



model 16000

features

- 400 t (440 USt)
- 2 599 mton-m (18,800 ft-kips)
Maximum Load Moment
- 96 m (315') Heavy-Lift Boom
- 132 m (432') Luffing Jib on
Heavy-Lift Boom
- 372 kW (500 HP) engine
- EPIC controls with CANbus
technology
- 212 m/m (697 fpm) line speed
standard
- 155 kN (35,000 lb.) line pull
standard
- Designed to meet US weight and
European width requirements
- Manitowoc Crane CARE
comprehensive support

product guide

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Diagram and Load Charts

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specifications

Upperworks



Engine

Cummins Model QSX15 – C500 diesel, 6 cylinder, 372 kW (500 BHP) at 1800 governed RPM.

Includes pump drive disconnect for easier starting, engine block heater (120V), ether starting aid, high silencing muffler, hydraulic oil cooler, radiator and fan.

Multiple hydraulic pump drive transmission provides power for all machine functions.

Two 12 volt maintenance-free batteries, 1155 CCA at -18°C (0° F), 24 volt system and 100 amp alternator.

One diesel fuel tank, 946 L. (250 gal.), with level indicator in operator's cab.

Optional: Cold-weather package with heater for fluids, and computer display.



Controls

Modulating electronic-over-hydraulic controls provide infinite speed response directly proportional to control lever movement. Controls include Manitowoc's exclusive **EPIC®** Electronically Processed Independent Control system with **CAN-BUS** technology providing microprocessor driven control logic, pump control, on-board diagnostics, and service information.

Block-up limit control is standard for hoist and whip lines.

Integrated Rated Capacity Limiter system (RCL) is standard for main boom and upper boom point. "Function cut-out" or "warning only" operation is selected via a keyed switch on the RCL console.

Travel and swing alarms are standard.

► Optional: Anemometer (wind speed indicator). Booms and jibs are prewired for anemometer.



Hydraulic System

Six high-pressure piston pumps, driven by a multi-pump transmission, provide independent closed-loop hydraulic power for the hoisting drums, boom hoist,

swing, left crawler and right crawler.

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Hydraulic reservoir capacity is 719 L. (190 gal.) and is equipped with breather, clean out access, and internal diffuser.

Each function is equipped with relief valves to protect the hydraulic circuit from overload or shock.

System includes oil cooler and replaceable, full flow filter. All oil is filtered before entering the hydraulic pumps.

Hydraulic system also includes pump transmission disconnect and hydraulic oil cooler.

Drums

Basic machine is equipped with 108,6 cm (42-3/4") wide and 64,1 cm (25-1/4") diameter main hoist drum, mounted in the boom butt, and 82,2 cm (32-3/8") wide and 64,1 cm (25-1/4") diameter whip drum, mounted in the rotating bed. Each end of the main drum is driven by a variable-displacement hydraulic motor through a planetary reduction. The whip drum is driven by an independent variable-displacement hydraulic motor thru a planetary reduction mounted on a shaft with anti-friction bearings. Drums are grooved for 28 mm rope.

Powered hoisting/lowering operation is standard with automatic (spring applied, hydraulically released) multi-disc brakes, and drum rotation indicators.

- Optional: High speed whip drum, each end of the whip drum is driven by a variable-displacement hydraulic motor through a planetary reduction.
- Optional: Auxiliary (third) hydraulic powered drum rated 147 kN (33,000 lb) line pull mounted in boom butt. Includes third drum control system.
- Optional: Auxiliary drum preparation includes electric wiring, controls, hydraulic pump and plumbing.

Swing System

Bearing adapter-mounted independent swing is powered by a fixed-displacement hydraulic motor coupled to an internal brake and planetary reduction. Includes Manitowoc Patented gear-segment type swing lock.

Swing system maximum speed: 2.2 rpm.

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Moving Mast Hoist System

Independent moving mast hoist with two grooved drums, each 32,5 cm (12-13/16") wide and 64,1 cm (25-1/4") diameter drum grooved for 1-1/8" diameter wire rope. Includes 498 m (1,620') of 1-1/8" wire rope for 26-part line reeving.

Drum is powered by 2 variable-displacement hydraulic motors coupled to integral brake and planetary reduction gearboxes. Ratcheting pawl and rotation indicator are standard.



Moving Mast Hoist Speed

Raise 96 m (315') full main boom from 0° - 82° in 3 minutes, 48 seconds.



Boom Support System

Moving Mast

Moving Mast is 9,75 m (32') long and connects the boom hoist reeving to the steel boom suspension strap rigging. When used with the optional self-erect package, the mast is used for crane assembly and disassembly. It is capable of lifting and positioning the crawler assemblies, stacking the counterweights, and assembling the boom and jib.

Spring cushioned boom stop and automatic boom stop are standard.



Counterweight

Counterweight tray and counterweights for the upperworks attaches to the rotating bed with power actuated pins.

QTY.	ITEM	UNIT WEIGHT		TOTAL WEIGHT	
		kg	lb	kg	lb
10	Upperworks Upper Side Box	8 164	18,000	81 640	180,000
1	Counterweight Tray	19 958	44,000	19 958	44,000
		Series 1 Total		101 598	224,000
4	Upperworks Upper Side Box	8 164	18,000	32 656	72,000
2	Carbody Center Box	13 608	30,000	27 216	60,000
		Series 2 Total		161 470	356,000
2	Upperworks Upper Side Box	8 164	18,000	16 328	36,000
4	Carbody Side Box	6 804	15,000	27 216	60,000
		Series 3 Total		205 014	452,000

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Vision Operator's Cab

The Vision CabTM is a fully enclosed and insulated steel module mounted to the left front corner of rotating bed. Module is equipped with power tilt, sliding door, large safety glass window and roof windshield wipers, dome light, sun visor and shade, fire extinguisher, air conditioning, swing and travel alarms, and radio/CD player are standard equipment. Operator's station swings over front of rotating bed for transportation.

■ Optional: Nylon protective window covers.

Lowerworks



Carbody

Connects rotating bed to crawler assemblies. High strength fabricated steel assembly with FACT connection system for fast installation and removal of crawler assemblies.



Crawlers

Crawler assemblies are 10,4 m (34' 2") long with 1,5 m (60") wide cast steel crawler pads and automatically lubricated intermediate rollers. Each crawler is identical and can be mounted on either side of the carbody. Each crawler is powered independently by a variable displacement hydraulic motor and includes two hydraulically powered pin actuators for fast installation and removal from carbody. Carbody mounted drive motors are connected to crawler final reduction via drive shaft with guard. Crawlers provide ample tractive effort for counter rotation with full rated load.

Maximum ground speed of 1,24 kph (0.77 mph).

Attachments



No. 58 Heavy-Lift Boom

The liftcrane is equipped with 30 m (98') No. 58 basic boom consisting of 8 m (26' 3") butt, 12 m (39' 5") insert with luffing hoist sheaves, 5 m (16' 5") transition insert, and 5 m (16' 5") top with thirteen 76,2 cm (30") diameter tapered roller bearing sheaves. Includes rope guides, boom hoist wire rope, boom angle indicator and 771 kg (1,700 lb) hook and weight ball. The boom connectors utilize Manitowoc's patented exclusive FACT™ connection boom



specifications

connector. Spring cushioned boom stop. Automatic boom stop.

Powered boom hinge system including cylinder, piping, operating controls, and locking device standard.

Luffing jib preparation included as standard.

- Optional: 6 m (19' 8") and 12 m (39' 5") No. 58 boom inserts with steel boom suspension straps and FACT connection system.
Utilize main boom inserts in combination with No. 58 basic main boom for total length up to 96 m (315').
- Optional: No. 58 detachable upper boom point with one 76,2 cm (30") diameter tapered roller bearing steel sheave grooved for 28 mm rope with rope guard for liftcrane.
- Optional: Heavy-duty 97,6 t (107.6 USt) detachable upper boom point with three 76,2 cm (30") diameter tapered roller bearing steel sheave grooved for 28 mm rope with rope guard for liftcrane.



No. 59 Luffing Jib

- Optional: 24 m (78') basic No. 59 luffing jib with LMI hardware for "lay out" assembly including PIN connected 7 m (23') butt, (1) 6 m (19' 8") inserts and 11 m (36') top, basic pendants, fixed strut, jib strut, backstay pendants, boom point guide wheel, luffing jib hoist with ratchet and pawl; quick disconnect for jib hoist piping, and 1" luffing jib hoist line (luffing jib preparation is standard).
- Optional: 6 m (19' 8") and 12 m (39' 5") No. 59 luffing jib inserts with steel boom suspension straps and FACT connection system.

Utilize luffing jib inserts in combination with the No. 59 basic luffing jib for total lengths up to 84 m (275').

Lift - Enhancing Attachment

- Optional: Intergral MAX-ER attachment, utilizing base crane boom to increase capacities at radius.

Optional Equipment

- Optional: Blocks and Hooks, each with roller-bearing sheaves for 28 mm wire rope, a roller-bearing swivel hook, a hook latch, and a swivel lock.
- Optional: 18,1 t (20 USt) swivel hook and weight ball.

► Optional: 41 t (45 USt) hook block with single roller bearing sheave and roller bearing swivel hook with hook latch and swivel lock (assembly block).

► Optional: 100 t (110 USt) hook block with three roller bearing sheaves and roller bearing swivel hook with hook latch and swivel lock.

► Optional: 180 t (200 USt) hook block with five roller bearing sheaves and roller bearing swivel hook with hook latch and swivel lock.

► Optional: 226 t (250 USt) hook block with seven roller bearing sheaves and roller bearing swivel hook with hook latch and swivel lock.

► Optional: 317 t (350 USt) hook block with seven roller bearing sheaves and roller bearing swivel hook with hook latch and swivel lock.

► Optional: 408 t (450 USt) hook block with thirteen roller bearing sheaves and roller bearing swivel hook with hook latch and swivel lock.

► Optional: Self-erect system includes, jacking cylinders with pads, 41 t (45 USt) assembly block and crawler handling chains.

► Optional: Hydraulic Test Kit: required to properly analyze the performance of the EPIC control system.

► Optional: Service Interval Kits for the regularly scheduled maintenance of general crane operations.

► Optional: Lighting Packages: consult dealer for available options.

► Optional: Special Paint [color(s) other than Manitowoc standard red and black].

► Optional: Custom vinyl decal(s) of customer name and/or logo from artwork supplied by customer.

► Optional: Export Packaging: basic crane, boom and jib sections.

