving	2	2	1	2	2	1	2	2	1	2	2	1	2	2	1

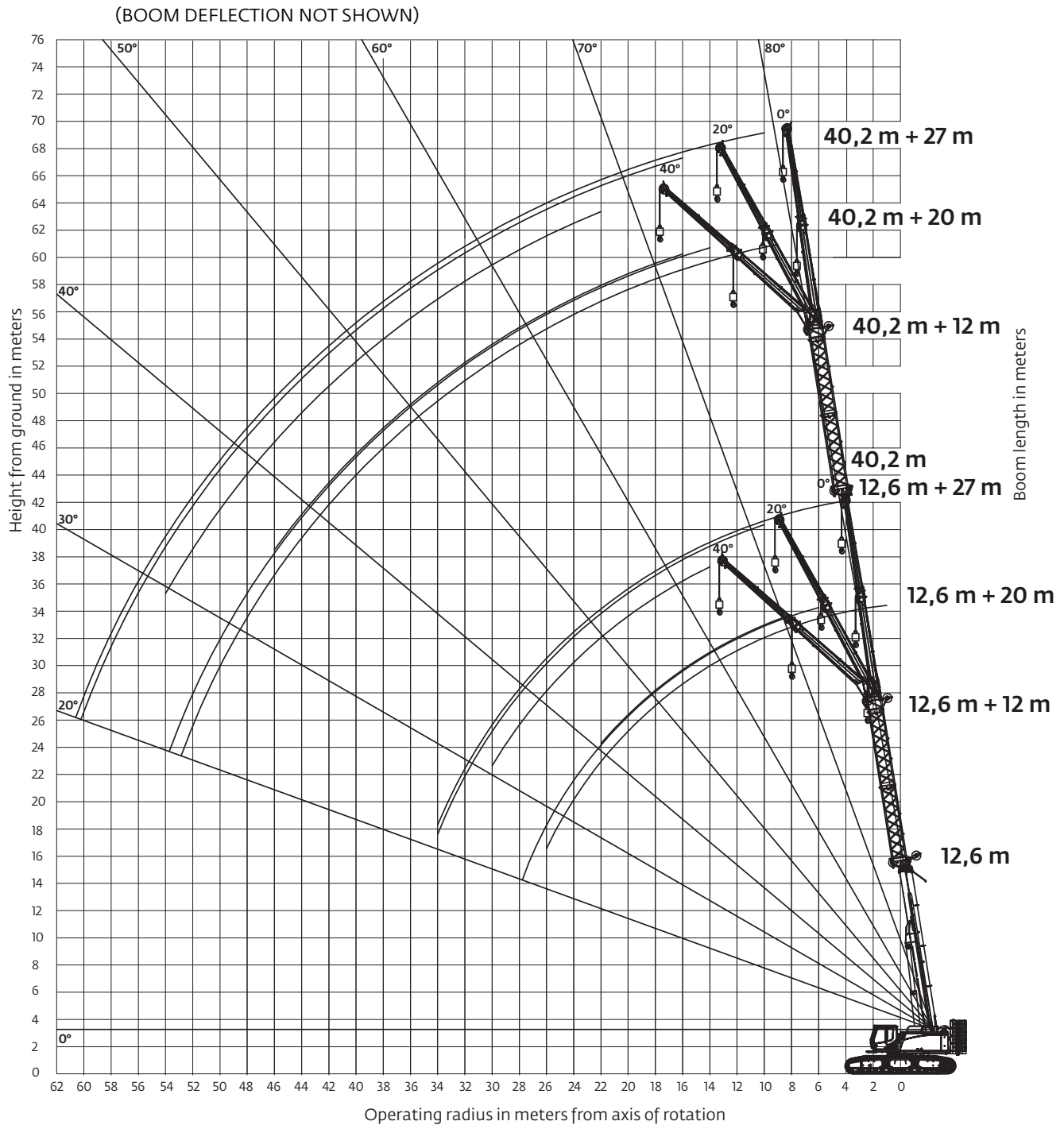
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Working range

