

# model 2250

## product guide

### features

- 272 mton (300 ton) capacity
- 1 700 mton-m (12,294 ft-kips) Maximum Load Moment
- 91,4 m (300') Heavy-Lift Boom
- 100,6 m (330') Long-Reach Boom
- 112,8 m (370') Fixed Jib on Heavy-Lift Boom
- 118,9 m (390') Fixed Jib on Long-Reach Boom
- 121,9 m (400') Luffing Jib
- 158,5 m (520') Fixed Jib on Luffing Jib
- 335 kW (450 HP) engine, standard
- EPIC® controls
- 165 m/min (541 fpm) line speed standard
- 133 kN (30,000 lb) line pull standard
- 222 kN (50,000 lb) line pull optional
- 18 100 kg (40,000 lb) Clamshell capacity
- 22 600 kg (50,000 lb) Bulk Material Handling capacity with duty-cycle package
- MAX-ER™ Attachment  
450-mton (500-ton) capacity  
226,7-mton (250-ton) luffing jib capacity
- RINGER® Attachment  
1 300-mton (1,433-ton) capacity  
1 045-mton (1,150-ton) jib capacity
- Container Handling Attachment  
45,4-mton (50-ton) capacity
- Fast, efficient self-assembly and disassembly
- Complete crane, maximum boom, fixed jib and counterweight ships on only 15 trucks
- Manitowoc CraneCARE™ comprehensive support

### contents

Specifications	3
Outline Dimensions	9
Transport / Assembly	15
Performance Data	17
Boom Combinations	25
Main Boom Range / Load Charts	28
Long-Reach Boom Range / Load Charts	30
Fixed Jib Range / Load Charts	32
Luffing Jib Range / Load Charts	38
Fixed Jib on Luffing Jib Range / Load Charts	42
MAX-ER™ 2000 Complete Information	46
M-1200 RINGER® Complete Information	85
Elevated Cab, Container, Bulk Material	97
CraneCARE™	104

Manitowoc

# index

2

	Specifications	Outline Dimensions and Weights	Wire Rope Lengths	Wire Rope Specifications	Boom Raising	Boom Combinations	Range Diagram and Capacity Charts
<b>No. 2250 Basic Crane</b>	3-8	9-11					
Engine(s)	3						
Controls	3						
Hydraulic System	3						
Drums & Laggings	3-4, 21-23						
Boom Hoist	4, 23						
Swing System	4						
Boom Support System	4						
Counterweights	4	10-11					
Operator's Cab	4						
Carbody, Rotating Module	7	10					
Crawlers	7	10					
<b>Optional</b>							
Self-erect System	8						
Hook block/weight ball	8	14					
Miscellaneous Optional Equipment	8						
Boom Points		14					
Working Weights	23						
Transport/Assembly	15	16					
CraneCARE <sup>SM</sup>	104-106						
<b>No. 44 Boom</b>							
<b>No. 44 Boom with Heavy-Lift Top</b>	4-5	11-12	17	21	24	25	28-29
No. 44 Boom with Heavy-Lift Top with <b>No. 132 Fixed Jib</b>	5	12	17	21	24	25	32-34
No. 44 Boom with Heavy-Lift Top with <b>No. 133 or 133A Luffing Jib</b>	5	13	18	21	24	27	38-41
No. 44 Boom with Heavy-Lift Top with <b>No. 140 Fixed Jib</b>	5	13-14	19	21	24	27	42-45
on No. 133A or 133 Luffing Jib							
<b>No. 44 Long Reach Boom Top</b>	5	11-12	20			26	30-31
No. 44 Boom with Long Reach Top with No. 132 Fixed Jib			20	30-31	33	26	35-37
<b>MAX-ER™ 2000 (with Counterweights, No. 44 Mast, and straps)</b>	5-6	46-49					
<b>No. 79 Boom with Heavy-Lift Top</b>	5	49-50	51	57	59	60	66-67
No. 79 Heavy-Lift Boom with <b>No. 44 Luffing Jib</b>	6	50	52-53	57	59	61	73-76
<b>No. 79-44 Long-Reach Boom</b>	6	50	54	57	59	62	68-69
No. 79-44 Long-Reach Boom with No. 132 Fixed Jib			54	57	59	63	70-72
No. 79-44 Long-Reach Boom with No. 133 or 133A Luffing Jib			55	57	59	64	77-80
No. 79-44 Long-Reach Boom with No. 132 Fixed Jib			56	57	59	65	81-84
on No. 133A or 133 Luffing Jib							
<b>Drums and Laggings</b>	58						
<b>M-1200 RINGER® Configurations and Systems</b>	6-7, 86	85					
<b>No. 72 or 72A Boom</b>	7		87	89			90-91
<b>No. 75A Boom</b>	6		87	89			92-93
No. 72A Boom <b>No. 75 Fixed Jib</b>	7		88	89			94-96
No. 72A Boom <b>No. 182 Fixed Jib</b>	7						
<b>Drums and Laggings, Boom Hoist</b>	6-7, 88-89						
<b>Elevated Cab</b>	4	97					
<b>Container Handling</b>							
<b>No. 44 Main Boom with No. 136 Luffing Jib</b>	8	98	101	101		100	101
<b>Bulk Material Handling</b>							
<b>No. 44 Main Boom with Duty Cycle Upper Boom Point</b>	8	100	102-103	102-103	102-103	102-103	102-103

model 2250



# specifications

## Upperworks



### Engine

Cummins Model N14-C450 diesel, 6 cylinder, 335 kW (450 BHP) @ 2100 governed RPM.

Optional: Cummins Model N14-C525E-CELECT diesel, 6 cylinder, 392 kW (525 BHP) @ 2100 governed RPM.

Optional: Caterpillar Model 3406C-DITA diesel, 6 cylinder, 335 kW (450 BHP) @ 2100 governed RPM.

Includes engine block heater (120 V), ether starting aid, alcohol injector in air line, disconnect clutch for cold weather starting, high silencing muffler, hydraulic oil cooler, radiator and fan.

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

Two 12 volt maintenance-free, Group 8D batteries, 1155 CCA at -18°C (0° F), 24 volt starting and 120 amp alternator.

One 644 l (170 gal) capacity diesel fuel tank, mounted on rear of upperworks, with level indicator in operator's cab.

Optional: Cold-weather package with heater for fluids, brake pedals, batteries, 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 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 Load Moment Indicator system (LMI) is standard for main boom and upper boom point. "Function cut-out" or "warning only" operation is selected via a keyed switch on the LMI console.

Optional: Travel and swing alarms.

Optional: Anemometer (wind indicator).



### 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 has 424 l (112 gal) capacity 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, spin-on, ten-micron full flow filter. All oil is filtered before entering the hydraulic pumps.

System	kg/cm <sup>2</sup> (psi)	lpm (gpm)
Hoisting Drums	422 (6,000)	598 (158)
Hoisting Drums	422 (6,000)	598 (158)
Boom Hoist &		
Auxiliary Drum	422 (6,000)	299 (79)
Swing	422 (6,000)	299 (79)
Left Crawler	422 (6,000)	299 (79)
Right Crawler	422 (6,000)	299 (79)

Optional: Independent front drum – 422 kg/cm<sup>2</sup> (6,000 psi) at 598 lpm (158 gpm) powered by travel pumps.