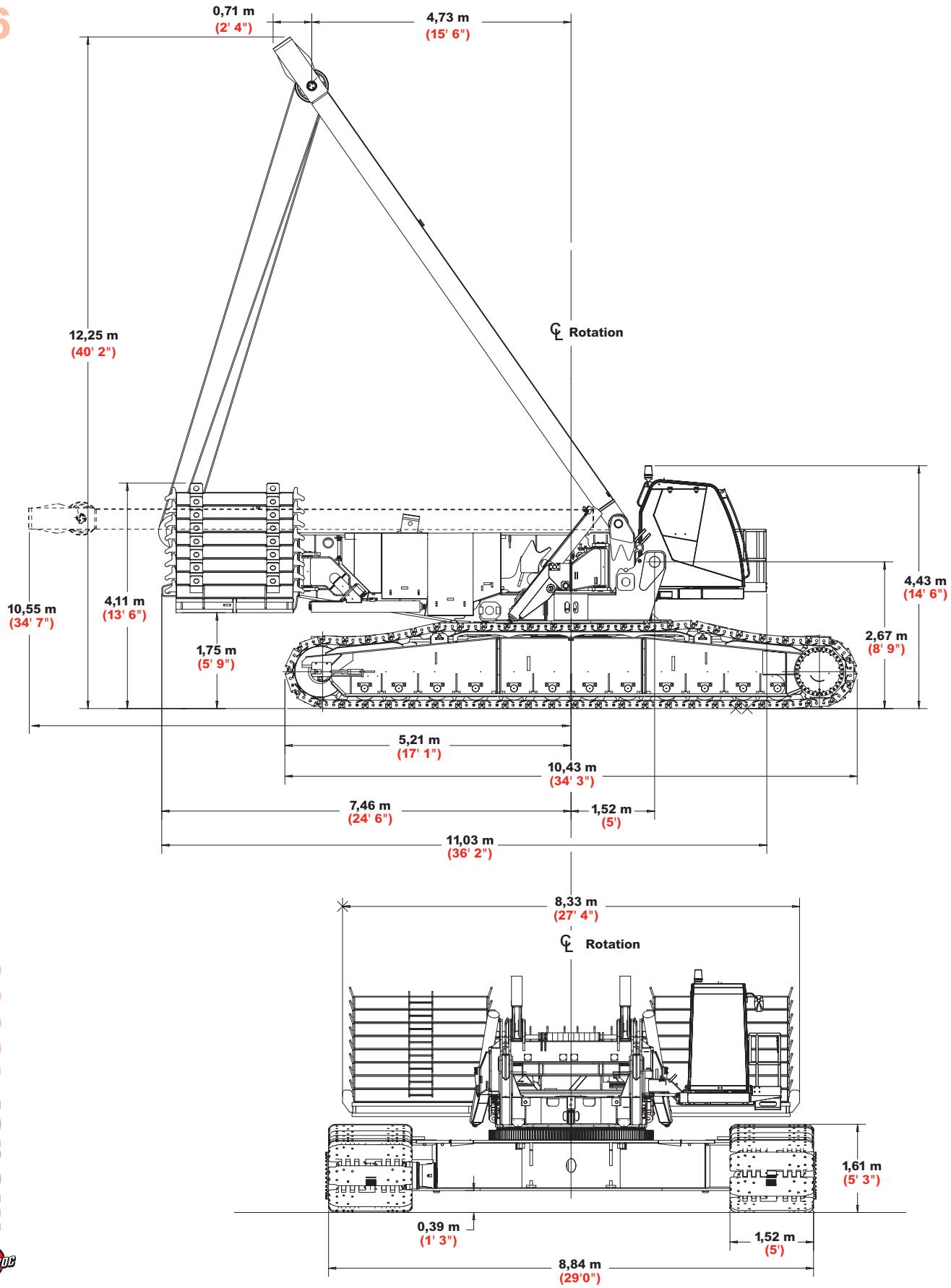
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outline dimensions

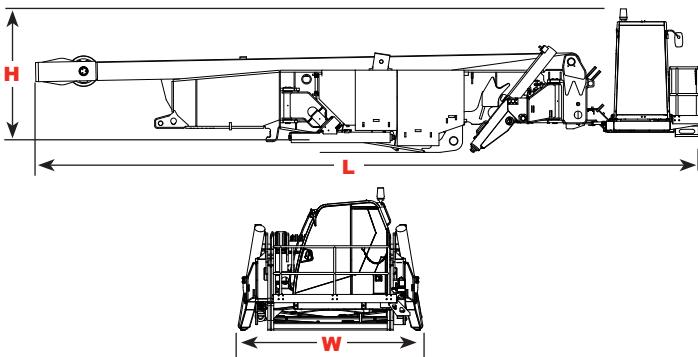
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model 1600



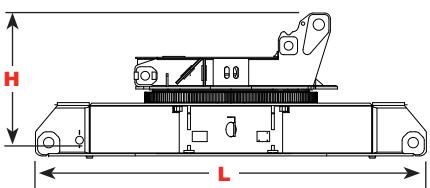
outline dimensions



Rotaing Bed Assembly

Length	13,25 m	43' 6"
Width	3,20 m	10' 6"
Height	2,87 m	9' 5"
Weight	39 612 kg	87,330 lb

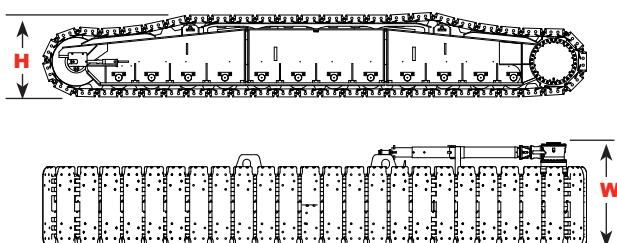
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Carbody Assembly

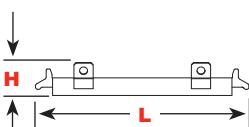
Length	6,78 m	22' 3"
Width	3,00 m	9' 10"
Height	2,52 m	8' 3"
Weight	28 161 kg	62,085 lb

Note: Weight includes rotating bed adapter frame with bearing turntable, four swing drives, and carbody.



Crawlers

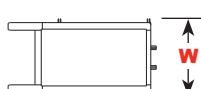
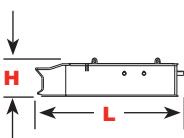
Length	10,43 m	34' 3"
Width	2,03 m	6' 8"
Height	1,61 m	5' 3"
Weight	32 665 kg	72,015 lb



Upper Counterweight

Series 1	x 10
Series 2	x 14
Series 3	x 16

Length	2,54 m	8' 4"
Width	2,61 m	8' 7"
Height	0,41 m	1' 4"
Weight	8 164 kg	18,000 lb



Carbody Center Counterweight

Series 2	x 2
Series 3	x 2

Length	3,45 m	11' 4"
Width	1,80 m	5' 11"
Height	0,89 m	2' 11"
Weight	13 607 kg	30,000 lb

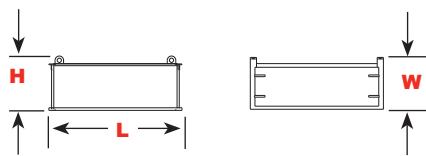
Option

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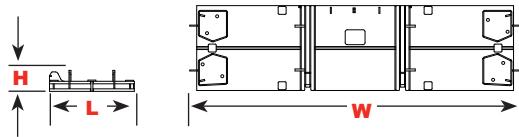
outline dimensions

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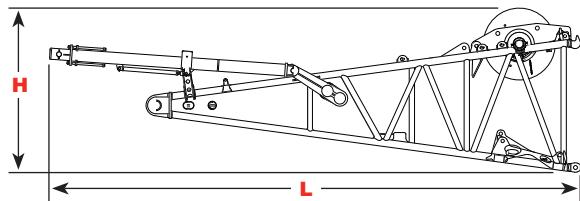
**Carbody Side Counterweight
Series 3 x 4**

Length	2,18 mm	7' 2"
Width	0,86 m	2' 10"
Height	0,89 m	2' 11"
Weight	6 803 kg	15,000 lb



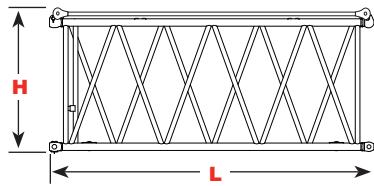
Upper Counterweight Tray

Length	2,14 m	7' 0"
Width	8,33 m	27' 4"
Height	0,53 m	1' 9"
Weight	19 958 kg	44,000 lb



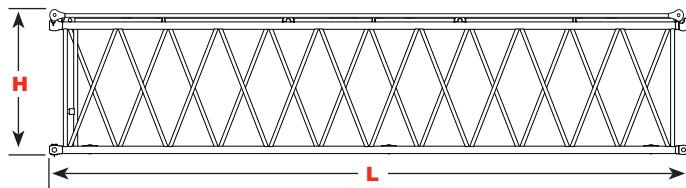
**No. 58 Boom Butt, Drum 1,
Luffing Drum, Wire Rope x 1**

Length	10,13 m	33' 3"
Width	2,96 m	9' 9"
Height	3,10 m	10' 2"
*Weight	21 609 kg	47,640 lb



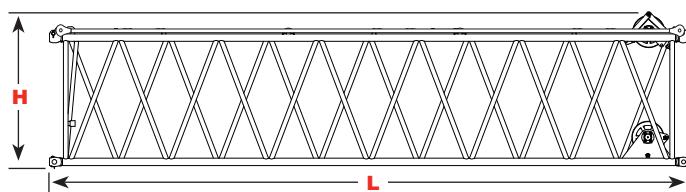
**No. 58 Boom Insert 6,0m (19' 8")
& Straps x 1**

Length	6,19 m	20' 3"
Width	2,96 m	9' 9"
Height	2,67 m	8' 9"
Weight	2 562 kg	5,650 lb



**No. 58 Boom Insert 12,0m (39' 5")
& Straps x 1**

Length	12,19 m	40' 0"
Width	2,96 m	9' 9"
Height	2,65 m	8' 8"
Weight	4 236 kg	9,340 lb



**No. 58 Boom Insert Heavy
12,0 (39' 5") with Sheave x 1**

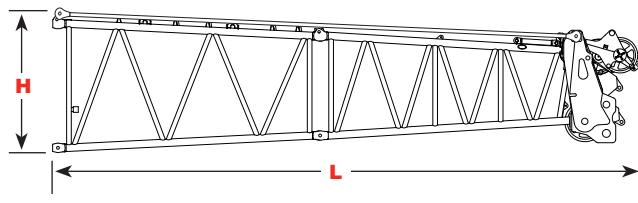
Length	12,19 m	40' 0"
Width	2,96 m	9' 9"
Height	2,67 m	8' 9"
Weight	5 595 kg	12,335 lb

► Option

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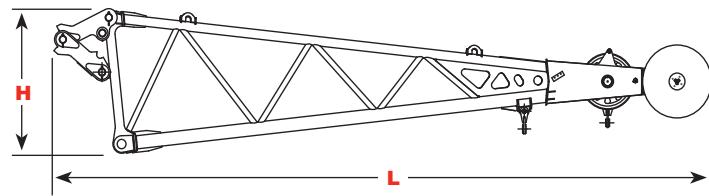
outline dimensions



**No. 58 Boom Top 5,0 m (16' 5")
with 5,0 (16' 5") Transitional
Insert & Straps**

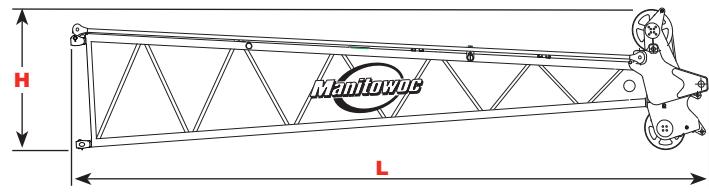
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Length	11,41 m	37' 5"
Width	2,96 m	9' 9"
Height	2,67 m	8' 9"
Weight	11 373 kg	25,075 lb