Main boom with inserts and extensions - metric 75%

Main boom with inserts and extensions



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Load chart

Main boom with inserts and extensions - metric 75%



40,2 m



12 m



15 m



33 t



100%



360°



Kilograms

Radius [m]	Mainboom length [m]														
	12,6			22,0			28,0			34,2			40,2		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
4	5000														
5	5000														
6	5000			4500			4300								
7	5000			4500			4300								
8	5000			4500			4300			3800					
9	5000			4500			4300			3800					
10	4900	3200		4500			4300			3800			2500		
12	4700	3200		4500	3100		4300			3800			2500		
14	4500	3200	2600	4500	3100		4200	3000		3800	2900		2500		
16	4300	3200	2600	4300	3100	2500	4100	3000		3800	2900		2500	2500	
18	4000	3200	2600	4200	3100	2500	4000	3000	2500	3700	2900		2500	2500	
20	3600	3000	2600	4000	3100	2500	3900	3000	2500	3600	2900	2600	2500	2500	
22	3300	2900	2600	3800	3100	2500	3700	3000	2500	3500	2900	2500	2500	2500	2400
24	3100	2800	2500	3600	3000	2500	3600	3000	2500	3400	2900	2400	2500	2500	2300
26	2800	2600	2400	3300	2800	2500	3400	2900	2500	3300	2800	2400	2500	2500	2300
28	2600	2400	2400	3100	2700	2400	3200	2800	2400	3100	2800	2400	2500	2500	2300
30	2400	2300	2300	2900	2600	2400	3000	2700	2300	3000	2700	2300	2500	2500	2200
32	2200	2100		2700	2500	2300	2800	2600	2300	2900	2600	2300	2500	2500	2200
34	2100	2000		2600	2300	2300	2600	2500	2300	2700	2500	2200	2500	2500	2100
36				2400	2200	2200	2500	2400	2300	2600	2400	2200	2500	2400	2100
38				2300	2100	2100	2400	2200	2200	2500	2300	2100	2500	2300	2100
40				2100	2000		2200	2100	2100	2300	2200	2100	2400	2300	2100
42				2000	1900		2100	2000	2000	2200	2100	2100	2300	2200	2000
44					1800		2000	2000		2100	2000	2000	2200	2100	2000
46							1900	1900		2000	2000	2000	2100	2000	2000
48							1800	1800		1900	1900	1900	2000	2000	2000
50								1700		1900	1800		1800	1900	1900
52										1800	1800		1700	1800	1800
54										1700	1700		1500	1600	1700
56											1700		1400	1500	
58													1200	1300	
60													1100	1200	
62													900	1000	
Parts reeving	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