Optional: Double-motor swing system – 422 kg/cm<sup>2</sup> (6,000 psi) at 299 lpm (79 gpm).



### Drums

Basic machine is equipped with a split rear drum shaft assembly. Right drum is 1 140 mm (44-9/10") wide and 572 mm (22-1/2") diameter. Left drum is 480 mm (18-9/10") wide and 572 mm (22-1/2") diameter. Drum shaft is antifriction bearing mounted and is driven by a variable-displacement hydraulic motor through a planetary reduction. Internal-expanding drum clutches are spring set, air released. External-contracting drum brakes are air applied, spring released. Parking brakes are spring set, air released. Drum rotation indicator is standard for each drum. Operator may select free-fall or powered lowering mode using a selector switch.

Optional: Two equal-split rear drums in place of standard drums. Each drum is 810 mm (31-9/10") wide and 572 mm (22-1/2") diameter.

Optional: Interlock that permits split rear drums to be used as single drum with two brakes. Recommended for concrete bucket operations.

Optional: Hydraulically powered auxiliary front drum 572 mm (22-1/2") diameter, 1 140 mm (44-9/10") wide rated at 133,4 kN (30,000 lb) line pull. For liftcrane, 963 mm (37.9") wide lagging provided. Drum shaft anti-friction bearing mounted on rotating bed. Drum anti-friction bearing mounted on shaft and equipped with internal-expanding clutch, external-contracting brake, and drum-rotation indicator. Includes third-drum control system. Bail limit is optional.

3

model 2250



# specifications

Optional: Other drum sizes, laggings, and additional drums.

4

Optional: Bolt-on 622 mm (24-1/2") laggings for liftcrane or clamshell applications.

Optional: Wire rope for various applications.



## Boom Hoist

Independent boom hoist with two grooved drums, each 505 mm (19-7/8") wide and 584 mm (23") diameter. Includes 297,2 m (975') of (1") diameter wire rope for reeving 12 part boom hoist line.

Drums are powered by a variable-displacement hydraulic motor coupled to an integral brake and a planetary reduction gearbox. Ratcheting pawl and rotation indicator are standard.

Boom hoist speed: raise 91,4 m (300') full main boom from 0° - 82° in 2 minutes, 40 seconds.



## Swing System

High strength fabricated steel alloy rotating bed is mounted on 2,95 m (9' 8") diameter triple-row roller bearing turntable.

Rotating bed's upper and lower modules are fabricated steel and connected by four power actuated pins. Hydraulic connection of upper and lower modules is made through H-FACT<sup>®</sup> hydraulic quick coupler. Enclosures are included on both sides of upper module.

Independent swing powered by a fixed displacement hydraulic motor coupled to a planetary reduction gearbox with internal brake. 360° positive swing lock.

Swing system maximum speed: 1.8 rpm.



## Boom Support System

The 8,5 m (28') long retractable gantry provides the geometry to raise and support all combinations of boom and jib. The telescoping square-tube backhitch is equipped with power actuated locking pins.

Boom-hoist rope reeved through sheaves in the gantry and equalizer forms 12-part boom-hoist rigging, and high-strength steel straps connect the equalizer to the boom top.

Air cushioned boom stop and automatic boom stop are standard.

Gantry includes hydraulic raising cylinders capable of lifting the upperworks counterweight for installation and removal. Counterweight attaches to rotating bed with power actuated pins.



## Counterweight

QTY.	ITEM	UNIT WEIGHT		TOTAL WEIGHT	
		kg	lb	kg	lb
1	<b>Upperworks</b>				
	Tray	17 781	39,200	17 781	39,200
1	Center Box	16 783	37,000	16 783	37,000
6	Lower Side Box	7 031	15,500	42 186	93,000
<b>SERIES 1 TOTAL</b>				<b>76 750</b>	<b>169,200</b>
2	<b>Upperworks</b>				
	Upper Side Box	9 072	20,000	18 144	40,000
2	<b>Carbody</b>				
	Center Box	13 608	30,000	27 216	60,000
Optional: Add to <b>SERIES 1</b> for <b>SERIES 2 TOTAL</b>				<b>122 110</b>	<b>269,200</b>
2	<b>Upperworks</b>				
	Upper Side Box	9 072	20,000	18 144	40,000
4	<b>Carbody</b>				
	Side Box	6 804	15,000	27 216	60,000
Optional: Add to <b>SERIES 2</b> for <b>SERIES 3 TOTAL</b>				<b>167 470</b>	<b>369,200</b>

Includes connecting pins, brackets, and stops.



## Operator's Cab

Fully enclosed and insulated steel module mounted at left front corner of rotating bed on a pivoting frame that permits cab to be repositioned for transportation. Module is equipped with sliding door, large safety glass windows on all sides and roof. Signal horn, cab space heater, front and roof windshield wipers, dome light, sun visor and shade, fire extinguisher and air circulating fan are standard.

Optional: Air conditioning for operator's cab.

Optional: Nylon protective window covers.

Optional: 10,7 m (35') elevated cab, 1 320 mm (52") wide, with catwalks and railing.

## Attachments



## No. 44 Boom with Heavy-Lift Top

The liftcrane is equipped with a 21,3 m (70') No. 44 angle-chord boom consisting of a two-piece 12,2 m (40') butt and a 9,1 m (30') heavy-lift top with nine 762 mm (30") diameter roller bearing sheaves on one shaft. Includes rope guides, boom angle indicator, and a 594 kg (1,310 lb) hook and weight ball. The No. 44 boom utilizes steel suspension straps and Manitowoc's patented, exclusive FACT<sup>™</sup> connection system consisting of two vertical pins, two horizontal connection pins, and alignment pads for each boom connection location. Because the 2250 uses steel-strap rigging, boom inserts from the M-250 cannot be used on the 2250.

Luffing jib preparation is standard.

model 2250





# specifications

5

Optional: 3,0 m (10'), 6,1 m (20'), and 12,2 m (40') No. 44 boom inserts with steel boom suspension straps, and FACT™ connection system.

Optional: Intermediate suspension, required for boom lengths of 85,3 m (280') or more.

Optional: Detachable upper boom point with one 762 mm (30") diameter tapered roller bearing steel sheave with rope guard, for liftcrane use on heavy-lift and long-reach boom tops. (Same upper point used on Models 777, 777T, 888, and M-250.)



## No. 44 Long Reach Boom Top

Optional: 21,3 m (70') long reach top consisting of 9,1 m (30') transition insert and 12,2 m (40') top with three 762 mm (30") diameter straight-roller-bearing sheaves. Includes steel rigging straps, wire rope guide, and hardware for LMI.

