

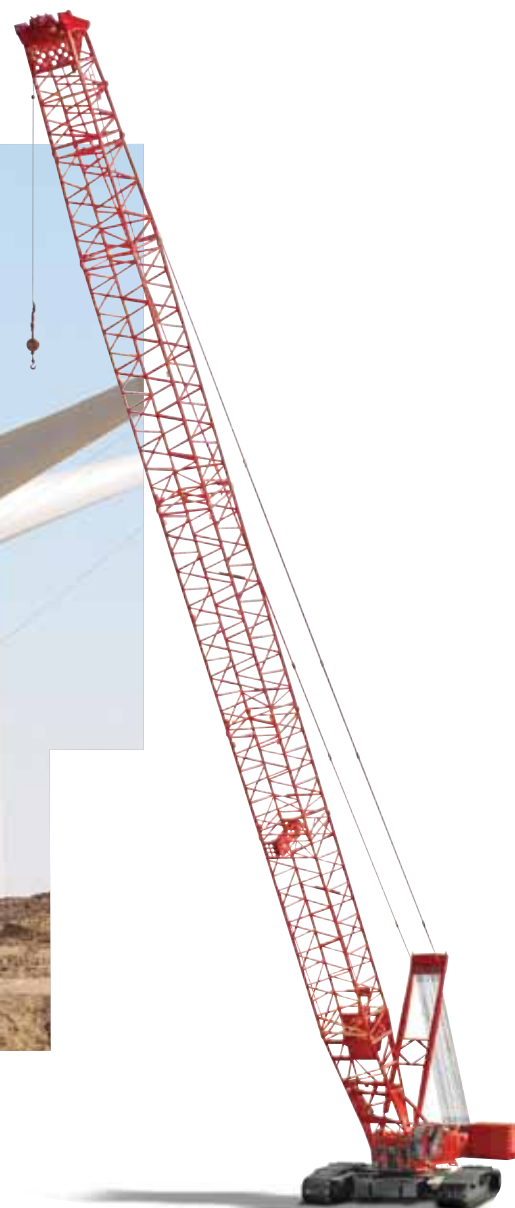


Grove Maniwoc National Crane Potain



# Manitowoc 16000

## Product Guide



### Features

- 400 t (440 USt) capacity
- 2 599 mton-m (18,800 ft-kips) maximum load moment
- 5 066 mton-m (36,405 ft-kips) maximum load moment with MAX-ER®
- 96 m (315 ft) heavy-lift boom
- 138 m (453 ft) luffing jib on heavy-lift boom
- 372 kW (500 HP) engine



## Features

### EPIC®

Manitowoc's field-proven Electronically Processed Independent Controls (EPIC) system delivers high productivity and precise load control by instantly matching a crane's commands to the crane function. EPIC's microprocessor maximizes a Manitowoc crane's function capability and simplifies servicing by pinpointing any problem in the crane's engine, power transmission and other operating systems. In addition, EPIC increases versatility by easily tailoring a Manitowoc crane's operation for specialized applications, with or without attachments. EPIC is a key reason no other crane can match the performance and reliability of Manitowoc.



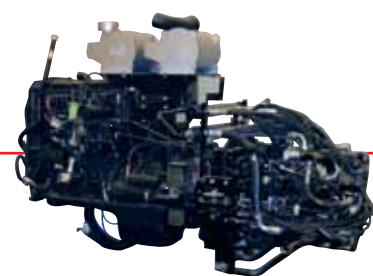
### FACT™ Connectors

Manitowoc's patented Fast Aligning Connection Technology (FACT) precisely aligns crane components for safe, fast, easy assembly.



### Crawler Drive Shafts

These eliminate the need to disconnect hydraulic systems for shipment—simplifying crawler removal and assembly.



### Hydraulics

Our closed-loop system provides a separate hydraulic circuit to power each crane function. The result is truly independent, variable-speed operation of the swing, load hoist, boom hoist and travel functions.



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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, 1400 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 pre wired 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.

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. 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: 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 swing lock.

Swing system maximum speed: 2.2 rpm.



### 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



# Specifications

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 luffing 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<br>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<br>Upper Side Box | 8 164       | 18,000 | 32 656       | 72,000  |
| 2              | Carbody<br>Center Box        | 13 608      | 30,000 | 27 216       | 60,000  |
| Series 2 Total |                              |             |        | 161 470      | 356,000 |
| 2              | Upperworks<br>Upper Side Box | 8 164       | 18,000 | 16 328       | 36,000  |
| 4              | Carbody<br>Side Box          | 6 804       | 15,000 | 27 216       | 60,000  |
| Series 3 Total |                              |             |        | 205 014      | 452,000 |



## Vision operator's cab

The Vision Cab™ 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 windows, front 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 safe, 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 system boom connector. Spring cushioned boom stop. Automatic boom stop.



# Specifications

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 extended 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').



## The Wheeled MAX-ER®

The Wheeled MAX-ER® attachment components include:

30 m of No. 59A mast consisting of a 6 m (19.7) butt, 6 m (19.7) insert, 12 m (39.4) insert and 6 m (19.7) top.

One additional swing drive (for a total of two) mounted on the rotating module. Each swing drive is powered by a fixed-displacement hydraulic motor coupled to a planetary reduction gearbox and internal brake.

Two 12 m (39' 5") heavy No. 58 boom inserts.

The wheeled MAX-ER® counterweight assembly attaches to the top of the mast by steel straps and to the rear of the upperworks by a telescopic beam assembly.

Counterweight includes (8) 19 958 kg (44,000 lb) and (2) 13 608 kg (30,000 lb) boxes.

The wheeled MAX-ER® counterweight can be positioned 11 m (36.1'), 13 m (42.7'), or 15 m (49.2') behind the crane's centerline of rotation, utilizing structural stinger equipped with hydraulic cylinder.

The wheeled counterweight uses large off-road tires, which can be positioned for traveling or swinging. It also includes hydraulic support jacks and pads.



## The Hanging MAX-ER®

The Hanging MAX-ER® attachment components include:

30 m of No. 59A mast consisting of a 6 m (19.7) butt, 6 m (19.7) insert, 12 m (39.4) insert and 6 m (19.7) top.

One additional swing drive (for a total of two) mounted on the rotating module. Each swing drive is powered by a fixed-displacement hydraulic motor coupled to a planetary reduction gearbox and internal brake.

Two 12 m (39' 5") heavy No. 58 boom inserts.

The hanging MAX-ER® counterweight assembly attaches to the top of the mast by steel straps and to the rear of the upperworks by a beam assembly.

Counterweight includes (10) 19 958 kg (44,000 lb) and (2) 6 804 kg (15,000 lb) boxes.

The hanging MAX-ER® counterweight can be positioned 11 m (36.1'), 13 m (42.7'), or 15 m (49.2') behind the crane's centerline of rotation.

## 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. Single line pull is 13 610 kg (30,000 lb).

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: Rated 100 t (110 USt) hook block with



# Specifications

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.

See hoist reaving for main load block chart for actual capacity when used with 16000.

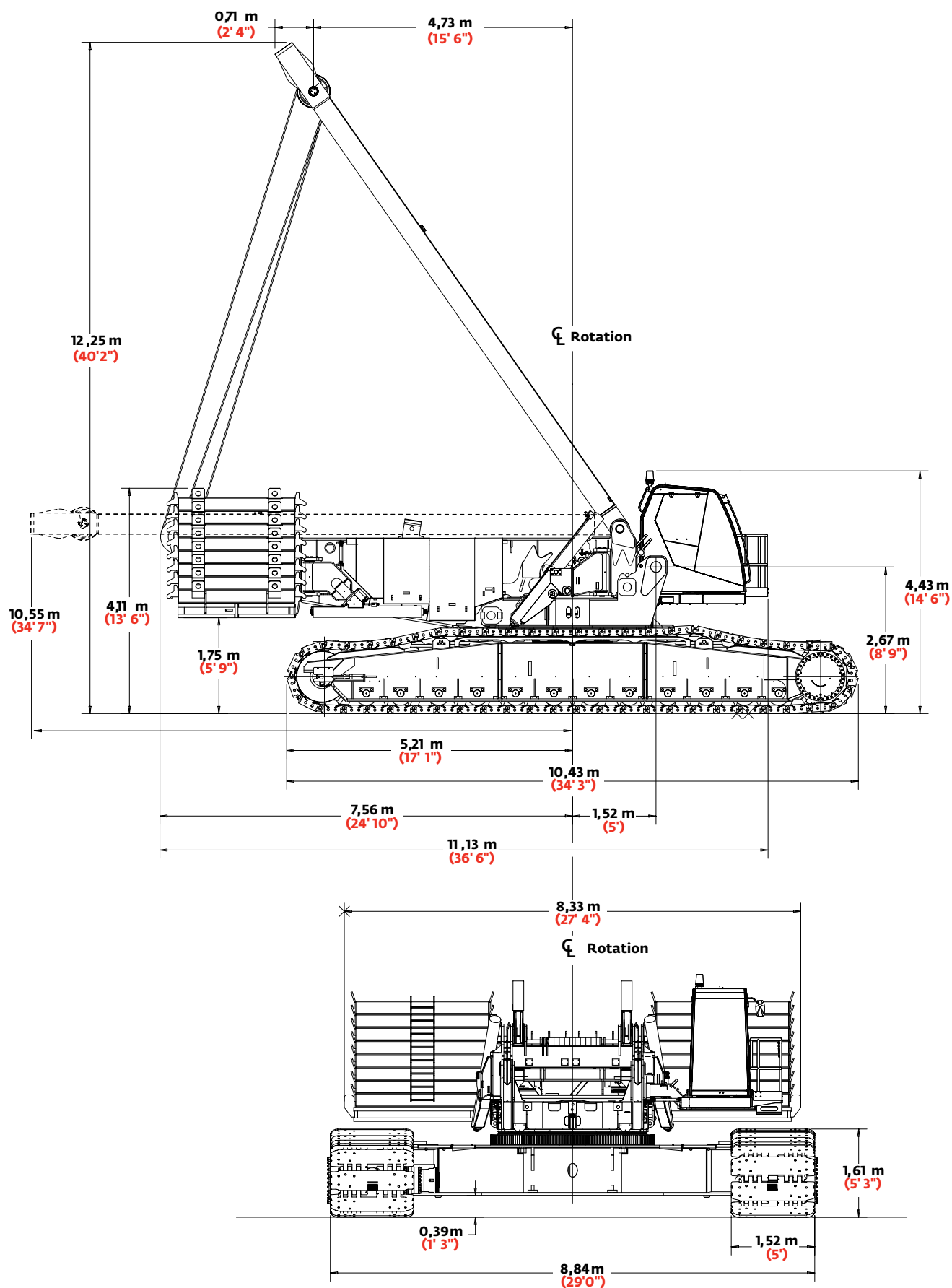
## Hoist reaving for main load block Single lead line 28 mm - Boom No. 58 HL

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 610       | 215,200 |
| 8                 | 130 180      | 287,000 |
| 10                | 162 750      | 358,800 |
| 12                | 195 270      | 430,500 |
| 14                | 227 840      | 502,300 |
| 16                | 260 360      | 574,000 |
| 18                | 292 930      | 645,800 |
| 20                | 322 690      | 711,400 |
| 22                | 351 530      | 775,000 |
| 24                | 379 840      | 837,400 |
| 26                | 400 000      | 881,900 |

*Note: 16000 can only be reeved even numbered parts of line.*

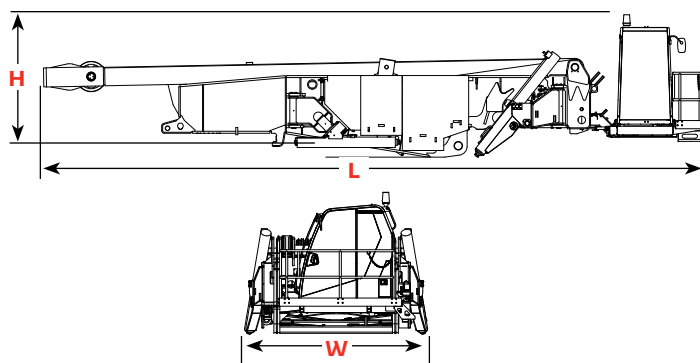


# Outline dimensions



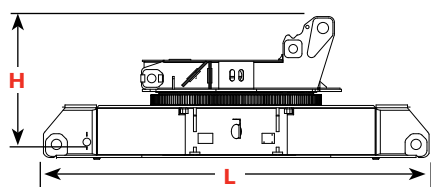


# Outline dimensions



## Rotating bed assembly

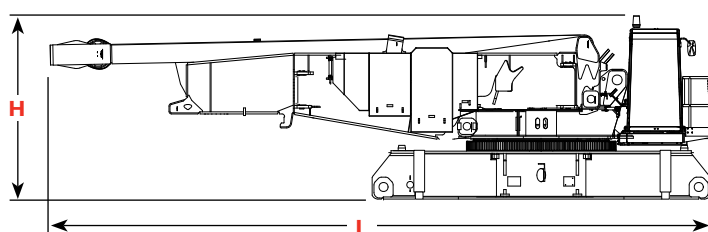
|        |           |           |
|--------|-----------|-----------|
| Length | 13,25 m   | 43' 6"    |
| Width  | 3,20 m    | 10' 6"    |
| Height | 2,87 m    | 9' 5"     |
| Weight | 39 612 kg | 87,330 lb |



## Carbody assembly

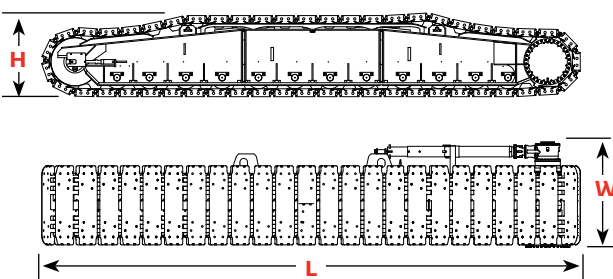
|        |           |           |
|--------|-----------|-----------|
| Length | 6,78 m    | 22' 3"    |
| Width  | 3,00 m    | 9' 10"    |
| Height | 2,52 m    | 8' 3"     |
| Weight | 28 161 kg | 62,085 lb |

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



## Rotating bed and carbody assembly (decked version)

|        |           |            |
|--------|-----------|------------|
| Length | 6,78 m    | 22' 3"     |
| Width  | 3,00 m    | 9' 10"     |
| Height | 3,20 m    | 10' 6"     |
| Weight | 64 982 kg | 143,260 lb |



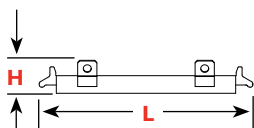
## Crawlers

|        |           |           |
|--------|-----------|-----------|
| 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 |

Option



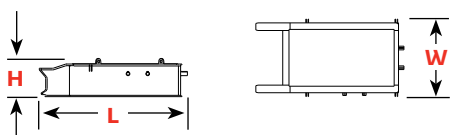
# Outline dimensions



## Upper counterweight

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

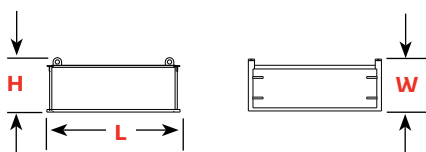
|        |          |           |
|--------|----------|-----------|
| Length | 2,54 m   | 8' 4"     |
| Width  | 2,61 m   | 8' 7"     |
| Height | 0,41 m   | 1' 4"     |
| Weight | 8 164 kg | 18,000 lb |



## Carbody center counterweight

|          |     |  |
|----------|-----|--|
| Series 2 | x 2 |  |
| Series 3 | x 2 |  |

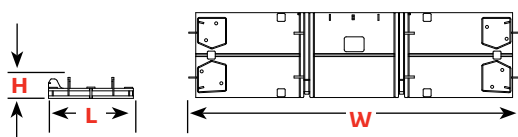
|        |           |           |
|--------|-----------|-----------|
| Length | 3,45 m    | 11' 4"    |
| Width  | 1,80 m    | 5' 11"    |
| Height | 0,89 m    | 2' 11"    |
| Weight | 13 607 kg | 30,000 lb |



## Carbody side counterweight

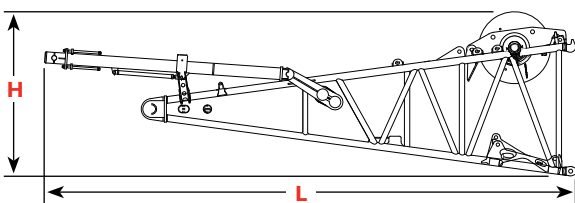
|          |     |  |
|----------|-----|--|
| Series 3 | x 4 |  |
|----------|-----|--|

|        |          |           |
|--------|----------|-----------|
| 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 |



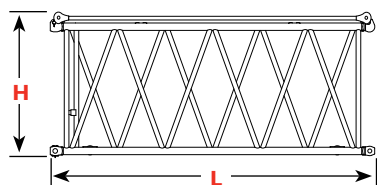
## No. 58 Boom butt, drum 1, luffing drum, wire rope

|        |           |           |
|--------|-----------|-----------|
|        | 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 |

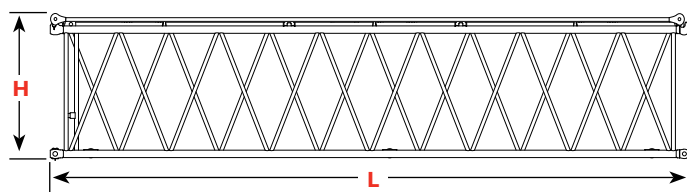
Option



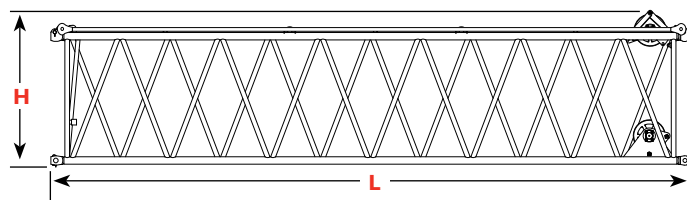
# Outline dimensions



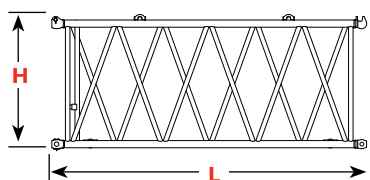
| No. 58 boom insert 6,0 m (19' 8") and straps x 1 |          |          |
|--------------------------------------------------|----------|----------|
| Length                                           | 6,19 m   | 20' 3"   |
| Width                                            | 2,96 m   | 9' 9"    |
| Height                                           | 2,67 m   | 8' 9"    |
| Weight                                           | 2 562 kg | 5,650 lb |



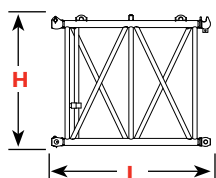
| No. 58 boom insert 12,0 m (39' 5") and straps x 1 |          |          |
|---------------------------------------------------|----------|----------|
| Length                                            | 12,19 m  | 40' 0"   |
| Width                                             | 2,96 m   | 9' 9"    |
| 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 |



| No. 58 WA boom insert 6,0 m (19' 8") and straps x 1 |          |          |
|-----------------------------------------------------|----------|----------|
| Length                                              | 6,19 m   | 20' 4"   |
| Width                                               | 2,96 m   | 9' 9"    |
| Height                                              | 2,67 m   | 8' 9"    |
| Weight                                              | 2 690 kg | 5,930 lb |

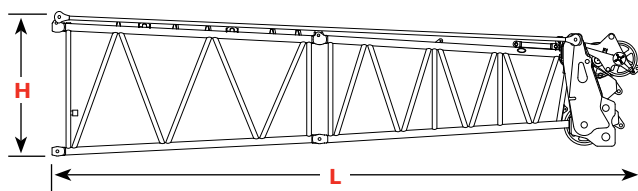


| No. 58 WA boom insert 3,0 m (9' 10") and straps x 1 |          |          |
|-----------------------------------------------------|----------|----------|
| Length                                              | 3,19 m   | 10' 6"   |
| Width                                               | 2,96 m   | 9' 9"    |
| Height                                              | 2,67 m   | 8' 9"    |
| Weight                                              | 1 599 kg | 3,525 lb |

Option



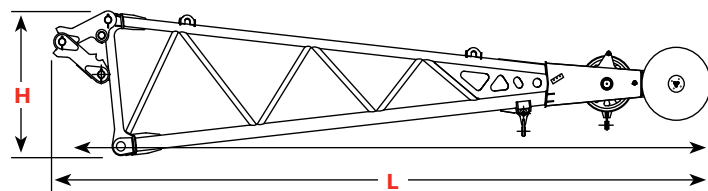
# Outline dimensions



## No. 58 boom top 5,0 m (16' 5") with 5,0 (16' 5") transitional insert and straps

x 1

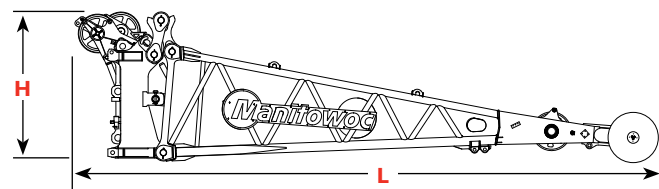
|        |           |           |
|--------|-----------|-----------|
| Length | 11,41 m   | 37' 5"    |
| Width  | 2,96 m    | 9' 9"     |
| Height | 2,67 m    | 8' 9"     |
| Weight | 11 373 kg | 25,075 lb |



## No. 58 extended upper boom point 7,0 m (23' 0")

x 1

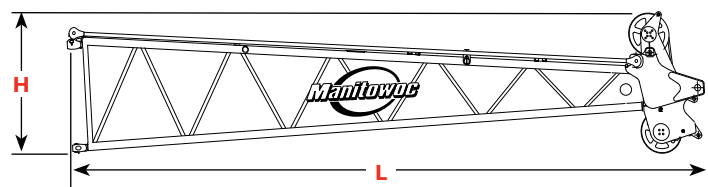
|        |          |          |
|--------|----------|----------|
| Length | 9,52 m   | 31' 3"   |
| Width  | 2,60 m   | 8' 6"    |
| Height | 1,99 m   | 6' 6"    |
| Weight | 3 674 kg | 8,100 lb |



## No. 58 WA boom cap and No. 58 WA extended upper boom point

x 1

|        |          |           |
|--------|----------|-----------|
| Length | 11,50 m  | 37' 9"    |
| Width  | 2,70 m   | 8' 10"    |
| Height | 2,97 m   | 9' 9"     |
| Weight | 8 519 kg | 18,780 lb |



## No. 59 luffing jib top 11,0 (36' 1")

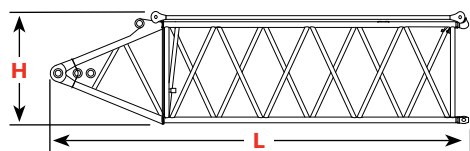
x 1

|        |          |           |
|--------|----------|-----------|
| 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 |

Option



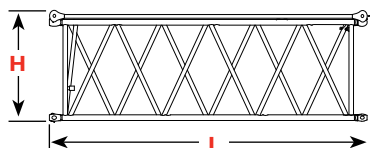
# Outline dimensions



## No. 59 luffing jib butt 7,0 (23' 0")

x 1

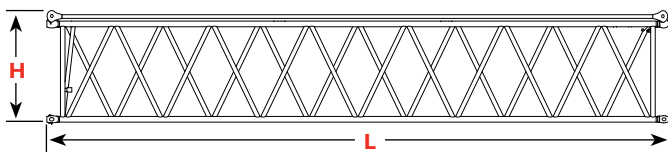
|        |          |          |
|--------|----------|----------|
| Length | 7,15 m   | 23' 6"   |
| Width  | 2,69 m   | 8' 10"   |
| Height | 2,17 m   | 7' 1"    |
| Weight | 2 722 kg | 6,000 lb |



## No. 59 luffing jib insert 6,0 (19' 8")

x 1

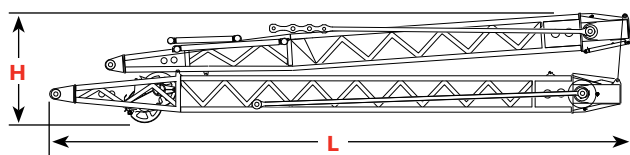
|        |          |          |
|--------|----------|----------|
| Length | 6,19 m   | 20' 3"   |
| Width  | 2,69 m   | 8' 10"   |
| Height | 2,17 m   | 7' 1"    |
| Weight | 1 685 kg | 3,715 lb |