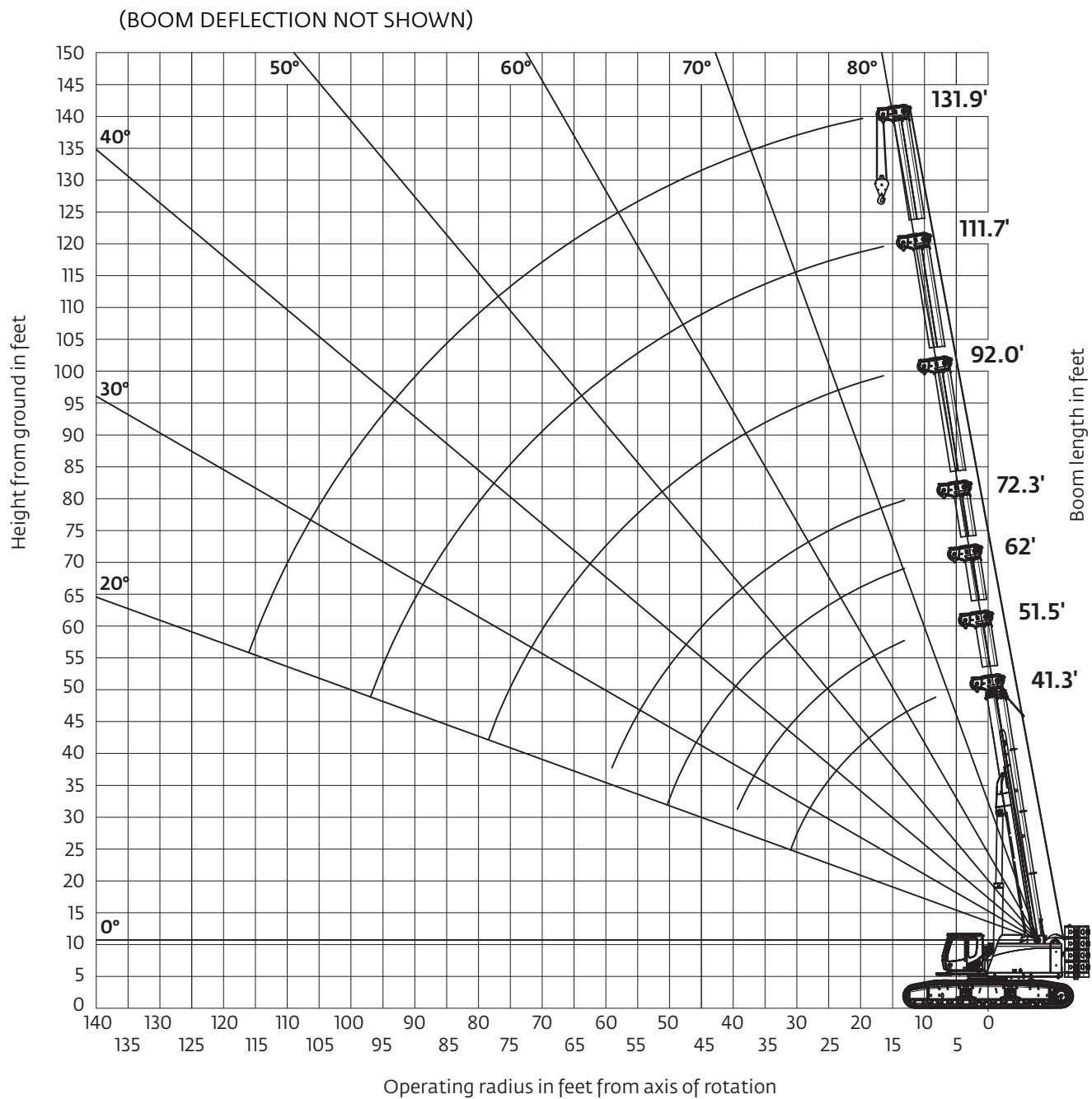
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Working range

Main boom - imperial 75%

Main boom



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Load chart

Main boom - imperial 75%



131 ft 11 in



73,458 lb



100%



360°



Pounds

Radius [ft]	Main boom length [ft]						
	41.3	51.5	62.0	72.3	92.0	111.7	131.9
8	264,800						
10	218,900						
15	174,000	152,200	139,800	114,700			
20	152,300	146,100	117,900	105,700	81,500	65,500	46,300
25	121,400	117,900	99,900	89,400	76,500	60,800	45,000
30	97,700	97,700	85,700	76,700	67,500	55,000	42,500
35		81,300	75,400	67,100	59,400	49,400	39,600
40			65,900	59,000	53,100	44,500	36,200
45			54,800	52,400	47,600	40,300	33,200
50			46,400	45,600	42,900	36,800	30,600
55				39,300	38,700	33,700	28,200
60					35,000	31,100	26,100
65					31,300	28,800	24,100
70					27,900	26,500	22,400
75					24,900	24,700	20,900
80						23,100	19,500
85						20,900	18,200
90						18,800	17,100
95						17,000	16,100
100							15,100
105							14,100
110							12,900
115							11,900
Parts reeving	10	8	8	7	5	4	3
When 26.2' extension is in stowed position, the rated loads must be reduced as follows:							
Reduction of load (lb)	1187	962	816	707	565	471	407

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Load chart

Auxiliary boom nose - imperial 75%



131 ft 11 in



With auxiliary
boom nose



73,458 lb



100%



360°



Pounds

Radius [ft]	Main boom length [ft]						
	41.3	51.5	62.0	72.3	92.0	111.7	131.9
10	27,600	27,600					
15	27,600	27,600	27,600	27,600			
20	27,600	27,600	27,600	27,600	27,600	27,100	
25	27,600	27,600	27,600	27,600	27,600	26,800	25,900
30	27,600	27,600	27,600	27,600	27,300	26,400	25,300
35		27,600	27,600	27,600	27,100	26,200	25,100
40			27,600	27,600	27,100	26,000	24,900
45			27,600	27,600	27,100	26,000	24,600
50			27,600	27,600	27,100	25,900	24,100
55				27,600	27,100	25,800	23,400
60					27,100	25,800	22,500
65					27,100	25,400	21,100
70					26,800	24,000	19,800
75					25,100	22,600	18,500
80						21,300	17,400
85						19,900	16,400
90						18,800	15,500
95						17,200	14,700
100							13,900
105							13,000
110							12,300
115							11,700
Parts reeving	1	1	1	1	1	1	1
When 26.2' extension is in stowed position, the rated loads must be reduced as follows:							
Reduction of load (lb)	1187	962	816	707	585	471	407

