



model 8000



product guide

- 80 ton Lift Capacity
- 2,037 ft-kips
Maximum Load Moment
- 200' Heavy-Lift Boom
- 240' Fixed Jib
on Heavy-Lift Boom
- 213 HP engine
- 525 fpm line speed
- 32,000 lb Maximum Line Pull
- 16,000 lb Material Rehandling
Clamshell capacity
- Fast, efficient self-assembly
and disassembly
- Manitowoc Crane CARE
comprehensive support

contents

Specifications

3

Outline Dimensions

6

Self Assembly

10

Winch Performance Data

11

Boom Combinations

12

Main Boom
Range / Load Charts

13

Fixed Jib
Range / Load Charts

16

Clamshell

19



Manitowoc
Crane Group

Above. Beyond. Everywhere.™



2**model 8000**

specifications

Upperworks



Engine

Mitsubishi 6D16-TLA2B Diesel, 6 cylinder, water-cooled diesel, direct fuel injection with turbocharger, 159 kW (213 HP) @ 2000 high-idle RPM. Maximum torque 593 lb·ft (804 N·m) net at 1,600 rpm (SAE J 1349).

One diesel fuel tank, 106 gallons (400 liters).

Two 12 volt 120 AH capacity batteries, 24 volt system and 80 amp alternator.

All wiring harnesses and connectors are numbered for easier servicing. Machine is equipped with individual fused branch circuits.



Controls

Full-flow hydraulic control system for constant variable pressure to front and rear drums, boom hoist brakes and clutches. Controls respond instantly to the touch, delivering smooth function operation.

Relief valve pressures:

Load hoist, boom hoist

and propel system 4,480 psi (315 kg/cm²)

Swing system 3,980 psi (280 kg/cm²)

Control system 1,140 psi (80 kg/cm²)



Hydraulic System

All three variable displacement piston-type pumps are driven by a heavy-duty pump drive. One of these pumps is used in the right propel circuit and hook hoist circuit, and can accommodate an optional third circuit. Another is used in the left propel circuit, boom hoist circuit and hook hoist circuit. The third variable displacement pump is used in the swing circuit. In addition, two gear pumps are used in the control system and auxiliary equipment. One of these serves the clutch and brakes. Also, two gear pumps are utilized in the brake cooling system.

Maximum pressure rating 4,640 psi (325 kg/cm²)

Load hoist, boom hoist and propel ... 2 Piston pumps

Swing 1 Piston pump

Control system and auxiliary 2 Gear pumps

Brake cooling system 2 Gear pumps

Reservoir capacity: 100 US gallon (380 liter).

Cooling: Oil-to-air heat exchanger (plate-fin type).

Filtration: Full-flow and bypass type with replaceable paper element.



Drums

3

Front and rear drums for load hoist powered by hydraulic variable displacement piston-type motors, driven through planetary reducers. Powered hoisting/lowering and free-fall operation is standard. Drum turn indicators for front and rear drums are also standard.

Brake: spring set, hydraulically-released, multiple-disc holding brake is mounted inside the hoist motor and is operated through a counter-balance valve. An external ratchet is fitted for locking the drums.

Drums: front and rear 21.7" (550,2 mm) P.C.D. X 21.5" (545.4 mm), grooved for 7/8" (2,2 mm) wire rope.

Wire rope capacity:

Front drum 869 ft (265 m) working length

Rear drum 673 ft (205 m) working length

Storage length (each drum) 1,099' (335 m)

Line speed: Single line on the first drum layer

Hoisting 390 ft/min (120m/min)

Lowering 390 ft/min (120m/min)

Optional third drum: same dimensions and specifications as front drum.



Swing System

Swing unit: Powered by a hydraulic piston-type motor driving spur gears through planetary reducers, the swing system provides 360° rotation.

Swing brake: A spring-set, hydraulically released multiple-disc brake is internally fitted in swing motor.

Swing lock: 2 Position lock for transportation.

Rotating bed turntable: Single-row ball bearing with an integral internally cut swing gear.

Swing speed 4.0 rpm



Boom Support System

Single drum powered by a hydraulic axial piston motor through a planetary reducer.

Brake: A spring-set, hydraulically released multiple-disc brake is internally fitted in the boom hoist motor and operated through a counter-balance valve. An external ratchet is fitted for locking the drums.

model 8000



specifications



Boom Support System

4

This high folding type gantry is fitted with a sheave frame for boom hoist reeving. Hydraulic lift is standard. It provides full up, full down positions with linkage.



Counterweight

| QTY. | ITEM | UNIT WEIGHT | | TOTAL WEIGHT | |
|----------------------------|--------------------------------------|---------------|--------|---------------|--------|
| | | kg | lb | kg | lb |
| 2 | Carbody Each | 3 340 | 7,350 | 6 680 | 14,700 |
| Carbody Total | | 6 680 | | 14,700 | |
| 1 | Upperworks Counterweight A | 12 500 | 27,563 | 12 500 | 27,560 |
| 1 | Counterweight B | 12 400 | 27,342 | 12 400 | 27,340 |
| Upperworks Total | | 24 900 | | 54,900 | |
| Counterweight TOTAL | | 31 580 | | 69,600 | |



Operator's Cab

Totally enclosed, full vision cab fitted with tinted safety glass and a sliding front window. A fully adjustable, highbacked seat with arm rests permits operators to set their ideal working position. Side mounted console for auxiliary controls and instruments. An air conditioner, a signal horn, cigarette lighter, windshield wiper and inspection lamp socket are standard features.

Controls

In front of operator are the foot pedals for front and rear drum brakes and foot acceleration pedal. At operator's right side are the travel (propel) control levers and the function lock lever. To the operator's right front are the boom hoist control lever, main (front) and auxiliary (rear) winch control levers and the free-fall select switches for the main and auxiliary winches and drum turn indicator (front/rear drum). To the operators left front are the swing control lever and third drum control lever (if the machine is so equipped). To the operator's left are the crawler extend/retract lever and the positive swing lock. The left-hand console contains toggle switches for travel (propel) speed, free-fall high/low select, gantry control, crane/clamshell select switch and the anti-two-block/boom overhoist switches. Directly in front of the console are the drum pawl lock for boom, front, rear and third drum (if so equipped) and the engine ignition key. The swing brake and signal horn are mounted on the swing control lever.

Gauges

Fuel gauge, engine water temperature gauge, hour meter and tachometer are located on the monitor display.

Warning display

All potential warnings, including battery charge, engine oil pressure, air cleaner, engine oil filter, control main pressure, and hydraulic oil temperature will appear on the monitor display when a fault occurs.

Safety device

Function lock lever, anti-two-block, boom over hoist limit switch, boom angle indicator, signal horn, boom hoist drum lock, front and rear drum lock, swing lock, swing alarm (buzzer and lamps), boom backstops, safety latch on hook blocks, and load moment indicator.

Lowerworks



Carbody

The durable carbody features steel welded construction with extendible axles.



Crawlers

Crawler assemblies can be hydraulically extended for wide-track operation or retracted for transportation. Crawler belt tension adjusted with hydraulic jack and maintained by shims between idler block and frame.

Crawler drive

The independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor driving a propel sprocket through a planetary gearbox. The hydraulic motor and gearbox are built into the crawler side frame within the shoe width. The track rollers are sealed for maintenance-free operation.

Crawler brakes

Spring set, hydraulically released, multiple disc-type parking brakes are built into each propel drive.

Steering mechanism

The hydraulic propel system provides both skid steering (driving one track only) and counter-rotating steering (driving each track in opposite direction).

Crawler shoes

63 shoes, 36" (914 mm) wide each crawler.

Travel speed

(High/Low) 1.18/0.75 mph (1,9/1,2 km/h)

specifications

5

Attachments



Boom

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections. Boom tip is open throat construction. Two idler sheaves and four point sheaves are standard.

Basic boom length 50' (15,2 m) consists of the boom butt section 19' 0" (5,80 m), 10' 0" (3,0 m) boom insert and boom top section 21' 0" (6,39 m) and .