## No. 59 luffing jib insert 12,0 (39' 5")

x 1

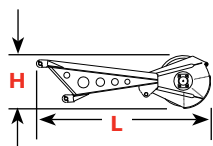
|        |          |          |
|--------|----------|----------|
| Length | 12,19 m  | 40' 0"   |
| Width  | 2,69 m   | 9' 9"    |
| Height | 2,17 m   | 7' 1"    |
| Weight | 2 928 kg | 6,455 lb |



## No. 59 luffing 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

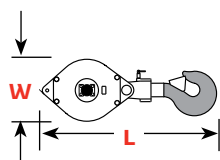
|        |        |          |
|--------|--------|----------|
| Length | 2,64 m | 8' 8"    |
| Width  | 0,41 m | 1' 4"    |
| Height | 0,81 m | 2' 8"    |
| Weight | 460 kg | 1,014 lb |



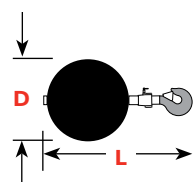
Option



# Outline dimensions



| Hook block for 28 mm (1-1/8") wire rope |          |           |        |        |        |
|-----------------------------------------|----------|-----------|--------|--------|--------|
| Capacity                                | 410 mt   | 450 t     | Length | 3,37 m | 11' 1" |
| Weight                                  | 9 661 kg | 21,300 lb | Width  | 1,19 m | 3' 11" |
| Capacity                                | 317 mt   | 350 t     | Length | 2,63 m | 8' 8"  |
| Weight                                  | 7 892 kg | 17,400 lb | Width  | 1,15 m | 3' 9"  |
| Capacity                                | 227 mt   | 250 t     | Length | 2,72 m | 8' 11" |
| Weight                                  | 5 257 kg | 11,590 lb | Width  | 0,93 m | 3' 0"  |
| Capacity                                | 182 mt   | 200 t     | Length | 2,65 m | 8' 8"  |
| Weight                                  | 4308 kg  | 9,500 lb  | Width  | 0,87 m | 2' 10" |
| Capacity                                | 100 mt   | 110 t     | Length | 2,28 m | 7' 6"  |
| Weight                                  | 3 404 kg | 7,500 lb  | Width  | 0,86 m | 2' 10" |
| Capacity                                | 41 mt    | 45 t*     | Length | 1,90 m | 6' 3"  |
| Weight                                  | 1 179 kg | 2,600 lb  | Width  | 0,91 m | 3' 0"  |
| *Assembly block                         |          |           |        |        |        |



| Weight ball     |        |          |          |        |       |
|-----------------|--------|----------|----------|--------|-------|
| Capacity/Swivel | 18 mt  | 20 t     | Diameter | 0,47 m | 1' 7" |
| Weight          | 771 kg | 1,700 lb | Length   | 1,23 m | 4' 0" |

 Option



# Transport data

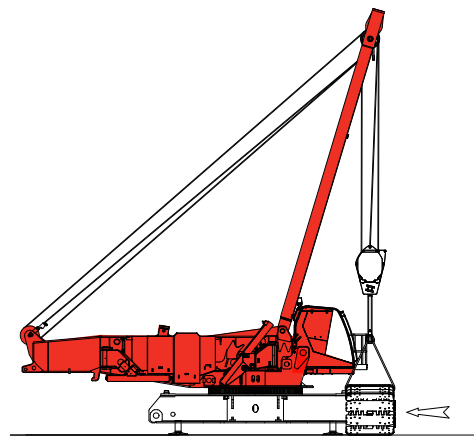
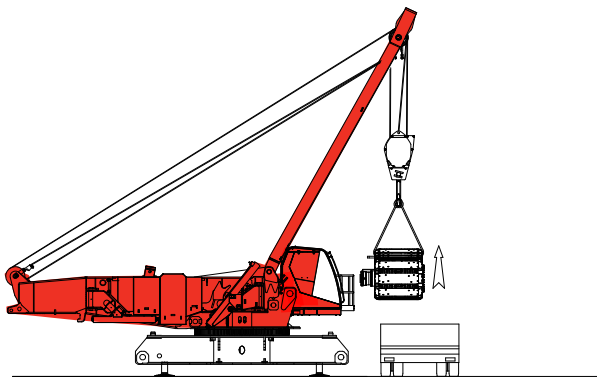
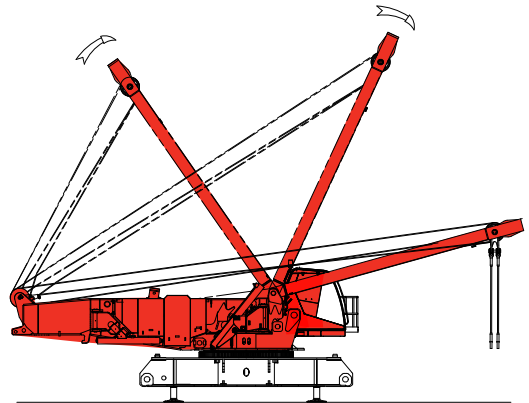
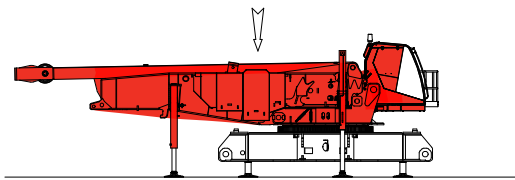
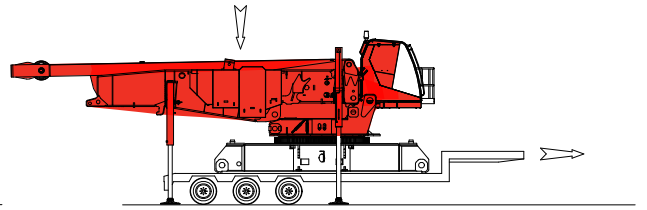
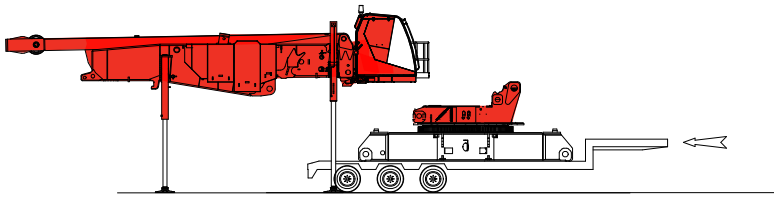
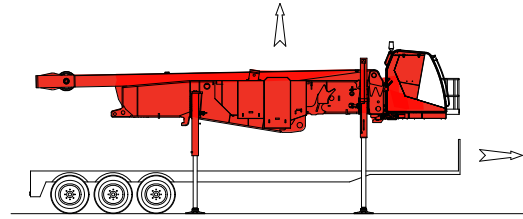
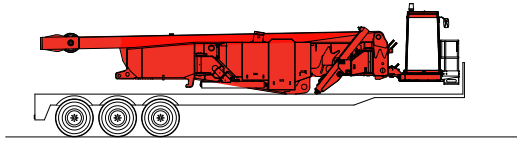
## Model 16000 trailer load out summary

| Weight<br>each item                                                |                    | No. 58 Boom 108 m (354 ft)<br>with No. 58 extended upper boom point 7 m (23 ft) |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|--------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                                                    |                    | Quantity on trailer load #                                                      |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Item                                                               | kg (lb)            | 1                                                                               | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  | 8                  | 9                  | 10                 | 11                 | 12                 | 13                 | 14                 | 15                 | 16                 | 17                 | 18                 | 19                 |
| Upperworks module                                                  | 39 612<br>(87,330) | 1                                                                               |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Carbody and adapter                                                | 28 161<br>(62,085) |                                                                                 | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Crawler assembly                                                   | 32 665<br>(72,015) |                                                                                 |                    | 1                  | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Counterweight tray                                                 | 19 958<br>(44,000) |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |
| Upper counterweight<br>(Box)                                       | 8 164<br>(18,000)  |                                                                                 |                    |                    |                    | 1                  |                    | 1                  | 1                  | 2                  | 1                  | 2                  | 1                  | 1                  | 2                  | 2                  | 2                  |                    |                    |                    |
| Carbody center<br>counterweight                                    | 13 607<br>(30,000) |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  | 1                  |
| Carbody side<br>counterweight                                      | 6 803<br>(15,000)  |                                                                                 |                    |                    |                    |                    |                    | 1                  | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  | 1                  |
| 8,0 m (262 ft) No. 58 boom<br>butt, drum 1 w/ wire rope            | 21 609<br>(47,640) |                                                                                 |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 5,0 m (16 ft 5 in) No. 58 boom<br>top and straps                   | 9 169<br>(20,215)  |                                                                                 |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 5,0 m (16 ft 5 in) No. 58 boom<br>trans. insert and straps         | 2 204<br>(4,860)   |                                                                                 |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 6,0 m (19 ft 8 in) No. 58 boom<br>insert and straps                | 2 562<br>(5,650)   |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |
| 12,0 m (39 ft 5 in) No. 58 boom<br>with WRG Boom insert and straps | 5 595<br>(12,335)  |                                                                                 |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 12,0 m (39 ft 5 in) No. 58 boom<br>insert and straps               | 4 236<br>(9,340)   |                                                                                 |                    |                    |                    |                    |                    |                    | 1                  | 1                  | 1                  | 1                  | 1                  | 1                  |                    |                    |                    |                    |                    |                    |
| No. 59 Upper boom point                                            | 460<br>(1,014)     |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |
| No. 58 Extended upper boom<br>point 7 m (23 ft)                    | 3 674<br>(8,100)   |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |
| 180 t (200 USt) 5 sheave load<br>block                             | 4 309<br>(9,500)   |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 100 t (110 USt) 3 sheave load<br>block                             | 3 402<br>(7,500)   |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |
| Reel cable - 701 m (2,300 ft)                                      | 3 629<br>(8,000)   |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |                    |                    |                    |                    |
| Miscellaneous                                                      | 907<br>(2,000)     |                                                                                 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    | 1                  |                    |                    |                    |
|                                                                    |                    | 39 612<br>(87,330)                                                              | 28 161<br>(62,085) | 32 665<br>(72,015) | 32 665<br>(72,015) | 19 958<br>(44,000) | 21 609<br>(47,640) | 20 562<br>(45,335) | 19 203<br>(42,340) | 20 564<br>(45,340) | 16 705<br>(36,840) | 20 564<br>(45,340) | 16 029<br>(35,340) | 15 802<br>(34,840) | 19 350<br>(42,664) | 20 002<br>(44,100) | 18 414<br>(40,600) | 19 958<br>(44,000) | 20 410<br>(45,000) | 20 410<br>(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 etc.

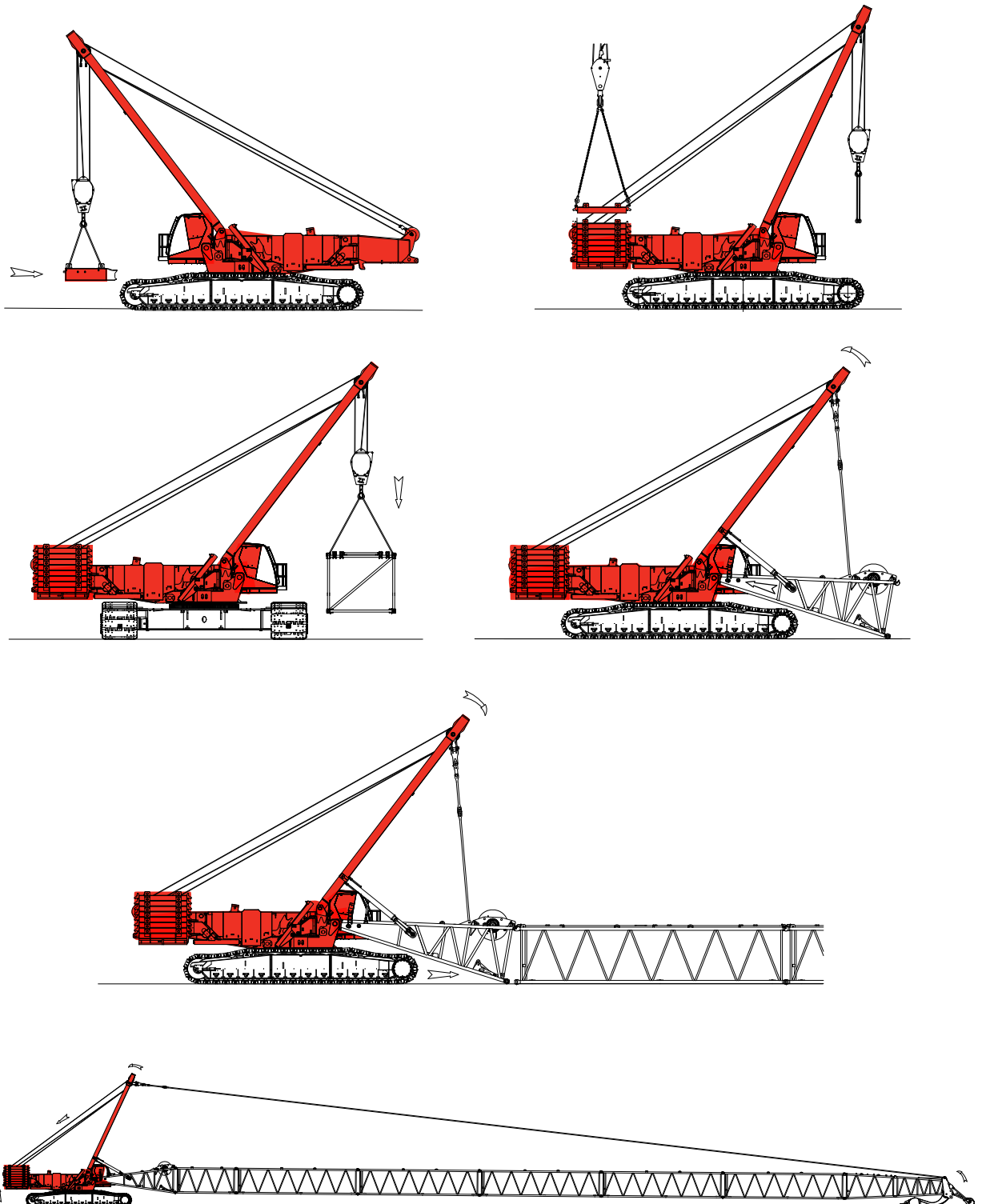


## Crane assembly - undecked



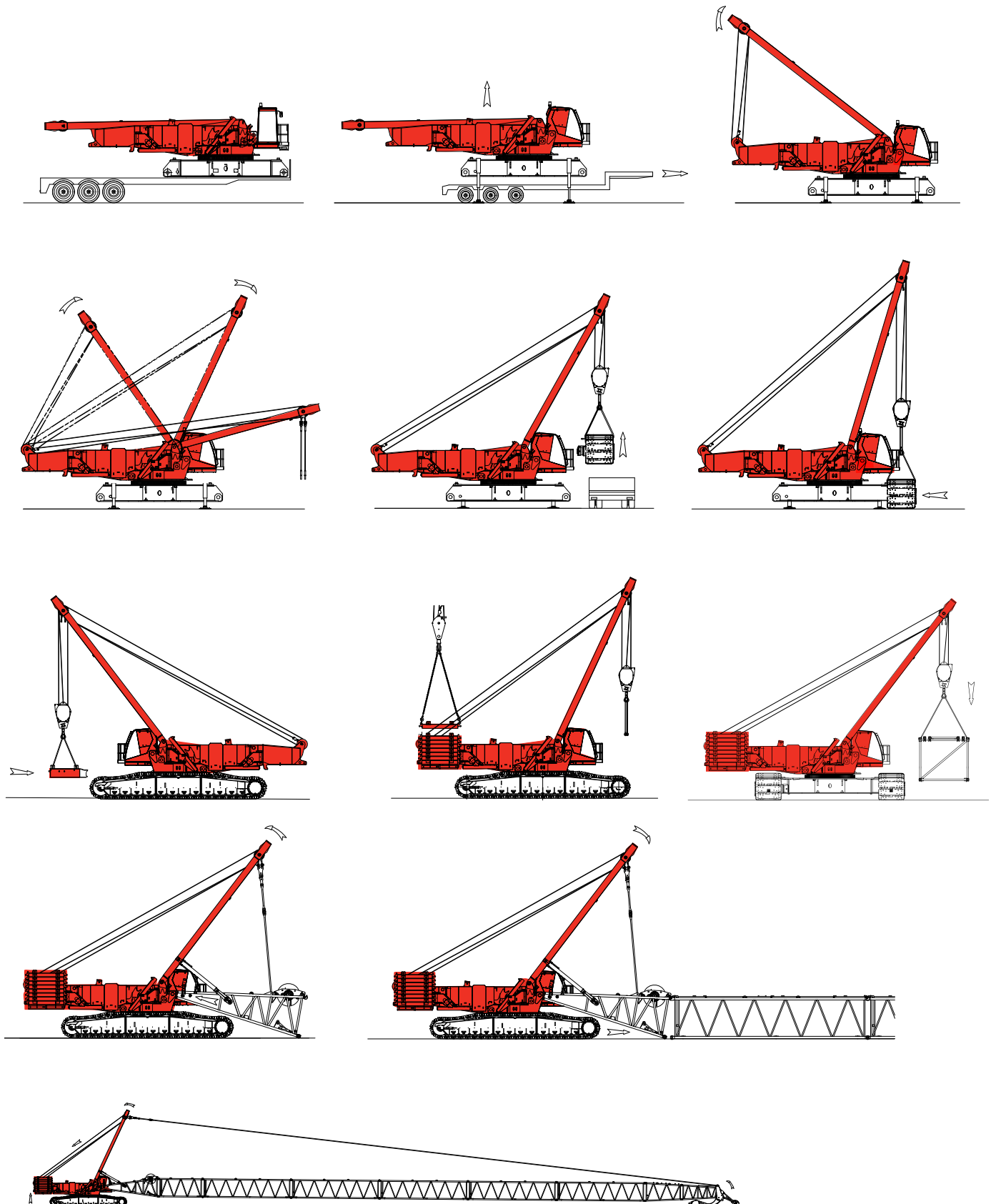


## Crane assembly - undecked





# Crane assembly - decked





# Performance data

## Performance for main hoist (drum #1)

28 mm wire rope - 11 layers maximum working - drum barrel groove root diameter 641.35 mm (25.5 in)

Single line speed in m (ft) per minute

| Layer<br>Single line pull<br>Radius<br>Single line pull<br>kg (lb) | 1<br>335 mm<br>(13.2") | 2<br>363 mm<br>(14.3") | 3<br>391 mm<br>(15.4") | 4<br>419 mm<br>(16.5") | 5<br>447 mm<br>(17.6") | 6<br>475 mm<br>(18.7") | 7<br>503 mm<br>(19.8") | 8<br>531 mm<br>(20.9") | 9<br>559 mm<br>(22.0") | 10<br>587 mm<br>(23.1") | 11<br>615 mm<br>(24.2") |
|--------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|
| 0<br>(0)                                                           | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 132<br>(432)           | 140<br>(460)           | 149<br>(489)           | 158<br>(518)           | 167<br>(547)           | 176<br>(576)           | 184<br>(605)            | 193<br>(634)            |
| 2 268<br>(5,000)                                                   | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 132<br>(432)           | 140<br>(460)           | 149<br>(489)           | 158<br>(518)           | 167<br>(547)           | 176<br>(576)           | 184<br>(605)            | 193<br>(634)            |
| 4 536<br>(10,000)                                                  | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 131<br>(430)           | 139<br>(456)           | 147<br>(481)           | 154<br>(506)           | 162<br>(530)           | 169<br>(554)           | 176<br>(577)            | 183<br>(601)            |
| 6 804<br>(15,000)                                                  | 103<br>(337)           | 110<br>(361)           | 117<br>(385)           | 124<br>(408)           | 131<br>(430)           | 135<br>(442)           | 136<br>(446)           | 137<br>(450)           | 138<br>(453)           | 139<br>(457)            | 141<br>(461)            |
| 9 072<br>(20,000)                                                  | 98<br>(322)            | 101<br>(332)           | 102<br>(336)           | 104<br>(340)           | 105<br>(344)           | 106<br>(348)           | 107<br>(352)           | 108<br>(355)           | 109<br>(359)           | 111<br>(363)            | 112<br>(367)            |
| 11 340<br>(25,000)                                                 | 83<br>(272)            | 84<br>(276)            | 85<br>(280)            | 87<br>(284)            | 87<br>(287)            | 89<br>(291)            | 90<br>(295)            | 91<br>(299)            | 92<br>(303)            | 94<br>(307)             | 95<br>(311)             |
| 13 608<br>(30,000)                                                 | 71<br>(234)            | 73<br>(238)            | 74<br>(242)            | 75<br>(246)            | 76<br>(250)            | 77<br>(254)            | 78<br>(257)            | 80<br>(261)            | 81<br>(265)            | 82<br>(269)             | 83<br>(273)             |
| 16 239<br>(35,800)                                                 | 62<br>(204)            | 63<br>(208)            | 65<br>(212)            | 66<br>(215)            | 67<br>(219)            | 68<br>(223)            | 69<br>(227)            | 70<br>(231)            | 72<br>(235)            | 73<br>(239)             | 74<br>(242)             |

## Performance for standard whip (drum #2)

28 mm wire rope - 7 layers maximum working

Drum barrel groove root diameter 641.35 mm (25.5 in)

Single line speed in m (ft) per minute

| Layer<br>Single line pull<br>Radius<br>Single line pull<br>kg (lb) | 1<br>335 mm<br>(13.2") | 2<br>363 mm<br>(14.3") | 3<br>391 mm<br>(15.4") | 4<br>419 mm<br>(16.5") | 5<br>447 mm<br>(17.6") | 6<br>475 mm<br>(18.7") | 7<br>503 mm<br>(19.8") |
|--------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 0<br>(0)                                                           | 85<br>(278)            | 92<br>(301)            | 99<br>(324)            | 106<br>(347)           | 113<br>(370)           | 120<br>(394)           | 127<br>(417)           |
| 2 268<br>(5,000)                                                   | 80<br>(262)            | 86<br>(283)            | 92<br>(303)            | 98<br>(323)            | 105<br>(343)           | 111<br>(363)           | 116<br>(382)           |
| 4 536<br>(10,000)                                                  | 75<br>(247)            | 81<br>(265)            | 86<br>(282)            | 91<br>(299)            | 96<br>(316)            | 101<br>(330)           | 101<br>(333)           |
| 6 804<br>(15,000)                                                  | 68<br>(222)            | 69<br>(225)            | 69<br>(228)            | 70<br>(230)            | 71<br>(233)            | 72<br>(236)            | 73<br>(239)            |
| 9 072<br>(20,000)                                                  | 53<br>(175)            | 54<br>(178)            | 55<br>(181)            | 56<br>(183)            | 57<br>(186)            | 58<br>(189)            | 59<br>(192)            |
| 11 340<br>(25,000)                                                 | 45<br>(147)            | 45<br>(149)            | 46<br>(152)            | 47<br>(155)            | 48<br>(158)            | 49<br>(161)            | 50<br>(164)            |
| 13 608<br>(30,000)                                                 | 39<br>(128)            | 40<br>(131)            | 41<br>(133)            | 41<br>(136)            | 42<br>(139)            | 43<br>(142)            | 44<br>(145)            |



# Performance data

**Performance for optional high speed whip (drum #2)  
28 mm wire rope - 7 layers maximum working  
drum barrel groove root diameter 641.35 mm (25.5 in)  
single line speed in m (ft) per minute**

| Layer<br>Single line pull<br>Radius<br>Single line pull<br>kg (lb) | 1<br>335 mm<br>(13.2") | 2<br>363 mm<br>(14.3") | 3<br>391 mm<br>(15.4") | 4<br>419 mm<br>(16.5") | 5<br>447 mm<br>(17.6") | 6<br>475 mm<br>(18.7") | 7<br>503 mm<br>(19.8") |
|--------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 0<br>(0)                                                           | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 132<br>(432)           | 140<br>(460)           | 149<br>(489)           | 158<br>(518)           |
| 2 268<br>(5,000)                                                   | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 132<br>(432)           | 140<br>(460)           | 149<br>(489)           | 158<br>(518)           |
| 4 536<br>(10,000)                                                  | 105<br>(345)           | 114<br>(374)           | 123<br>(403)           | 131<br>(430)           | 139<br>(456)           | 147<br>(481)           | 154<br>(506)           |
| 6 804<br>(15,000)                                                  | 103<br>(337)           | 110<br>(361)           | 117<br>(385)           | 124<br>(408)           | 131<br>(430)           | 135<br>(442)           | 136<br>(446)           |
| 9 072<br>(20,000)                                                  | 98<br>(322)            | 101<br>(332)           | 102<br>(336)           | 104<br>(340)           | 105<br>(344)           | 106<br>(348)           | 107<br>(352)           |
| 11 340<br>(25,000)                                                 | 83<br>(272)            | 84<br>(276)            | 85<br>(280)            | 87<br>(284)            | 87<br>(287)            | 89<br>(291)            | 90<br>(295)            |
| 13 608<br>(30,000)                                                 | 71<br>(234)            | 73<br>(238)            | 74<br>(242)            | 75<br>(246)            | 76<br>(250)            | 77<br>(254)            | 78<br>(257)            |