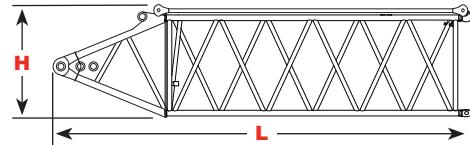
**No. 58 Extended Upper Boom
Point 7,0 m (23' 0")**

Length	9,52 m	31' 3"
Width	2,60 m	8' 6"
Height	1,99 m	6' 6"
Weight	3 674 kg	8,100 lb



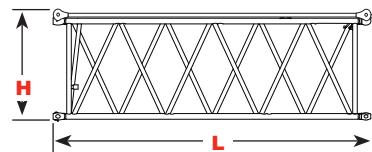
**No. 59 Luffing Jib Top
11,0 (36' 1")**

Length	11,95 m	39' 2"
Width	2,69 m	8' 10"
Height	2,54 m	8' 4"
Weight	6 015 kg	13,260 lb



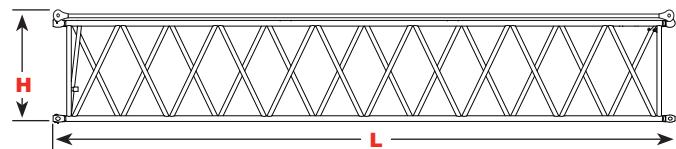
**No. 59 Luffing Jib Butt
7,0 (23' 0")**

Length	7,15 m	23' 6"
Width	2,69 m	8' 10"
Height	2,17 m	7' 1"
Weight	2 722 kg	6,000 lb



**No. 59 Jib Insert
6,0 (19' 8")**

Length	6,19 m	20' 3"
Width	2,69 m	8' 10"
Height	2,17 m	7' 1"
Weight	1 685 kg	3,715 lb



**No. 59 Jib Insert
12,0 (39' 5")**

Length	12,19 m	40' 0"
Width	2,69 m	9' 9"
Height	2,17 m	7' 1"
Weight	2 928 kg	6,455 lb

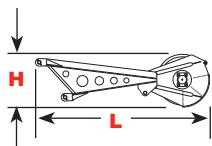
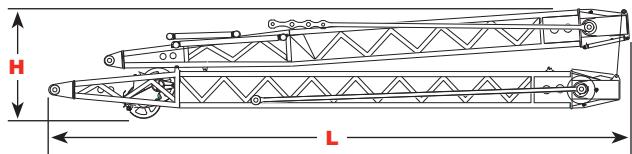
Option

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outline dimensions

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► **No. 59 Jib Strut with point sheaves
and straps 11,5 m (37' 9") x 1**

Length	12,46 m	40' 11"
Width	2,69 m	8' 10"
Height	2,27 m	7' 5"
Weight	9 287 kg	20,475 lb

► **No. 59 Luffing Jib Upper Point
Roller Assembly 11,5 m (37' 9")x 1**

Length	2,64 m	8' 8"
Width	0,41 m	1' 4"
Height	0,81 m	2' 8"
Weight	460 kg	1,014 lb

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► **Option**

transport data

Model 16000 Trailer Load Out Summary

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Weight Each Item	kg (lb)	Quantity on Trailer Load #																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Upperworks Module	39 612 (87,330)	1																		
Carbody and Adapter	28 161 (62,085)		1																	
Crawler Assembly	32 665 (72,015)			1	1															
Counterweight Tray	19 958 (44,000)																1			
Upper Counterweight (Box)	8 164 (18,000)					1		1	1	2	1	2	1	1	2	2	2			
Carbody Center Counterweight	13 607 (30,000)																	1	1	
Carbody Side Counterweight	6 803 (15,000)							1	1									1	1	
8,0 m (26'2") No. 58 Boom Butt, Drum 1 w/ Wire Rope	21 609 (47,640)						1													
5,0 m (16'5") No. 58 Boom Top & Straps	9 169 (20,215)							1												
5,0 m (16'5") No. 58 Boom Trans. Insert & Straps	2 204 (4,860)								1											
6,0 m (19'8") No. 58 Boom Insert & Straps	2 562 (5,650)																	1		
12,0 m (39'5") No. 58 Boom with WRG Boom Insert & Straps	5 595 (12,335)									1										
12,0 m (39'5") No. 58 Boom Insert & Straps	4 236 (9,340)										1	1	1	1	1	1				
No. 59 Upper Boom Point	460 (1,014)																1			
No. 58 Extended Upper Boom Point 7 m (23' 0")	3 674 (8,100)																1			
180 t (200 USt) 5 Sheave Load Block	4 309 (9,500)										1									
100 t (110 USt) 3 Sheave Load Block	3 402 (7,500)																1			
Reel Cable - 701 m (2,300')	3 629 (8,000)																1			
Miscellaneous	907 (2,000)																	1		
		39 612 (87,330)	28 161 (62,085)	32 665 (72,015)	32 665 (72,015)	19 538 (43,075)	21 609 (47,640)	20 562 (45,335)	19 203 (42,340)	20 564 (45,340)	16 705 (36,840)	16 029 (35,340)	15 802 (34,840)	19 350 (42,664)	20 002 (44,100)	18 414 (40,600)	19 958 (44,000)	20 410 (45,000)	19 958 (45,000)	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

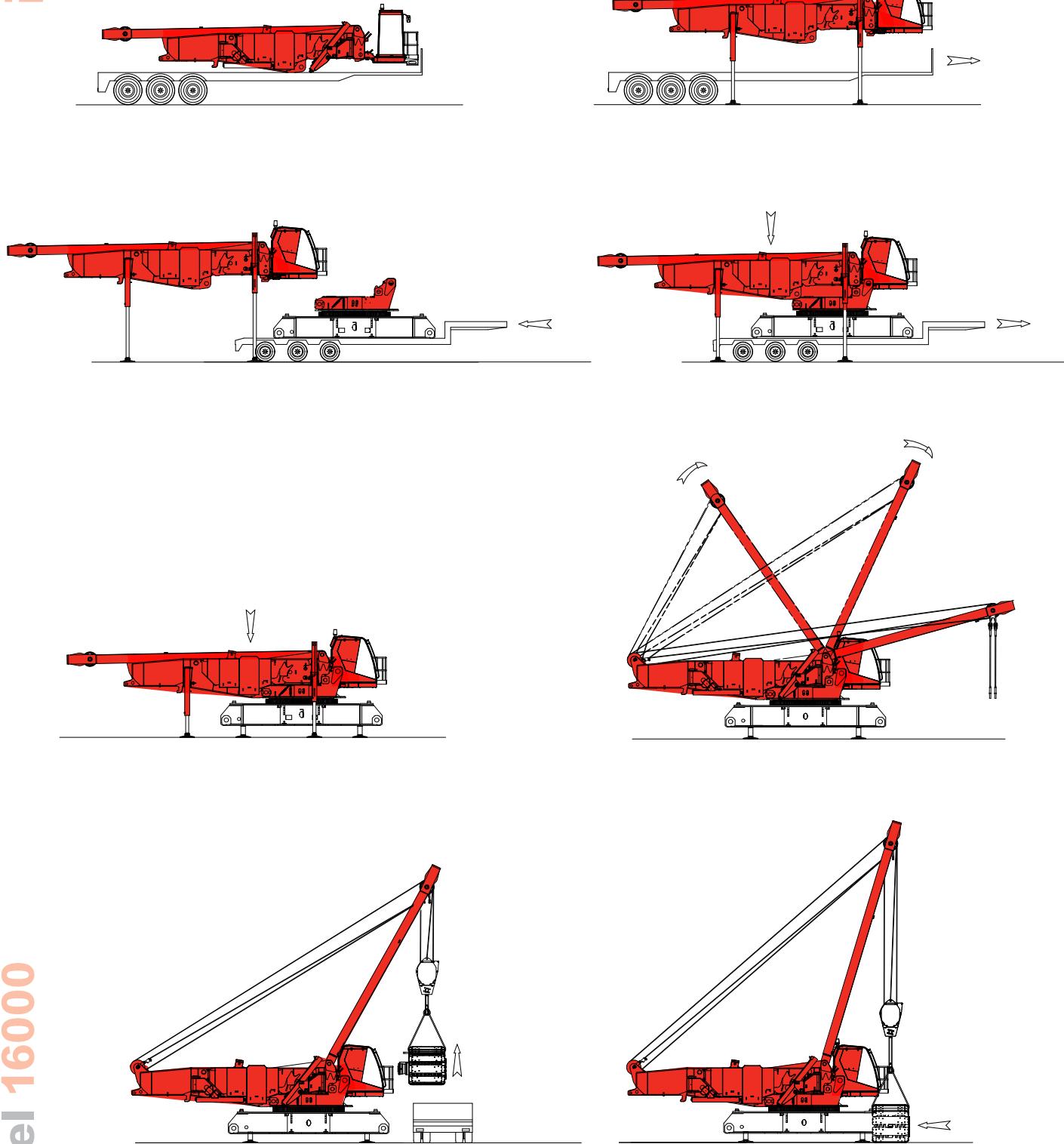
* Note: Does not include blocking, strapping ect.