Optional boom inserts are available to provide extension capabilities. They also have welded lattice construction with tubular, high-tension steel chords and pin connections on each one of 10' (3,05 m), 20' (6,10 m), 40' (12,2 m) inserts.

Maximum total length of boom 200' (61,0 m).



Fixed Jib

The optional fixed jib employs welded lattice construction with tubular, high-tension steel chords with pin connections between sections.

Basic jib length 30' (9,14 m) consists of Jib butt section 15' (4,57 m) and Jib top section 15' (4,57 m).

Optional Jib boom inserts of 10' (3,05 m), 20' (6,10 m) are available for extension capabilities up to 60' (18,3 m).

Maximum total length of boom and jib 180' (57,9 m) + 60' (18,3 m) is 240' (73,2 m).

Tools and Accessories

A set of tools and accessories are furnished.

Optional Equipment

Optional: Blocks and Hooks

12 US ton ball hook, 396 lbs.

60 US ton hook block, 2,398 lbs, four 24" Nom. OD roller bearing sheaves grooved for 7/8" dia. wire rope, and roller bearing swivel with hook latch.

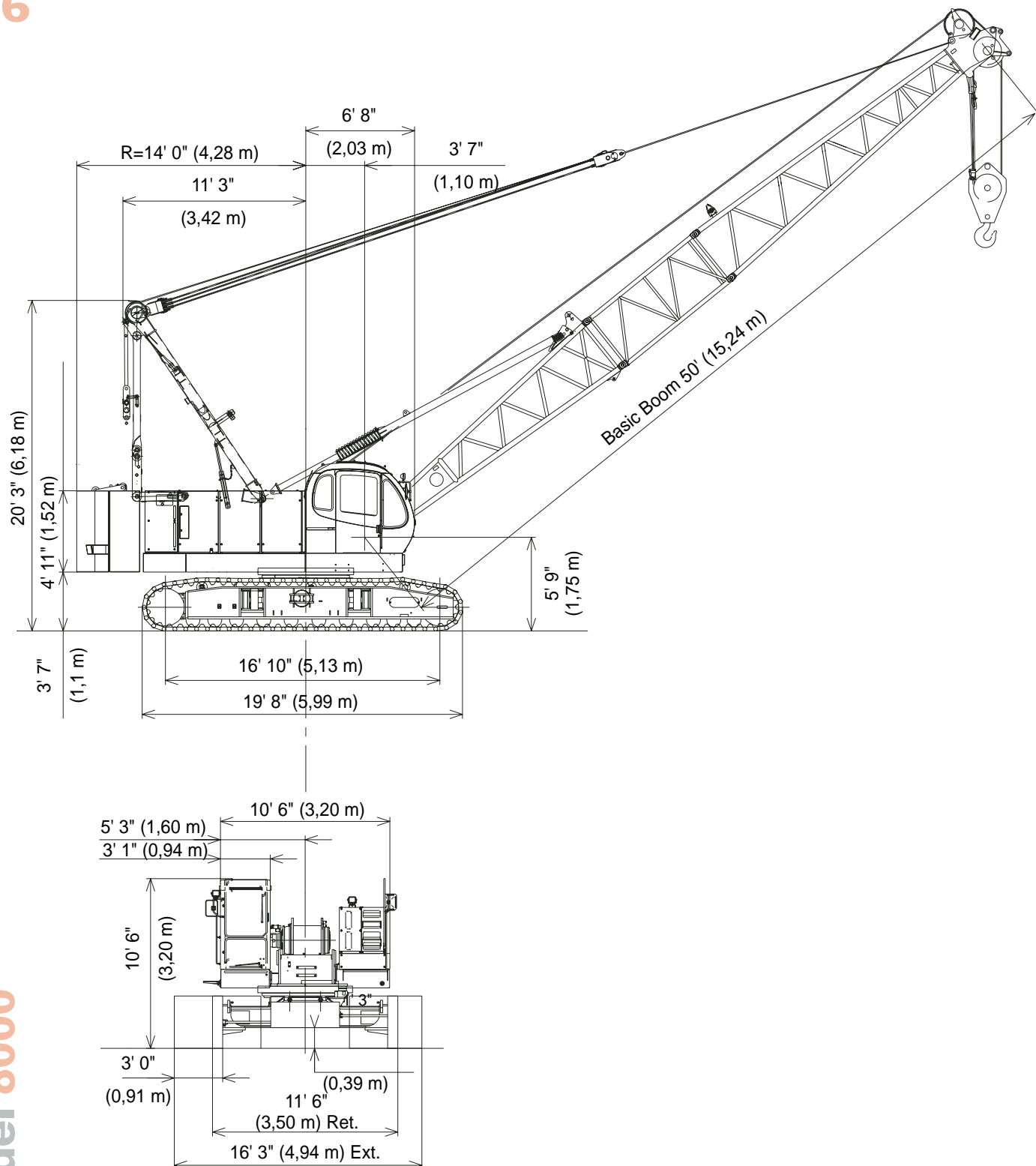
Travel kit
Detachable upper boom point
Custom color

model 8000
Manitowoc



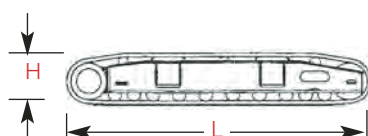
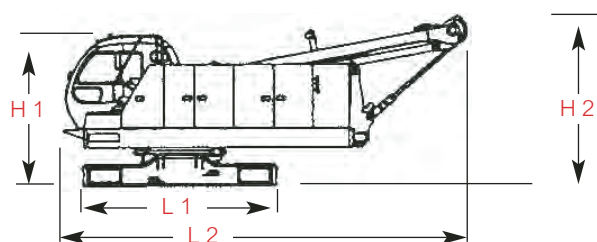
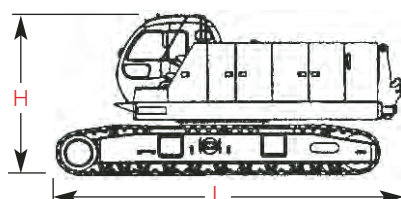
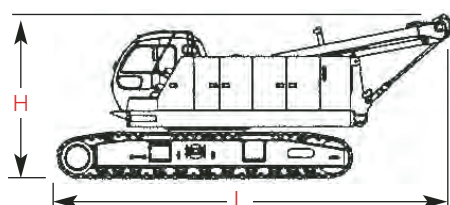
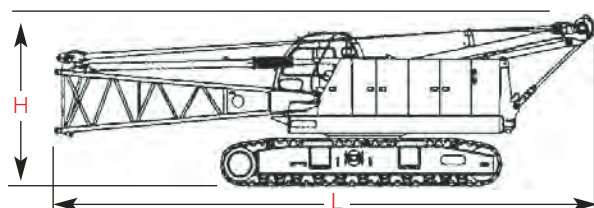
outline dimensions

6



model 8000

outline dimensions



Upperworks x 1

| | | |
|--------|-----------|-----------|
| Length | 12,16 m | 39' 11" |
| Width | 3,50 m | 11' 6" |
| Height | 3,45 m | 11' 4" |
| Weight | 40 820 kg | 89,980 lb |

Note: Weight includes base machine, crawler, gantry, maximum hoist and whip lines on drums, boom butt, full hydraulic fluid reservoir, and half tank of fuel.

Upperworks x 1

| | | |
|--------|-----------|-----------|
| Length | 8,27 m | 27' 2" |
| Width | 3,50 m | 11' 6" |
| Height | 3,45 m | 11' 4" |
| Weight | 38 700 kg | 85,350 lb |

Note: Weight includes base machine, crawler, gantry, maximum hoist and whip lines on drums, full hydraulic fluid reservoir, and half tank of fuel.