**Wire rope lengths - single hoist drum  
28 mm hoist line - boom No. 58 HL**

| Boom<br>length | Whip line - drum 2 or 3 |       |        |        | Hoist line - drum 1 |        |                                                           |
|----------------|-------------------------|-------|--------|--------|---------------------|--------|-----------------------------------------------------------|
|                | 1 Part                  |       | 2 Part |        |                     |        | Maximum<br>parts of line<br>for full<br>hoisting<br>range |
|                | m                       | (ft)  | m      | (ft)   | m                   | (ft)   |                                                           |
| 30,0 (98.4)    | 79                      | (260) | 116    | (380)  | 838                 | (2750) | 26                                                        |
| 36,0 (118.1)   | 91                      | (300) | 134    | (440)  | 853                 | (2800) | 22                                                        |
| 42,0 (137.8)   | 104                     | (340) | 152    | (500)  | 853                 | (2800) | 18                                                        |
| 48,0 (157.5)   | 116                     | (380) | 171    | (560)  | 930                 | (3050) | 18                                                        |
| 54,0 (177.2)   | 128                     | (420) | 186    | (610)  | 930                 | (3050) | 14                                                        |
| 60,0 (196.9)   | 140                     | (460) | 204    | (670)  | 930                 | (3050) | 14                                                        |
| 66,0 (216.5)   | 152                     | (500) | 223    | (730)  | 930                 | (3050) | 12                                                        |
| 72,0 (236.2)   | 165                     | (540) | 241    | (790)  | 930                 | (3050) | 10                                                        |
| 78,0 (255.9)   | 177                     | (580) | 259    | (850)  | 930                 | (3050) | 10                                                        |
| 84,0 (275.6)   | 189                     | (620) | 277    | (910)  | 930                 | (3050) | 8                                                         |
| 90,0 (295.3)   | 201                     | (660) | 296    | (970)  | 930                 | (3050) | 6                                                         |
| 96,0 (315.0)   | 213                     | (700) | 314    | (1030) | 930                 | (3050) | 6                                                         |

**Hoist reeving for main load block  
- single lead line  
28 mm - boom No. 58 HL**

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 610       | 215,200 |
| 8                 | 130 180      | 287,000 |
| 10                | 162 750      | 358,800 |
| 12                | 195 270      | 430,500 |
| 14                | 227 840      | 502,300 |
| 16                | 260 360      | 574,000 |
| 18                | 292 930      | 645,800 |
| 20                | 322 690      | 711,400 |
| 22                | 351 530      | 775,000 |
| 24                | 379 840      | 837,400 |
| 26                | 400 000      | 881,900 |

*NOTE: Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.*



# Performance data

## Wire rope lengths - single hoist drum - 28 mm hoist line - boom No. 58 HL w/ 7 m (23 ft) extended upper boom point

| Boom<br>length | Whip line<br>drum 2 or 3<br>1 Part |       | Hoist line<br>drum 1 |        | Total<br>parts of line |
|----------------|------------------------------------|-------|----------------------|--------|------------------------|
|                | m                                  | (ft)  | m                    | (ft)   |                        |
| 66,0 (216.5)   | 168                                | (550) | 533                  | (1750) | 6                      |
| 72,0 (236.2)   | 180                                | (590) | 579                  | (1900) | 6                      |
| 78,0 (255.9)   | 192                                | (630) | 610                  | (2000) | 6                      |
| 84,0 (275.6)   | 204                                | (670) | 655                  | (2150) | 6                      |
| 90,0 (295.3)   | 216                                | (710) | 701                  | (2300) | 6                      |

NOTE: Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

## Hoist reeving for main load block single lead line - 28 mm boom No. 58 HL w/ 7 m (23 ft) extended upper boom point

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 600       | 215,200 |

## Wire rope lengths - single hoist drum - 28 mm hoist line boom No. 58 HL w/ 30,0 m (98.4 ft) mast No. 59A and 7,0 m (23.0 ft) extended upper boom point

| Boom<br>length | Whip line<br>drum 2 or 3<br>1 Part |       | Hoist line<br>drum 1 |        | Total<br>parts of line |
|----------------|------------------------------------|-------|----------------------|--------|------------------------|
|                | m                                  | (ft)  | m                    | (ft)   |                        |
| 96,0 (315.0)   | 229                                | (750) | 747                  | (2450) | 6                      |

NOTE: Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

## Hoist reeving for main load block single lead line - 28 mm boom No. 58 HL w/ 30,0 m (98.4 ft) mast No. 59A and 7,0 m (23.0 ft) extended upper boom point

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 81 500       | 179,800 |

## Wire rope lengths - single hoist drum - 28mm hoist line boom No. 58 WA with 7.6 m (25 ft) extended upper boom point

| Boom<br>length | Whip line - drum 2 or 3 |       |        |        | Hoist line - drum 1 |        | Total parts<br>of line |
|----------------|-------------------------|-------|--------|--------|---------------------|--------|------------------------|
|                | 1 Part                  |       | 2 Part |        | m                   | (ft)   |                        |
| 65 (213.3)     | 183                     | (600) | 244    | (800)  | 686                 | (2250) | 8                      |
| 68 (223.1)     | 183                     | (600) | 259    | (850)  | 701                 | (2300) | 8                      |
| 71 (232.9)     | 183                     | (600) | 274    | (900)  | 732                 | (2400) | 8                      |
| 74 (242.8)     | 198                     | (650) | 274    | (900)  | 762                 | (2500) | 8                      |
| 77 (252.6)     | 198                     | (650) | 290    | (950)  | 792                 | (2600) | 8                      |
| 80 (262.5)     | 198                     | (650) | 290    | (950)  | 808                 | (2650) | 8                      |
| 83 (272.3)     | 213                     | (700) | 305    | (1000) | 838                 | (2750) | 8                      |
| 86 (282.2)     | 213                     | (700) | 320    | (1050) | 869                 | (2850) | 8                      |
| 89 (292.0)     | 229                     | (750) | 320    | (1050) | 899                 | (2950) | 8                      |
| 92 (301.8)     | -                       | -     | -      | -      | 914                 | (3000) | 8                      |

## Hoist reeving for main load block single lead line - 28 mm boom No. 58 WA w/ 7.6 m (25 ft) extended upper boom point

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 610       | 215,200 |
| 8                 | 130 000      | 296,600 |



# Performance data

## Wire rope lengths - single hoist drum - 28 mm hoist line - luffing jib No. 59 on boom No. 58 HL

| Boom length<br>m (ft) | Hoist line drum 1 |        | Whip line drum 2 |        |        |        |
|-----------------------|-------------------|--------|------------------|--------|--------|--------|
|                       |                   |        | 1 Part           |        | 2 Part |        |
|                       | m                 | (ft)   | m                | (ft)   | m      | (ft)   |
| 30,0 (98.4)           | 747               | (2450) | 244              | (800)  | 366    | (1200) |
| 36,0 (118.1)          | 808               | (2650) | 259              | (850)  | 381    | (1250) |
| 42,0 (137.8)          | 808               | (2650) | 274              | (900)  | 396    | (1300) |
| 48,0 (157.5)          | 823               | (2700) | 290              | (950)  | 427    | (1400) |
| 54,0 (177.2)          | 823               | (2700) | 305              | (1000) | 442    | (1450) |
| 60,0 (196.9)          | 823               | (2700) | 305              | (1000) | 442    | (1450) |
| 66,0 (216.5)          | 823               | (2700) | 305              | (1000) | 422    | (1450) |

## Hoist reeving for main load block single lead line - luffing jib No. 59 on boom No. 58 HL 28 mm

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 610       | 215,200 |
| 8                 | 130 180      | 287,000 |
| 10                | 162 750      | 358,800 |
| 12                | 185 200      | 408,500 |

NOTE: Hoist line lengths given in table include all luffing jib lengths. Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

## Maximum required parts of line - luffing jib No. 59 on boom No. 58 HL

| Boom length<br>m (ft) | Maximum parts of line |             |              |              |              |              |              |              |              |              |              |
|-----------------------|-----------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                       | Jib length m (ft)     |             |              |              |              |              |              |              |              |              |              |
|                       | 24,0 (78.7)           | 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) |
| 30,0 (98.4)           | 12                    | 10          | 10           | 8            | 8            | 6            | 6            | 6            | 4            | 4            | 4            |
| 36,0 (118.1)          | 12                    | 10          | 10           | 8            | 8            | 6            | 6            | 6            | 4            | 4            | 4            |
| 42,0 (137.8)          | 10                    | 10          | 8            | 8            | 6            | 6            | 6            | 4            | 4            | 4            | 4            |
| 48,0 (157.5)          | 10                    | 8           | 8            | 8            | 6            | 6            | 6            | 4            | 4            | 4            | 4            |
| 54,0 (177.2)          | 8                     | 8           | 6            | 6            | 6            | 6            | 4            | 4            | 4            | 4            | 2            |
| 60,0 (196.9)          | 8                     | 8           | 6            | 6            | 6            | 4            | 4            | —            | —            | —            | —            |
| 66,0 (216.5)          | 8                     | 6           | —            | —            | —            | —            | —            | —            | —            | —            | —            |



# Performance data

## Wire rope lengths - single hoist line drum - 28 mm boom No. 58 HL 16000 MAX-ER

| Boom length<br>m (ft) | Whip line - drum 2 or 3 |       |        |        | Hoist line - drum 1 |        |
|-----------------------|-------------------------|-------|--------|--------|---------------------|--------|
|                       | 1 Part                  |       | 2 Part |        | Total parts of line |        |
|                       | m                       | (ft)  | m      | (ft)   | m                   | (ft)   |
| 42,0 (137.8)          | 107                     | (350) | 152    | (500)  | 1 082               | (3550) |
| 48,0 (157.5)          | 119                     | (390) | 171    | (560)  | 1 128               | (3700) |
| 54,0 (177.2)          | 131                     | (430) | 189    | (620)  | 1 158               | (3800) |
| 60,0 (196.9)          | 143                     | (470) | 207    | (680)  | 1 158               | (3800) |
| 66,0 (216.5)          | 155                     | (510) | 226    | (740)  | 1 158               | (3800) |
| 72,0 (236.2)          | 168                     | (550) | 244    | (800)  | 1 158               | (3800) |
| 78,0 (255.9)          | 177                     | (580) | 262    | (860)  | 1 189               | (3900) |
| 84,0 (275.6)          | 189                     | (620) | 277    | (910)  | 1 189               | (3900) |
| 90,0 (295.3)          | 201                     | (660) | 296    | (970)  | 1 189               | (3900) |
| 96,0 (315.0)          | 213                     | (700) | 314    | (1030) | 1 189               | (3900) |
| 102,0 (334.6)         | 226                     | (740) | 332    | (1090) | 1 189               | (3900) |
| 108,0 (354.3)         | 238                     | (780) | 351    | (1150) | 1 189               | (3900) |
| 114,0 (374.0)         | 250                     | (820) | 369    | (1210) | 1 189               | (3900) |
| 120,0 (393.7)         | 262                     | (860) | 387    | (1270) | 1 189               | (3900) |

## Hoist reeving for main load block - single lead line - 28 mm boom No. 58 HL 16000 MAX-ER

| No. parts of line | Maximum load |         |
|-------------------|--------------|---------|
|                   | kg           | (lb)    |
| 2                 | 32 520       | 71,700  |
| 4                 | 65 090       | 143,500 |
| 6                 | 97 610       | 215,200 |
| 8                 | 130 180      | 287,000 |
| 10                | 162 750      | 358,800 |
| 12                | 195 270      | 430,500 |
| 14                | 227 840      | 502,300 |
| 16                | 260 360      | 574,000 |
| 18                | 292 930      | 645,800 |
| 20                | 322 690      | 711,400 |
| 22                | 351 530      | 775,000 |
| 24                | 379 800      | 837,400 |

NOTE: Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.



# Boom combinations

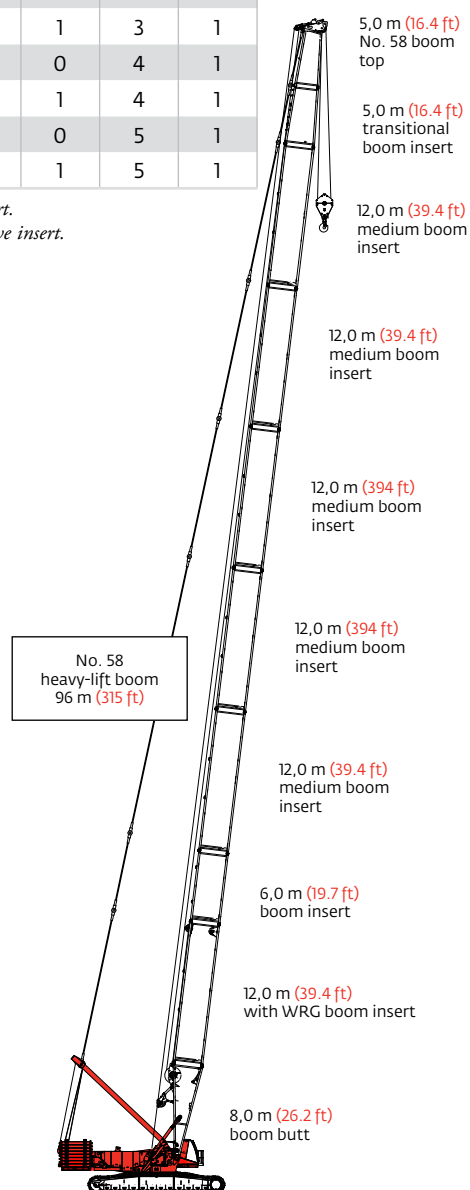
ANSI B30.5

## No. 58 main boom with heavy-lift top combinations

| Boom length<br>m (ft) | Boom inserts m (ft) |               |                |                  |
|-----------------------|---------------------|---------------|----------------|------------------|
|                       | 5,0*<br>(16.4)      | 6,0<br>(19.7) | 12,0<br>(39.4) | 12,0**<br>(39.4) |
| 30 (98.4)             | 1                   | 0             | 0              | 1                |
| 36 (118.1)            | 1                   | 1             | 0              | 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.



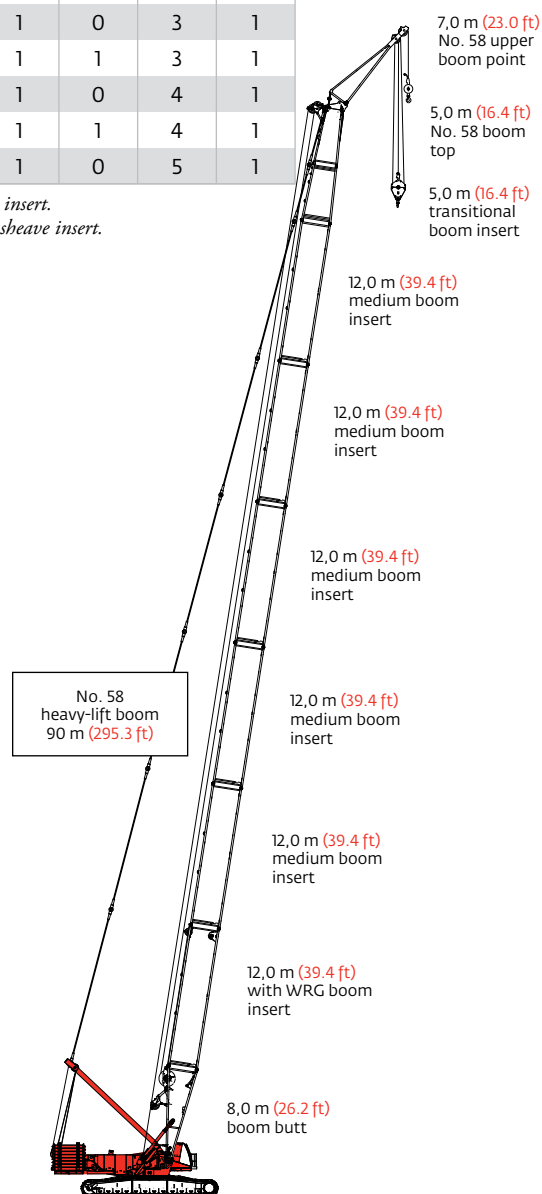
**Model 16000**  
No. 58 heavy-lift main boom  
96 m (315 ft)

## No. 58 main boom with 97.6 t (107.6 USt) extended upper boom point combinations

| Boom length<br>m (ft) | Boom inserts m (ft) |               |                |                  |
|-----------------------|---------------------|---------------|----------------|------------------|
|                       | 5,0*<br>(16.4)      | 6,0<br>(19.7) | 12,0<br>(39.4) | 12,0**<br>(39.4) |
| 30 (98.4)             | 1                   | 0             | 0              | 1                |
| 36 (118.1)            | 1                   | 1             | 0              | 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                |

\*transition boom insert.

\*\*with auxiliary sheave insert.



**Model 16000**  
No. 58 heavy-lift main boom with  
extended upper boom point 90 m (295.3 ft)



# Boom combinations

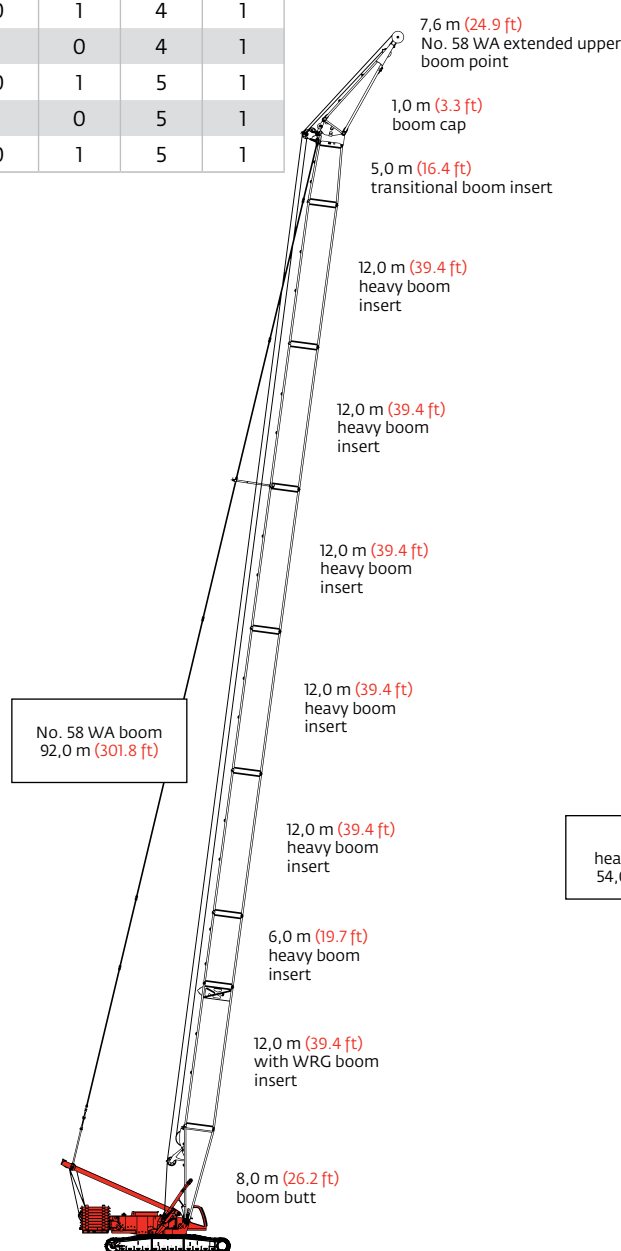
ANSI B30.5

## No. 58 WA boom with 129.9 t (143.2 USt) extended upper boom point combinations

| Boom length<br>m (ft) | Boom inserts m (ft) |               |                |                |                  |
|-----------------------|---------------------|---------------|----------------|----------------|------------------|
|                       | 5,0*<br>(16.4)      | 6,0<br>(19.7) | 12,0<br>(39.4) | 12,0<br>(39.4) | 12,0**<br>(39.4) |
| 65 (213.3)            | 1                   | 1             | 0              | 3              | 1                |
| 68 (223.1)            | 1                   | 0             | 1              | 3              | 1                |
| 71 (232.9)            | 1                   | 1             | 0              | 3              | 1                |
| 74 (242.8)            | 1                   | 0             | 1              | 4              | 1                |
| 77 (252.6)            | 1                   | 1             | 0              | 4              | 1                |
| 80 (262.5)            | 1                   | 0             | 1              | 4              | 1                |
| 83 (272.3)            | 1                   | 1             | 0              | 4              | 1                |
| 86 (282.2)            | 1                   | 0             | 1              | 5              | 1                |
| 89 (292.0)            | 1                   | 1             | 0              | 5              | 1                |
| 92 (301.8)            | 1                   | 0             | 1              | 5              | 1                |

\*transition boom insert.

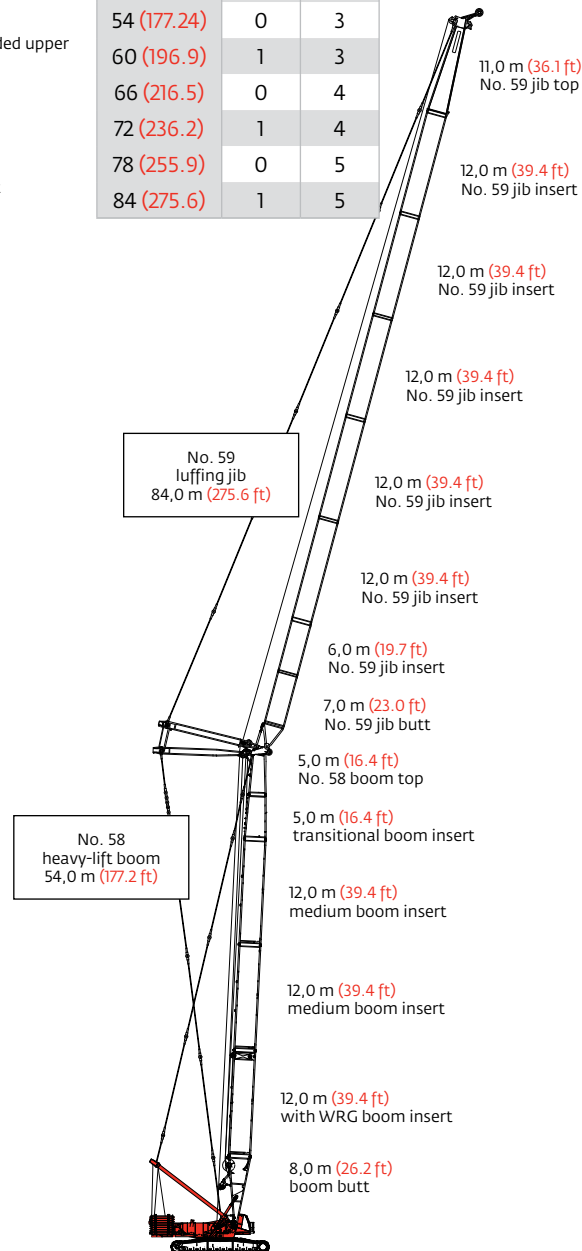
\*\*with auxiliary sheave insert.