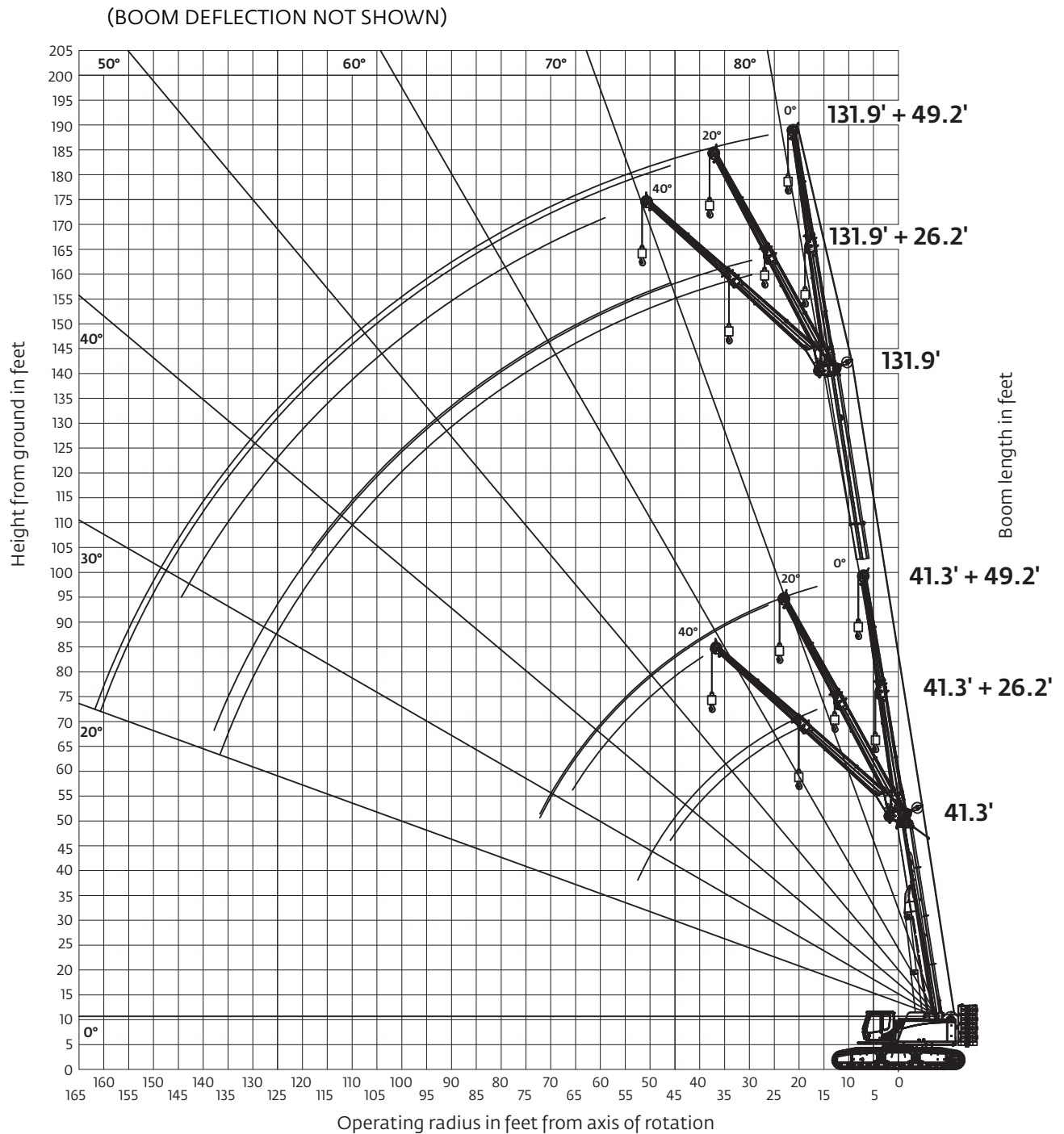
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Working range