Upperworks x 1

| | | |
|--------|-----------|-----------|
| Length | 6,55 m | 21' 6" |
| Width | 3,50 m | 11' 6" |
| Height | 3,20 m | 10' 6" |
| Weight | 37 000 kg | 81,600 lb |

Note: Weight includes base machine, crawler, maximum hoist and whip lines on drums, full hydraulic fluid reservoir, and half tank of fuel.

Upperworks x 1

| | | |
|----------|-----------|-----------|
| Length 1 | 3,39 m | 11' 1" |
| Length 2 | 6,31 m | 23' 9" |
| Width | 3,20 m | 10' 6" |
| Height 1 | 2,81 m | 9' 3" |
| Height 2 | 3,06 m | 10' 1" |
| Weight | 23 800 kg | 52,500 lb |

Note: Weight includes base machine, gantry, maximum hoist and whip lines on drums, full hydraulic fluid reservoir, and half tank of fuel.

Crawlers x 2

| | | |
|--------|----------|-----------|
| Length | 5,99 m | 19' 8" |
| Width | 0,91 m | 3' 0" |
| Height | 0,98 m | 3' 3" |
| Weight | 7 400 kg | 16,317 lb |

Optional 3rd Drum & Wire Rope x 1

| | | |
|--------|----------|----------|
| Weight | 1 930 kg | 4,236 lb |
|--------|----------|----------|

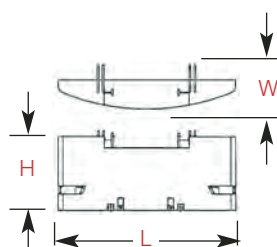
Option

model 8000



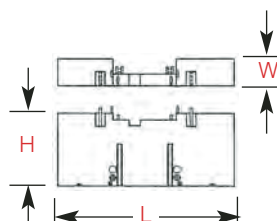
outline dimensions

8



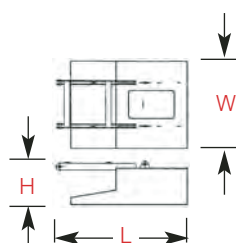
Upper Counterweight A x 1

| | | |
|--------|-----------|-----------|
| Length | 3,60 m | 11' 10" |
| Width | 0,91 m | 3' 0" |
| Height | 1,64 m | 5' 5" |
| Weight | 12 500 kg | 27,563 lb |



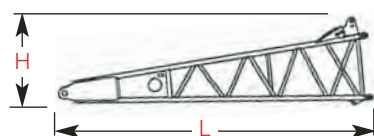
Upper Counterweight B x 1

| | | |
|--------|-----------|-----------|
| Length | 3,60 m | 11' 10" |
| Width | 0,57 m | 1' 10" |
| Height | 1,67 m | 5' 6" |
| Weight | 12 400 kg | 27,342 lb |



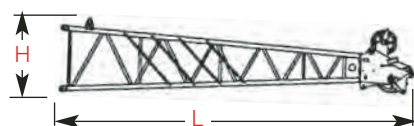
Carbody Counterweight x 2

| | | |
|--------|----------|----------|
| Length | 1,72 m | 5' 8" |
| Width | 1,16 m | 3' 10" |
| Height | 0,58 m | 1' 11" |
| Weight | 3 340 kg | 7,350 lb |



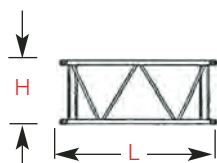
Boom Butt 5,8 m (19') x 1

| | | |
|--------|----------|----------|
| Length | 5,97 m | 19' 7" |
| Width | 1,42 m | 4' 8" |
| Height | 1,48 m | 4' 10" |
| Weight | 1 055 kg | 2,326 lb |



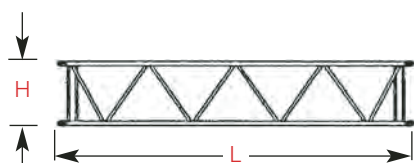
Boom Top 6,4 m (21') x 1

| | | |
|--------|----------|----------|
| Length | 6,90 m | 22' 8" |
| Width | 1,38 m | 4' 6" |
| Height | 1,48 m | 4' 10" |
| Weight | 1 010 kg | 2,227 lb |



Boom Insert 3,0 m (10') x 1, 2

| | | |
|--------|--------|--------|
| Length | 3,16 m | 10' 4" |
| Width | 1,36 m | 4' 6" |
| Height | 1,29 m | 4' 3" |
| Weight | 270 kg | 590 lb |



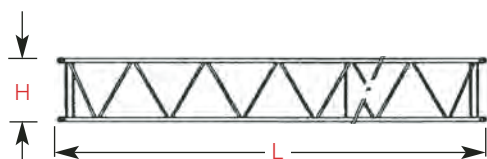
Boom Insert 6,1 m (20') x 1, 2

| | | |
|--------|--------|----------|
| Length | 6,21 m | 20' 5" |
| Width | 1,36 m | 4' 6" |
| Height | 1,29 m | 4' 3" |
| Weight | 465 kg | 1,025 lb |

Option

model 8000
Manitowoc

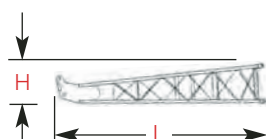
outline dimensions



Boom Insert 12,2 m (40') x 1, 2, 3

| | | |
|----------|---------|----------|
| Length | 12,31 m | 40' 5" |
| Width | 1,36 m | 4' 6" |
| Height | 1,29 m | 4' 3" |
| Weight | 860 kg | 1,896 lb |
| Weight A | 875 kg | 1,929 lb |

Note: Use one "A" type insert with lug required for any boom combinations that require a 12,2 m (40') insert.



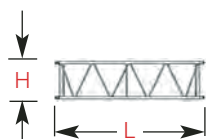
Fixed Jib Butt x 1

| | | |
|--------|--------|--------|
| Length | 4,82 m | 15' 9" |
| Width | 0,79 m | 2' 7" |
| Height | 0,79 m | 2' 7" |
| Weight | 200 kg | 441 lb |



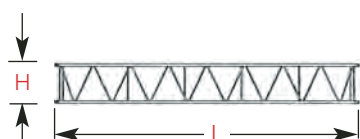
Fixed Jib Top x 1

| | | |
|--------|--------|--------|
| Length | 4,96 m | 16' 3" |
| Width | 0,79 m | 2' 7" |
| Height | 0,79 m | 2' 7" |
| Weight | 280 kg | 617 lb |



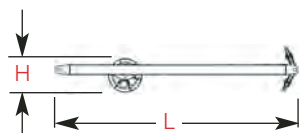
Fixed Jib Insert 3,0 m (10') x 1

| | | |
|--------|--------|--------|
| Length | 3,12 m | 10' 3" |
| Width | 0,79 m | 2' 7" |
| Height | 0,79 m | 2' 7" |
| Weight | 100 kg | 221 lb |



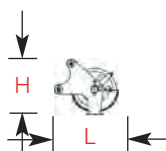
Fixed Jib Insert 6,1 m (20') x 1

| | | |
|--------|--------|--------|
| Length | 6,16 m | 20' 3" |
| Width | 0,79 m | 2' 7" |
| Height | 0,79 m | 2' 7" |
| Weight | 180 kg | 397 lb |



Fixed Jib Strut x 1

| | | |
|--------|--------|---------|
| Length | 3,62 m | 11' 11" |
| Width | 0,84 m | 2' 9" |
| Height | 0,50 m | 1' 8" |
| Weight | 205 kg | 452 lb |



Upper Sheave x 1

| | | |
|--------|--------|--------|
| Length | 0,83 m | 2' 9" |
| Width | 0,28 m | 1' 0" |
| Height | 0,74 m | 2' 5" |
| Weight | 145 kg | 320 lb |