Model 16000  
No. 58 WA boom 92,0 m (301.8 ft)

## No. 59 luffing jib combinations

| Luffing jib length<br>m (ft) | Luffing jib inserts<br>m (ft) |                |
|------------------------------|-------------------------------|----------------|
|                              | 6,0<br>(19.7)                 | 12,0<br>(39.4) |
| 24 (78.7)                    | 1                             | 0              |
| 30 (98.4)                    | 0                             | 1              |
| 36 (118.1)                   | 1                             | 1              |
| 42 (137.8)                   | 0                             | 2              |
| 48 (157.5)                   | 1                             | 2              |
| 54 (177.2)                   | 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              |



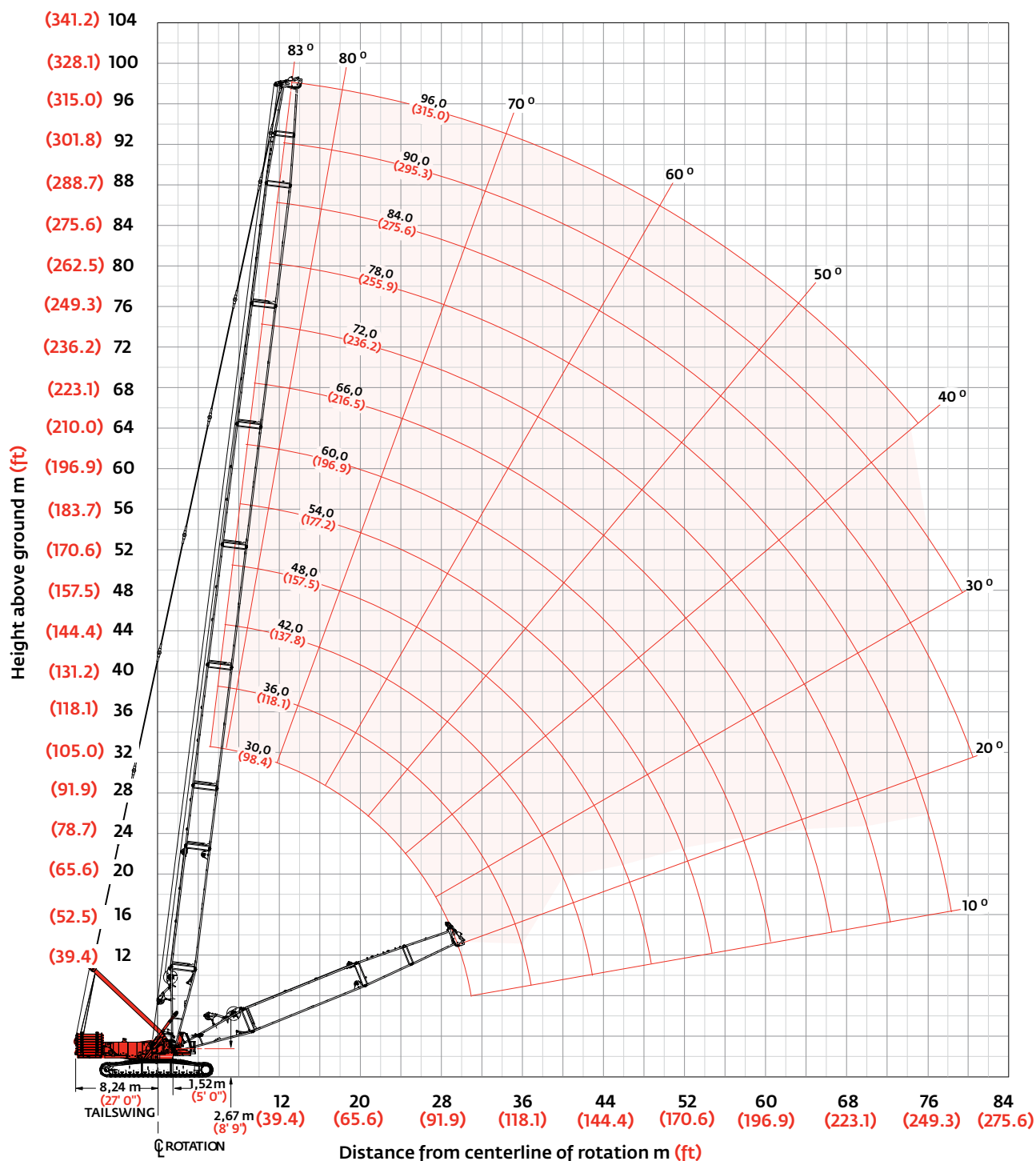
Model 16000  
No. 59 luffing jib on  
No. 58 heavy-lift main boom  
132 m (433.1 ft)



# Heavy-lift boom range diagram

ANSI B30.5

Liftcrane boom capacities - Model 16000 Series 3  
No. 58 heavy-lift main boom





# Heavy-lift boom load charts

ANSI B30.5

| Liftcrane boom capacities - Model 16000 Series 3<br>No. 58 heavy-lift main boom |                                       |                  |                  |                  |                  |                  |                                              |                  |                  |                  |                 |                 |
|---------------------------------------------------------------------------------|---------------------------------------|------------------|------------------|------------------|------------------|------------------|----------------------------------------------|------------------|------------------|------------------|-----------------|-----------------|
| Boom<br>m (ft)<br>Radius                                                        | 150 590 kg (332,000 lb) Counterweight |                  |                  |                  |                  |                  | 54 430 kg (120,000 lb) Carbody counterweight |                  |                  |                  |                 |                 |
|                                                                                 | 360° Rating kg (lb) x1 000            |                  |                  |                  |                  |                  |                                              |                  |                  |                  |                 |                 |
|                                                                                 | 30,0<br>(98.4)                        | 36,0<br>(118.1)  | 42,0<br>(137.8)  | 48,0<br>(157.5)  | 54,0<br>(177.2)  | 60,0<br>(196.9)  | 66,0<br>(216.5)                              | 72,0<br>(236.2)  | 78,0<br>(255.9)  | 84,0<br>(275.6)  | 90,0<br>(295.3) | 96,0<br>(315.0) |
| 6,4<br>(21)                                                                     | 400,0<br>(881.9)                      |                  |                  |                  |                  |                  |                                              |                  |                  |                  |                 |                 |
| 8,0<br>(26)                                                                     | 323,8<br>(720.5)                      | 323,3<br>(719.3) | 283,4<br>(625.7) |                  |                  |                  |                                              |                  |                  |                  |                 |                 |
| 10,0<br>(32)                                                                    | 256,4<br>(581.7)                      | 256,1<br>(581.0) | 256,6<br>(580.8) | 257,2<br>(579.6) | 216,1<br>(483.0) |                  |                                              |                  |                  |                  |                 |                 |
| 12,0<br>(40)                                                                    | 194,8<br>(419.1)                      | 195,1<br>(419.7) | 195,5<br>(420.5) | 195,4<br>(420.4) | 193,2<br>(420.4) | 181,9<br>(397.4) | 159,6<br>(348.9)                             | 147,0<br>(321.3) | —<br>(302.9)     |                  |                 |                 |
| 14,0<br>(45)                                                                    | 153,7<br>(349.9)                      | 153,9<br>(350.3) | 154,2<br>(351.0) | 154,1<br>(350.7) | 154,0<br>(350.6) | 154,5<br>(350.0) | 145,6<br>(325.9)                             | 134,0<br>(299.5) | 129,7<br>(288.7) | 113,7<br>(252.0) | 95,5<br>(211.6) |                 |
| 18,0<br>(60)                                                                    | 106,3<br>(229.3)                      | 106,4<br>(229.5) | 106,6<br>(229.9) | 106,3<br>(229.3) | 106,2<br>(229.0) | 105,8<br>(228.1) | 105,5<br>(227.5)                             | 105,7<br>(226.4) | 105,4<br>(225.6) | 103,4<br>(224.5) | 89,4<br>(196.3) | 77,2<br>(169.5) |
| 22,0<br>(70)                                                                    | 79,6<br>(183.6)                       | 79,7<br>(183.8)  | 79,9<br>(184.2)  | 79,5<br>(183.4)  | 79,4<br>(183.1)  | 78,9<br>(182.0)  | 78,5<br>(181.3)                              | 78,0<br>(180.2)  | 77,6<br>(179.2)  | 77,0<br>(178.0)  | 76,8<br>(176.9) | 72,5<br>(161.6) |
| 26,0<br>(85)                                                                    | 62,4<br>(138.5)                       | 62,5<br>(138.7)  | 62,7<br>(139.1)  | 62,4<br>(138.3)  | 62,1<br>(137.8)  | 61,6<br>(136.7)  | 61,3<br>(135.9)                              | 60,7<br>(134.6)  | 60,2<br>(133.5)  | 59,6<br>(132.2)  | 59,0<br>(131.0) | 58,4<br>(129.6) |
| 30,0<br>(100)                                                                   | 50,3<br>(108.2)                       | 50,5<br>(108.9)  | 50,7<br>(109.3)  | 50,3<br>(108.5)  | 50,1<br>(108.0)  | 49,6<br>(106.8)  | 49,2<br>(106.0)                              | 48,6<br>(104.6)  | 48,1<br>(103.5)  | 47,5<br>(102.1)  | 46,9<br>(100.9) | 46,2<br>(99.4)  |
| 34,0<br>(110)                                                                   |                                       | 41,6<br>(93.9)   | 41,9<br>(94.5)   | 41,5<br>(93.7)   | 41,3<br>(93.2)   | 40,8<br>(92.0)   | 40,3<br>(91.1)                               | 39,8<br>(89.8)   | 39,2<br>(88.6)   | 38,5<br>(87.1)   | 38,0<br>(85.9)  | 37,3<br>(84.4)  |
| 38,0<br>(120)                                                                   |                                       | —<br>(81.5)      | 35,0<br>(82.3)   | 34,7<br>(81.6)   | 34,5<br>(81.1)   | 33,9<br>(79.9)   | 33,6<br>(79.0)                               | 32,9<br>(77.6)   | 32,4<br>(76.4)   | 31,7<br>(74.9)   | 31,1<br>(73.7)  | 30,4<br>(72.1)  |
| 40,0<br>(130)                                                                   |                                       |                  | 32,1<br>(72.1)   | 31,9<br>(71.5)   | 31,7<br>(71.1)   | 31,1<br>(69.8)   | 30,7<br>(69.0)                               | 30,1<br>(67.5)   | 29,5<br>(66.3)   | 28,8<br>(64.8)   | 28,3<br>(63.6)  | 27,6<br>(62.0)  |
| 44,0<br>(140)                                                                   |                                       |                  |                  | 27,0<br>(62.9)   | 26,8<br>(62.5)   | 26,2<br>(61.3)   | 25,9<br>(60.5)                               | 25,2<br>(59.0)   | 24,7<br>(57.8)   | 24,0<br>(56.3)   | 23,4<br>(55.0)  | 22,7<br>(53.4)  |
| 48,0<br>(155)                                                                   |                                       |                  |                  | —<br>(52.1)      | 22,8<br>(52.0)   | 22,3<br>(50.8)   | 21,9<br>(49.9)                               | 21,2<br>(48.5)   | 20,7<br>(47.2)   | 20,0<br>(45.7)   | 19,4<br>(44.5)  | 18,7<br>(42.8)  |
| 52,0<br>(170)                                                                   |                                       |                  |                  |                  | 19,4<br>(43.2)   | 18,9<br>(42.2)   | 18,5<br>(41.3)                               | 17,9<br>(39.9)   | 17,4<br>(38.7)   | 16,6<br>(37.1)   | 16,1<br>(35.9)  | 15,3<br>(34.2)  |
| 56,0<br>(180)                                                                   |                                       |                  |                  |                  |                  | 16,1<br>(37.2)   | 15,7<br>(36.5)                               | 15,1<br>(35.0)   | 14,5<br>(33.8)   | 13,8<br>(32.2)   | 13,3<br>(31.0)  | 12,5<br>(29.3)  |
| 60,0<br>(195)                                                                   |                                       |                  |                  |                  |                  | —<br>(30.7)      | 13,3<br>(30.1)                               | 12,6<br>(28.7)   | 12,1<br>(27.5)   | 11,4<br>(25.9)   | 10,8<br>(24.7)  | 10,1<br>(23.0)  |
| 64,0<br>(210)                                                                   |                                       |                  |                  |                  |                  |                  | 11,1<br>(24.6)                               | 10,5<br>(23.3)   | 10,0<br>(22.1)   | 9,3<br>(20.5)    | 8,7<br>(19.3)   | 7,9<br>(17.6)   |
| 68,0<br>(220)                                                                   |                                       |                  |                  |                  |                  |                  |                                              | 8,6<br>(20.0)    | 8,1<br>(18.9)    | 7,4<br>(17.3)    | 6,8<br>(16.1)   | 6,1<br>(14.5)   |
| 70,0<br>(230)                                                                   |                                       |                  |                  |                  |                  |                  |                                              | 7,7<br>(17.1)    | 7,2<br>(16.0)    | 6,5<br>(14.4)    | 6,0<br>(13.2)   | 5,3<br>(11.6)   |
| 76,0<br>(255)                                                                   |                                       |                  |                  |                  |                  |                  |                                              |                  | 4,9<br>—         | 4,2<br>(8.1)     | 3,7<br>(7.0)    |                 |

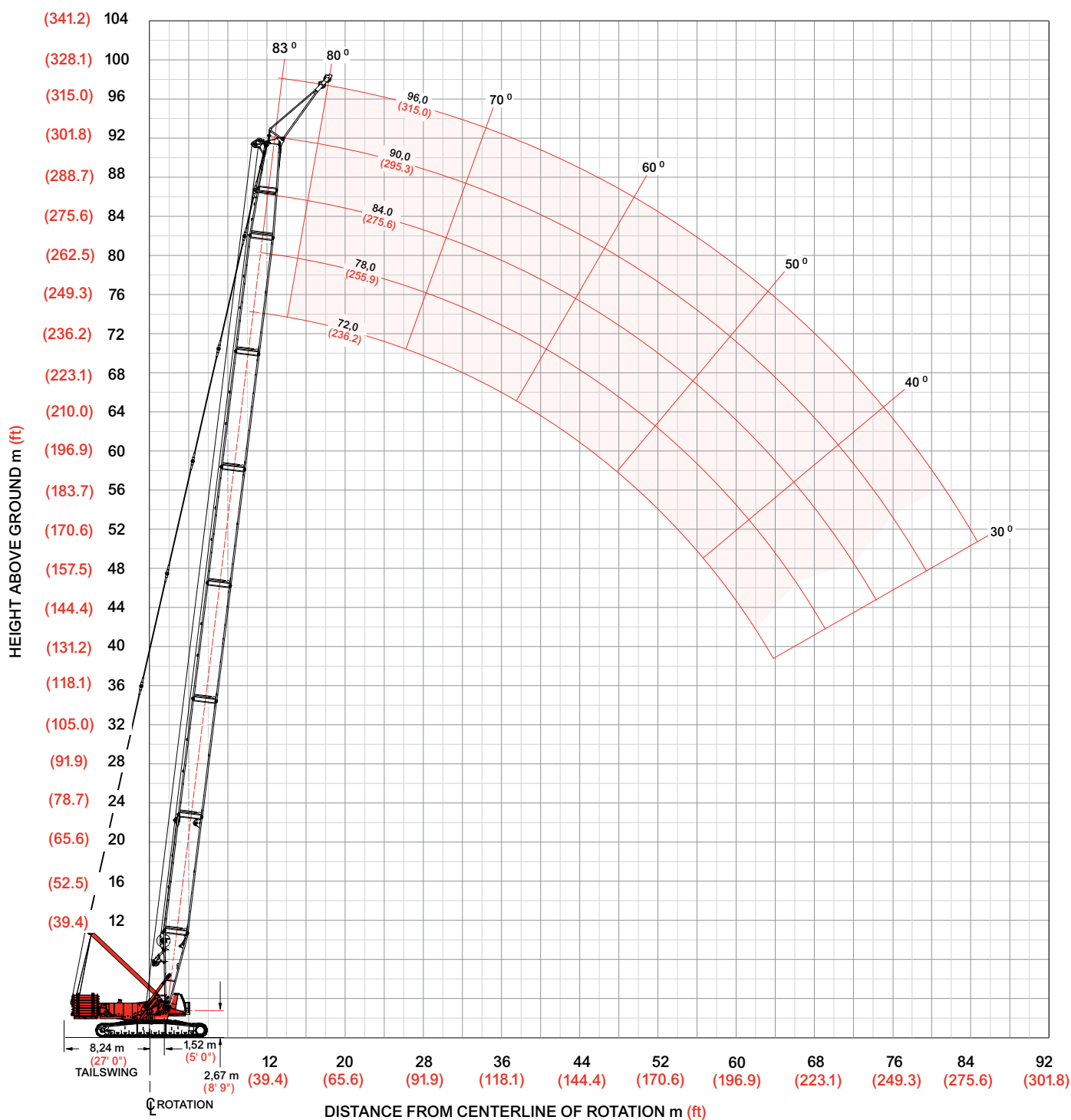


# Extended upper boom point range diagram

ANSI B30.5

Liftcrane boom capacities - Model 16000 Series 3

No. 58 heavy-lift main boom with extended upper boom point 7 m (23 ft)





# Extended upper boom point load charts

ANSI B30.5

## Liftcrane boom capacities - Model 16000 No. 58 heavy-lift main boom with 7,0 m (23 ft) extended upper boom point

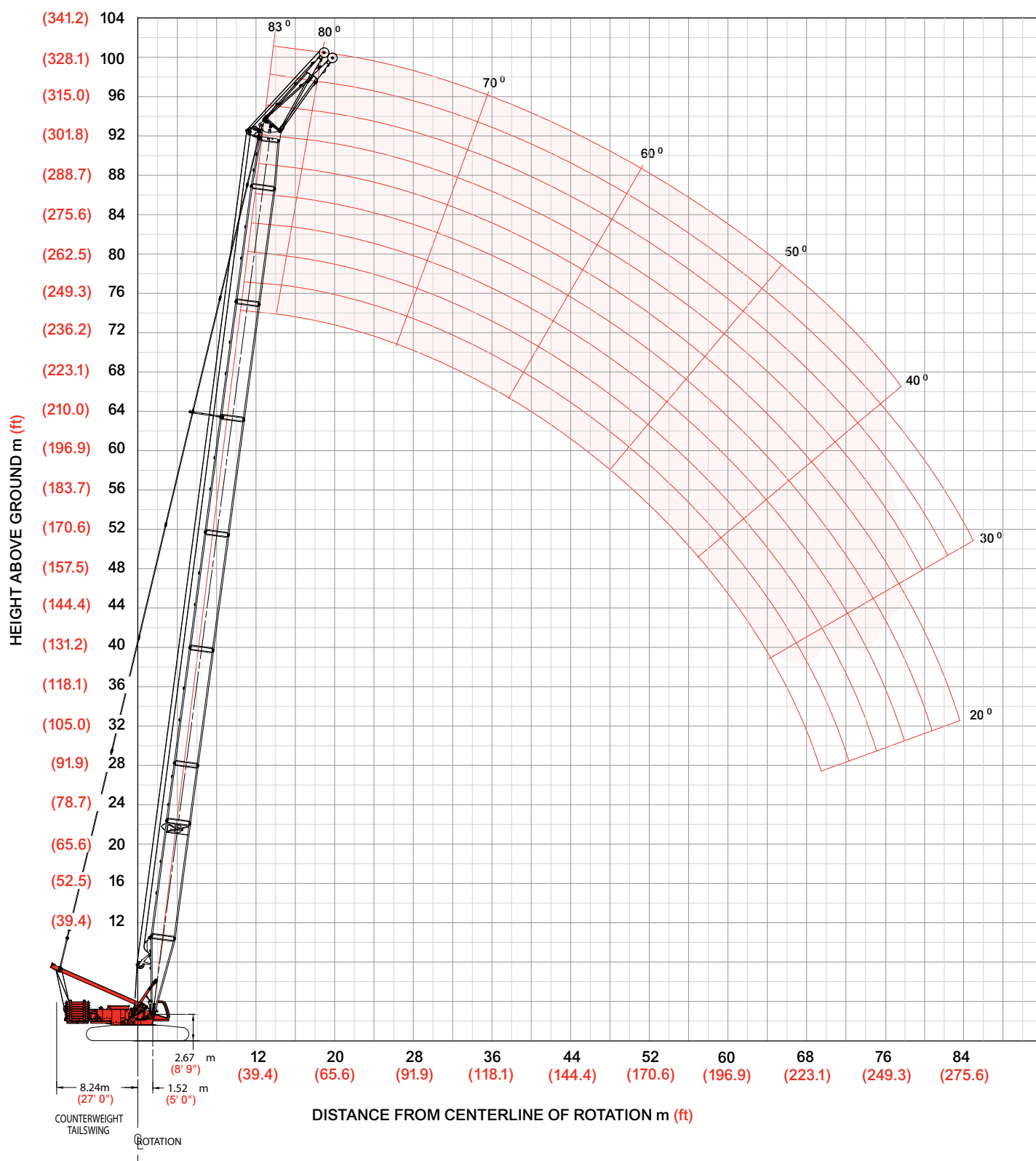
| Boom<br>m (ft)<br>Radius | 150 590 kg (332,000 lb) Counterweight<br>54 430 kg (120,000 lb) Carbody<br>counterweight<br>360° Rating kg (lb) x 1 000 |                 |                 |                 |                 |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
|                          | 66,0<br>(216.5)                                                                                                         | 72,0<br>(236.2) | 78,0<br>(255.9) | 84,0<br>(275.6) | 90,0<br>(295.3) |
| 15,2<br>(50)             | 97,6<br>(215.2)                                                                                                         |                 |                 |                 |                 |
| 16,8<br>(55)             | 97,6<br>(215.2)                                                                                                         | 97,6<br>(215.2) | 91,3<br>(201.5) | 87,8<br>(193.7) |                 |
| 18,0<br>(60)             | 97,6<br>(215.2)                                                                                                         | 97,6<br>(215.2) | 89,6<br>(196.8) | 86,5<br>(190.1) |                 |
| 20,0<br>(65)             | 95,5<br>(212.3)                                                                                                         | 95,1<br>(211.5) | 87,1<br>(192.6) | 84,4<br>(186.6) | 74,6<br>(165.0) |
| 22,0<br>(75)             | 82,7<br>(172.6)                                                                                                         | 82,3<br>(171.7) | 82,7<br>(170.8) | 81,1<br>(169.8) | 72,5<br>(158.2) |
| 24,0<br>(80)             | 72,9<br>(157.2)                                                                                                         | 72,4<br>(156.1) | 72,0<br>(155.2) | 71,8<br>(154.2) | 70,1<br>(153.2) |
| 26,0<br>(90)             | 64,8<br>(132.2)                                                                                                         | 64,4<br>(131.1) | 63,9<br>(130.1) | 63,4<br>(128.9) | 63,0<br>(127.9) |
| 28,0<br>(95)             | 58,1<br>(122.0)                                                                                                         | 57,6<br>(120.8) | 57,1<br>(119.8) | 56,6<br>(118.6) | 56,1<br>(117.5) |
| 30,0<br>(100)            | 52,4<br>(112.9)                                                                                                         | 51,9<br>(111.7) | 51,4<br>(110.7) | 50,8<br>(109.4) | 50,3<br>(108.3) |
| 32,0<br>(105)            | 45,5<br>(104.9)                                                                                                         | 47,0<br>(103.6) | 46,5<br>(102.5) | 45,9<br>(101.3) | 45,4<br>(100.2) |
| 34,0<br>(115)            | 43,3<br>(91.0)                                                                                                          | 42,7<br>(89.7)  | 42,2<br>(88.6)  | 41,6<br>(87.3)  | 41,1<br>(86.2)  |
| 38,0<br>(125)            | 36,2<br>(79.6)                                                                                                          | 35,6<br>(78.3)  | 35,1<br>(77.2)  | 34,5<br>(75.8)  | 33,9<br>(74.6)  |
| 40,0<br>(135)            | 33,3<br>(70.1)                                                                                                          | 32,7<br>(68.7)  | 32,2<br>(67.6)  | 31,5<br>(66.2)  | 31,0<br>(65.0)  |
| 44,0<br>(145)            | 28,3<br>(62.0)                                                                                                          | 27,7<br>(60.6)  | 27,1<br>(59.4)  | 26,5<br>(58.0)  | 25,9<br>(56.8)  |
| 48,0<br>(160)            | 24,2<br>(51.8)                                                                                                          | 23,5<br>(50.4)  | 23,0<br>(49.2)  | 22,3<br>(47.7)  | 21,8<br>(46.5)  |
| 52,0<br>(175)            | 20,7<br>(43.5)                                                                                                          | 20,1<br>(42.1)  | 19,5<br>(40.8)  | 18,9<br>(39.4)  | 18,3<br>(38.2)  |
| 56,0<br>(185)            | 17,8<br>(38.7)                                                                                                          | 17,1<br>(37.3)  | 16,6<br>(36.1)  | 15,9<br>(34.6)  | 15,4<br>(33.4)  |
| 60,0<br>(200)            | 15,2<br>(32.4)                                                                                                          | 14,6<br>(31.1)  | 14,0<br>(29.8)  | 13,4<br>(28.4)  | 12,8<br>(27.1)  |
| 64,0<br>(210)            |                                                                                                                         | 12,4<br>(27.4)  | 11,8<br>(26.2)  | 11,2<br>(24.7)  | 10,6<br>(23.5)  |
| 68,0<br>(225)            |                                                                                                                         |                 | 9,9<br>(21.3)   | 9,2<br>(19.8)   | 8,7<br>(18.7)   |
| 72,0<br>(240)            |                                                                                                                         |                 | 8,1<br>(17.1)   | 7,5<br>(15.6)   | 7,0<br>(14.4)   |
| 76,0<br>(250)            |                                                                                                                         |                 |                 | 5,9<br>(13.0)   | 5,4<br>(11.9)   |
| 82,0<br>(270)            |                                                                                                                         |                 |                 |                 | 3,4<br>(7.4)    |