Extensions - imperial 75%

Main boom with extensions



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Load chart

Extensions - imperial 75%



131 ft 11 in



26 ft 3 in



73,458 lb



100%



360°



Pounds

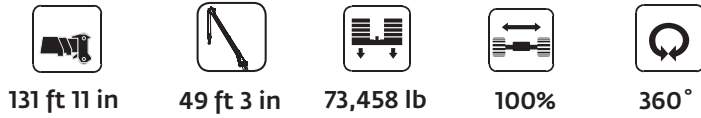
Radius [ft]	Main boom length [ft]														
	41.3			72.3			92.0			111.7			131.9		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
17	34,000	24,000		39,700			38,600								
20	30,600	22,400	17,800	36,200			36,200								
25	26,900	20,700	16,800	32,800	22,600		33,200	22,500		30,600					
30	23,800	19,100	15,800	29,800	21,300	16,700	30,700	21,500	16,700	28,700	20,900		25,900		
35	21,600	17,700	14,900	27,300	20,100	16,000	28,500	20,500	16,100	27,100	20,200	15,900	24,700		
40	19,600	16,500	14,100	25,100	19,100	15,400	26,500	19,500	15,600	25,600	19,300	15,400	23,700	18,400	
45	18,000	15,800	13,600	23,300	18,200	14,700	24,600	18,700	14,900	24,300	18,500	14,900	22,700	17,800	
50	16,600	15,100		21,700	17,400	14,200	23,200	18,000	14,500	23,100	17,900	14,400	21,700	17,200	14,100
55				20,300	16,700	13,700	21,900	17,300	14,200	21,900	17,300	14,000	20,800	16,700	13,700
60				19,000	16,000	13,400	20,700	16,700	13,800	20,800	16,700	13,600	19,900	16,200	13,400
65				18,000	15,500	13,100	19,600	16,200	13,300	20,000	16,200	13,300	18,900	15,700	13,100
70				17,000	15,000		18,500	15,700	12,900	19,000	15,700	12,900	18,000	15,400	12,900
75				16,100	14,600		17,600	15,200	12,700	18,200	15,300	12,700	17,100	14,900	12,600
80							16,800	14,700	12,500	17,400	14,900	12,500	16,100	14,500	12,300
85							16,100	14,400	12,400	16,600	14,600	12,200	15,100	14,100	12,100
90							15,500	14,200		16,100	14,200	12,000	14,200	13,800	11,800
95							14,900	13,900		15,500	13,900	11,800	13,400	13,300	11,600
100							14,500			14,800	13,600		12,600	12,600	11,500
105										14,300	13,500		11,900	12,100	11,500
110										13,300	13,300		11,200	11,500	11,300
115										12,200	12,500		10,700	10,800	10,900
120										11,100			10,100	10,200	
125													9500	9700	
130													9000	9200	
135													8300	8500	
Parts reeving	2	2	1	2	2	1	2	2	1	2	2	1	2	1	1