9

model 8000

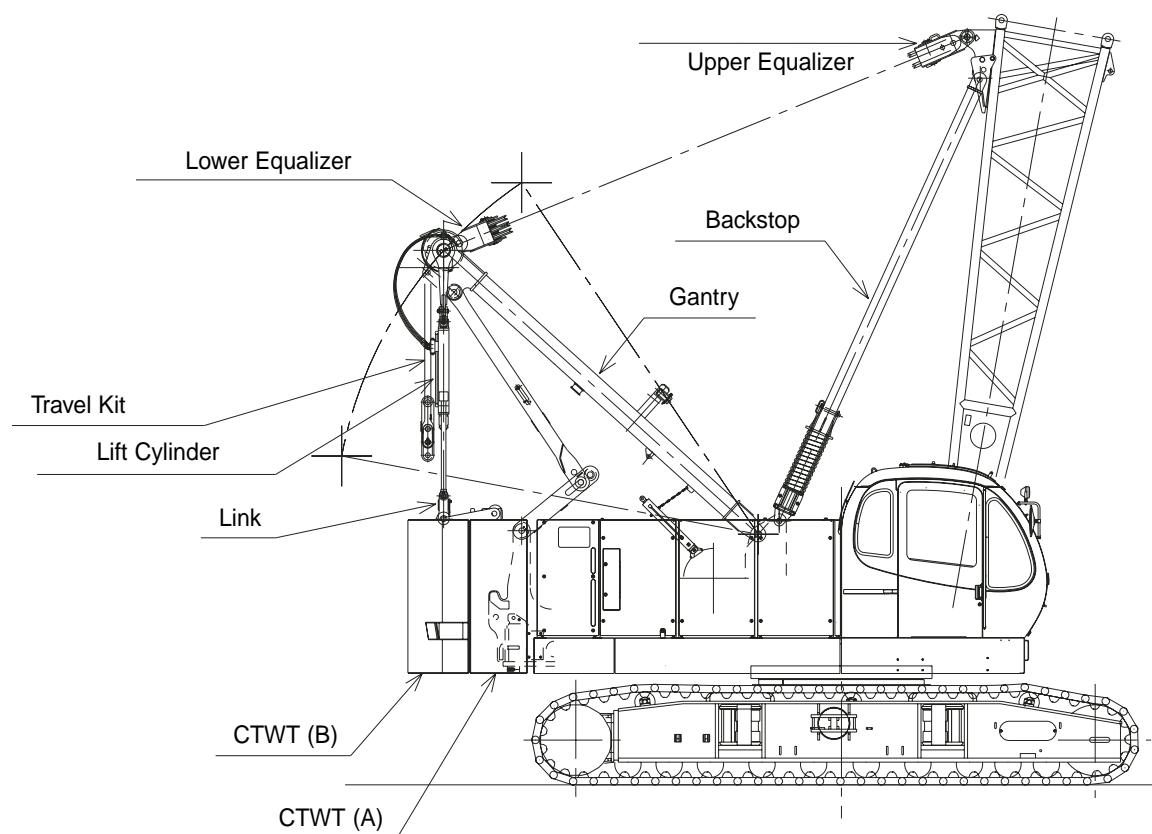


Option



self assembly

10



model 8000

Manitowoc

winch performance data

Line Pull

| | Rated line pull | *Maximum line pull |
|-------------------|--------------------------|---------------------------|
| Front Drum | 17,000 lbs (7 700 kg) | 32,000 lbs (14 500 kg) |
| Rear Drum | 17,000 lbs (7 700 kg) | 32,000 lbs (14 500 kg) |
| Optional 3rd Drum | 17,000 lbs (7 700 kg) | 32,000 lbs (14 500 kg) |

* Maximum line pull is not based on wire rope strength.

11

Wire Rope Specifications

| Use | Specs | Diameter inch (mm) | Working Length feet (m) | Breaking Strength lbs (kg) |
|-----------------|-------------------------|-----------------------|-------------------------------|----------------------------------|
| Front Drum | IWRC C/O 6 X Fi (25) | 7/8" (22,2) | 869' (265) | 79,586 (36 100) |
| Rear Drum | IWRC C/O 6 X Fi (25) | 7/8" (22,2) | 673' (205) | 79,586 (36 100) |
| Boom Hoist Drum | IWRC O/O 6 X WS (31) | 5/8" (15,8) | 492' (150) | 41,234 (18 700) |
| Opt. Third Drum | IWRC C/O 6 X Fi (25) | 7/8" (22,2) | 869' (265) | 79,586 (36 100) |

Model 8000 Front and Rear Winch Performance (Optional: Third Winch)

| Line speed (ft/min) | | | | | | |
|---------------------|--------|-----|-----|-----|-----|-----|
| Layer | 1 | 2 | 3 | 4 | 5 | 6 |
| Line Pull (lbs) | | | | | | |
| 0 | 394 | 420 | 446 | 472 | 499 | 525 |
| 5,000 | 397 | 420 | 446 | 472 | 499 | 525 |
| 10,000 | 353 | 353 | 353 | 353 | 353 | 353 |
| 15,000 | 235 | 235 | 235 | 235 | 235 | 235 |
| Rated Line pull | 17,000 | 208 | 208 | 208 | 208 | 208 |
| 20,000 | 176 | 176 | 176 | 176 | 179 | 182 |
| 25,000 | 141 | 146 | 148 | 149 | 149 | |
| 30,000 | 123 | | | | | |

| Line speed (m/min) | | | | | | |
|--------------------|-------|-----|-----|-----|-----|-----|
| Layer | 1 | 2 | 3 | 4 | 5 | 6 |
| Line Pull (kgf) | | | | | | |
| 0 | 120 | 128 | 136 | 144 | 152 | 160 |
| 2,268 | 121 | 128 | 136 | 144 | 152 | 160 |
| 4,536 | 108 | 108 | 108 | 108 | 108 | 108 |
| 6,804 | 72 | 72 | 72 | 72 | 72 | 72 |
| Rated Line pull | 7,711 | 63 | 63 | 63 | 63 | 63 |
| 9,072 | 54 | 54 | 54 | 54 | 55 | 56 |
| 11,340 | 43 | 44 | 45 | 45 | 45 | |
| 13,608 | 38 | | | | | |

Note:

Line speeds and line pull based on single line.

Line pulls are not based on wire rope strength.