# Extended upper boom point range diagram

ANSI B30.5

Liftcrane boom capacities - Model 16000 Wind Attachment  
No. 58 Wind Attachment with 7,6 m (25 ft) extended upper boom point





# Extended upper boom point load charts

ANSI B30.5

## Liftcrane boom capacities - Model 16000 Wind Attachment No. 58 WA with 7,6 m (25 ft) extended upper boom point

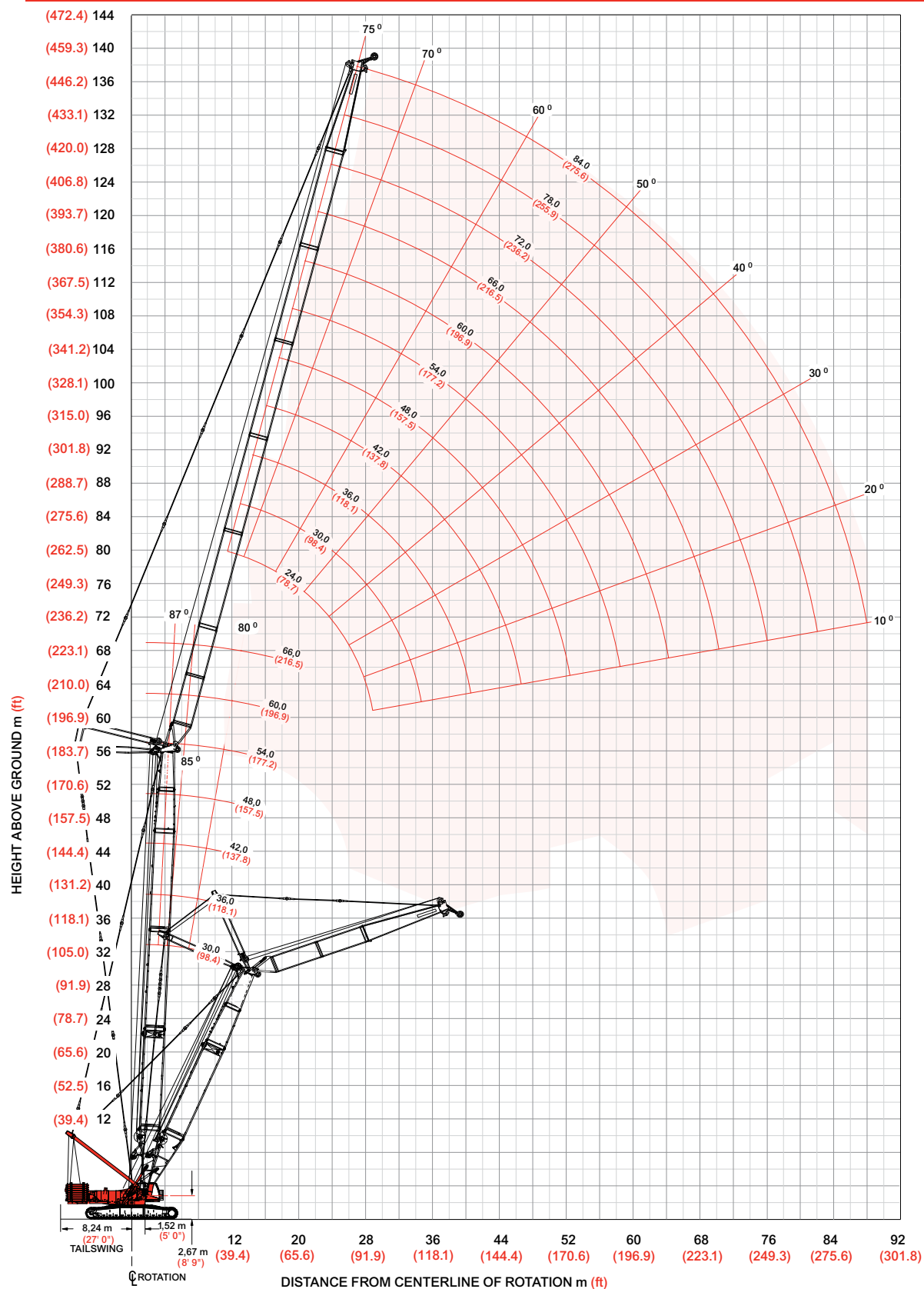
| Boom<br>m (ft)<br>Radius | 28° offset                                                                                                             |                  |                  |                  |                 |                  | 35° offset       |                  |                  |                 |                 |                 |
|--------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|-----------------|------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|
|                          | 166 920 kg (368,000 lb) Counterweight<br>54 430 kg (120,000 lb) Carbody counterweight<br>360° Rating<br>kg (lb) x 1000 |                  |                  |                  |                 |                  |                  |                  |                  |                 |                 |                 |
|                          | 65,0<br>(213.2)                                                                                                        | 71,0<br>(232.9)  | 77,0<br>(252.6)  | 83,0<br>(272.3)  | 89,0<br>(292.0) | 92,0<br>(301.8)  | 65,0<br>(213.2)  | 71,0<br>(232.9)  | 77,0<br>(252.6)  | 83,0<br>(272.3) | 89,0<br>(292.0) | 92,0<br>(301.8) |
| 15,2<br>(50)             | 130.0<br>(286.6)                                                                                                       | 130.0<br>(286.6) |                  |                  |                 |                  | 130.0<br>(286.6) |                  |                  |                 |                 |                 |
| 18,0<br>(60)             | 118.5<br>(255.6)                                                                                                       | 118.1<br>(254.5) | 117.8<br>(253.7) | 117.5<br>(252.7) | 86.5<br>(251.8) | 108.5<br>(239.4) | 119.9<br>(257.5) | 118.7<br>(256.5) | 118.4<br>(255.8) | 87.8<br>(254.9) | 87.3<br>(246.4) | 87.1<br>(232.4) |
| 22,0<br>(70)             | 88.7<br>(204.5)                                                                                                        | 88.0<br>(203.2)  | 87.5<br>(202.1)  | 87.0<br>(200.9)  | 75.8<br>(199.8) | 86.3<br>(199.5)  | 89.3<br>(206.0)  | 88.7<br>(204.8)  | 88.3<br>(203.9)  | 77.0<br>(202.8) | 76.5<br>(201.7) | 76.3<br>(201.2) |
| 24,0<br>(80)             | 78.2<br>(168.5)                                                                                                        | 77.5<br>(167.0)  | 76.9<br>(165.8)  | 76.3<br>(164.5)  | 59.7<br>(163.2) | 75.6<br>(162.8)  | 78.7<br>(169.7)  | 78.1<br>(168.3)  | 77.6<br>(167.2)  | 60.9<br>(166.0) | 60.3<br>(164.8) | 60.0<br>(164.2) |
| 28,0<br>(90)             | 62.3<br>(141.7)                                                                                                        | 61.5<br>(140.1)  | 61.0<br>(138.8)  | 60.3<br>(137.4)  | 53.5<br>(136.1) | 59.5<br>(135.6)  | 62.8<br>(142.8)  | 62.0<br>(141.2)  | 61.5<br>(140.0)  | 54.6<br>(138.7) | 54.0<br>(137.4) | 53.7<br>(136.8) |
| 30,0<br>(100)            | 56.2<br>(121.0)                                                                                                        | 55.4<br>(119.3)  | 54.8<br>(118.0)  | 54.1<br>(116.4)  | 43.5<br>(115.1) | 53.3<br>(114.6)  | 56.6<br>(121.9)  | 55.9<br>(120.3)  | 55.3<br>(119.0)  | 44.6<br>(117.6) | 44.0<br>(116.2) | 43.7<br>(115.6) |
| 34,0<br>(110)            | 46.4<br>(104.6)                                                                                                        | 45.5<br>(102.7)  | 44.9<br>(101.4)  | 44.2<br>(99.8)   | 39.4<br>(98.4)  | 43.3<br>(97.9)   | 46.7<br>(105.3)  | 45.9<br>(103.6)  | 45.3<br>(102.3)  | 40.5<br>(100.8) | 39.9<br>(99.4)  | 39.6<br>(98.7)  |
| 36,0<br>(120)            | 42.3<br>(91.1)                                                                                                         | 41.5<br>(89.3)   | 40.9<br>(87.9)   | 40.1<br>(86.2)   | 32.7<br>(84.7)  | 39.2<br>(84.2)   | 42.6<br>(91.8)   | 41.9<br>(90.0)   | 41.3<br>(88.7)   | 33.7<br>(87.1)  | 33.1<br>(85.7)  | 32.7<br>(84.9)  |
| 40,0<br>(130)            | 35.7<br>(80.0)                                                                                                         | 34.8<br>(78.1)   | 34.1<br>(76.6)   | 33.4<br>(75.0)   | 29.8<br>(73.4)  | 32.4<br>(72.9)   | 35.9<br>(80.6)   | 35.1<br>(78.7)   | 34.4<br>(77.3)   | 30.8<br>(75.7)  | 30.1<br>(74.3)  | 29.8<br>(73.5)  |
| 42,0<br>(140)            | 32.8<br>(70.5)                                                                                                         | 31.9<br>(68.6)   | 31.3<br>(67.1)   | 30.5<br>(65.4)   | 24.9<br>(63.9)  | 29.6<br>(63.4)   | 33.1<br>(71.1)   | 32.2<br>(69.2)   | 31.6<br>(67.8)   | 25.9<br>(66.1)  | 25.2<br>(64.6)  | 24.9<br>(63.8)  |
| 46,0<br>(150)            | 28.0<br>(62.5)                                                                                                         | 27.1<br>(60.5)   | 26.4<br>(59.0)   | 25.6<br>(57.3)   | 22.8<br>(55.7)  | 24.7<br>(55.2)   | 28.2<br>(62.9)   | 27.3<br>(61.0)   | 26.7<br>(59.6)   | 23.8<br>(57.9)  | 23.1<br>(56.4)  | 22.7<br>(55.6)  |
| 48,0<br>(160)            | 25.9<br>(55.5)                                                                                                         | 24.9<br>(53.5)   | 24.3<br>(52.0)   | 23.5<br>(50.2)   | 19.1<br>(48.6)  | 22.5<br>(48.1)   | 26.1<br>(55.8)   | 25.2<br>(53.9)   | 24.5<br>(52.5)   | 20.0<br>(50.8)  | 19.3<br>(49.2)  | 18.9<br>(48.4)  |
| 52,0<br>(170)            | 22.2<br>(49.3)                                                                                                         | 21.2<br>(47.3)   | 20.6<br>(45.8)   | 19.8<br>(44.1)   | 14.5<br>(42.5)  | 18.8<br>(41.9)   | 22.3<br>(49.6)   | 21.4<br>(47.7)   | 20.8<br>(46.3)   | 15.4<br>(44.5)  | 14.7<br>(43.0)  | 14.3<br>(42.2)  |
| 58,0<br>(190)            | 17.6<br>(39.1)                                                                                                         | 16.7<br>(37.0)   | 16.0<br>(35.6)   | 15.2<br>(33.8)   | 10.8<br>(32.2)  | 14.2<br>(31.6)   | 17.7<br>(39.3)   | 16.8<br>(37.3)   | 16.2<br>(35.9)   | 11.7<br>(34.2)  | 10.9<br>(32.6)  | 10.6<br>(31.8)  |
| 64,0<br>(210)            | 13.9<br>(30.7)                                                                                                         | 13.0<br>(28.8)   | 12.3<br>(27.3)   | 11.5<br>(25.5)   | 7.8<br>(23.9)   | 10.5<br>(23.3)   |                  | 13.1<br>(29.0)   | 12.4<br>(27.5)   | 8.6<br>(25.8)   | 7.9<br>(24.2)   | 7.5<br>(23.4)   |
| 70,0<br>(230)            |                                                                                                                        | -<br>(21.9)      | 9.3<br>(20.5)    | 8.5<br>(18.7)    | 5.0<br>(17.1)   | 7.5<br>(16.6)    |                  |                  | 9.4<br>(20.7)    | 6.0<br>(19.0)   | 5.1<br>(17.4)   | 4.6<br>(16.6)   |
| 76,0<br>(250)            |                                                                                                                        |                  | 6.7<br>(14.7)    | 5.9<br>(13.0)    | -<br>(10.9)     | 4.6<br>(10.1)    |                  |                  |                  | -<br>(13.2)     | -<br>(11.2)     | -<br>(10.0)     |



# Luffing jib range diagram

ANSI B30.5

Liftcrane boom capacities - Model 16000 Series 3  
No. 58 heavy-lift main boom with No. 59 luffing jib





# Luffing jib load charts

ANSI B30.5

## 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

| Luffing jib length 24,0 m (78.7 ft)  | Boom<br>m (ft)<br>Radius             | 30,0<br>(98.4)           | 42,0<br>(137.8)  | 54,0<br>(177.2)  | 66,0<br>(216.5) |                 |
|--------------------------------------|--------------------------------------|--------------------------|------------------|------------------|-----------------|-----------------|
|                                      | 11,6<br>(38)                         | 185,2<br>(408.5)         |                  |                  |                 |                 |
|                                      | 14,0<br>(45)                         | 157,7<br>(354.2)         | 151,0<br>(333.0) | 117,4<br>(262.3) | 99,6<br>(222.2) |                 |
|                                      | 18,0<br>(60)                         | 121,1<br>(260.7)         | 112,6<br>(244.8) | 97,8<br>(213.0)  | 84,8<br>(184.8) |                 |
|                                      | 22,0<br>(75)                         | 92,7<br>(194.7)          | 92,7<br>(194.5)  | 82,2<br>(174.9)  | 72,3<br>(154.3) |                 |
|                                      | 26,0<br>(90)                         | 74,6<br>(147.9)          | 73,9<br>(147.8)  | 69,5<br>(144.3)  | 62,1<br>(129.5) |                 |
|                                      | 32,0<br>(105)                        |                          |                  |                  |                 |                 |
|                                      | 38,0<br>(125)                        |                          |                  |                  |                 |                 |
|                                      | 44,0<br>(145)                        |                          |                  |                  |                 |                 |
|                                      | 52,0<br>(175)                        |                          |                  |                  |                 |                 |
|                                      | 56,0<br>(185)                        |                          |                  |                  |                 |                 |
|                                      | 60,0<br>(195)                        |                          |                  |                  |                 |                 |
|                                      | Luffing jib length 36,0 m (118.1 ft) | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)   | 42,0<br>(137.8)  | 54,0<br>(177.2) | 60,0<br>(196.9) |
|                                      |                                      | 15,2<br>(50)             | 136,1<br>(300.2) | 116,8<br>(252.6) |                 |                 |
|                                      |                                      | 16,0<br>(55)             | 131,2<br>(278.3) | 113,3<br>(242.0) | —<br>(205.4)    | —<br>(194.5)    |
|                                      |                                      | 18,0<br>(60)             | 118,9<br>(258.6) | 104,3<br>(227.5) | 89,0<br>(194.3) | 84,5<br>(184.4) |
|                                      |                                      | 22,0<br>(75)             | 92,3<br>(193.7)  | 89,1<br>(190.3)  | 77,1<br>(165.1) | 73,3<br>(157.0) |
| 26,0<br>(90)                         |                                      | 74,4<br>(153.3)          | 74,3<br>(152.9)  | 67,1<br>(141.2)  | 64,0<br>(134.6) |                 |
| 32,0<br>(105)                        |                                      | 57,0<br>(125.8)          | 56,9<br>(125.5)  | 55,2<br>(121.7)  | 52,5<br>(115.8) |                 |
| 38,0<br>(125)                        |                                      | 45,6<br>(100.2)          | 45,5<br>(100.0)  | 44,8<br>(98.5)   | 43,0<br>(94.7)  |                 |
| 44,0<br>(145)                        |                                      |                          |                  |                  |                 |                 |
| 52,0<br>(175)                        |                                      |                          |                  |                  |                 |                 |
| 56,0<br>(185)                        |                                      |                          |                  |                  |                 |                 |
| 60,0<br>(195)                        |                                      |                          |                  |                  |                 |                 |
| Luffing jib length 48,0 m (157.5 ft) |                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)   | 42,0<br>(137.8)  | 54,0<br>(177.2) | 60,0<br>(196.9) |
|                                      |                                      | 18,3<br>(60)             | 107,4<br>(236.8) | 92,1<br>(203.2)  |                 |                 |
|                                      |                                      | 22,0<br>(75)             | 91,9<br>(191.9)  | 81,6<br>(175.1)  | 70,3<br>(151.1) | 66,6<br>(142.9) |
|                                      |                                      | 24,0<br>(80)             | 81,6<br>(176.5)  | 75,6<br>(166.8)  | 66,2<br>(144.3) | 62,6<br>(136.6) |
|                                      |                                      | 30,0<br>(100)            | 61,2<br>(132.2)  | 61,0<br>(131.8)  | 55,5<br>(120.9) | 52,6<br>(114.6) |
|                                      | 34,0<br>(115)                        | 52,0<br>(110.2)          | 51,8<br>(109.9)  | 49,5<br>(106.2)  | 47,0<br>(100.7) |                 |
|                                      | 38,0<br>(125)                        | 44,9<br>(98.8)           | 44,8<br>(98.6)   | 44,4<br>(97.7)   | 42,0<br>(92.5)  |                 |
|                                      | 42,0<br>(140)                        | 39,3<br>(85.0)           | 39,2<br>(84.8)   | 39,1<br>(84.4)   | 37,6<br>(81.5)  |                 |
|                                      | 46,0<br>(155)                        | 34,8<br>(74,0)           | 34,7<br>(73.8)   | 34,5<br>(73.4)   | 33,7<br>(71.7)  |                 |
|                                      | 52,0<br>(175)                        |                          |                  |                  | 27,0<br>(54.3)  |                 |
|                                      | 56,0<br>(185)                        |                          |                  |                  |                 |                 |
|                                      | 60,0<br>(195)                        |                          |                  |                  |                 |                 |

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) | 60,0<br>(196.9) |
|--------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
| Luffing jib length 60,0 m (196.9 ft) | 21,3<br>(70)             | 86,0<br>(189.7) | 73,5<br>(162.2) |                 |                 |
|                                      | 24,0<br>(80)             | 79,1<br>(172.5) | 69,3<br>(151.1) | 58,2<br>(128.1) | 51,8<br>(114.1) |
|                                      | 28,0<br>(95)             | 65,9<br>(139.2) | 62,1<br>(133.6) | 53,2<br>(114.7) | 49,6<br>(107.3) |
|                                      | 34,0<br>(115)            | 51,1<br>(108.2) | 50,9<br>(107.8) | 45,8<br>(98.3)  | 43,2<br>(92.8)  |
|                                      | 40,0<br>(135)            | 41,1<br>(87.2)  | 40,9<br>(86.9)  | 39,4<br>(84.4)  | 37,2<br>(79.7)  |
|                                      | 48,0<br>(160)            | 31,9<br>(69.0)  | 31,8<br>(68.7)  | 31,7<br>(68.3)  | 30,4<br>(65.9)  |
|                                      | 56,0<br>(185)            | 25,6<br>(55.9)  | 25,5<br>(55.7)  | 25,3<br>(55.3)  | 24,9<br>(54.4)  |
|                                      | 64,0<br>(210)            | 18,4<br>(40.7)  | 18,3<br>(40.5)  | 18,2<br>(40.3)  | 18,1<br>(40.1)  |
|                                      | 72,0<br>(240)            |                 |                 |                 |                 |
|                                      | 84,0<br>(280)            |                 |                 |                 |                 |
|                                      | 88,0<br>(290)            |                 |                 |                 |                 |

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) |
|--------------------------------------|--------------------------|-----------------|-----------------|-----------------|
| Luffing jib length 72,0 m (236.2 ft) | 21,3<br>(70)             |                 |                 |                 |
|                                      | 24,0<br>(80)             | —<br>(132.1)    | —<br>(115.1)    |                 |
|                                      | 28,0<br>(95)             | 58,3<br>(127.7) | 51,2<br>(112.4) | 43,1<br>(94.6)  |
|                                      | 34,0<br>(115)            | 49,9<br>(105.8) | 48,2<br>(103.7) | 40,6<br>(88.0)  |
|                                      | 40,0<br>(135)            | 40,0<br>(84.8)  | 39,8<br>(84.5)  | 36,3<br>(78.1)  |
|                                      | 48,0<br>(160)            | 30,9<br>(66.6)  | 30,7<br>(66.3)  | 30,3<br>(65.7)  |
|                                      | 56,0<br>(185)            | 24,5<br>(53.5)  | 24,4<br>(53.3)  | 24,2<br>(52.9)  |
|                                      | 64,0<br>(210)            | 19,8<br>(43.7)  | 19,7<br>(43.5)  | 19,5<br>(43.2)  |
|                                      | 72,0<br>(240)            | 16,1<br>(34.6)  | 15,7<br>(32.5)  | 15,2<br>(31.6)  |
|                                      | 84,0<br>(280)            |                 |                 |                 |
|                                      | 88,0<br>(290)            |                 |                 |                 |

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) | 42,0<br>(137.8) | 54,0<br>(177.2) |
|--------------------------------------|--------------------------|----------------|-----------------|-----------------|
| Luffing jib length 84,0 m (275.6 ft) | 21,3<br>(70)             |                |                 |                 |
|                                      | 24,0<br>(80)             |                |                 |                 |
|                                      | 28,0<br>(95)             | 42,6<br>(93.3) | 37,9<br>(83.3)  | —<br>(70.9)     |
|                                      | 34,0<br>(115)            | 40,7<br>(89.2) | 36,7<br>(80.5)  | 31,4<br>(68.9)  |
|                                      | 40,0<br>(135)            | 38,7<br>(82.5) | 35,4<br>(77.7)  | 30,0<br>(65.2)  |
|                                      | 48,0<br>(160)            | 29,8<br>(64.2) | 29,6<br>(63.9)  | 26,4<br>(57.4)  |
|                                      | 56,0<br>(185)            | 23,4<br>(51.2) | 23,3<br>(50.9)  | 22,7<br>(49.8)  |
|                                      | 64,0<br>(210)            | 18,8<br>(41.5) | 18,6<br>(41.2)  | 18,5<br>(40.9)  |
|                                      | 72,0<br>(240)            | 15,2<br>(32.5) | 15,1<br>(32.3)  | 14,9<br>(32.0)  |
|                                      | 84,0<br>(280)            | 10,6<br>(21.4) | 9,6<br>(19.5)   | 9,1<br>(18.4)   |
|                                      | 88,0<br>(290)            |                | 6,8<br>(14.2)   | 6,6<br>(14.0)   |