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crane assembly - undecked

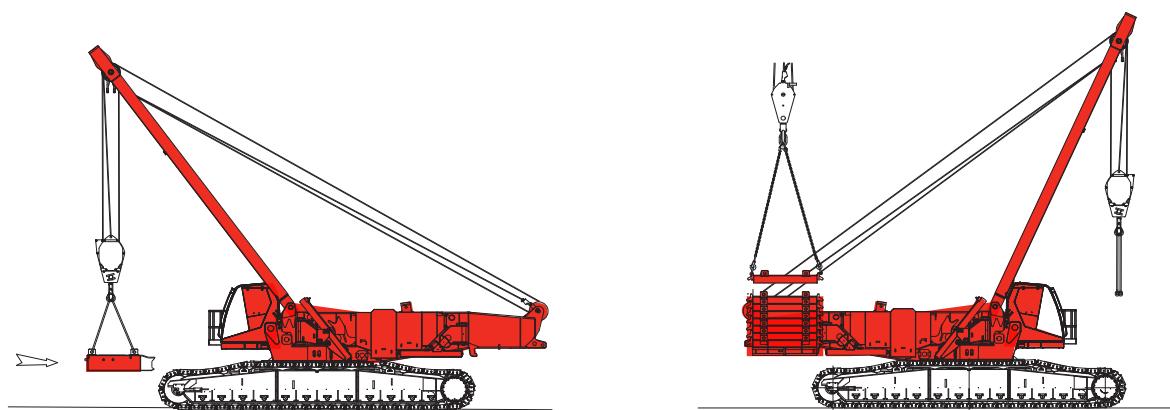
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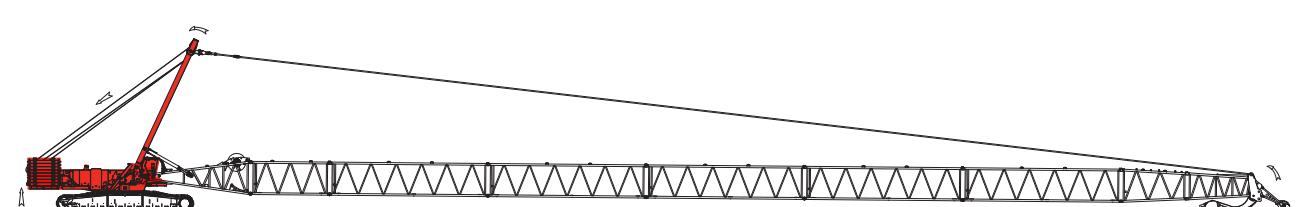
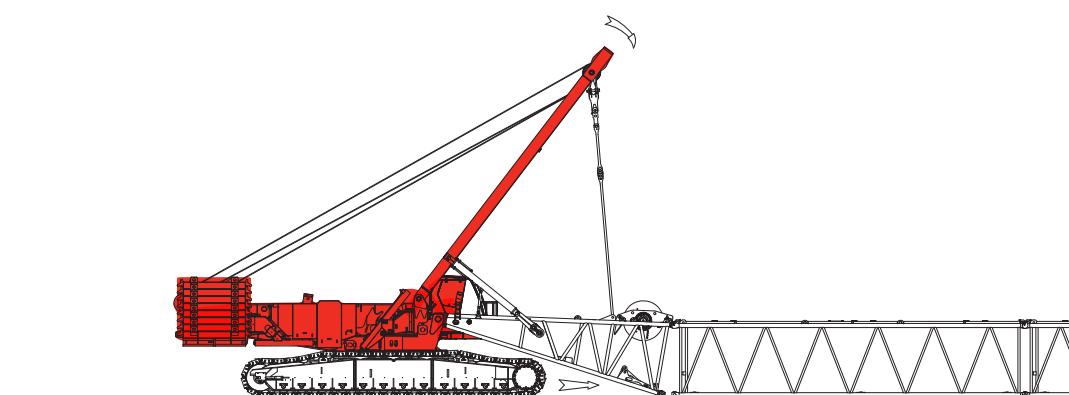
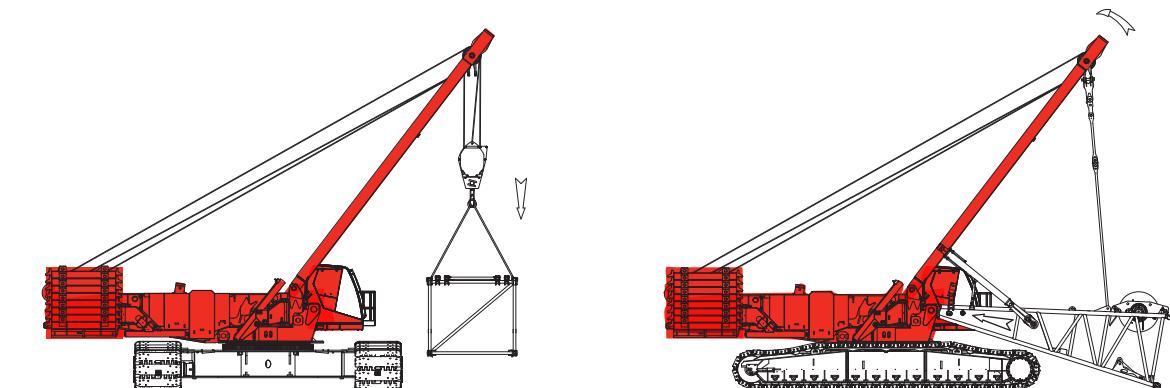
model 16000



crane assembly - undecked



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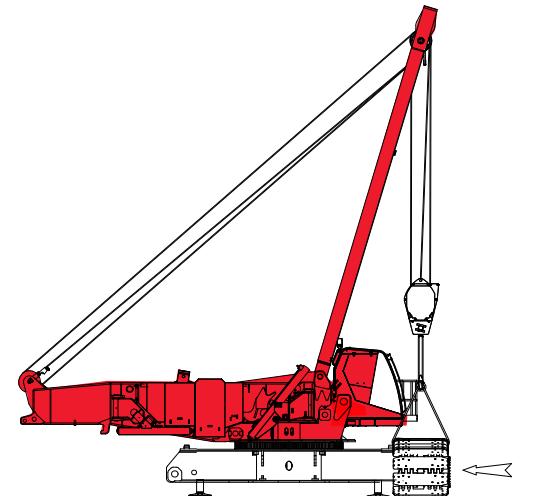
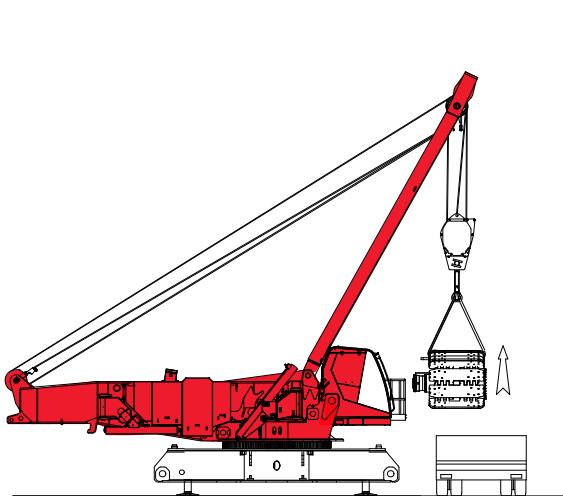
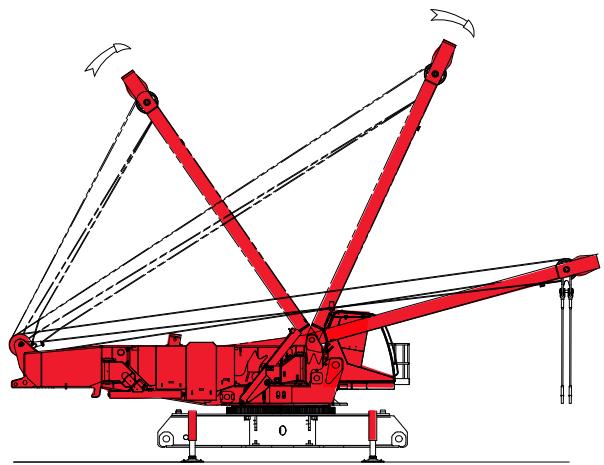
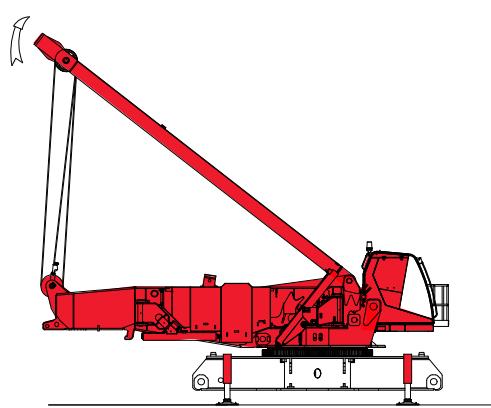
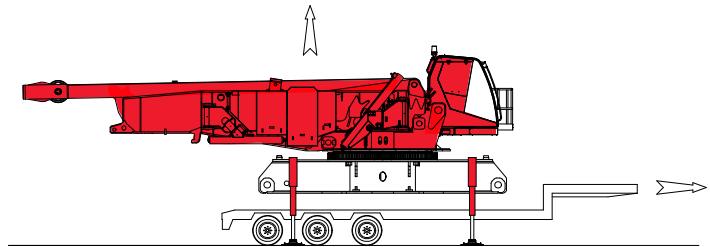
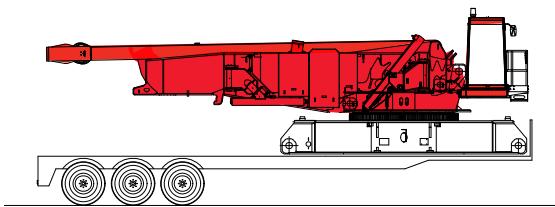


model 16000



crane assembly - decked

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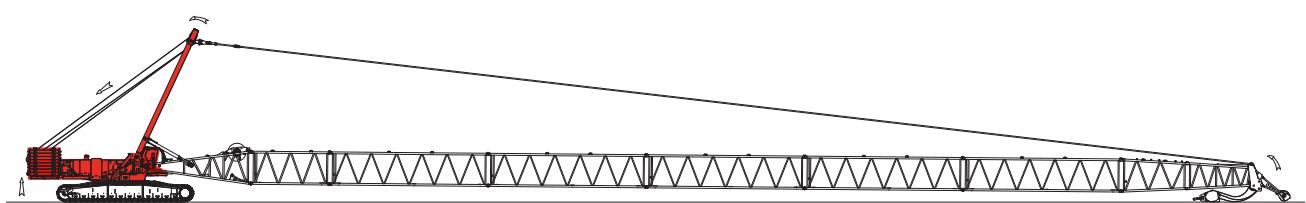
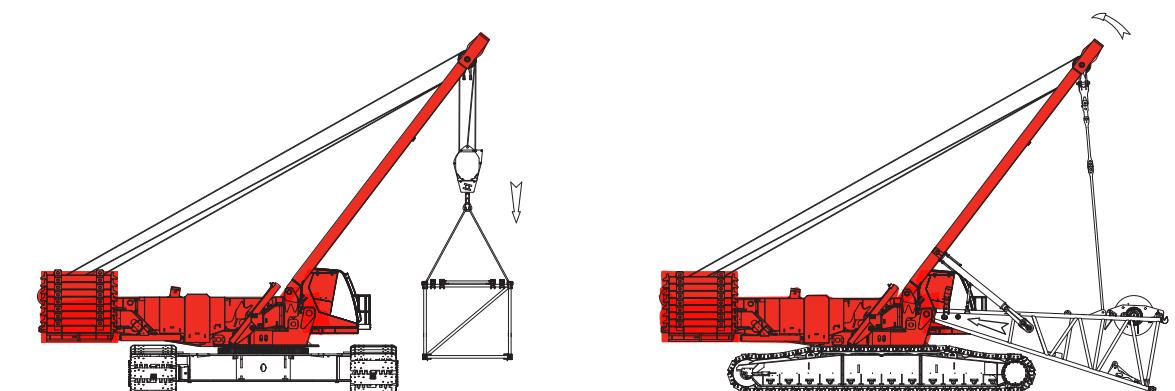
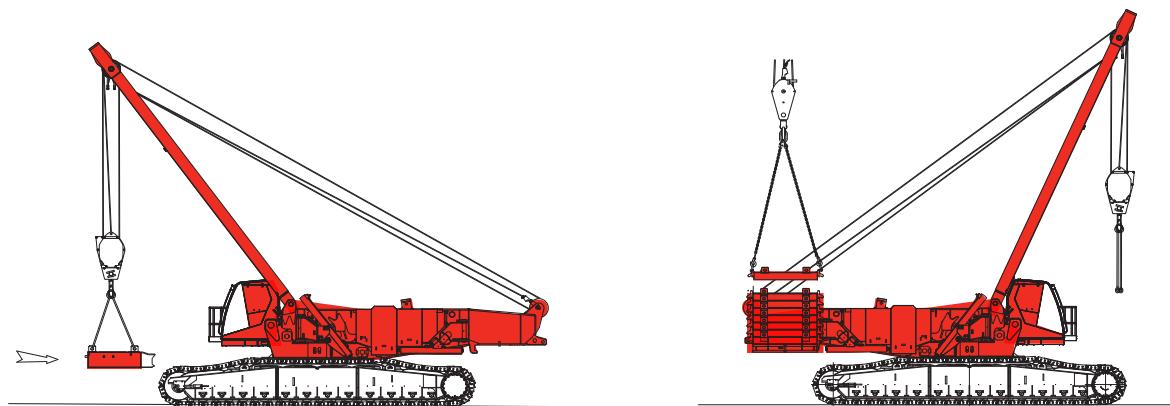