model 8000
Manitowoc

boom combinations

12

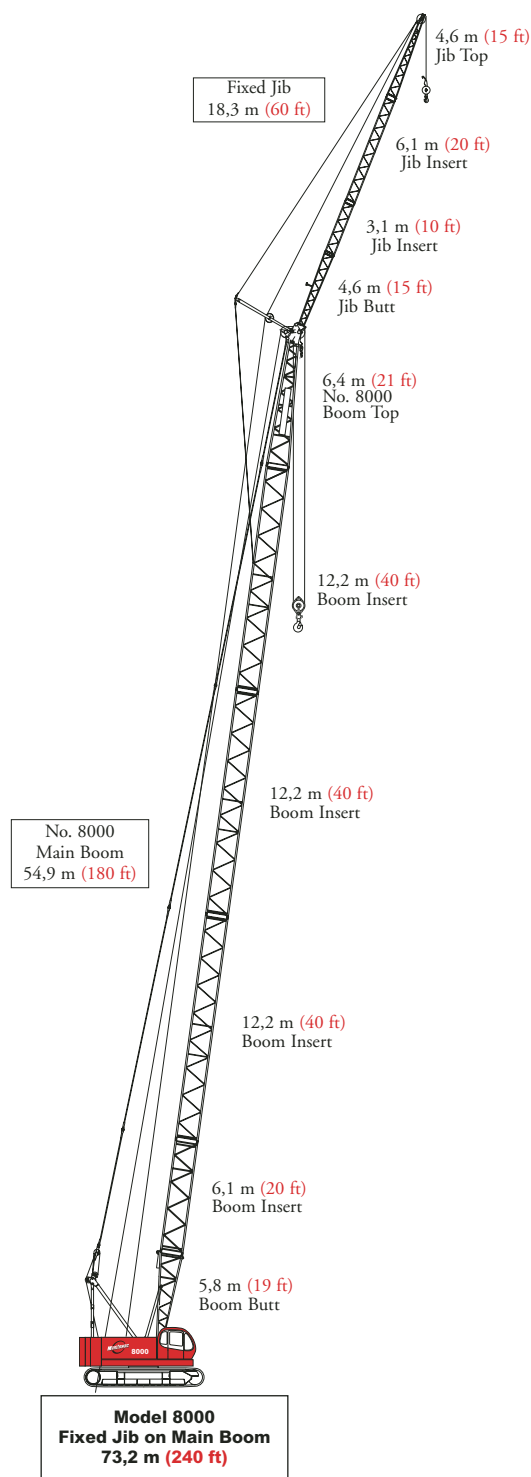
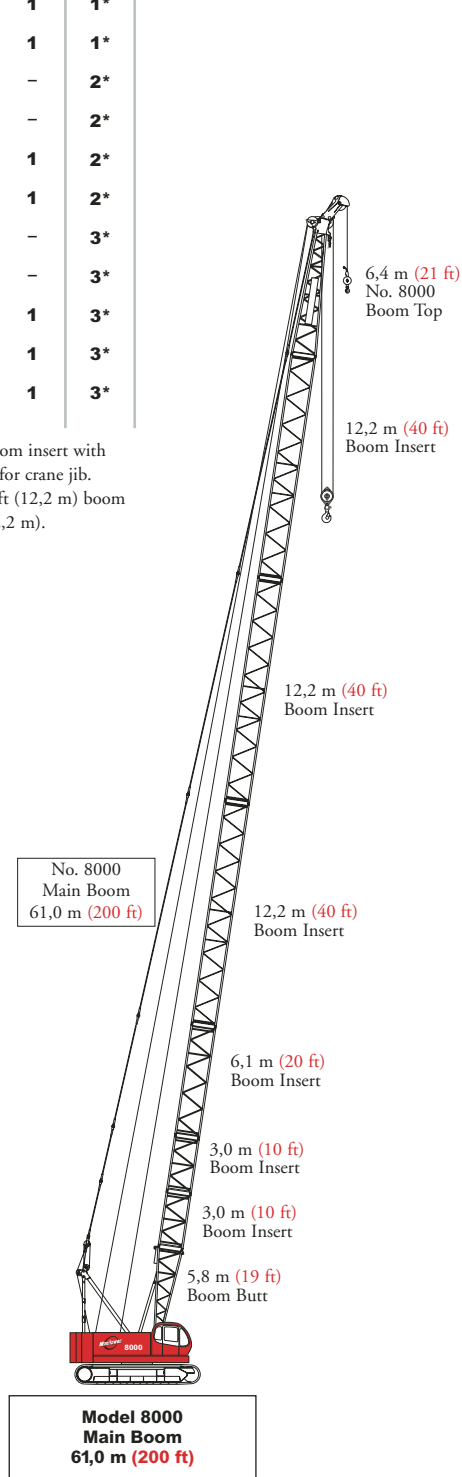
No. 8000 Heavy-Lift Boom Combinations

| Boom Length m (ft) | Boom Inserts | | |
|-----------------------|------------------|------------------|-------------------|
| | 3,1 m (10 ft) | 6,1 m (20 ft) | 12,2 m (40 ft) |
| 15,2 (50) | 1 | - | - |
| 18,3 (60) | - | 1 | - |
| 21,3 (70) | 1 | 1 | - |
| 24,4 (80) | - | - | 1* |
| 27,4 (90) | 1 | - | 1* |
| 30,5 (100) | - | 1 | 1* |
| 33,5 (110) | 1 | 1 | 1* |
| 36,6 (120) | - | - | 2* |
| 39,6 (130) | 1 | - | 2* |
| 42,7 (140) | - | 1 | 2* |
| 45,7 (150) | 1 | 1 | 2* |
| 48,8 (160) | - | - | 3* |
| 51,8 (170) | 1 | - | 3* |
| 54,9 (180) | - | 1 | 3* |
| 57,9 (190) | 1 | 1 | 3* |
| 61,0 (200) | 2 | 1 | 3* |

*Note: One 40 ft. (12,2 m) boom insert with lug 40A (12,20 m) is required for crane jib. When no jib is available, a 40 ft (12,2 m) boom can be used instead of 40A (12,2 m).

Fixed Jib Combinations

| Jib Length m (ft) | Fixed Jib Inserts | |
|----------------------|-------------------|-----------------|
| | 3,1m (10 ft) | 6,1m (20 ft) |
| 9,1 (30) | - | - |
| 12,2 (40) | 1 | - |
| 15,2 (50) | - | 1 |
| 18,3 (60) | 1 | 1 |



model 8000
Manitowoc

load chart notes

13

1.

Rated loads included in the charts are the maximum allowable freely suspended loads at a given boom length, boom angle and load radius, and have been determined for the machine standing level on firm supporting surface under ideal operating conditions. The user must limit or de-rate rated loads to allow for adverse conditions (such as soft or uneven ground, out-of-level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel, multiple machine lifts, and traveling with a load).
2.

Capacities do not exceed 75% of minimum tipping loads. Capacities based on factors other than machine stability such as structural competence are shown by asterisk * in the charts.
3.

The machine must be reeved and set-up as stated in the operation manual and all the instruction manuals if these manuals are missing, obtain replacements. Boom backstops are required for all boom lengths. Gantry must be fully raised position for all operations. Crawlers must be fully extended and be locked in position. The crane must be leveled to within 1% on a firm supporting surface.
4.

Do not attempt to lift where no radius or load is listed as crane may tip or collapse.
5.

Attempting to lift more than rated loads may cause machine to tip or collapse. Do not tip machine to determine capacity.
6.

Weight of hooks, hook blocks, slings and other lifting devices are a part of the total load. Their total weight must be subtracted from the rated load to obtain the weight that can be lifted.
7.

When lifting over boom point with jib or auxiliary sheave installed, rated loads for the boom must be deducted as shown below.

| Jib length | Aux. Sheave | 30' | 40' | 50' | 60' |
|--------------|-------------|-------|-------|-------|-------|
| Deduct (lbs) | 320 | 2,400 | 3,200 | 4,200 | 5,200 |

8.

The total load that can be lifted by the jib is limited by rated jib loads.
9.

Boom lengths for jib mounting are 80 ft (24,4 m) to 180 ft (54,9 m)
10.

The total load that can be lifted by the auxiliary sheave is: the rated load for the boom (without auxiliary sheave installed) minus 320 lbs; however, the auxiliary sheave rated load should not exceed 17,000 lbs.

11.

An auxiliary sheave cannot be used on a 200 ft (60.96 m) boom length.
12.

The boom should be erected over the front of the crawlers, not laterally. When erecting and lowering the boom with a length of 180 ft (54,9 m) with jib, blocking must be placed at the end of the crawlers. See operator's manual for details.
13.

Least stable position is over the side.
14.

Maximum hoist load for number of reeving parts of line for hoist rope.

Maximum Load for Main Boom

| No. of Parts of Line | 1 | 2 | 3 | 4 | 5 |
|----------------------|--------|--------|--------|--------|--------|
| Maximum Loads (lbs) | 17,000 | 34,000 | 51,000 | 68,000 | 85,000 |

| No. of Parts of Line | 6 | 7 | 8 | 9 | 10 |
|----------------------|---------|---------|---------|---------|---------|
| Maximum Loads (lbs) | 102,000 | 119,000 | 136,000 | 153,000 | 160,000 |

Maximum Load for Fixed Jib

| No. of Parts of Line | 1 | 2 |
|----------------------|--------|--------|
| Maximum Loads (lbs) | 17,000 | 24,000 |

Maximum Load for Auxiliary Sheave

| No. of Parts of Line | 1 |
|----------------------|--------|
| Maximum Loads (lbs) | 17,000 |

15.

Lifting capacities listed apply only to the machine as originally manufactured for and supplied by Manitowoc Cranes, Inc. Modifications to this machine or use of equipment other than that specified can reduce operating capacity.
16.