# Luffing jib load charts

ANSI B30.5

## 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 1000

### 75° Boom angle

|                                     | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) | 66,0<br>(216.5) |                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) | 60,0<br>(196.9) |                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) | 60,0<br>(196.9) |
|-------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
| Luffing jib length 24,0 m (78.7 ft) | 24,0<br>(80)             | 75,6<br>(163.2) |                 |                 |                 | Luffing jib length 36,0 m (118.1 ft) | 24,0<br>(80)             |                 |                 |                 |                 | Luffing jib length 48,0 m (157.5 ft) | 34,0<br>(110)            | 46,4<br>(104.2) |                 |                 |                 |
|                                     | 26,0<br>(90)             | 68,1<br>(140.3) | 65,0<br>(133.9) |                 |                 |                                      | 26,0<br>(90)             |                 |                 |                 |                 |                                      | 36,0<br>(120)            | 43,0<br>(92.9)  | —<br>(87.5)     |                 |                 |
|                                     | 28,0<br>(95)             | 61,9<br>(130.9) | 59,1<br>(124.9) |                 |                 |                                      | 28,0<br>(95)             | 61,1<br>(128.9) |                 |                 |                 |                                      | 38,0<br>(125)            | 40,0<br>(87.9)  | 37,6<br>(82.8)  |                 |                 |
|                                     | 32,0<br>(105)            | 52,1<br>(114.9) | 49,7<br>(109.7) | 46,9<br>(103.4) | 43,5<br>(96.0)  |                                      | 32,0<br>(105)            | 51,4<br>(113.3) | 48,7<br>(107.4) |                 |                 |                                      | 40,0<br>(135)            | 37,3<br>(79.3)  | 35,1<br>(74.6)  | 32,6<br>(69.2)  |                 |
|                                     | 36,0<br>(120)            |                 | 42,5<br>(91.8)  | 40,2<br>(213.0) | 37,2<br>(80.5)  |                                      | 36,0<br>(120)            | 44,0<br>(95.2)  | 41,7<br>(90.2)  | 39,1<br>(84.4)  | —<br>(81.0)     |                                      | 42,0<br>(140)            | 34,9<br>(75.5)  | 32,9<br>(71.0)  | 30,5<br>(65.8)  | 29,1<br>(62.8)  |
|                                     | 38,0<br>(125)            |                 |                 | 37,3<br>(82.1)  | 32,3<br>(76.3)  |                                      | 38,0<br>(125)            | 41,0<br>(90.3)  | 38,9<br>(125.5) | 36,3<br>(79.9)  | 34,9<br>(76.7)  |                                      | 44,0<br>(145)            | 32,8<br>(71.9)  | 30,8<br>(67.6)  | 28,5<br>(62.6)  | 27,2<br>(59.8)  |
|                                     | 42,0<br>(140)            |                 |                 |                 | 30,2<br>(65.1)  |                                      | 42,0<br>(140)            | 35,9<br>(77.5)  | 34,0<br>(85.5)  | 31,8<br>(68.6)  | 30,4<br>(65.8)  |                                      | 46,0<br>(155)            | 30,8<br>(65.6)  | 29,0<br>(61.6)  | 26,8<br>(56.9)  | 25,6<br>(54.3)  |
|                                     | 46,0<br>(155)            |                 |                 |                 |                 |                                      | 46,0<br>(155)            |                 | 30,0<br>(63.7)  | 28,0<br>(59.5)  | 26,8<br>(57.1)  |                                      | 50,0<br>(165)            | 27,4<br>(60,0)  | 25,7<br>(56.3)  | 23,7<br>(52.0)  | 22,6<br>(49.6)  |
|                                     | 52,0<br>(175)            |                 |                 |                 |                 |                                      | 52,0<br>(175)            |                 |                 |                 | 22,4<br>(47.5)  |                                      | 56,0<br>(185)            | 23,2<br>(50.6)  | 21,7<br>(47.5)  | 20,0<br>(43.7)  | 19,0<br>(41.6)  |
|                                     | 54,0<br>(180)            |                 |                 |                 |                 |                                      | 54,0<br>(180)            |                 |                 |                 |                 |                                      | 60,0<br>(200)            |                 | 19,5<br>(41.8)  | 17,9<br>(38.6)  | 17,0<br>(36.7)  |
| 56,0<br>(185)                       |                          |                 |                 |                 | 56,0<br>(185)   |                                      |                          |                 |                 | 64,0<br>(215)   |                 |                                      | 16,0<br>(32.2)           | 15,2<br>(32.2)  |                 |                 |                 |

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

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) | 42,0<br>(137.8) | 48,0<br>(157.5) |
|--------------------------------------|--------------------------|----------------|-----------------|-----------------|
| Luffing jib length 72,0 m (236.2 ft) | 40,0<br>(135)            |                |                 |                 |
|                                      | 44,0<br>(145)            |                |                 |                 |
|                                      | 48,0<br>(160)            | 26,6<br>(57.4) | 24,7<br>(53.1)  |                 |
|                                      | 54,0<br>(180)            | 22,2<br>(47.8) | 20,5<br>(44.1)  | 19,5<br>(41.9)  |
|                                      | 60,0<br>(200)            | 18,7<br>(40.2) | 17,1<br>(36.9)  | 16,3<br>(35.0)  |
|                                      | 66,0<br>(220)            | 15,9<br>(31.4) | 14,5<br>(31.1)  | 13,6<br>(29.3)  |
|                                      | 72,0<br>(240)            | 13,5<br>(28.9) | 12,2<br>(26.2)  | 11,5<br>(24.7)  |
|                                      | 76,0<br>(250)            | 12,1<br>(26.7) | 10,9<br>(24.1)  | 10,3<br>(22.6)  |
|                                      | 80,0<br>(265)            |                | 9,8<br>(—)      | 9,1<br>(—)      |
|                                      | 84,0<br>(280)            |                | 8,7<br>(18.2)   | 8,1<br>(17.1)   |
|                                      | 88,0<br>(300)            |                |                 |                 |

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) |
|--------------------------------------|--------------------------|----------------|
| Luffing jib length 84,0 m (275.6 ft) | 40,0<br>(135)            |                |
|                                      | 44,0<br>(145)            |                |
|                                      | 48,0<br>(160)            |                |
|                                      | 54,0<br>(180)            | 21,0<br>(45.1) |
|                                      | 60,0<br>(200)            | 17,5<br>(37.6) |
|                                      | 66,0<br>(220)            | 14,7<br>(31.5) |
|                                      | 72,0<br>(240)            | 12,3<br>(26.4) |
|                                      | 76,0<br>(250)            | 11,0<br>(24.2) |
|                                      | 80,0<br>(265)            | 9,8<br>(—)     |
|                                      | 84,0<br>(280)            | 8,7<br>(18.5)  |
|                                      | 88,0<br>(300)            | 7,7<br>(15.2)  |



# Luffing jib load charts

ANSI B30.5

## 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) x1 000

### 65° Boom angle

|                                     | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4)  | 42,0<br>(137.8) | 54,0<br>(177.2) | 66,0<br>(216.5) |                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) | 42,0<br>(137.8) | 54,0<br>(177.2) | 60,0<br>(196.9) |                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) | 42,0<br>(137.8) | 54,0<br>(177.2) |
|-------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------------------|--------------------------|----------------|-----------------|-----------------|-----------------|--------------------------------------|--------------------------|----------------|-----------------|-----------------|
|                                     |                          | (105.7)         | (80.8)          | (68.9)          | (60.6)          |                                      |                          | (74.0)         | (60.1)          | (44.9)          | (35.4)          |                                      |                          | (56.1)         | (43.1)          | (28.7)          |
| Luffing jib length 24,0 m (78.7 ft) | 32,0<br>(105)            | 47,9<br>(105.7) |                 |                 |                 | Luffing jib length 36,0 m (118.1 ft) | 32,0<br>(105)            |                |                 |                 |                 | Luffing jib length 48,0 m (157.5 ft) | 32,0<br>(105)            |                |                 |                 |
|                                     | 36,0<br>(120)            | 41,0<br>(88.7)  | —<br>(80.8)     |                 |                 |                                      | 36,0<br>(120)            |                |                 |                 |                 |                                      | 36,0<br>(120)            |                |                 |                 |
|                                     | 40,0<br>(135)            | 61,9<br>—       | 32,4<br>(68.9)  |                 |                 |                                      | 40,0<br>(135)            | 34,8<br>(74.0) |                 |                 |                 |                                      | 40,0<br>(135)            |                |                 |                 |
|                                     | 44,0<br>(145)            |                 | 28,2<br>(61.9)  | 25,0<br>(60.6)  |                 |                                      | 44,0<br>(145)            | 30,6<br>(67.1) | 27,4<br>(60.1)  |                 |                 |                                      | 44,0<br>(145)            |                |                 |                 |
|                                     | 48,0<br>(160)            |                 |                 | 21,9<br>(47.2)  | 18,5<br>(39.8)  |                                      | 48,0<br>(160)            | 27,0<br>(58.4) | 24,2<br>(52.2)  | —<br>(44.9)     |                 |                                      | 48,0<br>(160)            | 26,0<br>(56.1) |                 |                 |
|                                     | 52,0<br>(175)            |                 |                 |                 | 16,2<br>(34.3)  |                                      | 52,0<br>(175)            |                | 21,5<br>(45.7)  | 18,4<br>(39.2)  | 16,6<br>(35.4)  |                                      | 52,0<br>(175)            | 23,1<br>(49.2) | 20,3<br>(43.1)  |                 |
|                                     | 56,0<br>(185)            |                 |                 |                 |                 |                                      | 54,0<br>(180)            |                | 20,3<br>(43.7)  | 17,4<br>(34.3)  | 15,7<br>(33.8)  |                                      | 54,0<br>(180)            | 21,9<br>(47.1) | 19,1<br>(41.2)  |                 |
|                                     | 60,0<br>(200)            |                 |                 |                 |                 |                                      | 60,0<br>(200)            |                |                 | 14,6<br>(31.2)  | 13,1<br>(28.2)  |                                      | 60,0<br>(200)            | 18,5<br>(39.9) | 16,2<br>(34.8)  | 13,3<br>(28.7)  |
|                                     | 62,0<br>(205)            |                 |                 |                 |                 |                                      | 62,0<br>(205)            |                |                 |                 | 12,3<br>(26.9)  |                                      | 62,0<br>(205)            | 17,5<br>(38.2) | 15,3<br>(33.3)  | 12,6<br>(27.5)  |
|                                     | 68,0<br>(225)            |                 |                 |                 |                 |                                      | 68,0<br>(225)            |                |                 |                 |                 |                                      | 68,0<br>(225)            |                |                 | 10,6<br>(23.0)  |
|                                     | 72,0<br>(240)            |                 |                 |                 |                 |                                      | 72,0<br>(240)            |                |                 |                 |                 |                                      | 72,0<br>(240)            |                |                 | 9,3<br>(19.8)   |

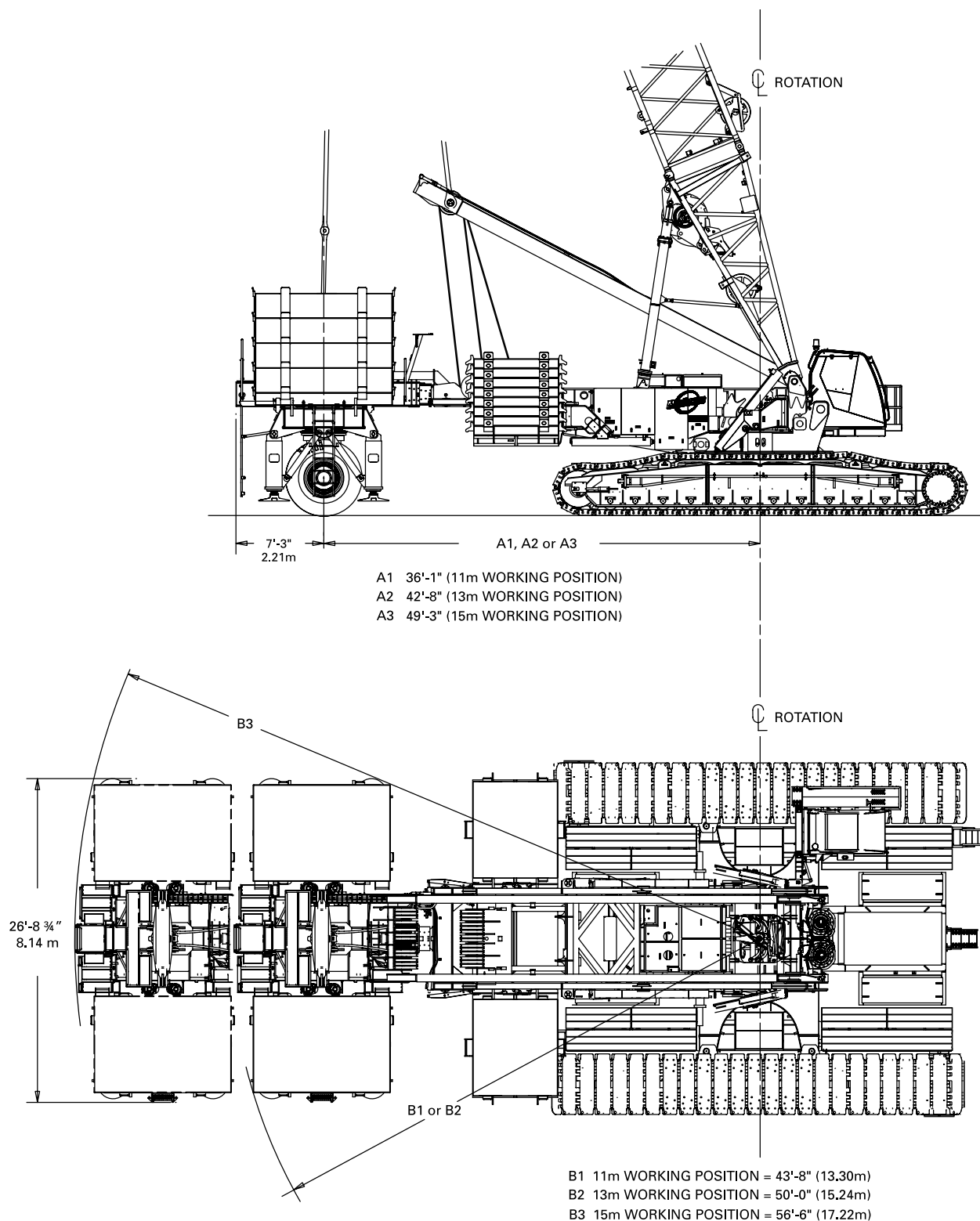
|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) | 42,0<br>(137.8) |
|--------------------------------------|--------------------------|----------------|-----------------|
|                                      |                          | (44.5)         | (34.9)          |
| Luffing jib length 60,0 m (196.9 ft) | 54,0<br>(180)            | 20,6<br>(44.5) |                 |
|                                      | 56,0<br>(185)            | 19,5<br>(42.6) |                 |
|                                      | 58,0<br>(190)            | 18,4<br>(40.8) | 15,7<br>(34.9)  |
|                                      | 60,0<br>(200)            | 17,4<br>(37.5) | 14,8<br>(31.9)  |
|                                      | 64,0<br>(210)            | 15,6<br>(34.5) | 13,2<br>(29.3)  |
|                                      | 68,0<br>(225)            | 14,0<br>(30.5) | 11,8<br>(25.7)  |
|                                      | 72,0<br>(240)            | 12,6<br>(26.9) | 10,5<br>(22.5)  |
|                                      | 74,0<br>(245)            | 11,8<br>(25.7) | 9,9<br>(21.5)   |
|                                      | 76,0<br>(250)            |                | 9,3<br>(20.6)   |
|                                      | 80,0<br>(260)            |                | —<br>(18.7)     |
|                                      | 84,0<br>(280)            |                |                 |

|                                      | Boom<br>m (ft)<br>Radius | 30,0<br>(98.4) |
|--------------------------------------|--------------------------|----------------|
|                                      |                          | (31.6)         |
| Luffing jib length 72,0 m (236.2 ft) | 54,0<br>(180)            |                |
|                                      | 56,0<br>(185)            |                |
|                                      | 58,0<br>(190)            |                |
|                                      | 60,0<br>(200)            | 16,1<br>(34.5) |
|                                      | 64,0<br>(210)            | 14,3<br>(31.6) |
|                                      | 68,0<br>(225)            | 12,7<br>(27.7) |
|                                      | 72,0<br>(240)            | 11,3<br>(24.3) |
|                                      | 74,0<br>(245)            | 10,7<br>(23.2) |
|                                      | 76,0<br>(250)            | 10,1<br>(22.2) |
|                                      | 80,0<br>(260)            | 9,0<br>(20.3)  |
|                                      | 84,0<br>(280)            | 7,9<br>(16.8)  |



# Outline dimensions

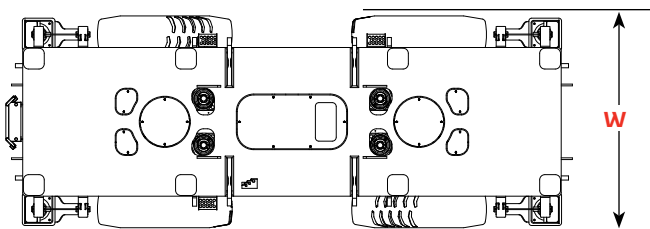
## MAX-ER®





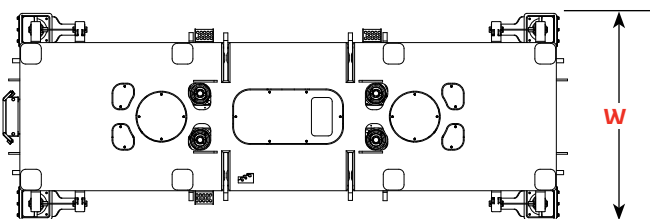
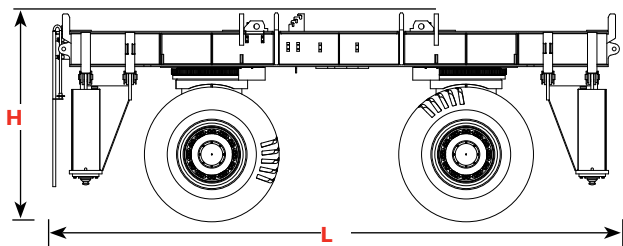
# Outline dimensions

## MAX-ER®



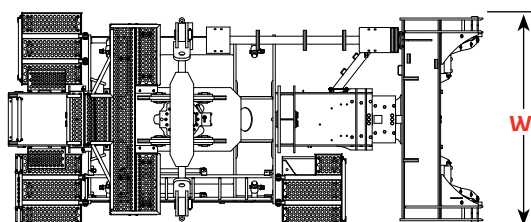
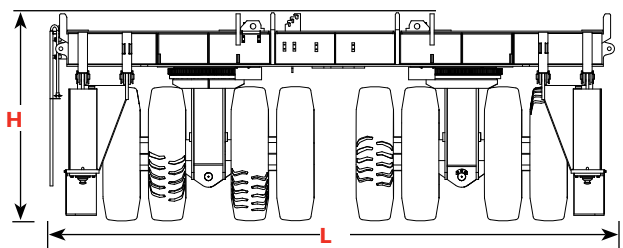
### Wheeled carrier (US)

|        |           |           |
|--------|-----------|-----------|
| Length | 8,15 m    | 26' 9"    |
| Width  | 3,05 m    | 10' 0"    |
| Height | 3,00 m    | 9' 10"    |
| Weight | 28 304 kg | 62,400 lb |



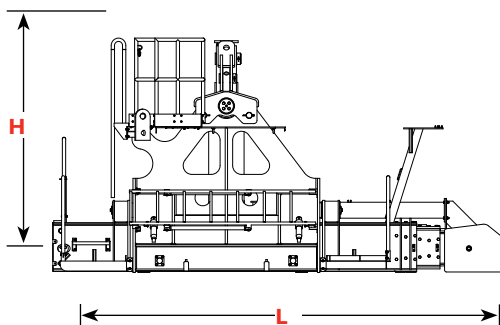
### Wheeled carrier (European)

|        |           |           |
|--------|-----------|-----------|
| Length | 8,15 m    | 26' 9"    |
| Width  | 2,98 m    | 9' 9"     |
| Height | 3,00 m    | 9' 10"    |
| Weight | 28 622 kg | 63,100 lb |



### Lifting frame and telescopic beam

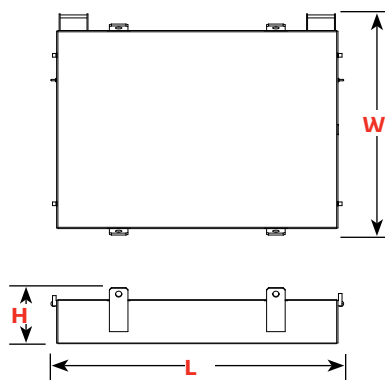
|        |           |           |
|--------|-----------|-----------|
| Length | 6,04 m    | 19' 10"   |
| Width  | 2,73 m    | 8' 11"    |
| Height | 2,99 m    | 9' 9"     |
| Weight | 16 828 kg | 37,100 lb |



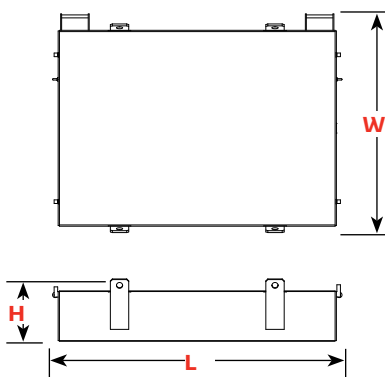


# Outline dimensions

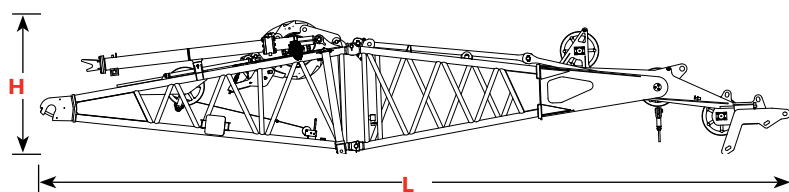
## MAX-ER®



| Side counterweight |           | x 2       |
|--------------------|-----------|-----------|
| Length             | 3,59 m    | 11' 9"    |
| Width              | 2,72 m    | 8' 11"    |
| Height             | 0,69 m    | 2' 3"     |
| Weight             | 13 608 kg | 30,000 lb |



| Side counterweight |           | x 8       |
|--------------------|-----------|-----------|
| Length             | 3,59 m    | 11' 9"    |
| Width              | 2,72 m    | 8' 11"    |
| Height             | 0,78 m    | 2' 6"     |
| Weight             | 19 958 kg | 44,000 lb |

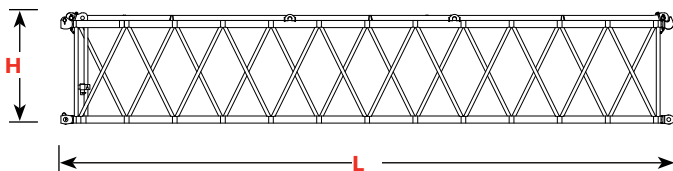


| No. 59A mast butt and top package, drum, wire rope, equilizer |           | x 1       |
|---------------------------------------------------------------|-----------|-----------|
| Length                                                        | 14,84 m   | 48' 8"    |
| Width                                                         | 2,99 m    | 9' 10"    |
| Height                                                        | 2,66 m    | 8' 9"     |
| Weight                                                        | 20 593 kg | 45,400 lb |

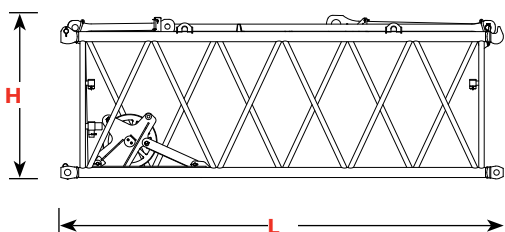


# Outline dimensions

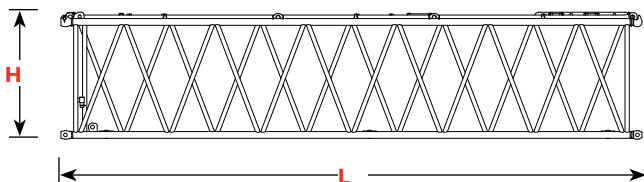
## MAX-ER®

**No. 59A mast insert****12 m (394')****x 1**

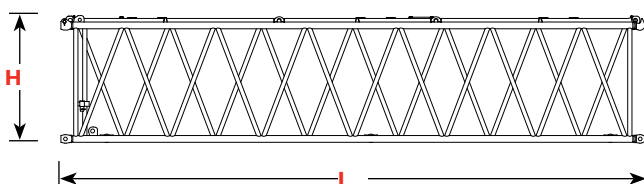
|        |          |          |
|--------|----------|----------|
| Length | 12,19 m  | 40' 0"   |
| Width  | 2,72 m   | 8' 11"   |
| Height | 2,23 m   | 7' 4"    |
| Weight | 4 375 kg | 9,645 lb |

**No. 59A mast insert****6 m (198')****x 1**

|        |          |          |
|--------|----------|----------|
| Length | 6,19 m   | 20' 4"   |
| Width  | 2,72 m   | 8' 11"   |
| Height | 2,29 m   | 7' 6"    |
| Weight | 3 366 kg | 7,420 lb |

**No. 58 heavy boom insert with  
equilizer rails 12 m (394')****x 1**

|        |          |           |
|--------|----------|-----------|
| Length | 12,19 m  | 40' 0"    |
| Width  | 2,98 m   | 9' 9"     |
| Height | 2,67 m   | 8' 9"     |
| Weight | 4 602 kg | 10,145 lb |

**No. 58 heavy boom insert  
12 m (394')****x 1**

|        |          |           |
|--------|----------|-----------|
| Length | 12,19 m  | 40' 0"    |
| Width  | 2,98 m   | 9' 9"     |
| Height | 2,67 m   | 8' 9"     |
| Weight | 5 087 kg | 11,215 lb |



# Boom combinations

## MAX-ER®

ANSI B30.5

### No. 58 main boom with heavy-lift top combinations

| Boom length<br>m (ft) | Boom inserts m (ft) |               |                          |                  |                   |                         |
|-----------------------|---------------------|---------------|--------------------------|------------------|-------------------|-------------------------|
|                       | 5,0*<br>(16.4)      | 6,0<br>(19.7) | 12,0<br>medium<br>(39.4) | 12,0**<br>(39.4) | 12,0***<br>(39.4) | 12,0<br>heavy<br>(39.4) |
| 42 (137.8)            | 1                   | 0             | 0                        | 1                | 1                 | 0                       |
| 48 (157.5)            | 1                   | 1             | 0                        | 1                | 1                 | 0                       |
| 54 (177.2)            | 1                   | 0             | 0                        | 1                | 1                 | 1                       |
| 60 (196.9)            | 1                   | 1             | 0                        | 1                | 1                 | 1                       |
| 66 (216.5)            | 1                   | 0             | 1                        | 1                | 1                 | 1                       |
| 72 (236.2)            | 1                   | 1             | 1                        | 1                | 1                 | 1                       |
| 78 (255.9)            | 1                   | 0             | 2                        | 1                | 1                 | 1                       |
| 84 (275.6)            | 1                   | 1             | 2                        | 1                | 1                 | 1                       |
| 90 (295.3)            | 1                   | 0             | 3                        | 1                | 1                 | 1                       |
| 96 (315.0)            | 1                   | 1             | 3                        | 1                | 1                 | 1                       |
| 102 (334.6)           | 1                   | 0             | 4                        | 1                | 1                 | 1                       |
| 108 (354.3)           | 1                   | 1             | 4                        | 1                | 1                 | 1                       |
| 114 (374.0)           | 1                   | 0             | 5                        | 1                | 1                 | 1                       |
| 120 (393.7)           | 1                   | 1             | 5                        | 1                | 1                 | 1                       |

\*transition boom insert.