FACT™ connectors at lower end of transition insert enable mounting to standard No. 44 boom inserts. Transition insert can be purchased with FACT™ or pin connectors at top, permitting either No. 133A (pinned) or No. 133 (FACT™) luffing jib top to also be used as long-reach top for No. 44 boom.

Optional: Intermediate suspension, required for boom lengths of 91,4 m (300') or more.



## No. 132 Fixed Jib

Optional: 12,2 m (40') basic No. 132 fixed jib consists of 6,1 m (20') butt and 6,1 m (20') top, with 6,1 m (20') strut, pendants, backstay, and LMI hardware.

Optional: No. 132 fixed jib 6,1 m (20') inserts with pendants for total jib lengths to 36,6 m (120').

Use on Boom No. 44 with heavy-lift or long-reach boom top.



## No. 133A or 133 Luffing Jib

Optional: 21,3 m (70') basic No. 133A (pin connected) or No. 133 (FACT™) luffing jib with LMI hardware consists of 9,1 m (30') butt and 12,2 m (40') top with three 762 mm (30") roller bearing sheaves and basic pendants, fixed strut, jib strut, backstay pendants, boom point guide wheel, luffing jib hoist with ratcheting pawl, quick-disconnect for luffing jib hoist piping, (7/8") luffing jib hoist line, and 476 mm (18-3/4") diameter grooved luffing drum.

Optional: 3,0 m (10'), 6,1 m (20'), and 12,2 m (40') No. 133A or 133 inserts with pendants for total jib lengths to 61,0 m (200').

Optional: Parts for outside-assist raising (where code permits).



## No. 140 Fixed Jib

Optional: Basic 12,2 m (40') No. 140 fixed jib consists of 6,1 m (20') butt and 6,1 m (20') top, with 6,1 m (20') strut, pendants, backstay, and LMI hardware.

Optional: No. 140 fixed jib inserts 6,1 m (20') with pendants for total jib lengths to 36,6 m (120').

Use on No. 133A or 133 luffing jib.

Optional: Parts to convert No. 132 fixed jib to No. 140 fixed jib.



## MAX-ER™ 2000

Components to make up 36,6 m (120') No. 79 boom including one 9,1 m (30') No. 79 boom butt, one 6,1 m (20') No. 79 boom insert, one 12,2 m (40') No. 79 boom insert with equalizer platform, one 7,6 m (25') No. 79 transition insert, one 1,52 m (5') No. 79 boom top (15 sheaves), deflector sheave assembly (3 sheaves), boom equalizer (5 sheaves), steel rigging straps, and LMI hardware for No. 79 boom top.

Automatic boom stop, air-cushioned physical boom stop, and 793 m (2,600') of boom hoist wire rope (can be used as load line on 2250 crane). Components to make up 39,6 m (130') No.44 mast including one 12,2 m (40') No.44 mast butt, one 12,2 m (40') No.44 mast top (5 sheaves), physical mast stop, wire rope guide, and steel rigging straps.

Note: Requires use of 3,0 m (10') No. 44 boom insert and 12,2 m (40') No. 44 boom insert from 2250 liftcrane.

Main hoist drum assembly grooved for 29 mm or (1-1/8") wire rope mounted in No. 79 boom butt.

Integrated boom and mast adaptor frame.

Note: 2250 liftcrane requires MAX-ER 2000 preparation, Series 2 counterweights on carbody, and Series 1 counterweights on upperworks.

Note: The MAX-ER 2000 attachment cannot be used on an existing model 2250 liftcrane without modification, and cannot be used on M-250 model.

The MAX-ER 2000 attachment uses up to 209 560 kg (462,000 lb) of MAX-ER counterweight supported on a carrier behind the basic crane. The MAX-ER counterweight is attached to the top of the mast by straps and to the rear of the 2250's upperworks by an adaptor arm and trailer arm inserts.

model 2250  
Manitowoc



# specifications

6

The MAX-ER counterweight can be carried by a hanging counterweight tray or a wheeled counterweight carrier. The wheeled counterweight carrier uses eight large off-road vehicle tires, which can be positioned for traveling, crabbing, or swinging. It also includes hydraulic support jacks and pads.

Either counterweight assembly can be positioned 9,14 m (30'); 12,2 m (40'); or 15,2 m (50') behind the 2250's centerline of rotation to meet the capacity requirements of an individual lift.

ITEM	QTY	UNIT WEIGHT		TOTAL WEIGHT	
		kg	lb	kg	lb
<b>Wheeled Carrier</b>	1	34 609	76,300	34 609	76,300
<b>Counterweight Boxes</b>					
Lower Side*	12	5 897	13,000	70 760	156,000
Lower Center**	6	6 441	14,200	38 646	85,200
Upper Side - Right***	2	9 072	20,000	18 144	40,000
Upper Side - Left***	2	9 072	20,000	18 144	40,000
Upper Center*	4	6 804	15,000	27 216	60,000
<b>Adaptor Plate - Front</b>	2	454	1,000	907	2,000
<b>Adaptor Plate - Rear</b>	2	502	1,106	1 003	2,212
<b>Miscellaneous parts</b>	1	131	288	131	288
				<b>209 560</b>	<b>462,000</b>

\* Optional: 8 each 8 845 kg (19,500 lb).

\*\* Optional: 4 each 9 639 kg (21,250 lb).

\*\*\*From Model 2250 Series 3 Crane.

Optional: 12,2 m (40') No. 79 boom insert with stowable steel rigging straps and wire rope guides, one required in boom rigging for all boom lengths over 36,6 m (120').

Optional: 12,2 m (40') No. 79 boom insert with stowable steel rigging straps for boom lengths over 48,8 m (160') up to 109,7 m (360').

Optional: 4,6 m (15') No. 79-44 transition insert with wire rope guide and stowable steel rigging straps for use of No. 44 boom insert(s) and top for long-reach boom

Optional: No. 44 luffing jib. Components to make up 21,3 m (70') basic luffing jib include a 15,2 m (50') jib strut with 7 sheaves, 14,3 m (47') main strut with 7 sheaves, jib strut stop, luffing jib stop, main luffing strut backstay straps, basic luffing jib steel rigging straps, combination upper point and luffing jib raising wheel, luffing drum assembly, 549 m (1,800') luffing drum wire rope, and wire rope guide(s) as required.

Note: Basic luffing jib utilizes 12,2 m (40'), No. 44 boom butt and 9,1 m (30') No. 44 boom top from 2250 liftcrane. Luffing jib also uses No. 44 boom inserts and straps from 2250 liftcrane for luffing jib lengths greater than 21,3 m (70').

Optional: 408-mton (450-ton) load block with duplex hook

Optional: 227-mton (250-ton) load block with duplex hook

Optional: Liftcrane load line 29 mm or (1-1/8") rotation resistant.

Optional: Components to allow for self-assembly of boom and other components utilizing mast, boom hoist drum, and boom equalizer.



## M-1200 RINGER®

18,3 m (60') diameter ring structure with wear plates, crawler side frame attaching beams and "RINGER-SWINGER" gear segments.

RINGER support pedestals with manual screw style adjustments.