model 16000



crane assembly - decked

15



model 16000



boom combinations

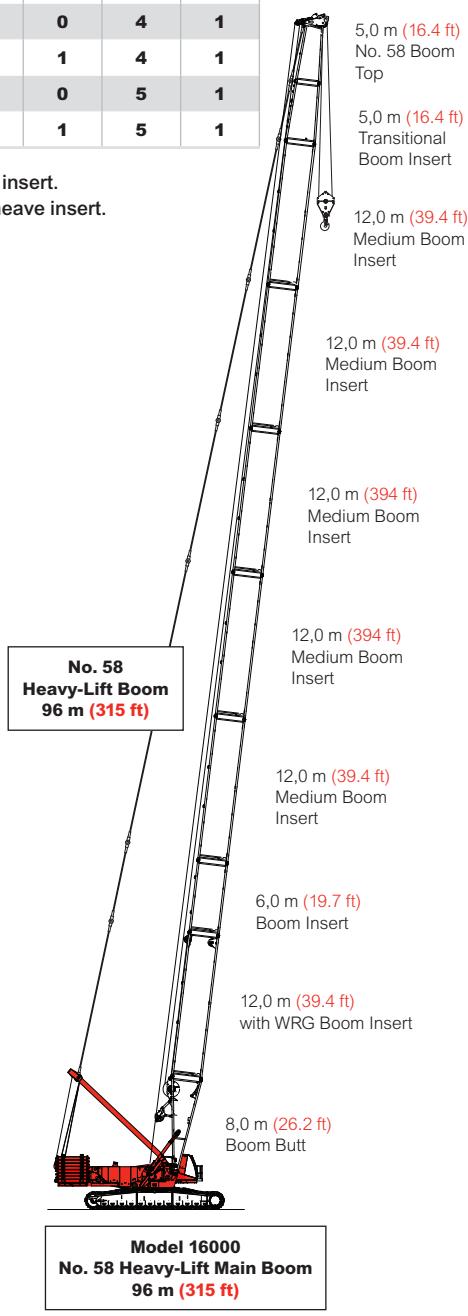
16

No. 58 Main Boom with Heavy-Lift Top Combinations

Boom Length m (ft)	Boom Inserts m (ft)			
	5,0* (6.4)	6,0 (9.7)	12,0 (39.4)	12,0** (39.4)
30 (98.4)	1	-	-	1
36 (118.1)	1	1	-	1
42 (137.8)	1	0	1	1
48 (157.5)	1	1	1	1
54 (177.2)	1	0	2	1
60 (196.9)	1	1	2	1
66 (216.5)	1	0	3	1
72 (236.2)	1	1	3	1
78 (255.9)	1	0	4	1
84 (275.6)	1	1	4	1
90 (295.3)	1	0	5	1
96 (315.0)	1	1	5	1

* transition boom insert.

** with auxiliary sheave insert.

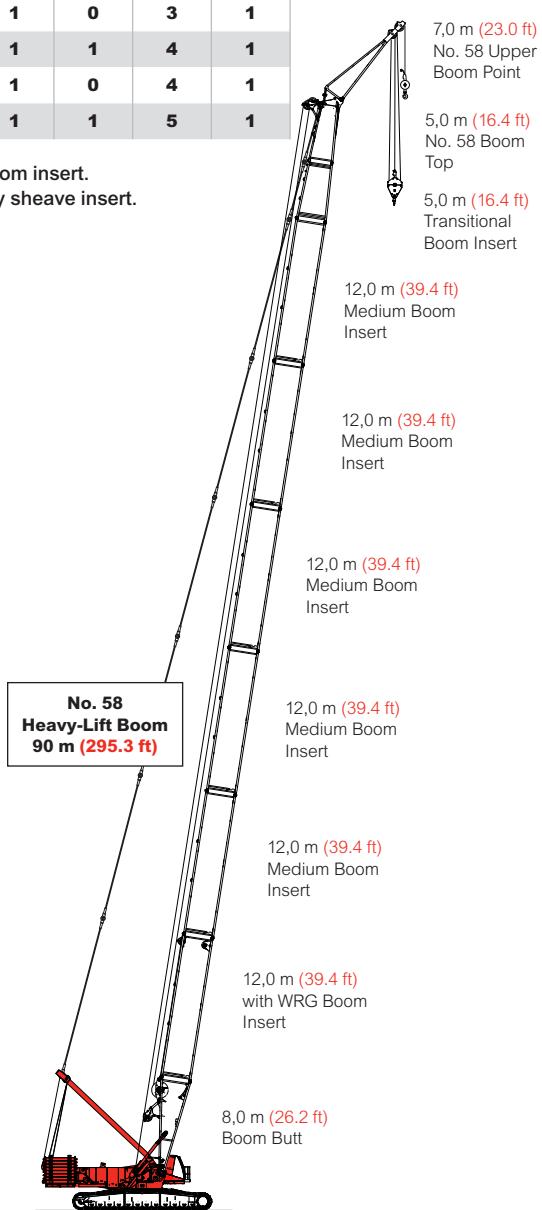


No. 58 Main Boom with 95 t (104.7 USt) Upper Boom Point Combinations

Boom Length m (ft)	Boom Inserts m (ft)			
	5,0* (6.4)	6,0 (9.7)	12,0 (39.4)	12,0** (39.4)
30 (98.4)	1	-	-	1
36 (118.1)	1	1	-	1
42 (137.8)	1	0	1	1
48 (157.5)	1	1	1	1
54 (177.2)	1	0	2	1
60 (196.9)	1	1	2	1
66 (216.5)	1	1	3	1
72 (236.2)	1	0	3	1
78 (255.9)	1	1	4	1
84 (275.6)	1	0	4	1
90 (295.3)	1	1	5	1

* transition boom insert.

** with auxiliary sheave insert.



model 16000

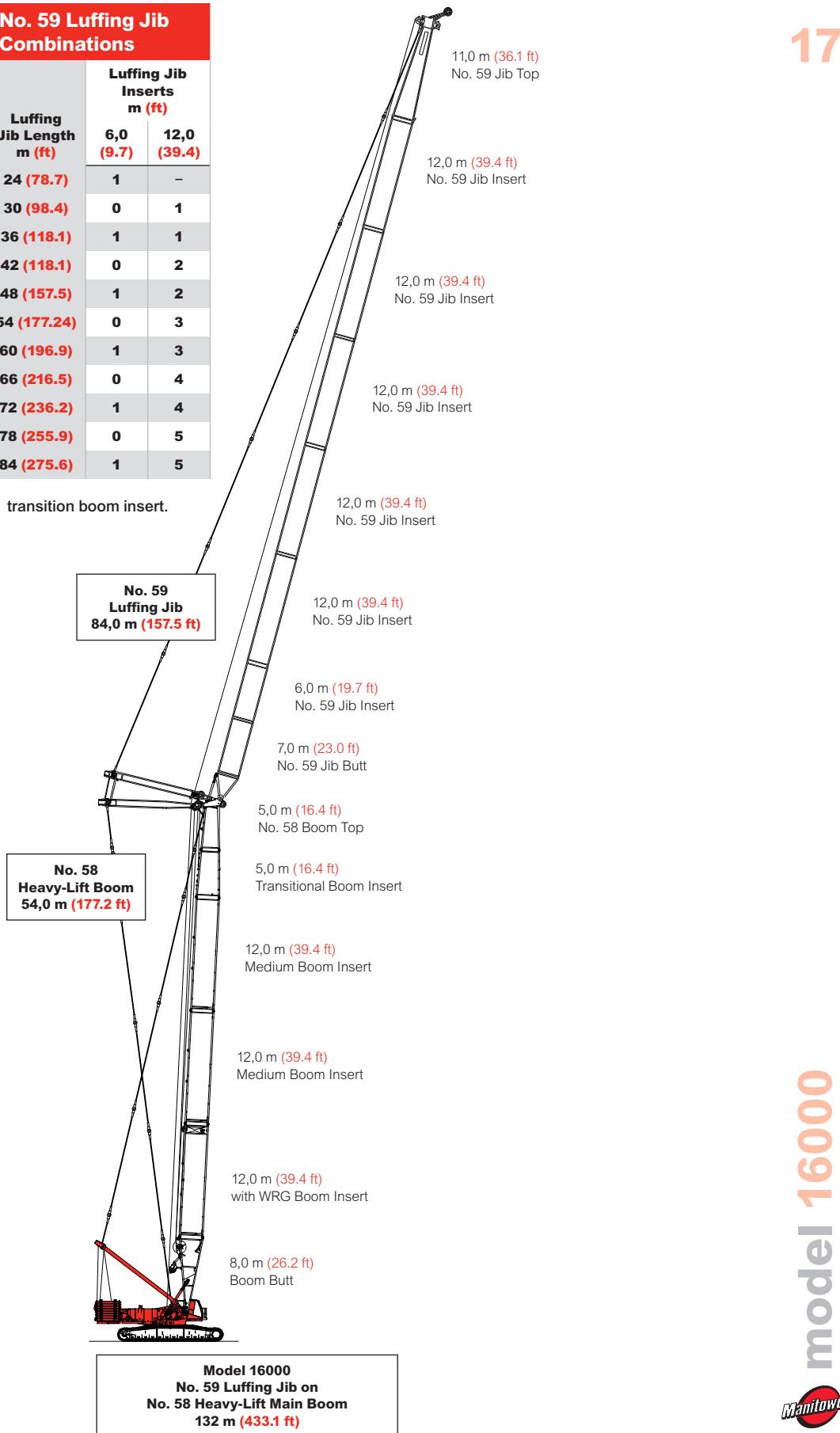


boom combinations

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No. 59 Luffing Jib Combinations		
Luffing Jib Length m (ft)	Luffing Jib Inserts m (ft)	
	6,0 (9.7)	12,0 (39.4)
24 (78.7)	1	-
30 (98.4)	0	1
36 (118.1)	1	1
42 (118.1)	0	2
48 (157.5)	1	2
54 (177.24)	0	3
60 (196.9)	1	3
66 (216.5)	0	4
72 (236.2)	1	4
78 (255.9)	0	5
84 (275.6)	1	5

* transition boom insert.