\*\*with auxiliary sheave insert.

\*\*\* with equalizer rails insert.

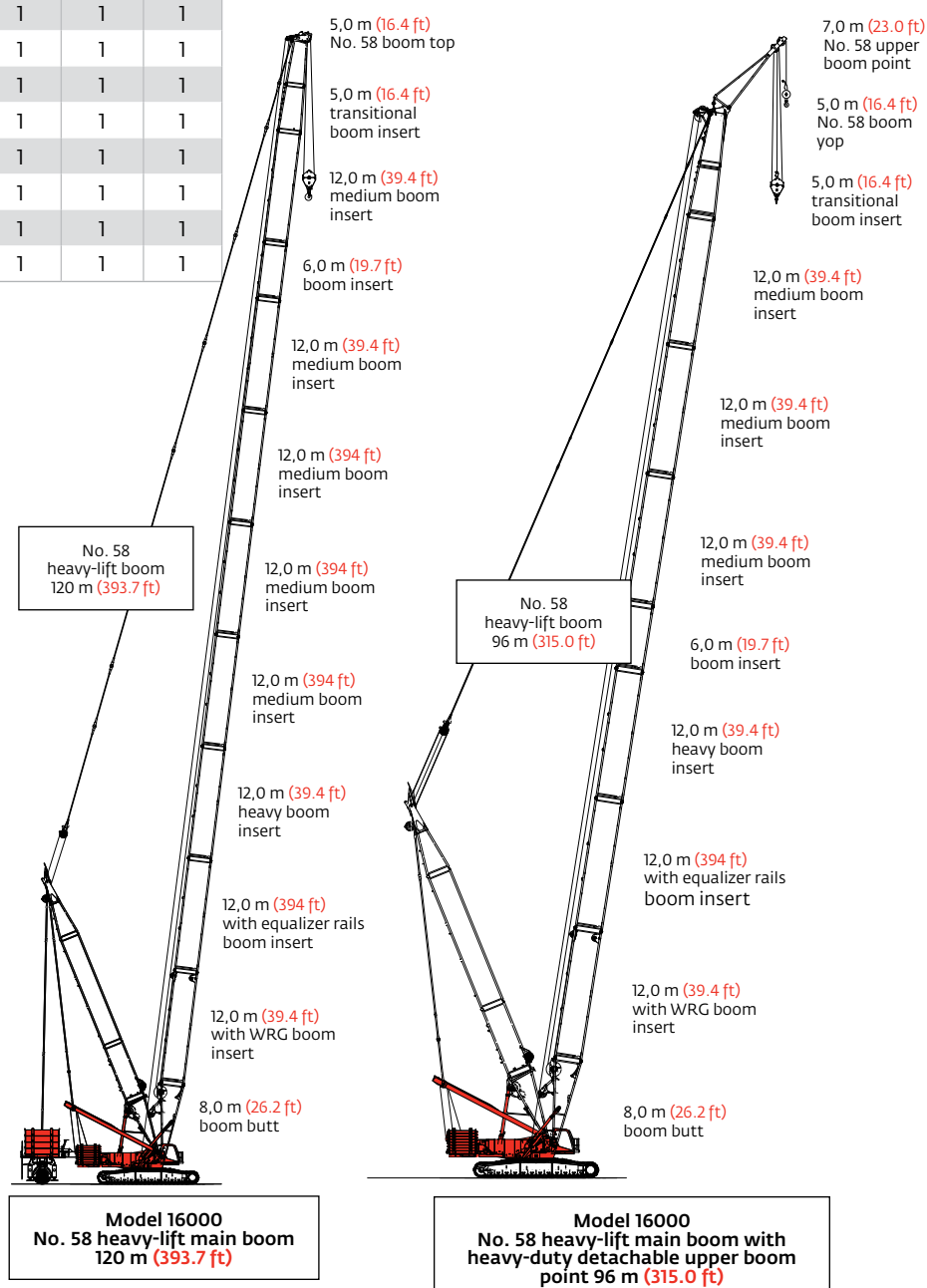
### No. 58 main boom with heavy-duty extended upper boom point combination

| Boom length<br>m (ft) | Boom inserts m (ft) |               |                          |                  |                   |                         |
|-----------------------|---------------------|---------------|--------------------------|------------------|-------------------|-------------------------|
|                       | 5,0*<br>(16.4)      | 6,0<br>(19.7) | 12,0<br>medium<br>(39.4) | 12,0**<br>(39.4) | 12,0***<br>(39.4) | 12,0<br>heavy<br>(39.4) |
| 96 (315.0)            | 1                   | 1             | 3                        | 1                | 1                 | 1                       |

\*transition boom insert.

\*\*with auxiliary sheave insert.

\*\*\* with equalizer rails insert.





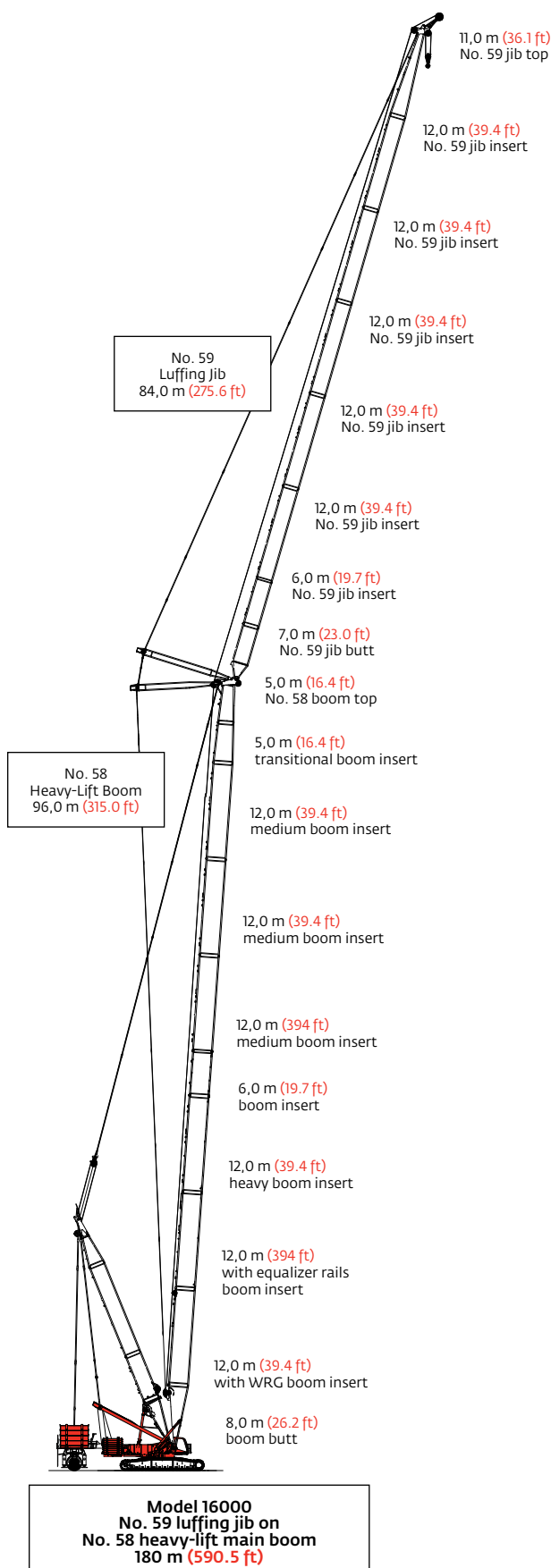
# Boom combinations

## MAX-ER®

ANSI B30.5

### No. 59 luffing jib combinations

| Luffing jib length<br>m (ft) | Luffing jib inserts<br>m (ft) |                |
|------------------------------|-------------------------------|----------------|
|                              | 6,0<br>(19.7)                 | 12,0<br>(39.4) |
| 24 (78.7)                    | 1                             | 0              |
| 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              |





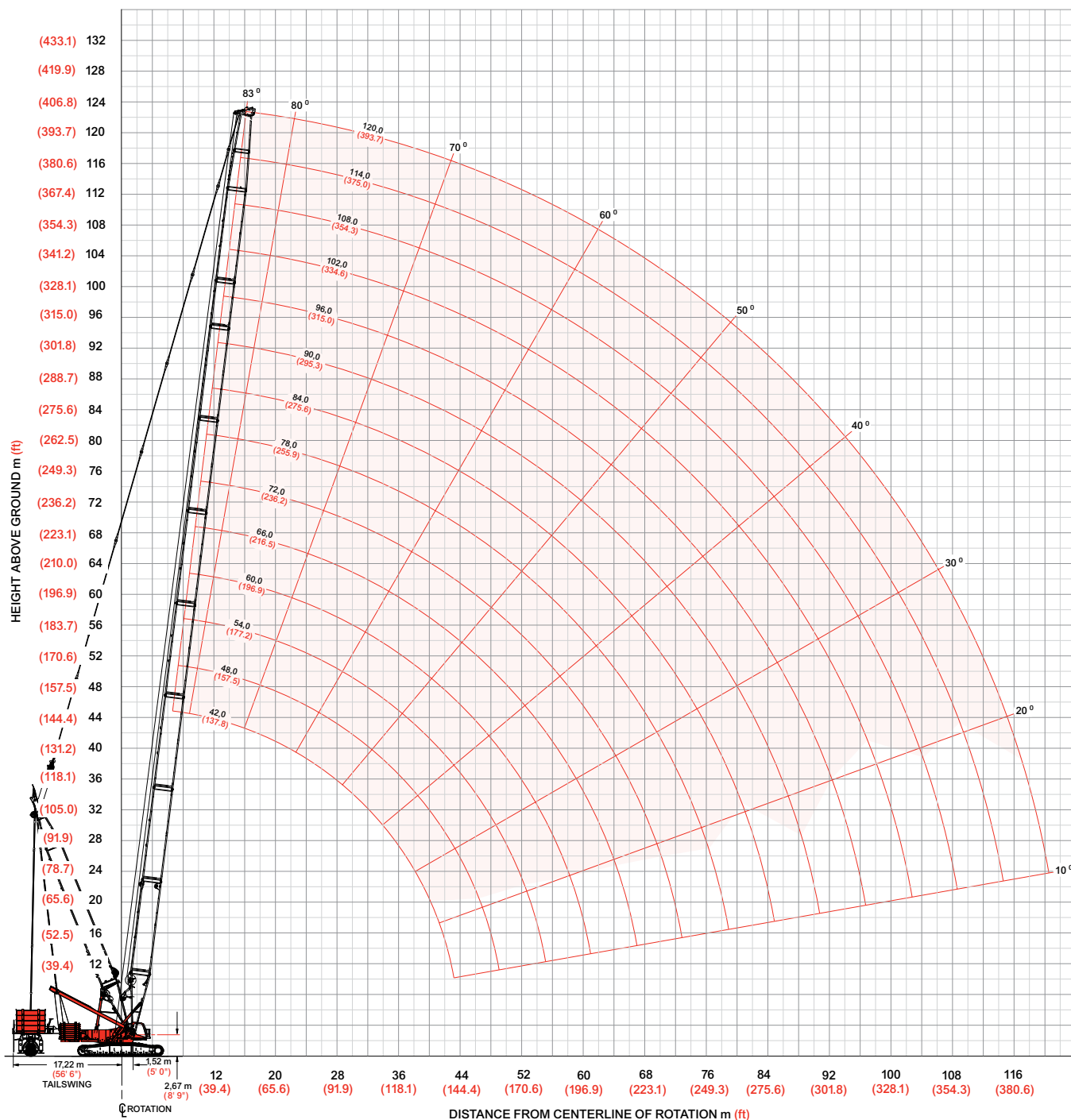
# Heavy-lift boom range diagram

## MAX-ER®

ANSI B30.5

Liftcrane boom capacities - Model 16000 MAX-ER®

No. 58 heavy-lift main boom with 30,0 m (98.4 ft) mast No.59A





# Heavy-lift boom load charts

## MAX-ER®

ANSI B30.5

**Liftcrane boom capacities - Model 16000 MAX-ER® with MAX-ER® at 15 m (49.2 ft) position**  
**No. 58 heavy-lift main boom with 30,0 m (98.4 ft) mast No. 59A**

| Boom<br>m (ft)<br>Radius | 150 590 kg (332,000 lb) Counterweight    54 430 kg (120,000 lb) Carbody counterweight<br>231 970 kg (511,400 lb) Wheeled counterweight<br>360° Rating kg (lb) x 1 000 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                          | 42,0<br>(137.8)                                                                                                                                                       | 48,0<br>(157.5)  | 54,0<br>(177.2)  | 60,0<br>(196.9)  | 66,0<br>(216.5)  | 72,0<br>(236.2)  | 78,0<br>(255.9)  | 84,0<br>(275.6)  | 90,0<br>(295.3)  | 96,0<br>(315.0)  | 102,0<br>(334.6) | 108,0<br>(354.3) | 114,0<br>(374.0) | 120,0<br>(393.7) |
| 7,9<br>(26)              | 379,8<br>(837.4)                                                                                                                                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 10,0<br>(34)             | 379,8<br>(837.4)                                                                                                                                                      | 340,0<br>(749.7) | 312,2<br>(688.1) | —<br>(623.6)     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 12,0<br>(40)             | 379,8<br>(837.4)                                                                                                                                                      | 340,0<br>(749.7) | 311,4<br>(686.4) | 282,4<br>(622.6) | 251,1<br>(553.8) | 227,8<br>(502.3) | —<br>(452.3)     |                  |                  |                  |                  |                  |                  |                  |
| 14,0<br>(50)             | 361,9<br>(728.0)                                                                                                                                                      | 338,1<br>(726.9) | 310,6<br>(675.6) | 277,8<br>(605.4) | 250,4<br>(545.6) | 225,2<br>(491.5) | 203,5<br>(445.5) | 177,0<br>(390.3) | 148,4<br>(327.2) | —<br>(279.8)     | —<br>(237.7)     |                  |                  |                  |
| 18,0<br>(60)             | 278,9<br>(605.2)                                                                                                                                                      | 278,4<br>(604.1) | 279,5<br>(602.7) | 267,1<br>(587.1) | 241,4<br>(530.8) | 217,8<br>(479.2) | 198,9<br>(437.8) | 177,0<br>(390.3) | 148,4<br>(327.2) | 126,9<br>(279.8) | 107,8<br>(237.7) | 92,9<br>(205.0)  | 79,7<br>(175.7)  | —<br>(152.1)     |
| 20,0<br>(70)             | 250,4<br>(516.4)                                                                                                                                                      | 249,8<br>(515.2) | 249,2<br>(513.9) | 248,8<br>(512.3) | 236,9<br>(511.7) | 214,2<br>(466.9) | 196,6<br>(430.3) | 176,8<br>(386.1) | 148,4<br>(327.2) | 126,9<br>(279.8) | 107,8<br>(237.7) | 92,9<br>(204.7)  | 79,5<br>(175.4)  | 68,8<br>(151.8)  |
| 24,0<br>(80)             | 207,1<br>(449.1)                                                                                                                                                      | 206,6<br>(448.0) | 206,0<br>(446.7) | 205,2<br>(445.1) | 205,0<br>(444.5) | 203,4<br>(442.8) | 192,2<br>(422.9) | 170,4<br>(374.3) | 145,3<br>(319.1) | 126,9<br>(279.8) | 107,6<br>(237.4) | 92,7<br>(204.4)  | 79,3<br>(174.9)  | 68,6<br>(151.3)  |
| 30,0<br>(100)            | 163,3<br>(354.1)                                                                                                                                                      | 162,8<br>(352.9) | 162,2<br>(351.6) | 161,5<br>(350.1) | 161,3<br>(349.6) | 160,5<br>(347.8) | 159,9<br>(346.5) | 158,7<br>(344.7) | 137,0<br>(300.8) | 126,6<br>(278.9) | 106,5<br>(234.5) | 91,0<br>(200.4)  | 77,6<br>(170.8)  | 67,1<br>(147.8)  |
| 36,0<br>(120)            | 133,8<br>(289.9)                                                                                                                                                      | 133,3<br>(288.9) | 132,7<br>(287.6) | 132,1<br>(286.1) | 131,8<br>(285.6) | 131,0<br>(283.9) | 130,5<br>(282.6) | 129,6<br>(280.8) | 128,5<br>(279.8) | 124,1<br>(273.1) | 104,2<br>(229.4) | 89,0<br>(195.9)  | 75,7<br>(166.7)  | 65,0<br>(142.0)  |
| 42,0<br>(140)            |                                                                                                                                                                       | 112,1<br>(242.7) | 115,5<br>(241.5) | 110,8<br>(240.0) | 110,6<br>(239.6) | 109,8<br>(237.9) | 109,3<br>(236.6) | 108,5<br>(234.8) | 108,0<br>(233.8) | 107,1<br>(231.8) | 102,0<br>(224.3) | 87,0<br>(191.4)  | 73,9<br>(162.5)  | 61,1<br>(134.0)  |
| 48,0<br>(160)            |                                                                                                                                                                       |                  | 95,4<br>(206.6)  | 94,8<br>(205.2)  | 94,6<br>(204.8)  | 93,9<br>(203.2)  | 93,3<br>(202.0)  | 92,5<br>(200.1)  | 92,1<br>(199.2)  | 91,1<br>(197.2)  | 90,6<br>(196.0)  | 84,9<br>(186.8)  | 72,1<br>(158.4)  | 57,6<br>(126.0)  |
| 54,0<br>(180)            |                                                                                                                                                                       |                  |                  | 82,2<br>(177.9)  | 82,1<br>(177.6)  | 81,4<br>(176.0)  | 80,8<br>(174.8)  | 80,0<br>(173.0)  | 79,6<br>(172.1)  | 78,7<br>(170.1)  | 78,1<br>(168.9)  | 77,3<br>(167.0)  | 70,2<br>(154.4)  | 54,0<br>(118.0)  |
| 60,0<br>(200)            |                                                                                                                                                                       |                  |                  |                  | 71,8<br>(155.2)  | 71,1<br>(153.7)  | 70,6<br>(152.6)  | 69,9<br>(150.9)  | 69,5<br>(150.0)  | 68,6<br>(148.1)  | 68,1<br>(147.0)  | 67,3<br>(145.2)  | 66,8<br>(143.9)  | 50,4<br>(110.0)  |
| 66,0<br>(220)            |                                                                                                                                                                       |                  |                  |                  |                  | 62,7<br>(135.3)  | 62,2<br>(134.3)  | 61,4<br>(132.7)  | 61,1<br>(131.8)  | 60,2<br>(129.9)  | 59,7<br>(128.8)  | 58,9<br>(127.0)  | 58,3<br>(125.7)  | 46,8<br>(102.0)  |
| 74,0<br>(240)            |                                                                                                                                                                       |                  |                  |                  |                  |                  | 53,1<br>(119.0)  | 52,3<br>(117.4)  | 52,0<br>(116.6)  | 51,1<br>(114.7)  | 50,6<br>(113.6)  | 49,8<br>(111.8)  | 49,3<br>(110.6)  | 42,1<br>(94.0)   |
| 80,0<br>(260)            |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  | 46,6<br>(104.4)  | 46,3<br>(103.7)  | 45,5<br>(101.9)  | 45,0<br>(100.8)  | 44,2<br>(99.0)   | 43,7<br>(97.8)   | 38,5<br>(86.0)   |
| 84,0<br>(280)            |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  | 43,0<br>(92.6)   | 42,2<br>(90.8)   | 41,7<br>(89.8)   | 40,9<br>(88.0)   | 40,4<br>(86.8)   | 36,6<br>(80.0)   |
| 96,0<br>(300)            |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |                  | —<br>(81.1)      | 33,4<br>(80.1)   | 32,6<br>(78.4)   | 32,1<br>(77.2)   | 31,1<br>(75.0)   |
| 100,0<br>(330)           |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 30,3<br>(66.1)   | 29,8<br>(65.0)   | 28,8<br>(62.8)   |
| 108,0<br>(340)           |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | —<br>(56.4)      | 16,8<br>(61.2)   | 23,9<br>(58.5)   |
| 112,0<br>(350)           |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | —<br>(44.3)      | 21,6<br>(54.4)   |
| 116,0<br>(360)           |                                                                                                                                                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | —<br>(27.8)      | 17,8<br>(50.6)   |