Hydraulic jacking system, including jacks, controls and ring leveling gauge.

Boom carrier with boom and mast hinge pins. Carrier includes mounting for Model M-1200 hoist drum.

Counterweight carrier with attachment beams to machine rear and counterweight lift indicator in operator's cab.



Optional: 714 811 kg (1,577,600 lb) of counterweight for 800-mton (900-ton) rating.



Optional: 914 175 kg (2,017,000 lb) of counterweight for 1 300-mton (1,433-ton) rating.

## No. 75A boom attachment 800-mton (900-ton) capacity.

45,7 m (150') No. 75A basic boom, including 15,2 m (50') No. 75A butt, 15,2 m (50') No. 75A insert and 15,2 m (50') No. 75 top.

45,7 m (150') No. 75A mast including 7,6 m (25') No. 75 mast butt, two 15,2 m (50') No. 75A inserts, 7,6 m (25') No. 75 mast top, counterweight straps and backhitch straps.

Mast self-erect system, steel strap rigging, equalizer, and boom hoist wire rope for 32-part boom hoist reeving for No. 72 boom.

Air-cushioned physical boom stop, air automatic boom stop, boom angle indicator.

No. 75A 800-mton (900-ton) boom point with sixteen 1067 mm (42") diameter sheaves grooved for (1-5/8") diameter rope.

RINGER® travel assist system.

Two "RINGER-SWINGER" assemblies.

Single-drum Model M-1200 hoist, complete with lagging grooved for (1-5/8") wire rope, hydraulic power provided by 2250 liftcrane, for load hoist drum.



Optional: 7,6 m (25') and 15,2 m (50') No. 75 boom inserts and rigging straps for total boom lengths to 121,9 m (400').

model 2250



## specifications

### No. 72A boom attachment.

The following components must be added to the No. 75A boom attachment to achieve a No. 72A liftcrane attachment for the M-1200 RINGER.

Conversion to two drum M-1200 hoist [each drum includes lagging grooved for (1-5/8") wire rope], including additional Cummins N14-C450 diesel engine rated at 335 kW (450 HP), which supplements total load hoist and swing capability.

46,6 m (153') No. 72A boom, including 15,2 m (50') butt, one 15,2 m (50') insert and 15,2 m (50') transition insert with 0,9 m (3') boom top/jib adaptor. Strap rigging, equalizer and boom hoist wire rope for 36-part reeving in place of 32-part reeving.

Two additional "RINGER-SWINGER®" assemblies and interconnecting piping.

Optional: 7,6 m (25') and 15,2 m (50') No. 72A boom inserts and rigging straps for total boom lengths to 122,8 m (403').

Optional: (1-5/8") wire rope for load line and (1-1/8") wire rope for whip line.

Optional: 1 300-mton (1,433-ton) lower point.

Optional: 1 300-mton, (1,433-ton) load block with quad hook and hanger block.

Optional: No. 72A to No. 75 boom picture frame insert for making No. 72A-75 combination boom.

The 914 175 kg (2,017,600 lb) of counterweight required for 1 300-mton (1,433-ton) rating can be supplied by Manitowoc.

### No. 75 Jib

Optional: 30,4 m (100') No. 75 jib, backstay straps and rigging components utilizes No. 75 boom top and butt from 800-mton (900-ton) lift attachment and No. 44 boom from 2250 for jib strut.

Optional: 7,6 m (25') and 15,2 m (50') No. 75 inserts and straps for total lengths up to 76,2 m (250').

### MAX-RINGER™ suspended counterweight attachment

Suspended counterweight attachment consists of structural backhitch links at the No. 75A mast top, structural backhitch straps, and suspended counterweight tray. Counterweight for the suspended counterweight attachment will be quoted upon request or may be customer supplied.

### No. 182 structural fixed jib for No. 72A boom

Single piece 15,2 m (50') structural jib and jib strut pin to No. 72A boom top and utilize the 800-mton (900-ton) boom point from the No. 75 fixed jib. Rigging consists of structural straps, links and pins.

Optional: Front auxiliary drum, with ratchet and pawl. Includes hydraulic piping and liftcrane lagging grooved for (1-1/8") rope.

NOTE: Auxiliary drum cannot run simultaneously with M-1200 main hoist drums

Optional: 80-mton (88-ton) upper boom point assembly for use with No. 75A boom, No. 72A boom, or No. 75 jib.

Consult Manitowoc Sales department for other options.

## Lowerworks

### Carbody

Connects rotating bed and crawler frames. Fabricated steel rotating bed lower module mounts to single-piece carbody by 2,9 m (9' 8") diameter triple-row roller bearing turntable. Each crawler frame is mounted to the carbody with FACT™ connection system power-actuated pins. Crawler drive motors are mounted on carbody. Permits crawler removal without opening travel drive hydraulic circuit.

### Crawlers

Crawler assemblies are 9,40 m (30' 9") long with 1,22 m (48") wide cast steel crawler pads and sealed "low maintenance" intermediate rollers. Each crawler is powered independently by a variable displacement hydraulic motor. Carbody mounted drive motors are connected to crawler final reduction via telescoping shafts. This permits crawlers to be removed without opening their hydraulic circuits. Crawlers provide ample tractive effort for counter rotation with full rated load.

Maximum ground speed of 1,61 kph (1.0 mph).

Optional: 1 220 mm (48") wide flattened treads for 1 149 mm (45-1/4") hard surface bearing width [instead of 514 mm (20-1/4") bearing width of standard treads].

Optional: 1 524 mm (60") wide treads (no self erect option allowed).

model 2250



# specifications

## Optional Equipment

8

Optional: Self-erect system, includes two wire rope guides for crawler handling, boom butt handling cylinder, upperworks jacking cylinders with pads, alignment device, four carbody support pedestals, 41-mton (45-ton) assembly block, crawler handling chains, 48,7 m (160') of (1-1/8") diameter rigging line.

Optional: Blocks and Hooks, each with 762 mm (30") roller-bearing sheaves for 29 mm or (1-1/8") wire rope, a roller-bearing swivel hook, a hook latch, and a swivel lock.

13,6-mton (15-ton) swivel hook and weight ball

41-mton (45-ton) hook block with one sheave [assembly block]

54-mton (60-ton) hook block with two sheaves

91-mton (100-ton) hook block with three sheaves

272-mton (300-ton) hook block with nine sheaves and a duplex swivel hook

Optional: Wire rope for various applications.

Optional: Equipment and testing for special code compliance.

Optional: Preparation for MAX-ER™ 2000.

Optional: Preparation for M-1200 RINGER®.

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. MAX-ER™ and RINGER® export packaging available.

## Optional Applications



### Clamshell/Material Rehandling

**Conversion from Liftcrane To Material Rehandling Clamshell 18 144 kg (40,000 lb) Rating** [No. 44 Heavy Lift Boom only]

Single front drum in addition to split rear drum. Front drum and right rear drums are equipped with laggings 622 mm (24-1/2") in diameter, 1 141 mm (44-29/32") wide, and grooved for (1-1/4") wire rope. Tapered pins for rotating bed connection. Pressure rollers for right rear and front drum. Tagline, Rud-O-Matic No. 1866, three barrel with 762 mm (30") wheel. Delete H-FACT® in rotating module and powered pins in crawlers.