Designed and rated to comply with ANSI Code B30.5.

Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

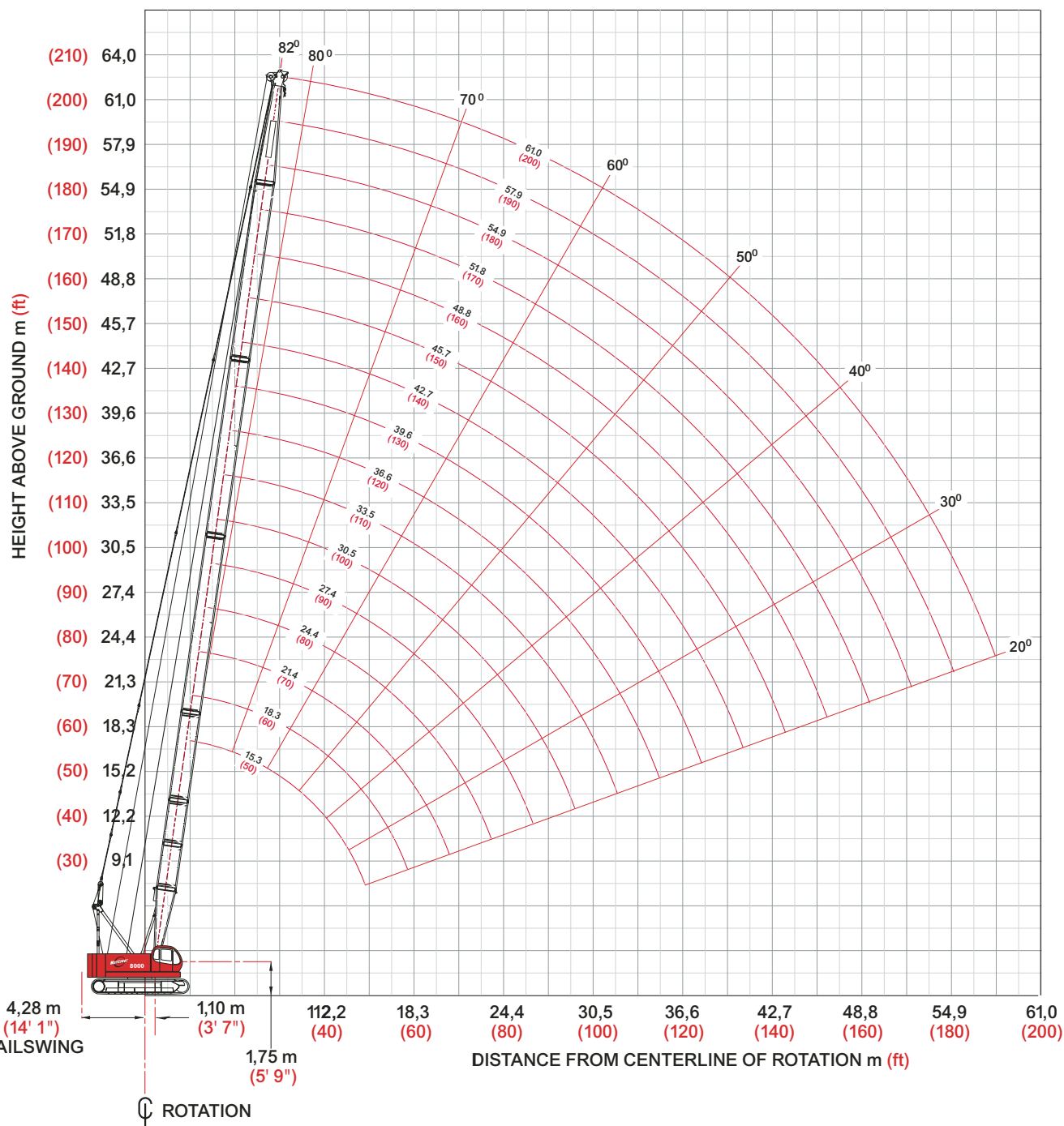
model 8000



heavy-lift boom range diagram

No. 8000 Main Boom

14



model 8000
Manitowoc



heavy-lift load charts

Liftcrane Boom Capacities No. 8000 Main Boom

69,600 lb Counterweight

360° Rating

lb x 1 000

15

| Boom ft | 50 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 190 | 200 |
|------------|-------|-------|-------|------|------|------|------|------|------|------|
| Radius | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | 160.0 | | | | | | | | | |
| 14 | 144.0 | 143.8 | | | | | | | | |
| 16 | 126.9 | 126.7 | 126.3 | | | | | | | |
| 18 | 113.2 | 113.0 | 112.6 | | | | | | | |
| 20 | 97.4 | 97.1 | 96.9 | 96.8 | | | | | | |
| 24 | 73.8 | 73.6 | 73.3 | 73.1 | 73.0 | 61.7 | | | | |
| 28 | 59.2 | 58.9 | 58.7 | 58.4 | 58.3 | 57.9 | 44.0 | | | |
| 34 | 45.5 | 45.2 | 44.8 | 44.5 | 44.3 | 44.0 | 42.1 | 32.6 | 28.8 | 25.7 |
| 40 | 36.8 | 36.4 | 36.0 | 35.7 | 35.4 | 35.1 | 34.9 | 31.0 | 27.5 | 24.4 |
| 45 | 31.6 | 31.2 | 30.8 | 30.5 | 30.2 | 29.9 | 29.7 | 29.2 | 26.4 | 23.3 |
| 55 | | 24.2 | 23.7 | 23.3 | 23.0 | 22.6 | 22.4 | 22.0 | 22.1 | 21.3 |
| 75 | | | 15.9 | 15.4 | 15.0 | 14.6 | 14.3 | 13.9 | 13.9 | 13.7 |
| 95 | | | | 11.2 | 10.7 | 10.2 | 10.0 | 9.5 | 9.5 | 9.3 |
| 105 | | | | | 9.2 | 8.7 | 8.5 | 8.0 | 8.0 | 7.8 |
| 115 | | | | | 8.1 | 7.6 | 7.2 | 6.7 | 6.8 | 6.5 |
| 125 | | | | | | 6.6 | 6.2 | 5.7 | 5.7 | 5.4 |
| 135 | | | | | | 5.9 | 5.4 | 4.7 | 4.8 | 4.5 |
| 145 | | | | | | | 4.7 | 4.0 | 4.0 | 3.7 |
| 155 | | | | | | | | 3.3 | 3.3 | 3.0 |
| 170 | | | | | | | | 2.6 | 2.5 | |

Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

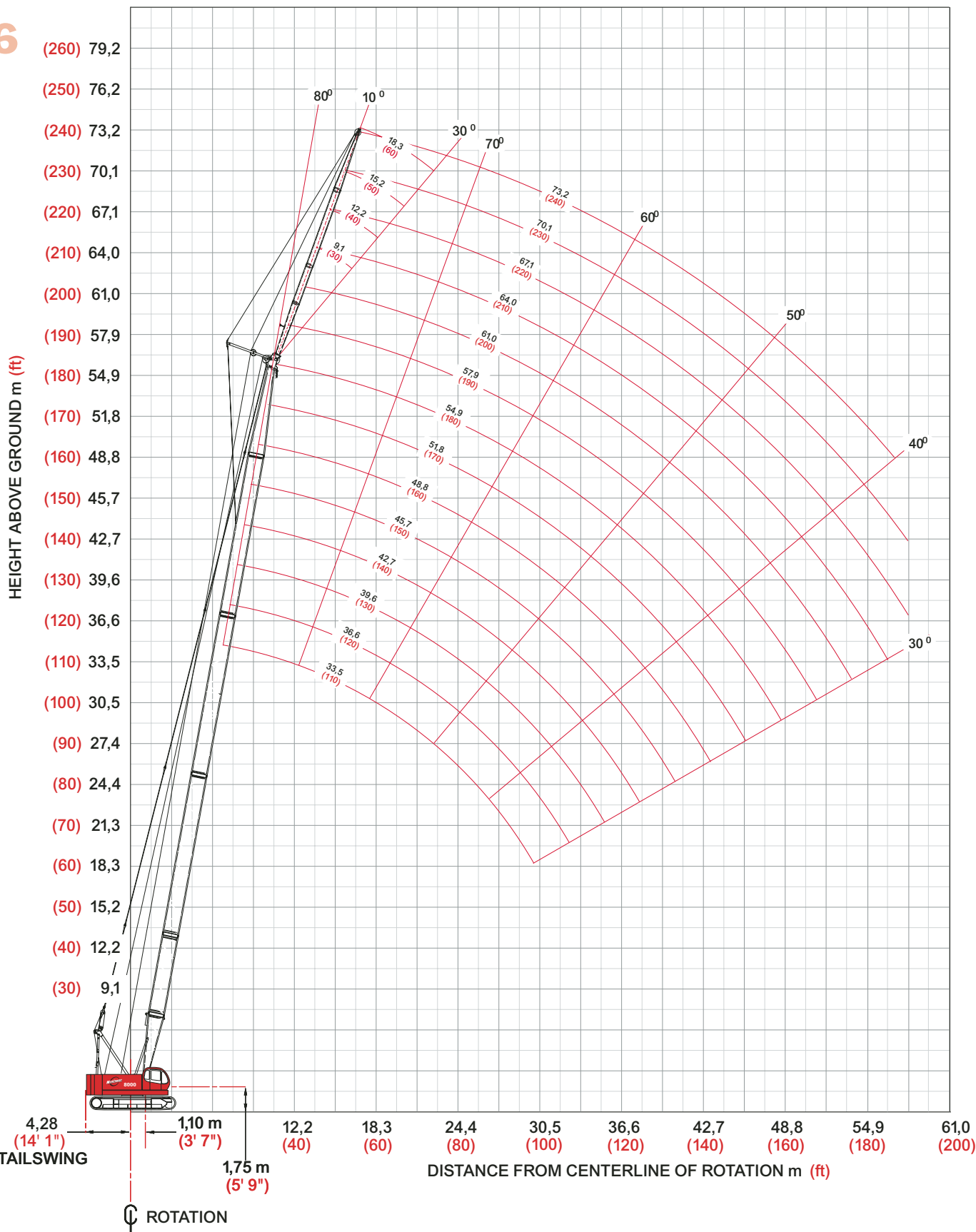
model 8000




fixed jib range diagram

No. 8000 Fixed Jib on Main Boom

16



model 8000



fixed jib load charts

Liftcrane Jib Capacities Fixed Jib on No. 8000 Main Boom

69,600 lb Counterweight

360° Rating

lb x 1 000

17

| 10° Offset | | | | | | 30° Offset | | | | | |
|------------------|------|------|------|------|------|------------------|------|------|------|------|------|
| Boom ft | 80 | 100 | 130 | 160 | 180 | Boom ft | 80 | 100 | 130 | 160 | 180 |
| Radius | | | | | | Radius | | | | | |
| Jib 30 ft | | | | | | Jib 30 ft | | | | | |
| 30 | 24.0 | | | | | 30 | | | | | |
| 40 | 24.0 | 24.0 | 24.0 | | | 40 | 19.7 | | | | |
| 50 | 24.0 | 24.0 | 24.0 | 24.0 | 19.7 | 50 | 17.6 | 18.5 | 19.6 | | |
| 60 | 21.3 | 20.8 | 20.3 | 19.7 | 18.7 | 60 | 15.9 | 16.9 | 18.0 | 18.9 | 18.5 |
| 80 | 14.4 | 13.9 | 13.3 | 12.7 | 12.3 | 80 | 13.7 | 14.3 | 13.7 | 13.2 | 12.9 |
| 100 | 10.6 | 10.0 | 9.4 | 8.8 | 8.3 | 100 | | | 9.7 | 9.1 | 8.7 |
| 120 | | | 6.9 | 6.2 | 5.8 | 120 | | | | 6.5 | 6.1 |
| 140 | | | 5.2 | 4.4 | 3.7 | 140 | | | | | 4.0 |
| 150 | | | | 3.6 | 2.9 | 150 | | | | | |
| 160 | | | | 2.9 | | 160 | | | | | |
| 170 | | | | | | 170 | | | | | |

| 10° Offset | | | | | | 30° Offset | | | | | |
|------------------|------|------|------|------|------|------------------|------|------|------|------|------|
| Boom ft | 80 | 100 | 130 | 160 | 180 | Boom ft | 80 | 100 | 130 | 160 | 180 |
| Radius | | | | | | Radius | | | | | |
| Jib 40 ft | | | | | | Jib 40 ft | | | | | |
| 30 | | | | | | 30 | | | | | |
| 40 | 24.0 | 24.0 | | | | 40 | | | | | |
| 50 | 22.1 | 24.0 | 24.0 | 22.8 | | 50 | 14.4 | 15.1 | | | |
| 60 | 18.8 | 20.9 | 20.5 | 20.3 | 17.8 | 60 | 12.9 | 13.6 | 14.5 | 15.1 | |
| 80 | 14.5 | 14.1 | 13.5 | 12.9 | 12.5 | 80 | 10.9 | 11.6 | 12.5 | 13.2 | 13.5 |
| 100 | 10.7 | 10.2 | 9.5 | 8.9 | 8.5 | 100 | | 10.3 | 10.0 | 9.6 | 9.3 |
| 120 | | 7.6 | 7.0 | 6.4 | 5.9 | 120 | | | 7.4 | 6.9 | 6.5 |
| 140 | | | 5.2 | 4.5 | 3.9 | 140 | | | | 5.0 | 4.5 |
| 150 | | | 4.6 | 3.7 | 3.1 | 150 | | | | | 3.6 |
| 160 | | | | 3.0 | | 160 | | | | | |
| 170 | | | | | | 170 | | | | | |

Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

model 8000

fixed jib load charts

18

Liftcrane Jib Capacities Fixed Jib on Main Boom

69,600 lb Counterweight

360° Rating

lb x 1 000

| 10° Offset | | | | | | | 30° Offset | | | | | | |
|------------|------------|------|------|------|------|------|------------|------|------|------|------|------|--|
| Jib 50 ft | Boom ft | 80 | 100 | 130 | 160 | 180 | Boom ft | 80 | 100 | 130 | 160 | 180 | |
| | Radius | | | | | | Radius | | | | | | |
| | 30 | | | | | | 30 | | | | | | |
| | 40 | 20.0 | 20.0 | | | | 40 | | | | | | |
| | 50 | 18.5 | 20.0 | 20.0 | | | 50 | | | | | | |
| | 60 | 15.6 | 17.2 | 19.3 | 19.2 | 17.0 | 60 | 10.4 | 10.9 | 11.4 | | | |
| | 80 | 12.0 | 13.3 | 13.6 | 13.1 | 12.7 | 80 | 8.7 | 9.2 | 9.8 | 10.3 | 10.6 | |
| | 100 | 9.7 | 10.3 | 9.7 | 9.1 | 8.7 | 100 | 7.6 | 8.0 | 8.7 | 9.2 | 9.5 | |
| | 120 | 8.6 | 7.7 | 7.1 | 6.5 | 6.0 | 120 | | | 7.6 | 7.1 | 6.8 | |
| | 140 | | | 5.7 | 4.6 | 4.0 | 140 | | | | 5.2 | 4.8 | |
| | 150 | | | 4.6 | 3.1 | 3.2 | 150 | | | | | 3.9 | |
| | 160 | | | 4.0 | | | 160 | | | | | 3.1 | |
| | 170 | | | | | | 170 | | | | | | |