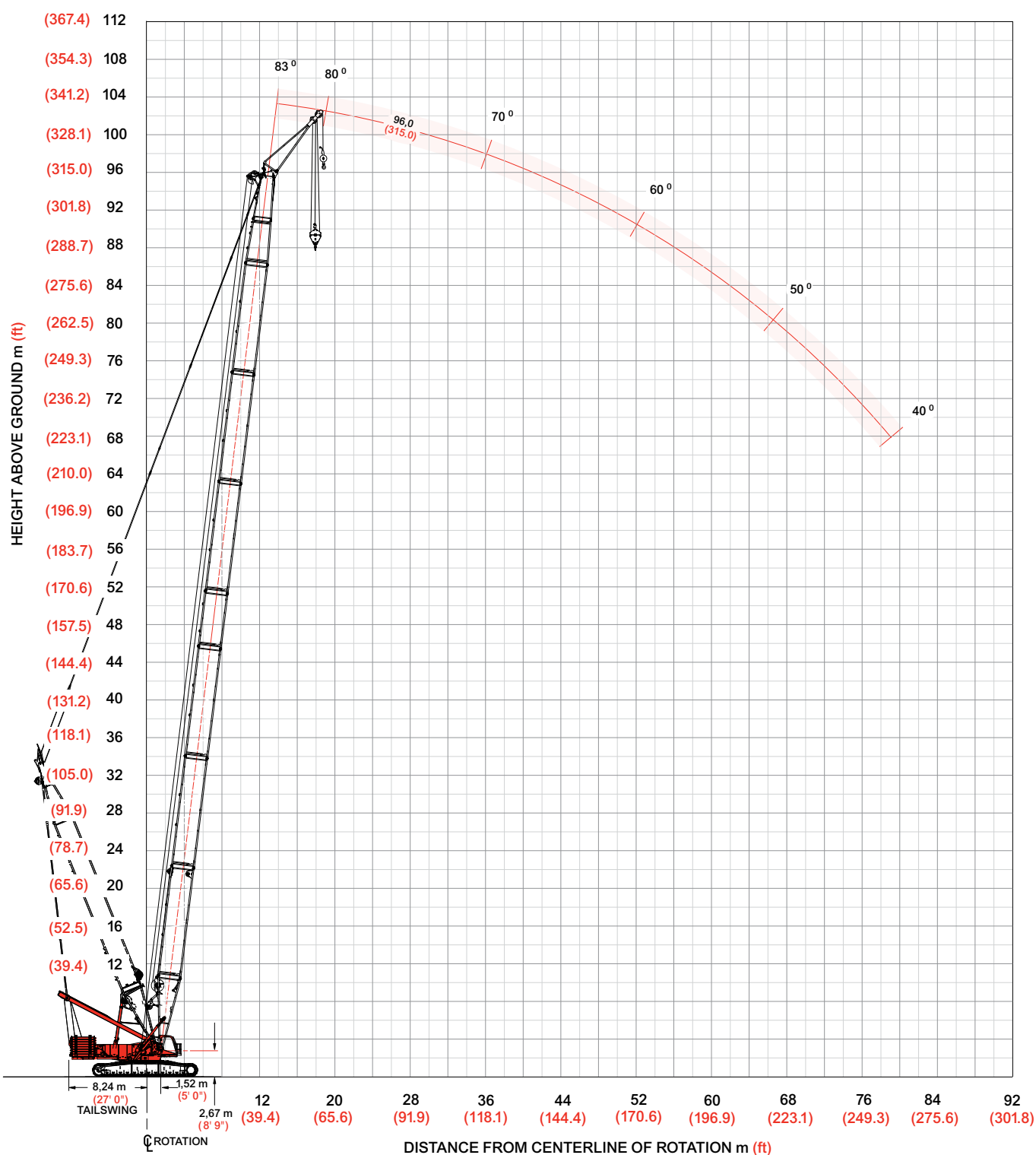


# Extended upper boom point range diagram

ANSI B30.5

Liftcrane boom capacities - Model 16000

No. 58 heavy-lift main boom with 30,0 (98.4 ft) mast No. 59A and 7,0 m (23 ft) extended upper boom point





# Extended upper boom point load charts

ANSI B30.5

| Liftcrane boom capacities - Model 16000 No. 58<br>heavy-lift main boom with 30,0 (98.4 ft) mast No.<br>59A and 7,0 m (23 ft)<br>extended upper boom point |                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Boom<br>m (ft)<br>Radius                                                                                                                                  | 150 590 kg (332,000 lb) Counterweight<br>54 430 kg (120,000 lb) Carbody counterweight<br>360° Rating kg (lb) x 1 000 |
|                                                                                                                                                           | 96,0<br>(315.0)                                                                                                      |
| 18,3<br>(60)                                                                                                                                              | 81,5<br>(179.8)                                                                                                      |
| 20,0<br>(65)                                                                                                                                              | 81,5<br>(179.8)                                                                                                      |
| 22,0<br>(70)                                                                                                                                              | 81,5<br>(179.8)                                                                                                      |
| 24,0<br>(80)                                                                                                                                              | 78,4<br>(170.7)                                                                                                      |
| 26,0<br>(85)                                                                                                                                              | 70,2<br>(155.8)                                                                                                      |
| 30,0<br>(100)                                                                                                                                             | 56,3<br>(121.2)                                                                                                      |
| 32,0<br>(105)                                                                                                                                             | 50,9<br>(112.2)                                                                                                      |
| 34,0<br>(110)                                                                                                                                             | 46,1<br>(104.1)                                                                                                      |
| 36,0<br>(115)                                                                                                                                             | 41,9<br>(96.8)                                                                                                       |
| 38,0<br>(125)                                                                                                                                             | 38,3<br>(84.1)                                                                                                       |
| 42,0<br>(140)                                                                                                                                             | 32,0<br>(68.7)                                                                                                       |
| 46,0<br>(150)                                                                                                                                             | 27,0<br>(60.3)                                                                                                       |
| 50,0<br>(165)                                                                                                                                             | 22,8<br>(49.8)                                                                                                       |
| 54,0<br>(175)                                                                                                                                             | 19,3<br>(43.8)                                                                                                       |
| 58,0<br>(190)                                                                                                                                             | 16,3<br>(36.1)                                                                                                       |
| 62,0<br>(200)                                                                                                                                             | 13,6<br>(31.6)                                                                                                       |
| 64,0<br>(210)                                                                                                                                             | 12,5<br>(27.6)                                                                                                       |
| 66,0<br>(215)                                                                                                                                             | 11,4<br>(25.7)                                                                                                       |
| 70,0<br>(230)                                                                                                                                             | 9,3<br>(20.6)                                                                                                        |
| 72,0<br>(235)                                                                                                                                             | 8,4<br>(19.0)                                                                                                        |
| 74,0<br>(245)                                                                                                                                             | 7,5<br>(16.0)                                                                                                        |
| 78,0<br>(255)                                                                                                                                             | 5,6<br>(12.7)                                                                                                        |
| 80,0<br>(260)                                                                                                                                             | 4,6<br>(11.1)                                                                                                        |
| 82,0<br>(270)                                                                                                                                             | 3,8<br>(8.1)                                                                                                         |

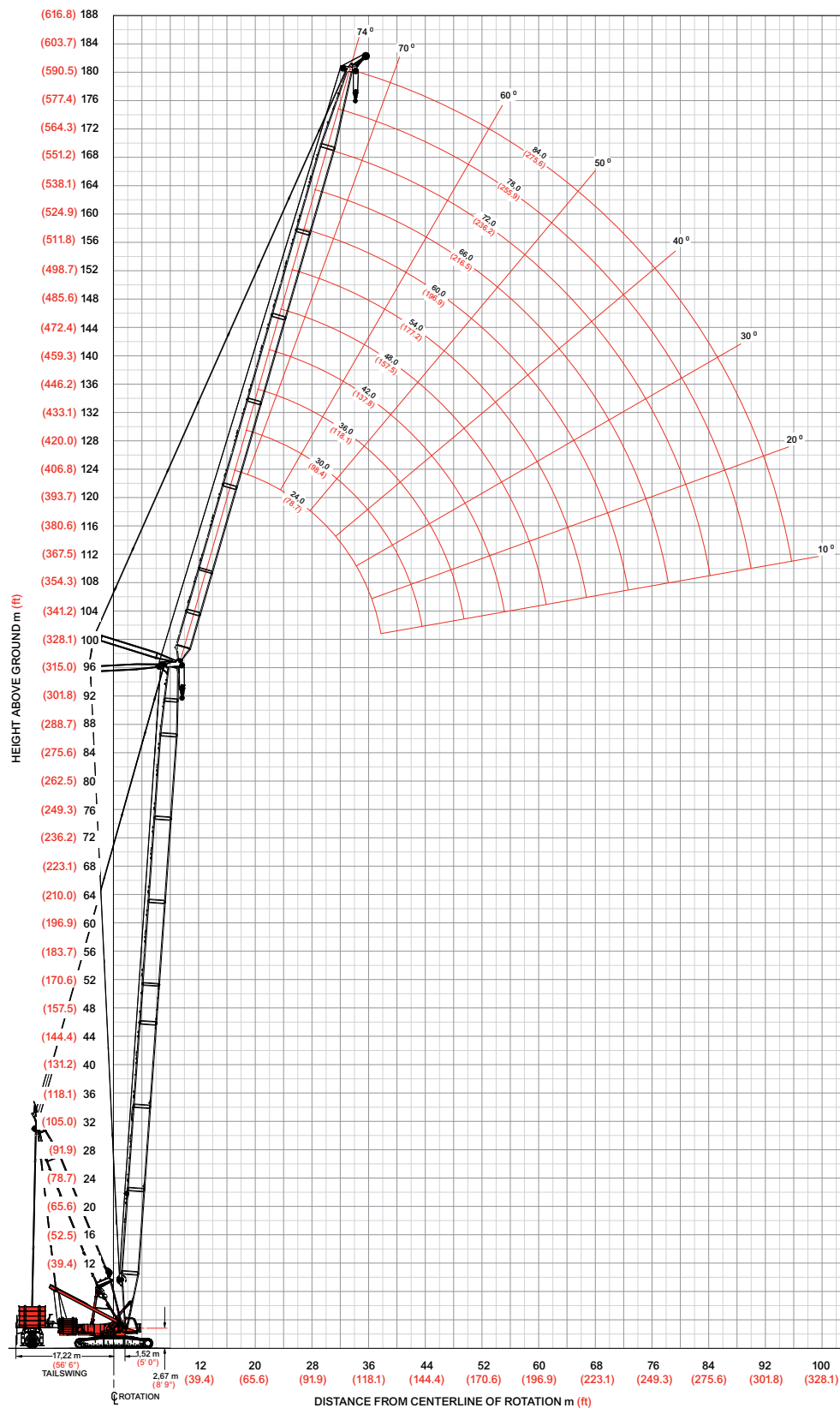


# Luffing jib range diagram

## MAX-ER®

ANSI B30.5

Liftcrane luffing jib capacities - Model 16000 MAX-ER® with MAX-ER® at 15 m (49.2 ft) position  
No. 59 luffing jib on No. 58 heavy-lift main boom





# Luffing jib load charts

## MAX-ER®

ANSI B30.5

Liftcrane luffing jib capacities - Model 16000 MAX-ER® with MAX-ER® at 15 m (49.2 ft) position  
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  
231 970 kg (511,400 lb) Wheeled counterweight  
360° Rating kg (lb) x 1 000

86° Boom angle

|                                     | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0)  | 60,0<br>(197.0)  | 78,0<br>(256.0) | 96,0<br>(315.0) |  | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0)  | 60,0<br>(197.0)  | 78,0<br>(256.0) | 96,0<br>(315.0) |  | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0)  | 60,0<br>(197.0) | 78,0<br>(256.0) | 96,0<br>(315.0) |
|-------------------------------------|--------------------------|------------------|------------------|-----------------|-----------------|--|--------------------------|------------------|------------------|-----------------|-----------------|--|--------------------------|------------------|-----------------|-----------------|-----------------|
| Luffing jib length 24,0 m (79.0 ft) | 13,7<br>(45)             | 185,4<br>(408.9) | 146,8<br>—       |                 |                 |  | 18,0<br>(55)             | 139,7<br>(321.0) |                  |                 |                 |  | 20,0<br>(65)             | 115,5<br>(255.6) |                 |                 |                 |
|                                     | 14,0<br>(50)             | 181,7<br>(364.9) | 129,8<br>(339.6) |                 |                 |  | 20,0<br>(65)             | 124,2<br>(277.1) | 111,3<br>(246.9) | 76,4<br>(169.2) |                 |  | 22,0<br>(70)             | 111,7<br>(249.2) | 85,3<br>(190.8) |                 |                 |
|                                     | 16,0<br>(55)             | 156,7<br>(308.0) | 117,1<br>(307.6) | —<br>(223.8)    | —<br>(142.9)    |  | 24,0<br>(80)             | 101,2<br>(219.4) | 94,7<br>(205.7)  | 68,7<br>(149.9) | 47,4<br>(104.4) |  | 26,0<br>(85)             | 94,5<br>(209.3)  | 77,2<br>(170.7) | 54,9<br>(121.5) | 38,1<br>(84.1)  |
|                                     | 18,0<br>(60)             | 137,6<br>(298.5) | 107,2<br>(281.8) | 98,6<br>(216.0) | 62,2<br>(135.9) |  | 26,0<br>(85)             | 93,0<br>(205.8)  | 87,6<br>(193.8)  | 64,7<br>(143.2) | 46,0<br>(101.7) |  | 30,0<br>(100)            | 80,1<br>(173.7)  | 68,3<br>(148.4) | 49,8<br>(108.5) | 35,5<br>(77.6)  |
|                                     | 20,0<br>(65)             | 123,4<br>(274.7) | 99,3<br>(260.7)  | 92,6<br>(205.6) | 60,5<br>(133.8) |  | 28,0<br>(90)             | 86,2<br>(194.1)  | 81,6<br>(183.6)  | 60,8<br>(136.6) | 43,7<br>(97.9)  |  | 34,0<br>(110)            | 70,1<br>(156.9)  | 59,8<br>(134.0) | 44,7<br>(99.9)  | 32,4<br>(72.3)  |
|                                     | 22,0<br>(70)             | 112,3<br>(255.1) | 96,4<br>(243.1)  | 86,5<br>(195.3) | 59,0<br>(131.4) |  | 32,0<br>(105)            | 75,9<br>(167.5)  | 70,2<br>(154.8)  | 53,5<br>(118.0) | 39,4<br>(86.9)  |  | 38,0<br>(125)            | 62,7<br>(138.1)  | 52,1<br>(114.6) | 39,9<br>(87.8)  | 29,4<br>(64.8)  |
|                                     | 24,0<br>(80)             | 103,8<br>(225.8) | 89,4<br>(216.3)  | 80,7<br>(175.6) | 57,2<br>(125.4) |  | 34,0<br>(110)            | 72,2<br>(161.0)  | 64,9<br>(145.7)  | 50,2<br>(112.5) | 37,4<br>(83.6)  |  | 42,0<br>(135)            | 55,9<br>(127.2)  | 45,5<br>(103.3) | 35,6<br>(80.6)  | 26,7<br>(60.2)  |
|                                     | 26,0<br>(85)             | 97,4<br>(215.3)  | 79,1<br>(206.6)  | 75,3<br>(166.7) | 54,3<br>(120.2) |  | 36,0<br>(120)            | 69,1<br>(150.9)  | 60,3<br>(130.4)  | 47,3<br>(102.8) | 35,6<br>(77.4)  |  | 46,0<br>(150)            | 48,5<br>(108.0)  | 40,1<br>(89.3)  | 32,1<br>(71.3)  | 24,4<br>(54.2)  |
|                                     | 28,0<br>(90)             | 89,8<br>(207.8)  | —<br>(199.2)     | 70,8<br>(158.8) | 51,5<br>(115.4) |  | 38,0<br>(125)            | 65,8<br>(144.6)  | 56,4<br>(124.1)  | 44,8<br>(98.6)  | 33,9<br>(74.7)  |  | 50,0<br>(165)            | 42,9<br>(94.0)   | 36,0<br>(79.0)  | 29,2<br>(64.2)  | 22,5<br>(49.4)  |
|                                     | 30,0<br>(100)            |                  | —<br>(160.4)     | 67,4<br>(147.4) | 49,2<br>(107.7) |  | 42,0<br>(135)            | —<br>(107.6)     | —<br>(115.1)     | 41,3<br>(92.2)  | 31,4<br>(70.3)  |  | 54,0<br>(180)            |                  |                 | 27,6<br>(60.8)  | 21,2<br>(46.6)  |
|                                     | 32,0<br>(105)            |                  |                  |                 | 47,0<br>(103.8) |  | 44,0<br>(145)            |                  |                  |                 | 30,9<br>(68.1)  |  | 56,0<br>(185)            |                  |                 |                 | 21,1<br>(46.6)  |

| Luffing jib length 60,0 m (197.0 ft) | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0) | 60,0<br>(197.0) | 78,0<br>(256.0) | 96,0<br>(315.0) |
|--------------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
|                                      | 24,0<br>(75)             | 79,7<br>(176.3) |                 |                 |                 |
|                                      | 28,0<br>(90)             | 78,3<br>(174.1) | 61,0<br>(136.0) | 43,8<br>(97.6)  | 30,1<br>(66.8)  |
|                                      | 32,0<br>(105)            | 71,4<br>(157.4) | 55,8<br>(123.2) | 40,6<br>(89.5)  | 28,7<br>(63.4)  |
|                                      | 38,0<br>(125)            | 60,5<br>(133.0) | 47,7<br>(105.0) | 35,4<br>(78.0)  | 25,4<br>(56.1)  |
|                                      | 42,0<br>(135)            | 53,5<br>(121.3) | 42,6<br>(96.3)  | 32,1<br>(72.4)  | 23,4<br>(52.6)  |
|                                      | 46,0<br>(150)            | 47,2<br>(105.1) | 37,9<br>(84.3)  | 29,0<br>(64.6)  | 21,4<br>(47.5)  |
|                                      | 50,0<br>(165)            | 41,7<br>(91.2)  | 33,8<br>(74.0)  | 26,3<br>(57.6)  | 19,6<br>(43.0)  |
|                                      | 56,0<br>(185)            | 35,0<br>(76.4)  | 28,7<br>(62.8)  | 22,9<br>(50.1)  | 17,3<br>(37.9)  |
|                                      | 60,0<br>(200)            | 31,5<br>(68.1)  | 26,2<br>(56.7)  | 21,1<br>(45.8)  | 16,1<br>(35.0)  |
|                                      | 64,0<br>(210)            | 27,0<br>(59.7)  | 24,4<br>(54.0)  | 19,9<br>(43.9)  | 15,2<br>(33.6)  |
| 68,0<br>(225)                        |                          |                 |                 | 14,9<br>(33.0)  |                 |
| Luffing jib length 72,0 m (236.0 ft) | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0) | 60,0<br>(197.0) | 78,0<br>(256.0) | 96,0<br>(315.0) |
|                                      | 28,0<br>(90)             | 55,4<br>(122.6) | 46,9<br>(103.7) |                 |                 |
|                                      | 32,0<br>(105)            | 54,5<br>(120.2) | 46,0<br>(101.6) | 33,6<br>(74.2)  | 23,5<br>(52.0)  |
|                                      | 38,0<br>(125)            | 51,6<br>(113.6) | 41,3<br>(90.9)  | 30,4<br>(67.0)  | 21,4<br>(47.2)  |
|                                      | 44,0<br>(145)            | 45,4<br>(99.7)  | 36,2<br>(79.6)  | 27,0<br>(59.3)  | 19,2<br>(42.2)  |
|                                      | 50,0<br>(165)            | 39,3<br>(86.1)  | 31,4<br>(68.8)  | 23,7<br>(52.0)  | 17,0<br>(37.3)  |
|                                      | 54,0<br>(180)            | 35,6<br>(76.8)  | 28,5<br>(61.6)  | 21,7<br>(47.0)  | 15,6<br>(34.0)  |
|                                      | 58,0<br>(190)            | 32,1<br>(71.1)  | 25,8<br>(57.2)  | 19,9<br>(44.0)  | 14,4<br>(31.9)  |
|                                      | 64,0<br>(210)            | 27,8<br>(61.3)  | 22,5<br>(49.6)  | 17,5<br>(38.7)  | 12,8<br>(28.4)  |
|                                      | 70,0<br>(230)            | 24,3<br>(53.6)  | 19,9<br>(43.8)  | 15,7<br>(34.7)  | 11,6<br>(25.6)  |
|                                      | 76,0<br>(250)            | 21,6<br>(40.5)  | 18,2<br>(40.2)  | 14,6<br>(32.2)  | 10,8<br>(23.9)  |
| 80,0<br>(265)                        |                          |                 |                 | 10,7<br>(23.7)  |                 |
| Luffing jib length 84,0 m (276.0 ft) | Boom<br>m (ft)<br>Radius | 42,0<br>(138.0) | 60,0<br>(197.0) | 78,0<br>(256.0) | 96,0<br>(315.0) |
|                                      | 32,0<br>(100)            | 39,4<br>(87.6)  |                 |                 |                 |
|                                      | 38,0<br>(125)            | 38,0<br>(83.9)  | 33,6<br>(74.2)  | 25,1<br>(55.3)  | 17,4<br>(38.5)  |
|                                      | 44,0<br>(145)            | 36,7<br>(80.9)  | 30,9<br>(68.1)  | 22,9<br>(50.4)  | 15,9<br>(35.0)  |
|                                      | 50,0<br>(165)            | 34,3<br>(75.2)  | 27,7<br>(60.8)  | 20,6<br>(45.3)  | 14,3<br>(31.4)  |
|                                      | 56,0<br>(185)            | 30,5<br>(66.9)  | 24,6<br>(53.8)  | 18,4<br>(40.4)  | 12,8<br>(28.0)  |
|                                      | 62,0<br>(205)            | 27,1<br>(59.2)  | 21,7<br>(47.4)  | 16,3<br>(35.8)  | 11,3<br>(24.9)  |
|                                      | 68,0<br>(225)            | 23,9<br>(52.3)  | 19,2<br>(41.9)  | 14,6<br>(31.9)  | 10,1<br>(22.2)  |
|                                      | 74,0<br>(245)            | 21,3<br>(46.3)  | 17,0<br>(37.1)  | 13,0<br>(28.5)  | 9,1<br>(19.9)   |
|                                      | 80,0<br>(265)            | 18,2<br>(39.4)  | 15,3<br>(33.5)  | 11,8<br>(26.0)  | 8,3<br>(18.2)   |
|                                      | 86,0<br>(285)            | 14,5<br>(30.2)  | 14,1<br>(31.1)  | 11,1<br>(24.4)  | 7,7<br>(17.1)   |
| 92,0<br>(305)                        |                          |                 |                 | 7,5<br>(15.9)   |                 |



# Manitowoc Crane Care

**Crane Care** is Manitowoc's comprehensive service and support program. It includes classroom and on-site training, prompt parts availability, expert field service, technical support and documentation.

That's commitment you won't find anywhere else.

That's Crane Care.

## Service training

Manitowoc specialists work with you in our training centers and in the field to make sure you know how to get maximum performance, reliability and life from your cranes.

Manitowoc Cranes Technical Training Centers provide valuable multi-level training, which is available for all models and attachments, in the following format:

- **Intro to Canbus and Canbus 1, 2, 3**
- **Intro to EPIC and EPIC 1, 2, 3**
- **Small Crawler 1**
- **Canbus 1 and 2 assembly, operation and maintenance**
- **EPIC 1 and 2 assembly, operation and maintenance**

Refer to [www.manitowoc.com](http://www.manitowoc.com) for course descriptions.

## Parts availability

Genuine Manitowoc replacement parts are accessible through your distributor 24 hours a day, 7 days a week, 365 days a year.

### Service interval kits

**200 hour kit**

**1,000 hour kit**

**2,000 hour kit**

**Hydraulic test kit**

**U.S. standard tools kit**

## Field service

Factory-trained service experts are always ready to help maintain your crane's peak performance.

For a worldwide listing of dealer locations, please consult our website at: [www.manitowoc.com](http://www.manitowoc.com)

## Technical support

Manitowoc's dealer network and factory personnel are available 24 hours a day, 7 days a week, 365 days a year to answer your technical questions and more, with the help of computerized programs that simplify crane selection, lift planning, and ground-bearing calculations.

For a worldwide listing of dealer locations, please consult our website at: [www.manitowoc.com](http://www.manitowoc.com)

## Technical documentation

Manitowoc has the industry's most extensive documentation; available in major languages and formats that include print, videotape, and DVD/CD.

Additional copies available through your Authorized Manitowoc Distributor.

- Crane operator's manual
- Crane parts manual
- Crane capacity manual
- Crane vendor manual
- Crane service manual
- Luffing jib operator's/parts manual
- Capacity chart manual - attachments

CD rom versions of the operator's and parts manuals are shipped with each crane. Also available are the following CDs:

- Crane Care Owner CD –
- Ground Bearing Pressure Estimator CD
- Crane Selection and Planning Software (CompuCRANE®)
- EPIC® Crane Library CD consisting of capacity charts, range diagrams, wire rope specifications, travel specifications, crane weights, counterweight arrangements, luffing jib raising procedures, operating range diagrams, drum and lagging charts, boom rigging drawings, jib rigging drawings, outline dimensions and wind condition charts.

Available from your Authorized Manitowoc Cranes Distributor, these videos are available in NTSC, PAL, SECAM, and DVD formats.

- Your Capacity Chart Video
- Respect the Limits Video
- Crane Safety Video
- Boom Inspection/Repair Video

### Crane Care Package

Manitowoc has assembled all of the available literature, CD's and videos listed above plus several Manitowoc premiums into one complete Crane Care Package.



# Notes



## Notes



# Notes



Grove   Maniowoc   National Crane   Potain



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#### Netherlands

Breda

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Pune

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