**Conversion from Liftcrane to 22 681 kg (50,000 lb) Material Rehandling / 18 144 kg (40,000 lb) Digging Clamshell** [No. 44 Heavy-Lift Boom only].

Full width front and rear drums, each 1 694 mm (66-5/8") wide, 572 mm (22-1/2") in diameter, driven independently, and equipped with double brakes. Each drum also equipped with lagging 1 143 mm (45") wide, 622 mm (24-1/2") in diameter, and grooved for (1-3/8") wire rope. Tapered pins for rotating bed connection. Pressure rollers for front and rear drums. Hydraulic tagline. Second swing drive and larger swing pump. Cummins N14-C525 engine rated 391 kW (525 BHP) at 2100 RPM in place of standard engine. Duty cycle upper boom point with two 1 190 mm (47") diameter sheaves. Continuous-length boom-support pendants for the boom length purchased, in place of standard steel straps. Delete H-FACT® in rotating module and powered pins in crawlers. Delete Load Moment Indicator (LMI) system.

Optional: Boom inserts and continuous-length boom pendants in 3,1 m (10') increments for boom lengths from 24,4 m (80') to 42,7 m (140').



### No. 136 Container Handling Jib

**Conversion from Liftcrane to No. 136 Container Handling jib.**

Equal-split rear drum assembly, with two drums, each 810 mm (31-9/10") wide, in place of standard unequal-split rear drum. Liftcrane laggings for both drums, 810 mm (31-9/10") wide, 622 mm (24-1/2") in diameter and grooved for 29 mm or (1-1/8") rope. Tapered pins for rotating bed connection. Block up limit for No. 44 boom and No. 136 luffing jib. 24,4 m (80') No. 44 boom in place of 21,3 m (70') basic boom. 21,3 m (70') basic No. 136 luffing jib for layout assembly consisting of pin connected 6,1 m (20') jib butt, 15,2 m (50') top with two 762 mm (30") diameter sheaves spread 1 520 mm (60") apart to provide horizontal stability of the container, basic pendants, fixed strut, jib strut, backstay pendants, boom point guide wheel, luffing jib hoist with ratchet and pawl, and (7/8") luffing jib line. Hydraulic container tagline system. Slack-rope detection with visual and audible alarm in operator's cab. Two 27-mton (30-ton) single sheave hook blocks. Delete H-FACT® and power pins in rotating module. Delete Load Moment Indicator (LMI). Delete 594 kg (1,310 lb) hook and weight ball. Delete powered pins in crawlers.

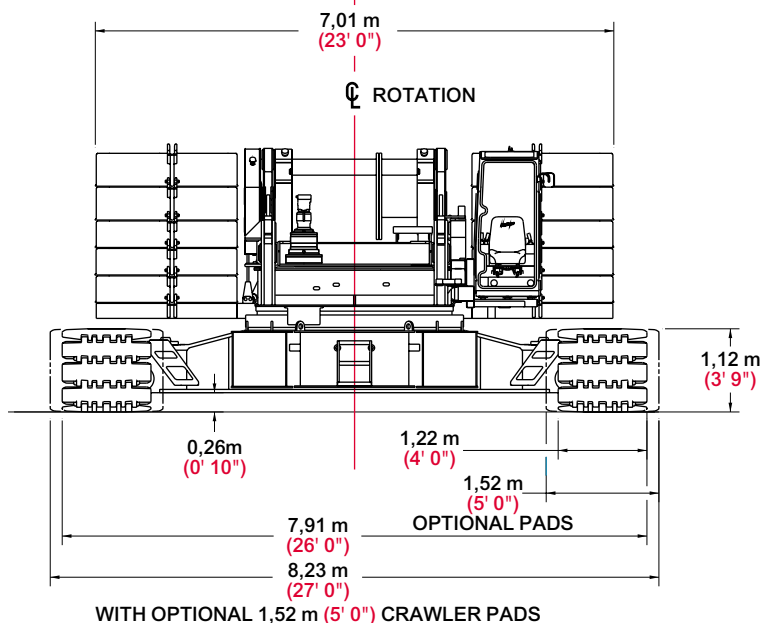
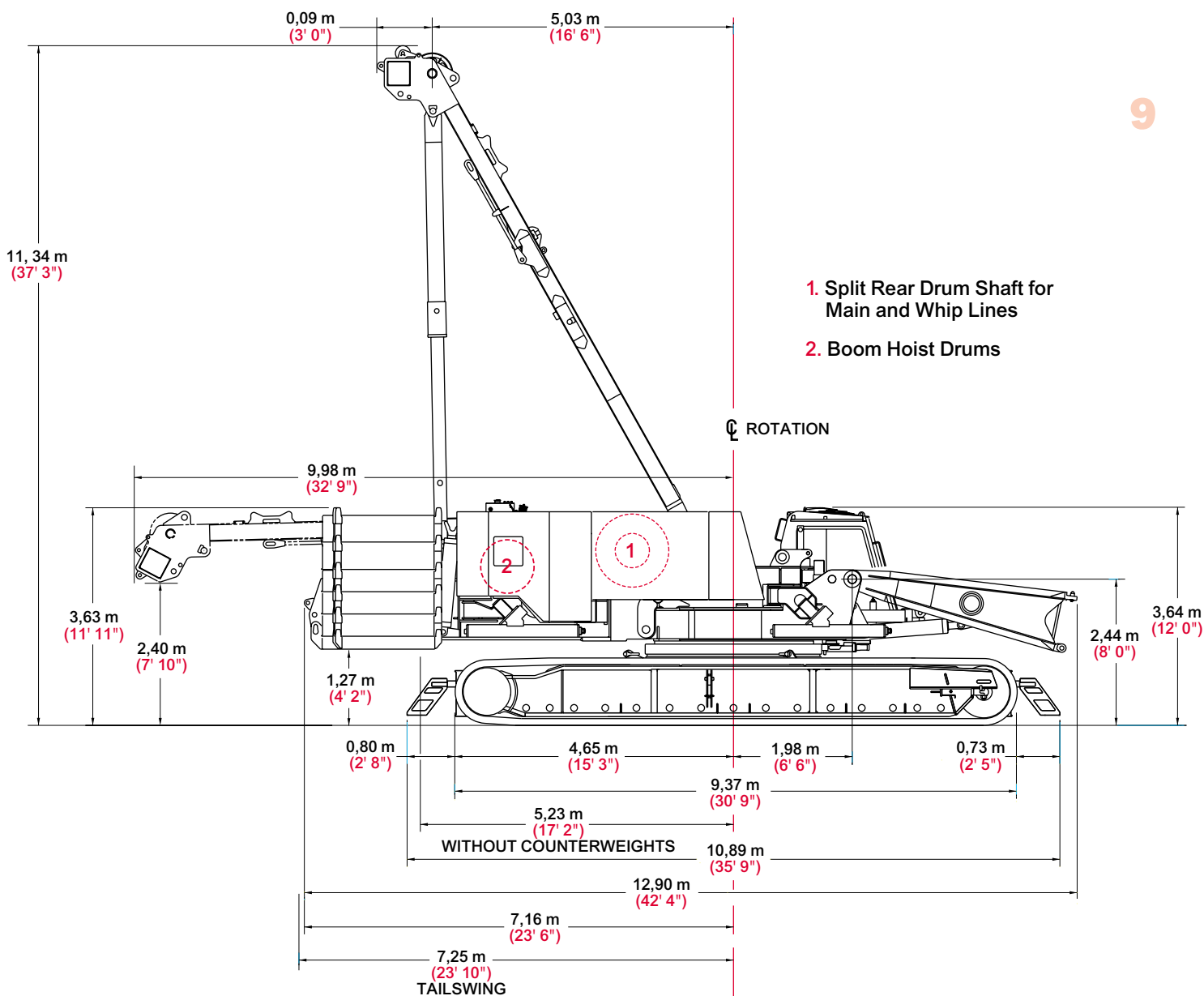
model 2250  
Manitowoc