| 10° Offset | | | | | | | 30° Offset | | | | | | | |
|------------|------------|------|------|------|------|------|------------|------------|-----|-----|-----|-----|-----|--|
| Jib 60 ft | Boom ft | 80 | 100 | 130 | 160 | 180 | Jib 60 ft | Boom ft | 80 | 100 | 130 | 160 | 180 | |
| | Radius | | | | | | | Radius | | | | | | |
| | 30 | | | | | | | 30 | | | | | | |
| | 40 | 18.0 | | | | | | 40 | | | | | | |
| | 50 | 16.3 | 17.6 | 18.0 | | | | 50 | | | | | | |
| | 60 | 13.7 | 15.0 | 16.7 | 17.8 | 15.0 | | 60 | 8.9 | | | | | |
| | 80 | 10.4 | 11.5 | 13.0 | 13.2 | 12.8 | | 80 | 7.3 | 7.7 | 8.1 | 8.5 | 8.7 | |
| | 100 | 8.3 | 9.3 | 9.7 | 9.1 | 8.7 | | 100 | 6.2 | 6.6 | 7.1 | 7.5 | 7.7 | |
| | 120 | 7.0 | 7.8 | 7.1 | 6.5 | 6.1 | | 120 | | 5.9 | 6.3 | 6.7 | 7.0 | |
| | 140 | | 6.0 | 5.4 | 4.7 | 4.1 | | 140 | | | 5.8 | 5.3 | 5.0 | |
| | 150 | | | 4.7 | 3.9 | 3.3 | | 150 | | | | 4.5 | 4.1 | |
| | 160 | | | 4.0 | 3.1 | 2.5 | | 160 | | | | 3.8 | 3.3 | |
| | 170 | | | 3.4 | 2.5 | | | 170 | | | | | 2.6 | |

Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

model 8000




clamshell

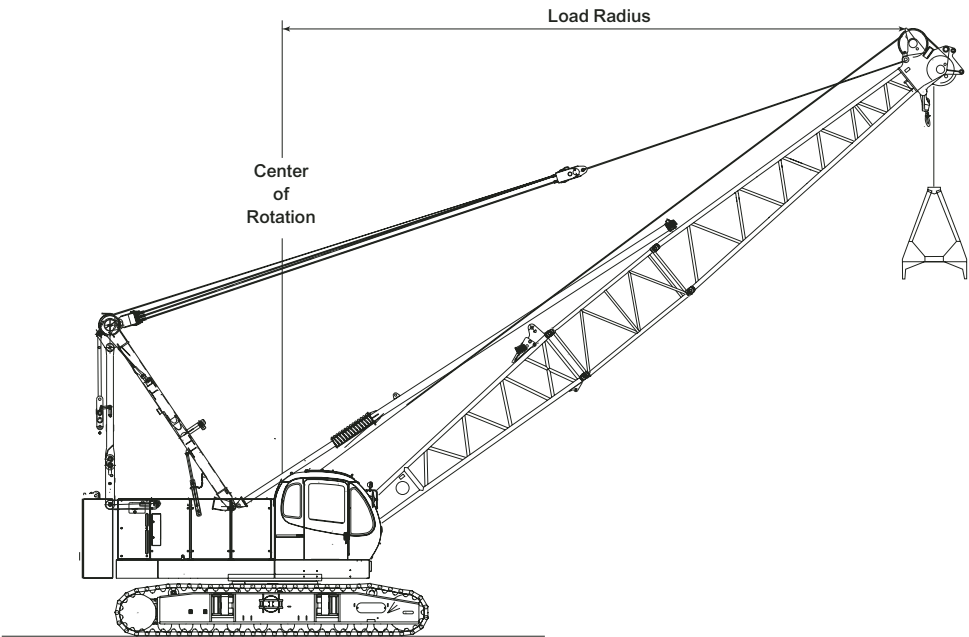
Boom:

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections.
Basic boom length: 40 ft (12.2 m)
Max. boom length: 70 ft (21.3 m)
Limit on clamshell bucket weight: 4,600 lbs (2,100 kg)

Boom Component Chart

| Boom length ft (m) | Boom arrangement |
|--------------------|--------------------------|
| 50 (15.2) | Base-A-Tip |
| 60 (18.3) | Base-A-A-Tip, Base-B-Tip |
| 70 (21.3) | Base-A-B-Tip |

Base = 20 ft (6.10 m)
Insert: A = 10 ft (3.05 m)
 B = 20 ft (6.10 m)
Tip = 20 ft (6.10 m)



Clamshell Capacities

42,258 lb Counterweight

lb x 1 000

| Boom ft | 40 | 50 | 60 | 70 |
|---------|------|------|------|------|
| Radius | | | | |
| 22 | 16.0 | | | |
| 26 | 16.0 | 16.0 | | |
| 30 | 16.0 | 16.0 | 16.0 | |
| 36 | 16.0 | 16.0 | 16.0 | 16.0 |
| 40 | 16.0 | 16.0 | 16.0 | 16.0 |
| 46 | | 16.0 | 16.0 | 16.0 |
| 50 | | | 14.5 | 14.3 |
| 56 | | | 12.3 | 12.3 |
| 60 | | | | 11.2 |
| 66 | | | | 9.7 |

model 8000

**Manitowoc Crane Group - Americas**

Manitowoc, Wisconsin Facility
Tel: [Int + 001] 920 684 6621
Fax: [Int + 001] 920 683 6277
Shady Grove, Pennsylvania Facility
Tel: [Int + 001] 717 597 8121
Fax: [Int + 001] 717 597 4062

Manitowoc Crane Group - Latin America

Mexico (Service)
Tel: [Int + 52] 81 8124 0128
Fax: [Int + 52] 81 8124 0129

Manitowoc Crane Group - EMEA

Europe Middle East & Africa
Tel: [Int + 33] (0) 4 72 18 20 20
Fax: [Int + 33] (0) 4 72 18 20 00

Manitowoc Crane Group - UK

Europe Middle East & Africa (Parts & Service)
Tel: [Int + 44] (0) 191 565-6281
Fax: [Int + 44] (0) 191 564-0442

Manitowoc Crane Group - Germany

(Sales, Parts & Service)
Tel: [Int + 49] (0) 2173 8909-0
Fax: [Int + 49] (0) 2173 8909-30

Manitowoc Crane Group - France

France & Africa (Sales, Parts & Service)
Tel: [Int + 33] (0) 1 303-13150
Fax: [Int + 33] (0) 1 303-86085

Manitowoc Crane Group - Netherlands

(Sales, Parts & Service)
Tel: [Int + 31] (0) 76 578 39 99
Fax: [Int + 31] (0) 76 578 39 78

Manitowoc Crane Group - Italy

Italy & Southern Europe (Sales, Parts & Service)
Tel: [Int + 39] (0) 331 49 33 11
Fax: [Int + 39] (0) 331 49 33 30

Manitowoc Crane Group - Portugal

Portugal & Spain (Sales, Parts & Service)
Tel: [Int + 351] (0) 22 968 08 89
Fax: [Int + 351] (0) 22 968 08 97

Manitowoc Crane Group - Singapore

Asia/Pacific excl China (Sales, Parts & Service)
Tel: [Int + 65] 6861-7133
Fax: [Int + 65] 6862-4040 / 4142

Manitowoc Crane Group - Shanghai

China (Sales, Parts & Service)
Tel: [Int + 86] (0) 21-64955555
Fax: [Int + 86] (0) 21-64852038

Manitowoc Crane Group - Beijing

China (Sales, Parts & Service)
Tel: [Int + 86] (0) 10 646-71690
Fax: [Int + 86] (0) 10 646-71691

Manitowoc Crane Group - Middle East

(Sales)
Tel: [Int + 971] (0) 4 348-4478
Fax: [Int + 971] (0) 4 348-4478
(Parts & Service)
Tel: [Int + 973] (0) 9 660-899
Fax: [Int + 973] (0) 2 707-740



www.manitowoccrane.com

Bigge Crane and Rigging Co.

10700 Bigge Avenue
San Leandro, CA 94577
Phone: (888) 337-BIGGE or (510) 638-8100
Fax: (510) 639-4053
Email: info@bigge.com
Web site: www.bigge.com