model 16000

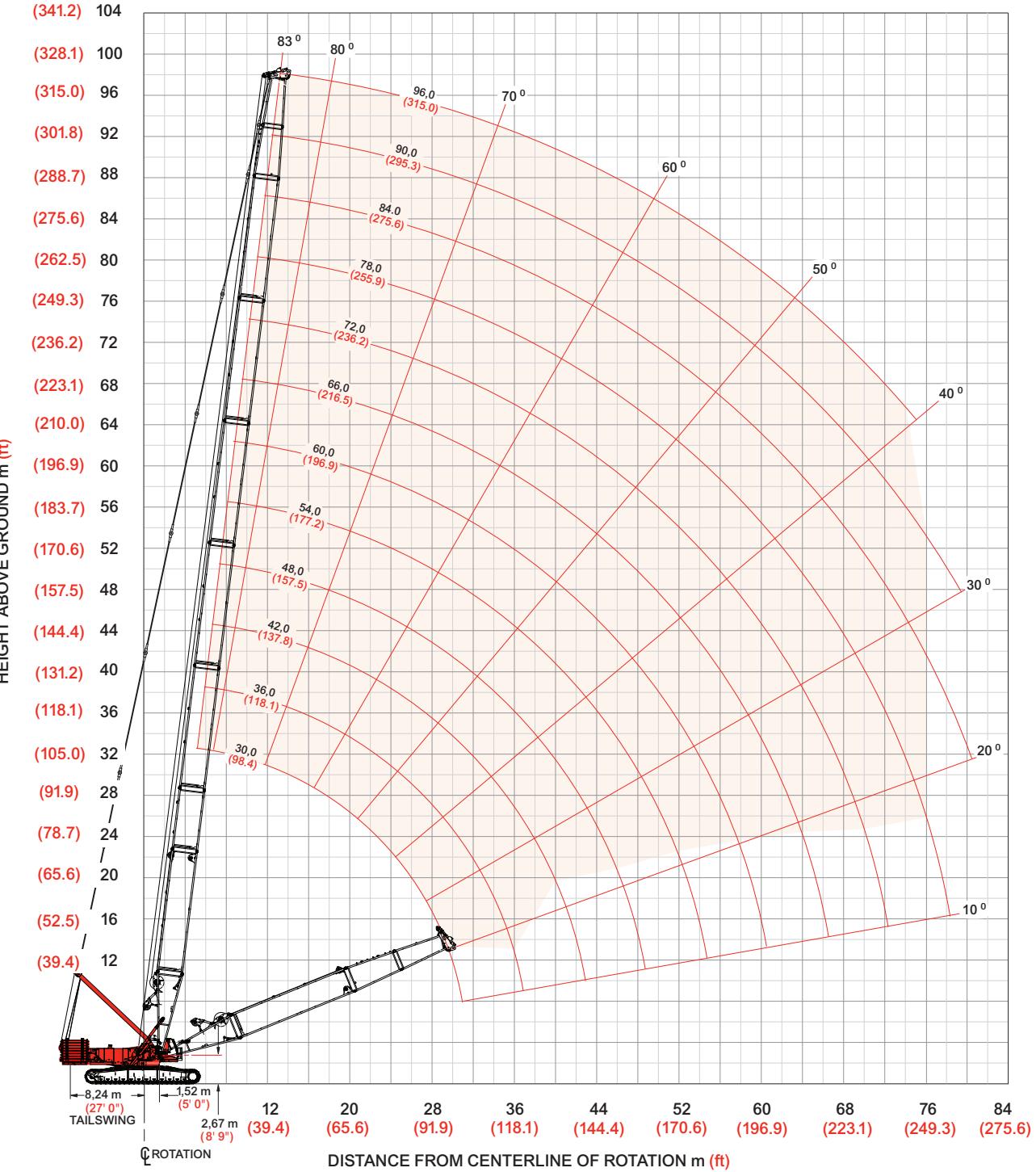


heavy-lift boom range diagrams

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Liftcrane Boom Capacities - Model 16000 Series 3
No. 58 Heavy -lift Main Boom with 9,75 m (32 ft) Live mast with 2 Lead Lines

model 16000



heavy-lift boom load charts

Liftcrane Boom Capacities - Model 16000 Series 3
No. 58 Heavy -lift Main Boom with 9,75 m (32 ft) Live mast with 2 Lead Lines

150 590 kg (332,000 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

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360° Rating

kg (lb) x 1 000

Boom m (ft)	30,0 (98.4)	36,0 (118.1)	42,0 (137.8)	48,0 (157.5)	54,0 (177.2)	60,0 (196.9)	66,0 (216.5)	72,0 (236.2)	78,0 (255.9)	84,0 (275.6)	90,0 (295.3)	96,0 (315.0)
Radius												
6,4 (21)	400,0 (881.9)											
8,0 (26)	323,8 (720.5)	323,3 (719.3)	283,4 (625.7)									
10,0 (32)	256,4 (581.7)	256,1 (581.0)	256,6 (580.8)	257,2 (579.6)	216,1 (483.0)							
12,0 (40)	194,8 (419.1)	195,1 (419.7)	195,5 (420.5)	195,4 (420.4)	193,2 (420.4)	181,9 (397.4)	159,6 (348.9)	147,0 (321.3)	— (302.9)			
14,0 (45)	153,7 (349.9)	153,9 (350.3)	154,2 (351.0)	154,1 (350.7)	154,0 (350.6)	154,5 (350.0)	145,6 (325.9)	134,0 (299.5)	129,7 (288.7)	113,7 (252.0)	95,5 (211.6)	
18,0 (60)	106,3 (229.3)	106,4 (229.5)	106,6 (229.9)	106,3 (229.0)	106,2 (229.0)	105,8 (228.1)	105,5 (227.5)	105,7 (226.4)	105,4 (225.6)	103,4 (224.5)	89,4 (196.3)	77,2 (169.5)
22,0 (70)	79,6 (183.6)	79,7 (183.8)	79,9 (184.2)	79,5 (183.4)	79,4 (183.1)	78,9 (182.0)	78,5 (181.3)	78,0 (180.2)	77,6 (179.2)	77,0 (178.0)	76,8 (176.9)	72,5 (161.6)
26,0 (85)	62,4 (138.5)	62,5 (138.7)	62,7 (139.1)	62,4 (138.3)	62,1 (137.8)	61,6 (136.7)	61,3 (135.9)	60,7 (134.6)	60,2 (133.5)	59,6 (132.2)	59,0 (131.0)	58,4 (129.6)
30,0 (100)	50,3 (108.2)	50,5 (108.9)	50,7 (109.3)	50,3 (108.5)	50,1 (108.0)	49,6 (106.8)	49,2 (106.0)	48,6 (104.6)	48,1 (103.5)	47,5 (102.1)	46,9 (100.9)	46,2 (99.4)
34,0 (110)		41,6 (93.9)	41,9 (94.5)	41,5 (93.7)	41,3 (93.2)	40,8 (92.0)	40,3 (91.1)	39,8 (89.8)	39,2 (88.6)	38,5 (87.1)	38,0 (85.9)	37,3 (84.4)
38,0 (120)			35,0 (81.5)	34,7 (82.3)	34,5 (81.6)	33,9 (81.1)	33,6 (79.9)	32,9 (79.0)	32,4 (77.6)	31,7 (76.4)	31,1 (74.9)	30,4 (73.7)
40,0 (130)				32,1 (72.1)	31,9 (71.5)	31,7 (71.1)	31,1 (69.8)	30,7 (69.0)	30,1 (67.5)	29,5 (66.3)	28,8 (64.8)	28,3 (63.6)
44,0 (140)					27,0 (62.9)	26,8 (62.5)	26,2 (61.3)	25,9 (60.5)	25,2 (59.0)	24,7 (57.8)	24,0 (56.3)	23,4 (55.0)
48,0 (155)						— (52.1)	22,8 (52.0)	22,3 (50.8)	21,9 (49.9)	21,2 (48.5)	20,7 (47.2)	20,0 (45.7)
52,0 (170)							19,4 (43.2)	18,9 (42.2)	18,5 (41.3)	17,9 (39.9)	17,4 (38.7)	16,6 (37.1)
56,0 (180)								16,1 (37.2)	15,7 (36.5)	15,1 (35.0)	14,5 (33.8)	13,8 (32.2)
60,0 (195)									— (30.7)	13,3 (30.1)	12,6 (28.7)	12,1 (27.5)
64,0 (210)										11,1 (24.6)	10,5 (23.3)	10,0 (22.1)
68,0 (220)											8,6 (20.0)	8,1 (18.9)
70,0 (230)											7,7 (17.1)	7,2 (16.0)
76,0 (255)												4,9 (8.1)
												— (7.0)
												3,7 (7.0)

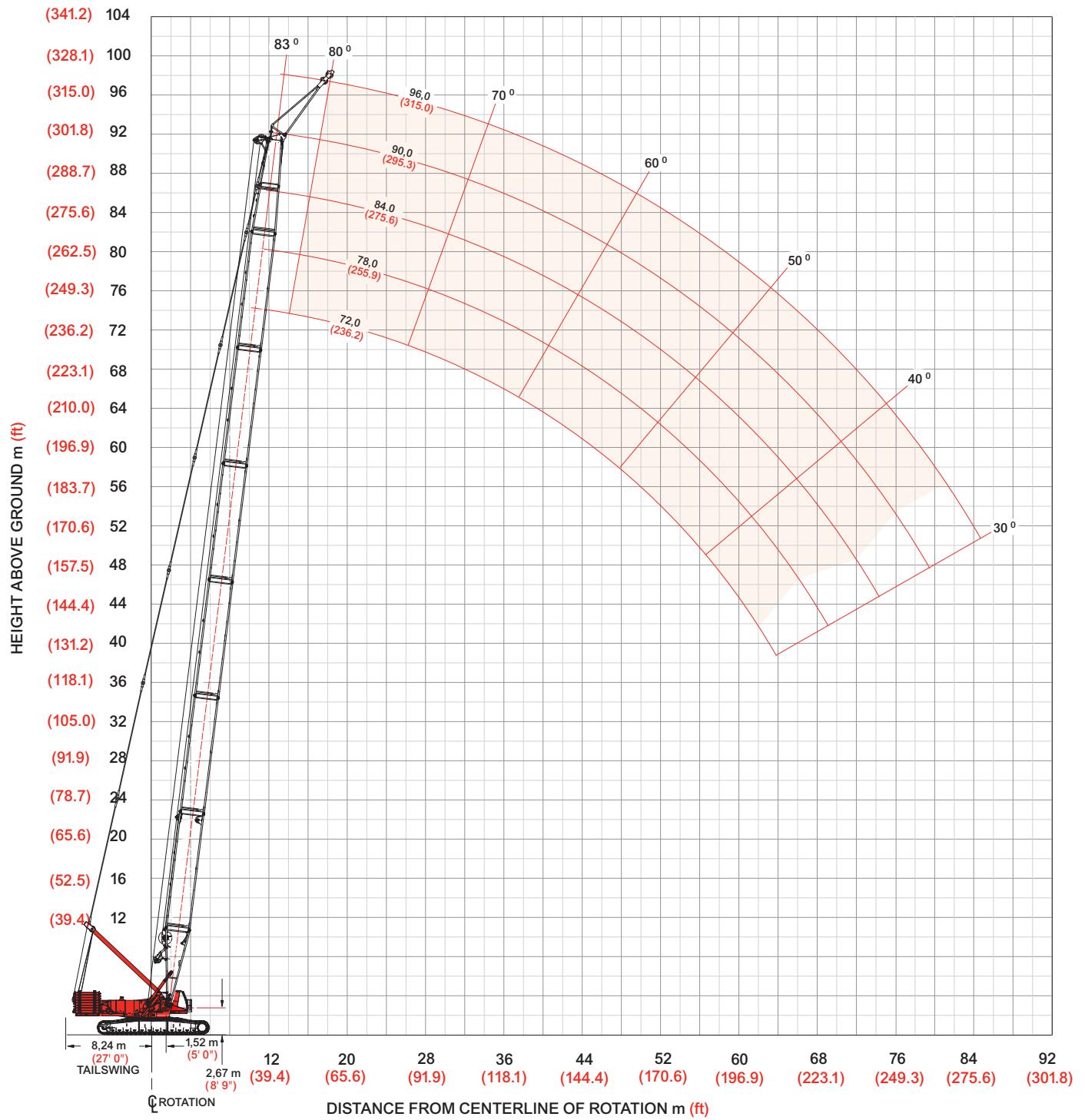
model 16000



upper boom point range diagram

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Liftcrane Boom Capacities - Model 16000 Series 3
No. 58 Heavy -lift Main Boom with Extended Upper Boom Point 7 m (23')



model 16000



upper boom point load charts

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**Liftcrane Boom Capacities - Model 16000
No. 58 Heavy Lift Main Boom with 7,0 m
(23') Extended Upper Boom Point**