# outline dimensions

9

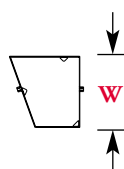
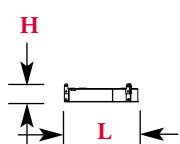
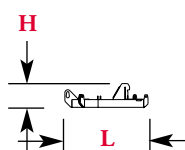
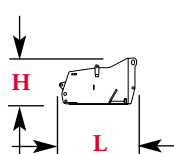
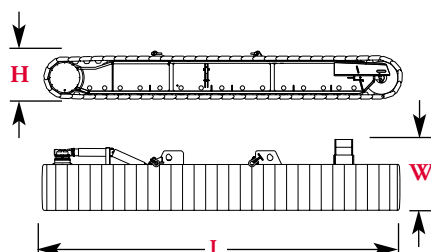
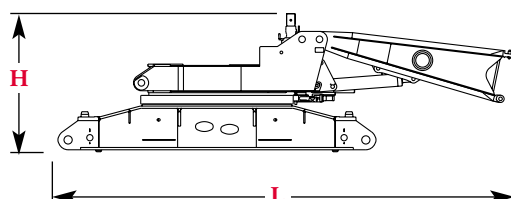
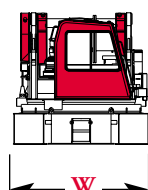
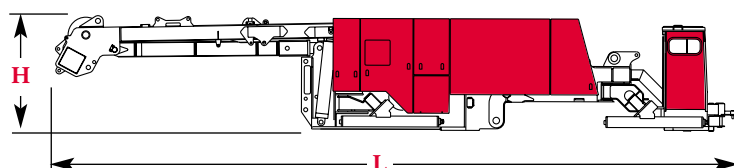


model 2250



# outline dimensions

10



## Upperworks Module x 1

Length	13,16 m	43' 2"
Width	3,00 m	9' 10"
Height	2,18 m	7' 2"
Weight	38 563 kg	85,020 lb

Note: Weight includes rotating bed rear section, diesel power plant, operator's cab, gantry, gantry lifting cylinders, boom hoist with wire rope, equalizer, split rear drum shaft with hoist and whip lines, optional self assembly jacks, full hydraulic fluid reservoir, and half tank of fuel.

## Carbody, Rotating Module & Lower Boom Butt 3,7 m (12') x 1

Length	8,81 m	28' 11"
Width	2,95 m	9' 8"
Height	2,63 m	8' 8"
Weight	29 187 kg	64,350 lb

Note: Weight includes turntable bearing, one swing drive, rotating union, 3,7 m (12' 0") lower boom butt, optional boom-butt handling cylinder, and four carbody support pedestals.

## Crawlers x 2

Length	9,37 m	30' 9"
Width	2,21 m	7' 3"
Height	1,26 m	4' 2"
Weight	24 412 kg	53,820 lb

## Upper Center Counterweight x 1

Length	2,08 m	6' 10"
Width	2,72 m	8' 11"
Height	1,27 m	4' 2"
Weight	16 782 kg	37,000 lb

## Counterweight Tray x 1

Length	2,19 m	7' 2"
Width	6,99 m	22' 11"
Height	0,64 m	2' 1"
Weight	17 742 kg	39,115 lb

Note: Weight includes lifting frames.

## Side Counterweight x 6

Length	2,01 m	6' 7"
Width	1,93 m	6' 4"
Height	0,48 m	1' 7"
Weight	7 030 kg	15,500 lb

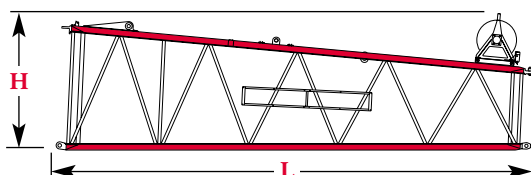
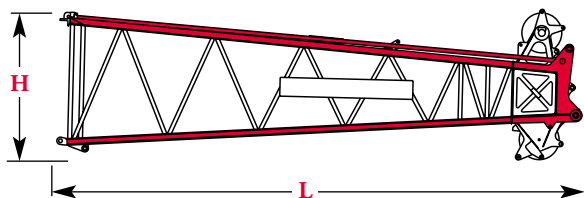
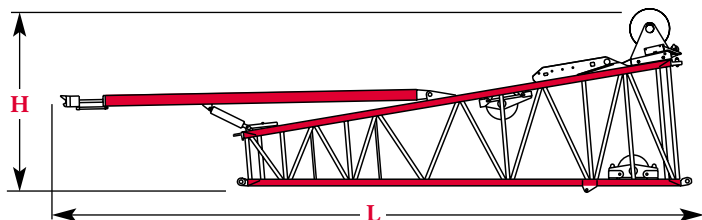
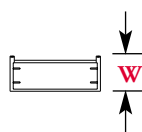
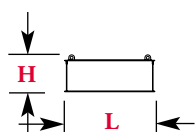
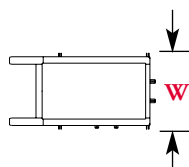
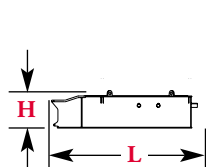
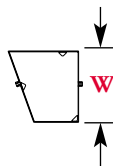
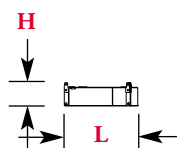
Note: Three each of left- and right-side configurations required.

Option

model 2250



# outline dimensions



Side Counterweight		
Series 2, 3		x 2, 4
Length	2,01 m	6' 7"
Width	1,93 m	6' 4"
Height	0,58 m	1' 11"
Weight	9 071 kg	20,000 lb

Note: Left- and right-side configurations are required.