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Load chart

Extensions - imperial 75%



Radius [ft]	Main boom length [ft]														
	41.3			72.3			92.0			111.7			131.9		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
17	12,800			12,800											
20	12,800			12,800			12,800			11,700					
25	12,100			12,400			12,100			11,300					
30	11,200	9000		12,100			11,700			11,000			10,300		
35	10,300	8500		11,500	8800		11,300			10,700			10,100		
40	9600	7900	6800	11,000	8600		11,000	8800		10,500			9900		
45	9000	7600	6500	10,500	8200		10,700	8400		10,200			9600		
50	8300	7200	6300	9800	7900	6700	10,300	8100	6700	9900	8100		9400		
55	7700	6900	6100	9200	7600	6500	9900	7800	6500	9600	7800	6500	9200	7600	
60	7200	6600	5900	8700	7200	6400	9400	7500	6400	9400	7500	6400	9000	7400	6100
65	6900	6200	5800	8200	7100	6200	8900	7300	6200	9100	7300	6200	8800	7100	6000
70	6500	6000		7900	6800	6000	8500	7000	6000	8800	7100	6000	8500	6900	5800
75				7500	6500	5900	8200	6700	6000	8400	7000	6000	8300	6700	5600
80				7200	6400	5700	7900	6600	5900	8100	6800	5900	8100	6600	5500
85				6900	6200	5700	7500	6400	5700	7700	6400	5700	7700	6400	5500
90				6500	6000	5600	7200	6200	5600	7400	6400	5600	7600	6200	5500
95				6300	5900		7000	6100	5500	7200	6300	5500	7300	6100	5500
100							6700	6000	5500	7000	6100	5500	7000	6000	5500
105							6400	6000		6800	6000	5300	6800	6000	5300
110							6200	5800		6500	5800	5300	6700	5800	5300
115							6100	5700		6300	5700	5300	6500	5700	5200
120							5900	5700		6100	5700	5200	6300	5700	5100
125										5900	5500		6200	5500	5100
130										5800	5500		6000	5500	5100
135										5600	5500		5800	5400	4900
140													5700	5300	4900
145													5500	5300	
150													5300	5300	
155													5300	5300	
160													5300	5300	
Parts reeving	2	2	1	2	2	1	2	2	1	2	2	1	2	1	1

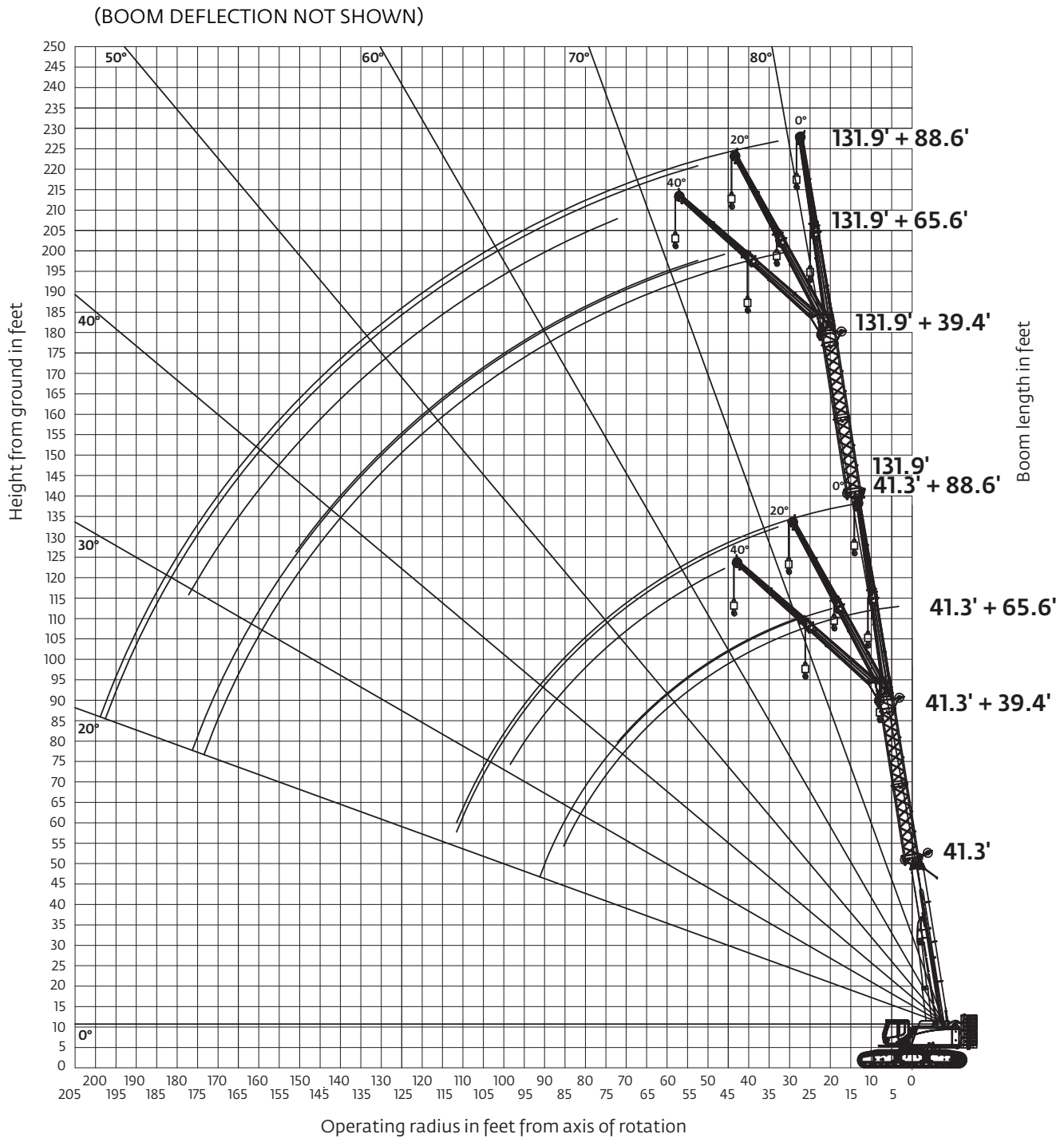
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Working range