150 590 kg (332,000 lb) Counterweight
54 430 kg (120,000 lb) Carbody Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	66,0 (216.5)	72,0 (236.2)	78,0 (255.9)	84,0 (275.6)	90,0 (295.3)
Radius					
15,2 (50)	97,6 (215.2)				
16,8 (55)	97,6 (215.2)	97,6 (215.2)	91,3 (201.5)	87,8 (193.7)	
18,0 (60)	97,6 (215.2)	97,6 (215.2)	89,6 (196.8)	86,5 (190.1)	
20,0 (65)	95,5 (212.3)	95,1 (211.5)	87,1 (192.6)	84,4 (186.6)	74,6 (165.0)
22,0 (75)	82,7 (172.6)	82,3 (171.7)	82,7 (170.8)	81,1 (169.8)	72,5 (158.2)
24,0 (80)	72,9 (157.2)	72,4 (156.1)	72,0 (155.2)	71,8 (154.2)	70,1 (153.2)
26,0 (90)	64,8 (132.2)	64,4 (131.1)	63,9 (130.1)	63,4 (128.9)	63,0 (127.9)
28,0 (95)	58,1 (122.0)	57,6 (120.8)	57,1 (119.8)	56,6 (118.6)	56,1 (117.5)
30,0 (100)	52,4 (112.9)	51,9 (111.7)	51,4 (110.7)	50,8 (109.4)	50,3 (108.3)
32,0 (105)	45,5 (104.9)	47,0 (103.6)	46,5 (102.5)	45,9 (101.3)	45,4 (100.2)
34,0 (115)	43,3 (91.0)	42,7 (89.7)	42,2 (88.6)	41,6 (87.3)	41,1 (86.2)
38,0 (125)	36,2 (79.6)	35,6 (78.3)	35,1 (77.2)	34,5 (75.8)	33,9 (74.6)
40,0 (135)	33,3 (70.1)	32,7 (68.7)	32,2 (67.6)	31,5 (66.2)	31,0 (65.0)
44,0 (145)	28,3 (62.0)	27,7 (60.6)	27,1 (59.4)	26,5 (58.0)	25,9 (56.8)
48,0 (160)	24,2 (51.8)	23,5 (50.4)	23,0 (49.2)	22,3 (47.7)	21,8 (46.5)
52,0 (175)	20,7 (43.5)	20,1 (42.1)	19,5 (40.8)	18,9 (39.4)	18,3 (38.2)
56,0 (185)	17,8 (38.7)	17,1 (37.3)	16,6 (36.1)	15,9 (34.6)	15,4 (33.4)
60,0 (200)	15,2 (32.4)	14,6 (31.1)	14,0 (29.8)	13,4 (28.4)	12,8 (27.1)
64,0 (210)		12,4 (27.4)	11,8 (26.2)	11,2 (24.7)	10,6 (23.5)
68,0 (225)			9,9 (21.3)	9,2 (19.8)	8,7 (18.7)
72,0 (240)				8,1 (17.1)	7,5 (15.6)
76,0 (250)					5,9 (13.0)
82,0 (270)					3,4 (7.4)

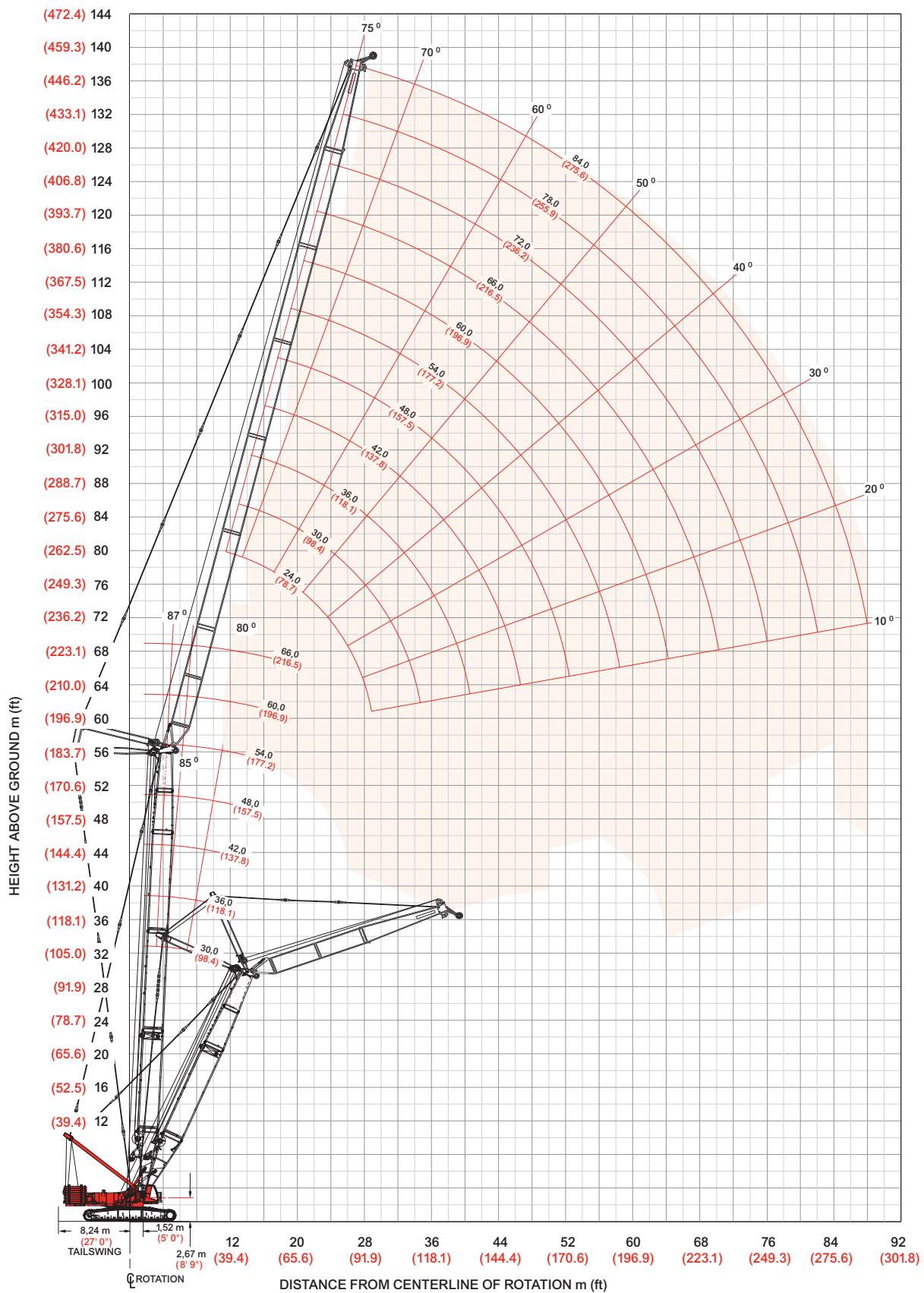
model 16000



Luffing jib range diagram

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**Liftcrane Boom Capacities - Model 16000 Series 3
No. 58 Heavy -lift Main Boom with No. 59 Luffing Jib**



Luffing jib load charts

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Liftcrane Boom Capacities - Model 16000 Series 3 No. 59 Luffing Jib on No. 58 Heavy Lift Main Boom

150 590 kg (332,000 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

87° Boom Angle

Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (216.5)	Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (196.9)	Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (196.9)
11,6 (38)	185,2 (408.5)				15,2 (50)	136,1 (300.2)	116,8 (252.6)			18,3 (60)	107,4 (236.8)	92,1 (203.2)		
14,0 (45)	157,7 (354.2)	151,0 (333.0)	117,4 (262.3)	99,6 (222.2)	16,0 (55)	131,2 (278.3)	113,3 (242.0)	— (205.4)	— (194.5)	22,0 (75)	91,9 (191.9)	81,6 (175.1)	70,3 (151.1)	66,6 (142.9)
18,0 (60)	121,1 (260.7)	112,6 (244.8)	97,8 (213.0)	84,8 (184.8)	18,0 (60)	118,9 (258.6)	104,3 (227.5)	89,0 (194.3)	84,5 (184.4)	24,0 (80)	81,6 (176.5)	75,6 (166.8)	66,2 (144.3)	62,6 (136.6)
22,0 (75)	92,7 (194.7)	92,7 (194.5)	82,2 (174.9)	72,3 (154.3)	22,0 (75)	92,3 (193.7)	89,1 (190.3)	77,1 (165.1)	73,3 (157.0)	30,0 (100)	61,2 (132.2)	61,0 (131.8)	55,5 (120.9)	52,6 (144.6)
26,0 (90)	74,6 (147.9)	73,9 (147.8)	69,5 (144.3)	62,1 (129.5)	26,0 (90)	74,4 (153.3)	74,3 (152.9)	67,1 (141.2)	64,0 (134.6)	34,0 (115)	52,0 (110.2)	51,8 (109.9)	49,5 (106.2)	47,0 (100.7)
32,0 (105)					32,0 (105)	57,0 (125.8)	56,9 (125.5)	55,2 (121.7)	52,5 (115.8)	38,0 (125)	44,9 (98.8)	44,8 (98.6)	44,4 (97.7)	42,0 (92.5)
38,0 (125)					38,0 (125)	45,6 (100.2)	45,5 (100.0)	44,8 (98.5)	43,0 (94.7)	42,0 (140)	39,3 (85.0)	39,2 (84.8)	39,1 (84.4)	37,6 (81.5)
44,0 (145)					44,0 (145)					46,0 (155)	34,8 (74.0)	34,7 (73.8)	34,5 (73.4)	33,7 (71.7)
52,0 (175)					52,0 (175)					52,0 (175)				27,0 (54.3)
56,0 (185)					56,0 (185)					56,0 (185)				
60,0 (195)					60,0 (195)					60,0 (195)				

Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (196.9)	Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (196.9)	Radius	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)
21,3 (70)	86,0 (189.7)	73,5 (162.2)			21,3 (70)					21,3 (70)			
24,0 (80)	79,1 (172.5)	69,3 (151.1)	58,2 (128.1)	51,8 (114.1)	24,0 (80)	— (132.1)	— (115.1)			24,0 (80)	42,6 (93.3)	37,9 (83.3)	— (70.9)
28,0 (95)	65,9 (139.2)	62,1 (133.6)	53,2 (114.7)	49,6 (107.3)	28,0 (95)	58,3 (127.7)	51,2 (112.4)	43,1 (94.6)		28,0 (95)	40,7 (89.2)	36,7 (80.5)	31,4 (68.9)
34,0 (115)	51,1 (108.2)	50,9 (107.8)	45,8 (98.3)	43,2 (92.8)	34,0 (115)	49,9 (105.8)	48,2 (103.7)	40,6 (88.0)		34,0 (115)	38,7 (82.5)	35,4 (77.7)	30,0 (65.2)
40,0 (135)	41,1 (87.2)	40,9 (86.9)	39,4 (84.4)	37,2 (79.7)	40,0 (135)	40,0 (84.8)	39,8 (84.5)	36,3 (78.1)		40,0 (135)	29,8 (64.2)	29,6 (63.9)	26,4 (57.4)
48,0 (160)	31,9 (69.0)	31,8 (68.7)	31,7 (68.3)	30,4 (65.9)	48,0 (160)	30,9 (66.6)	30,7 (66.3)	30,3 (65.7)		56,0 (185)	23,4 (51.2)	23,3 (50.9)	22,7 (49.8)
56,0 (185)	25,6 (55.9)	25,5 (355.7)	35,3 (55.3)	24,9 (54.4)	56,0 (185)	24,5 (53.5)	24,4 (53.3)	24,2 (52.9)		64,0 (210)	19,8 (43.7)	19,7 (43.5)	19,5 (43.2)
64,0 (210)	18,4 (40.7)	18,3 (40.5)	18,2 (40.3)	18,1 (40.1)	64,0 (210)	16,1 (34.6)	15,7 (32.5)	15,2 (31.6)		72,0 (240)	15,2 (32.5)	15,1 (32.3)	14,9 (32.0)
72,0 (240)					84,0 (280)					84,0 (280)	10,6 (21.4)	9,6 (19.5)	9,1 (18.4)
84,0 (280)					88,0 (290)					88,0 (290)	6,8 (14.2)	6,6 (14.0)	
88,0 (290)													

model 16000



Luffing jib load charts

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Liftcrane Boom Capacities - Model 16000 Series 3 No. 59 Luffing Jib on No. 58 Heavy Lift Main Boom

150 590 kg (332,000 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

75° Boom Angle

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (216.5)
Radius				
24,0 (80)	75,6 (163.2)			
26,0 (90)	68,1 (140.3)	65,0 (133.9)		
28,0 (95)	61,9 (130.9)	59,1 (124.9)		
32,0 (105)	52,1 (114.9)	49,7 (109.7)	46,9 (103.4)	43,5 (96.0)
36,0 (120)		42,5 (91.8)	40,2 (213.0)	37,2 (80.5)
38,0 (125)			37,3 (82.1)	32,3 (76.3)
42,0 (140)				30,2 (65.1)
46,0 (155)				
52,0 (175)				
54,0 (180)				
56,0 (185)				

Luffing Jib Length 24,0 m (78.7 ft)

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (216.9)
Radius				
24,0 (80)				
26,0 (90)				
28,0 (95)	61,1 (128.9)			
32,0 (105)	51,4 (113.3)	48,7 (107.4)		
36,0 (120)	44,0 (95.2)	41,7 (90.2)	39,1 (84.4)	— (81.0)
38,0 (125)	41,0 (90.3)	38,9 (125.5)	36,3 (79.9)	34,9 (76.7)
42,0 (140)	35,9 (77.5)	34,0 (85.5)	31,8 (68.6)	30,4 (65.8)
46,0 (155)		30,0 (63.7)	28,0 (59.5)	26,8 (57.1)
52,0 (175)	52,0 (175)			22,4 (47.5)
54,0 (180)				
56,0 (185)				

Luffing Jib Length 36,0 m (118.1 ft)

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	60,0 (196.9)
Radius				
34,0 (110)	46,4 (104.2)			
36,0 (120)	43,0 (92.9)	— (87.5)		
38,0 (125)	40,0 (87.9)	37,6 (82.8)		
40,0 (135)	37,3 (79.3)	35,1 (74.6)	32,6 (69.2)	
42,0 (140)	34,9 (75.5)	32,9 (71.0)	30,5 (65.8)	29,1 (62.8)
44,0 (145)	32,8 (71.9)	30,8 (67.6)	28,5 (62.6)	27,2 (59.8)
46,0 (155)	30,8 (65.6)	29,0 (61.6)	26,8 (56.9)	25,6 (54.3)
50,0 (165)	27,4 (60.0)	25,7 (56.3)	23,7 (52.0)	22,6 (49.6)
56,0 (185)	23,2 (50.6)	21,7 (47.5)	20,0 (43.7)	19,0 (41.6)
60,0 (200)		19,5 (41.8)	17,9 (38.6)	17,0 (36.7)
64,0 (215)			16,0 (32.2)	15,2 (32.2)

Luffing Jib Length 48,0 m (157.5 ft)

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	60,0 (196.9)
Radius				
40,0 (135)	36,1 (76.7)			
44,0 (145)	31,6 (69.4)	29,6 (64.9)		
48,0 (160)	27,9 (60.3)	26,0 (56.2)	23,9 (51.5)	22,7 (48.9)
54,0 (180)	23,5 (50.6)	21,8 (47.0)	19,9 (42.9)	18,8 (40.6)
60,0 (200)	19,9 (42.9)	18,4 (39.8)	16,8 (36.1)	15,8 (34.0)
66,0 (220)	17,0 (36.6)	15,7 (33.8)	14,2 (30.5)	13,3 (28.7)
72,0 (240)		13,4 (28.6)	12,0 (25.8)	11,3 (24.2)
76,0 (250)			10,7 (23.6)	10,0 (22.1)
80,0 (265)				
84,0 (280)				
88,0 (300)				

Luffing Jib Length 60,0 m (196.9 ft)

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	48,0 (157.5)
Radius			
40,0 (135)			
44,0 (145)			
48,0 (160)	26,6 (57.4)	24,7 (53.1)	
54,0 (180)	22,2 (47.8)	20,5 (44.1)	19,5 (41.9)
60,0 (200)	18,7 (40.2)	17,1 (36.9)	16,3 (35.0)
66,0 (220)	15,9 (31.4)	14,5 (31.1)	13,6 (29.3)
72,0 (240)	13,5 (28.9)	12,2 (26.2)	11,5 (24.7)
76,0 (250)	12,1 (26.7)	10,9 (24.1)	10,3 (22.6)
80,0 (265)		9,8 (18,2)	9,1 (17,1)
84,0 (280)		8,7 (18,2)	8,1 (17,1)
88,0 (300)			

Luffing Jib Length 72,0 m (236.2 ft)

Boom m (ft)	30,0 (98.4)
Radius	
40,0 (135)	
44,0 (145)	
48,0 (160)	
54,0 (180)	21,0 (45.1)
60,0 (200)	17,5 (37.6)
66,0 (220)	14,7 (31.5)
72,0 (240)	12,3 (26.4)
76,0 (250)	11,0 (24.2)
80,0 (265)	9,8 (—)
84,0 (280)	8,7 (18.5)
88,0 (300)	7,7 (15.2)

Luffing Jib Length 84,0 m (275.6 ft)

Luffing jib load charts

Liftcrane Boom Capacities - Model 16000 Series 3 No. 59 Luffing Jib on No. 58 Heavy Lift Main Boom

150 590 kg (332,000 lb) Counterweight 54 430 kg (120,000 lb) Carbide Counterweight

360° Rating

kg (lb) x 1 000

65° Boom Angle

25

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (216.5)
Radius				
32,0 (105)	47,9 (105.7)			
36,0 (120)	41,0 (88.7)	— (80.8)		
40,0 (135)	61,9 —	32,4 (68.9)		
44,0 (145)		28,2 (61.9)	25,0 (60.6)	
48,0 (160)			21,9 (47.2)	18,5 (39.8)
52,0 (175)				16,2 (34.3)
56,0 (185)				
60,0 (200)				
62,0 (205)				
68,0 (225)				
72,0 (240)				

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)	66,0 (216.9)
Radius				
32,0 (105)				
36,0 (120)				
40,0 (135)	34,8 (74.0)			
44,0 (145)	30,6 (67.1)	27,4 (60.1)		
48,0 (160)	27,0 (58.4)	24,2 (52.2)	— (44.9)	
52,0 (175)		21,5 (45.7)	18,4 (39.2)	16,6 (35.4)
56,0 (180)		20,3 (43.7)	17,4 (34.3)	15,7 (33.8)
60,0 (200)			14,6 (31.2)	13,1 (28.2)
62,0 (205)				12,3 (26.9)
68,0 (225)				
72,0 (240)				

Boom m (ft)	30,0 (98.4)	42,0 (137.8)	54,0 (177.2)
Radius			
32,0 (105)			
36,0 (120)			
40,0 (135)			
44,0 (145)			
48,0 (160)	26,0 (56.1)		
52,0 (175)	23,1 (49.2)	20,3 (43.1)	
56,0 (180)	21,9 (47.1)	19,1 (41.2)	
60,0 (200)	18,5 (39.9)	16,2 (34.8)	13,3 (28.7)
62,0 (205)	17,5 (38.2)	15,3 (33.3)	12,6 (27.5)
68,0 (225)			10,6 (23.0)
72,0 (240)			9,3 (19.8)

Boom m (ft)	30,0 (98.4)	42,0 (137.8)
Radius		
54,0 (180)	20,6 (44.5)	
56,0 (185)	19,5 (42.6)	
58,0 (190)	18,4 (40.8)	15,7 (34.9)
60,0 (200)	17,4 (37.5)	14,8 (31.9)
64,0 (210)	15,6 (34.5)	13,2 (29.3)
68,0 (225)	14,0 (30.5)	11,8 (25.7)
72,0 (240)	12,6 (26.9)	10,5 (22.5)
74,0 (245)	11,8 (25.7)	9,9 (21.5)
76,0 (250)		9,3 (20.6)
80,0 (260)		— (18.7)
84,0 (280)		

Boom m (ft)	30,0 (98.4)
Radius	
54,0 (180)	
56,0 (185)	
58,0 (190)	
60,0 (200)	16,1 (34.5)
64,0 (210)	14,3 (31.6)
68,0 (225)	12,7 (27.7)
72,0 (240)	11,3 (24.3)
74,0 (245)	10,7 (23.2)
76,0 (250)	10,1 (22.2)
80,0 (260)	9,0 (20.3)
84,0 (280)	7,9 (16.8)

model 16000





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