Carbody Center Counterweight		
Series 2, 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 m	7' 2"
Width	0,86 m	2' 10"
Height	0,89 m	2' 11"
Weight	6 803 kg	15,000 lb

## No. 44 Upper Boom Butt 8,5 m (28') & Wire Rope Guide, Boom Stop x 1

Length	11,94 m	39' 2"
Width	2,59 m	8' 6"
Height	3,45 m	11' 4"
Weight	5 194 kg	11,450 lb

## No. 44 Boom Top 9,1 m (30') & Wire Rope Guide, Straps, Lower Point x 1

Length	10,06 m	33' 0"
Width	2,59 m	8' 6"
Height	2,90 m	9' 6"
Weight	5 657 kg	12,475 lb

## No. 44 Long Reach Transition Insert 9,1 m (30') & Wire Rope Guide, Straps x 1

Length	9,63 m	31' 7"
Width	2,59 m	8' 6"
Height	2,64 m	8' 8"
Weight	2 179 kg	4,805 lb

Note: Must specify if to be used with pin or FACT™ connections for long reach boom top.

Option

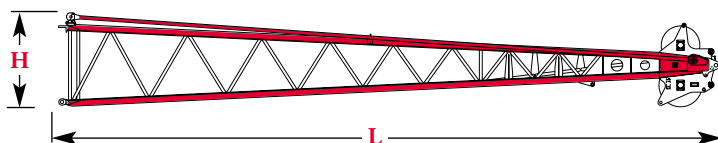
11

model 2250



# outline dimensions

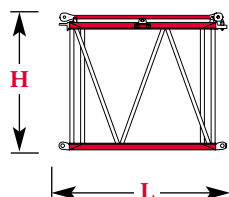
12



## No. 44 Long Reach Boom Top 12,2 m (40') & Wire Rope Guide, Lower Point, Straps x 1

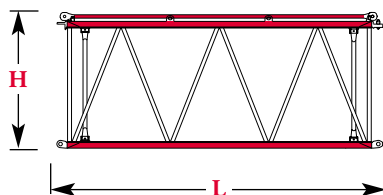
Length	13,06 m	42' 10"
Width	2,08 m	6' 10"
Height	1,83 m	6' 0"
Weight	3 529 kg	7,785 lb

Note: Can be used as No. 133A or No. 133 luffing jib top.



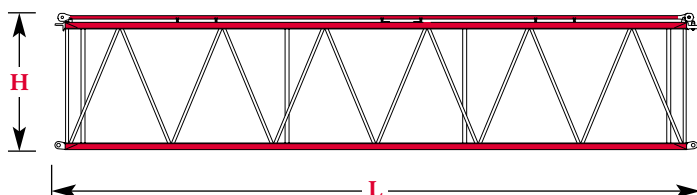
## No. 44 Boom Insert 3,0 m (10') & Straps x 1, 2

Length	3,23 m	10' 7"
Width	2,59 m	8' 6"
Height	2,59 m	8' 6"
Weight	1 015 kg	2,240 lb



## No. 44 Boom Insert 6,1 m (20') & Straps x 1, 2

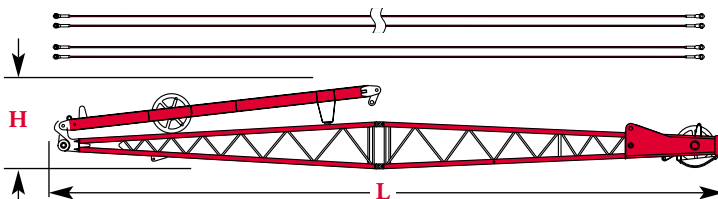
Length	6,28 m	20' 7"
Width	2,59 m	8' 6"
Height	2,59 m	8' 6"
Weight	1 724 kg	3,805 lb



## No. 44 Boom Insert 12,2 m (40') & Straps x 1, 2, 3, 4, 5

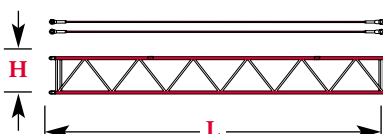
Length	12,38 m	40' 7"
Width	2,59 m	8' 6"
Height	2,59 m	8' 6"
Weight	2 946 kg	6,500 lb
Light Weight	2 415 kg	5,330 lb

Note: One light weight insert required for lengths above 82,3 m (270') with heavy-lift top or for lengths above 88,4 m (290') with long-reach top.



## No. 132 Fixed Jib 12,2 m (40') & Strut, Pendants x 1

Length	12,78 m	41' 11"
Width	1,22 m	4' 0"
Height	1,60 m	5' 3"
Weight	2 604 kg	5,740 lb



## No. 132 Jib Insert 6,1 m (20') & Pendants x 1, 2, 3, 4

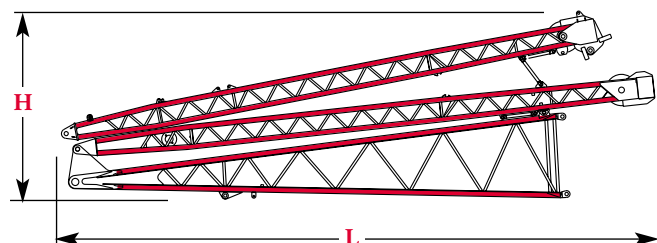
Length	6,25 m	20' 6"
Width	1,22 m	4' 0"
Height	0,91 m	3' 0"
Weight	466 kg	1,030 lb

Option

model 2250  
Manitowoc



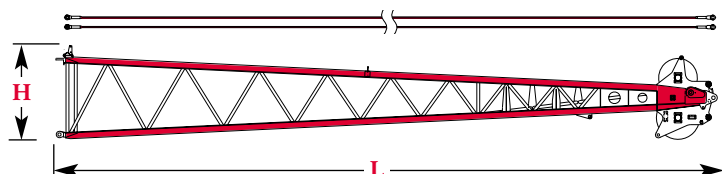
# outline dimensions



## No. 133A or 133 Luffing Jib Butt 9,1 m (30') & Struts x 1

Length	11,21 m	36' 10"
Width	2,07 m	6' 10"
Height	3,46 m	11' 4"
Weight	7 793 kg	17,180 lb

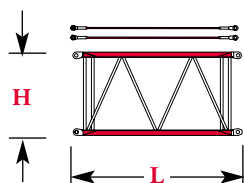
13



## No. 133A or 133 Luffing Jib Top 12,2 m (40') & Wire Rope Guide, Lower Point, Pendants x 1

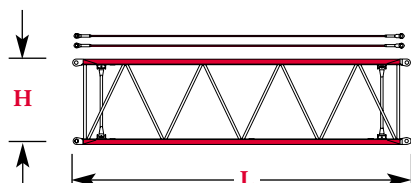
Length	13,06 m	42' 10"
Width	2,08 m	6' 10"
Height	1,65 m	5' 5"
Weight	3 649 kg	8,045 lb

Note: Can be used as long-reach top for No. 44 boom when combined with No. 44 long-reach transition insert 9,1 m (30').