Main boom with inserts and extensions - imperial 75%

Main boom with inserts and extensions



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Load chart

Main boom with inserts and extensions - imperial 75%



131 ft 11 in



39 ft 4 in



49 ft 3 in



73,458 lb



100%



360°



Pounds

Radius [ft]	Main boom length [ft]														
	41.3			72.3			92.0			111.7			131.9		
	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°	0°	20°	40°
14	11,000														
15	11,000														
20	11,000														
25	11,000			9900											
30	11,000			9900											
35	10,600	7100		9900			9500			8400					
40	10,300	7100		9900			9500			8400			5500		
45	10,000	7100		9900			9500			8400			5500		
50	9600	7100	5700	9900	6800		9500			8400			5500		
55	9200	7100	5700	9800	6800		9400	6600		8400	6400		5500		
60	8700	7000	5700	9500	6800	5500	9200	6600		8400	6400		5500	5500	
65	8000	6700	5700	9400	6800	5500	9000	6600		8200	6400		5500	5500	
70	7600	6500	5700	9100	6800	5500	8800	6600	5500	8000	6400		5500	5500	
75	7100	6300	5600	8700	6800	5500	8700	6600	5500	7800	6400	5600	5500	5500	
80	6700	6100	5500	8300	6800	5500	8400	6600	5500	7700	6400	5500	5500	5500	5300
85	6200	5800	5300	7900	6600	5500	8100	6600	5500	7500	6400	5300	5500	5500	5100
90	5900	5400	5300	7500	6300	5500	8000	6500	5500	7300	6200	5300	5500	5500	5100
95	5500	5200	5200	7100	6100	5400	7600	6300	5400	7100	6200	5300	5500	5500	5100
100	5200	5000		6700	5900	5300	7300	6100	5200	6800	6100	5200	5500	5500	5000
105	4900	4600		6400	5700	5300	7000	6000	5100	6600	6000	5100	5500	5500	4900
110	4700	4500		6100	5600	5100	6600	5800	5100	6500	5800	5100	5500	5500	4900
115				5800	5300	5100	6300	5600	5100	6200	5600	5000	5500	5500	4700
120				5500	5000	5000	5900	5500	5100	5900	5500	4900	5500	5500	4600
125				5300	4800	4800	5700	5300	5100	5700	5300	4800	5500	5300	4600
130				5100	4700	4700	5500	4900	4900	5600	5100	4700	5500	5100	4600
135				4800	4500		5300	4700	4700	5300	4900	4600	5400	5100	4600
140				4600	4300		5000	4600	4600	5000	4800	4600	5200	5000	4600
145					4200		4800	4400		4800	4600	4600	5100	4800	4400
150					4000		4600	4400		4700	4400	4400	4900	4700	4400
155							4400	4300		4500	4400	4400	4700	4500	4400
160							4300	4100		4300	4300	4300	4500	4400	4400
165							4100	3900		4200	4200		4300	4400	4400
170								3800		4200	4000		4000	4200	4200
175										4000	4000		3800	4400	4400
180										3900	3900		3600	3800	3900
Parts reeving	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

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Load handling

Weight reductions for load handling devices		
8 m - 15 m (26.2 ft - 49.2 ft) : Boom extension:		
	Without block or ball	With 250 kg (550 lb) headache ball
*8 m (26.2 ft) extension (erected)	1057 kg (2330 lb)	1486 kg (3276 lb)
*15 m (49.2 ft) extension (erected)	1674 kg (3691 lb)	2245 kg (4950 lb)
Hook blocks and Headache ball:		
120 t (132 USt), 5-sheave		1100 kg+ (2425 lb+)
80 t (88 USt), 3-sheave		1000 kg+ (2205 lb+)
60 t (66 USt), 2-sheave		600 kg+ (1325 lb+)
15 t (16.5 USt) headache ball		250 kg+ (550 lb+)

*Reduction of main boom capacities
+Refer to rating plate for actual weight

When lifting over boom extension, deduct total weight of all load handling devices reeved over main boom nose from boom extension capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

Line pulls and reeving information			
Hoists	Cable specs	Permissible line pulls	Nominal cable length
Main and auxiliary	26 mm Verotop Rotation Resistant (non-rotating) Min. breaking strength 65 800 kg (145,000 lb)	12 500 kg* (27,600 lb*)	175 m (574 ft)
Main and auxiliary	26 mm Casar Starlift (35x7 class) Rotation Resistant Min. breaking strength 62 685 kg (138,200 lb)	12 500 kg* (27,600 lb*)	175 m (574 ft)

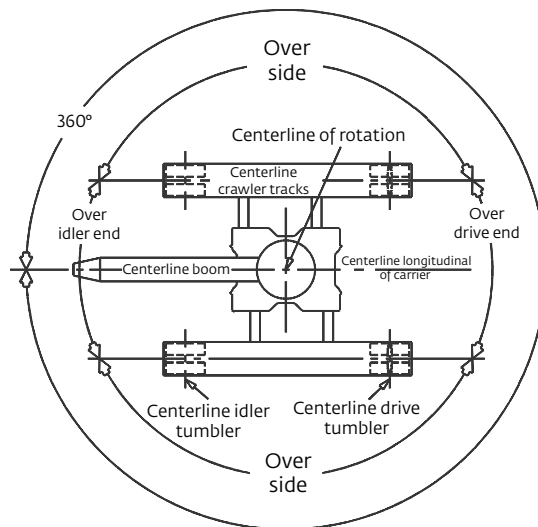
The approximate weight of Verotop and Casar 26 mm wire rope is 3,3 kg/m (2.2 lb/ft).

*With certain boom and hoist tackle combinations, the allowable line pull may be limited by hoist performance. Refer to Hoist Performance table for lift planning to ensure adequate hoist performance on drum rope layer required.

Hoist performance				
Wire rope layer	Hoist line pulls two-speed hoist		Drum rope capacity	
	Low available*	High available*	Layer	Total
1	18 365 kg (40,488 lb)	5874 kg (12,949 lb)	21,9 m (71.8 ft)	21,9 m (71.8 ft)
2	16 891 kg (37,238 lb)	5402 kg (11,910 lb)	23,9 m (78.1 ft)	45,7 m (149.9 ft)
3	15 636 kg (34,471 lb)	5001 kg (11,025 lb)	25,7 m (84.3 ft)	71,4 m (234.2 ft)
4	14 554 kg (32,087 lb)	4655 kg (10,262 lb)	27,6 m (90.6 ft)	99,0 m (324.8 ft)
5	13 613 kg (30,012 lb)	4354 kg (9598 lb)	29,5 m (96.9 ft)	128,5 m (421.7 ft)
6	12 786 kg (28,188 lb)	4089 kg (9015 lb)	31,4 m (103.1 ft)	160,0 m (524.8 ft)
7	12 053 kg (26,573 lb)	3855 kg (8499 lb)	33,3 m (109.4 ft)	193,3 m (634.2 ft)

*Max lifting capacity: Verotop & 35x7 class rope = 12 500 kg (27,600 lb)

Working area diagram



THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

Symbols glossary

	Axles		Crawler		Gear		Radius
	Boom		Counterweight		Grade		Rotation
	Boom elevation		Drive		Heavy duty jib		Speed
	Boom extension		Electrical system		Hoist		Steering
	Boom length		Engine		Hookblock		Suspension
	Boom nose		Extension		Hydraulic system		Swing
	Brakes		Frame		Lights		Tires
	Cab		Fuel tank capacity		Oil		Transmission
	Crawler		Outriggers		Outrigger controls		

Notes

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