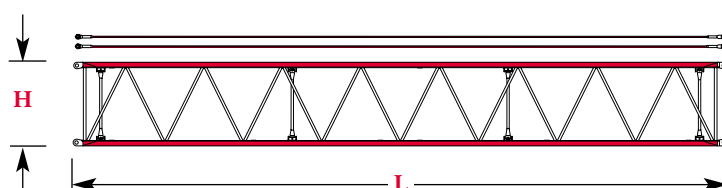
## No. 133A or 133 Luffing Jib Insert 3,0 m (10') & Pendants x 1

Length	3,18 m	10' 5"
Width	2,07 m	6' 10"
Height	1,65 m	5' 5"
Weight	559 kg	1,235 lb



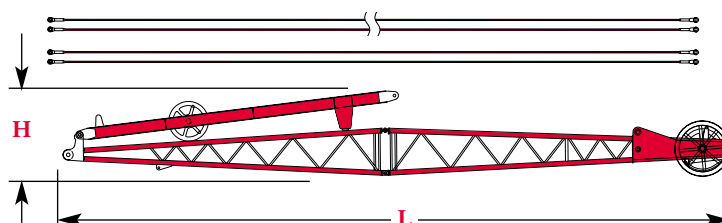
## No. 133A or 133 Luffing Jib Insert 6,1 m (20') & Pendants x 1

Length	6,22 m	20' 5"
Width	2,07 m	6' 10"
Height	1,65 m	5' 5"
Weight	960 kg	2,120 lb



## No. 133A or 133 Luffing Jib Insert 12,2 m (40') & Pendants x 1

Length	12,32 m	40' 5"
Width	2,07 m	6' 10"
Height	1,63 m	5' 5"
Weight	1 712 kg	3,780 lb



## No. 140 Fixed Jib 12,2 m (40') & Strut, Pendants x 1

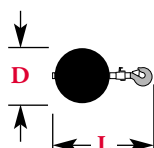
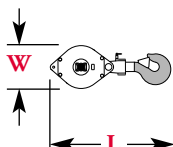
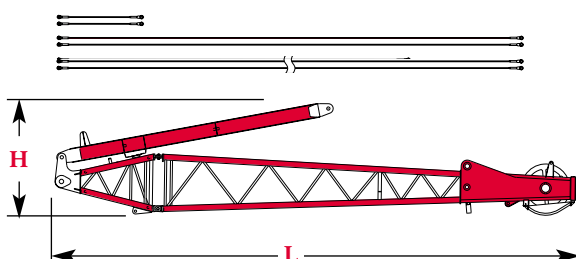
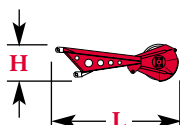
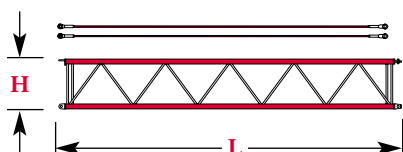
Length	12,78 m	41' 11"
Width	1,22 m	4' 0"
Height	1,63 m	5' 4"
Weight	2 975 kg	6,558 lb

Option

model 2250  
**Manitowoc**

# outline dimensions

14



## No. 140 Jib Insert 6,1 m (20') & Pendants x 1, 2, 3, 4

Length	6,20 m	20' 4"
Width	1,22 m	4' 0"
Height	0,91 m	3' 0"
Weight	467 kg	1 030 lb

## Upper Boom Point x 1

Length	2,64 m	8' 8"
Width	0,41 m	1' 4"
Height	0,81 m	2' 8"
Weight	421 kg	930 lb

## Extended Upper Boom Point 6,1 m (25') & Strut, Pendants x 1

Length	8,28 m	27' 2"
Width	1,22 m	4' 0"
Height	1,80 m	5' 11"
Weight	2 381 kg	5,250 lb

## Hook block for 28 mm (1-1/8") wire rope

Capacity	272 mt	300 t	Length	2,41 m	7' 11"
Weight	4 268 kg	9,410 lb	Width	1,14 m	3' 9"
Capacity	91 mt	100 t	Length	1,98 m	6' 6"
Weight	1 770 kg	3,900 lb	Width	0,89 m	2' 11"
Capacity	54 mt	60 t	Length	1,80 m	5' 11"
Weight	921 kg	2,030 lb	Width	0,89 m	2' 11"
Capacity	41 mt*	45 t*	Length	1,83 m	6' 0"
Weight	1 179 kg	2,600 lb	Width	0,91 m	3' 0"

\*Assembly block

## Weight Ball

Capacity/Swivel	13,5 mt	15 t	Diameter	0,46 m	1' 6"
Weight	594 kg	1,310 lb	Length	1,22 m	4' 0"

Option

model 2250  
Manitowoc

# transport data

## Trailer Load Out Summary

15

		Model 2250 Series 3 No. 132 Fixed Jib 36,6 m (120') and No. 44 Boom 91,4 m (300')														
Item	Weight each Item	Quantity on Trailer Load #														
	kg (lb)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Upperworks Module	38 563 (85,020)	1														
Carbody, Rotating Module and Lower Boom Butt	29 187 (64,350)		1													
Crawler Assembly	24 412 (53,820)			1	1											
Upper Center Counterweight	16 782 (37,000)												1			
Counterweight Tray & Lifting Frames	17 742 (39,115)													1		
Side Counterweight Series 1, 2, 3	7 030 (15,500)									2	2	2				
Side Counterweight Series 2,3	9 071 (20,000)					1	1	1	1							
Carbody Center Counterweight Series 2,3	13 607 (30,000)														1	1
Carbody Side Counterweight Series 3	6 803 (15,000)							1	1						1	1
8,5 m (28') No. 44 Upper Boom Butt	5 194 (11,450)					1										
9,1 m (30') No. 44 Boom Top & Straps	5 657 (12,475)						1									
3,0 m (10') No. 44 Boom Insert & Straps	1 015 (2,240)													1		
6,1 m (20') No. 44 Boom Insert & Straps	1 724 (3,805)												1			
12,2 m (40') No. 44 Boom Insert & Straps	2 946 (6,500)							1	1	1*	1	1				
12,2 m (40') No. 132 Basic Jib, Strut & Pendants	2 604 (5,740)										1**					
6,1 m (20') No. 132 Jib Insert	466 (1,030)											2**	1	1		
272 mton (300 ton) Hook Block	3 628 (8,000)						1									
41 mton (45 ton) Assembly Hook Block	1 179 (2,600)					1										
13,6 mton (15 ton) Weight Ball	594 (1,310)					1										
No. 44 Upper Boom Point	421 (930)					1										
Miscellaneous	907 (2,000)					1				1						
Approximate Total Shipping Weight kg (lb)		38 563 (85,020)	29 187 (64,350)	24 412 (53,820)	24 412 (53,820)	17 366 (38,290)	18 356 (40,475)	18 820 (41,500)	18 820 (41,500)	17 382 (38,330)	19 610 (43,240)	17 938 (39,560)	18 972 (41,835)	19 223 (41,385)	20 410 (45,000)	20 410 (45,000)

\*12,2 m (40') No. 44 Light Weight insert 2 417 kg (5,330 lb).

\*\*Jib inside of 12,2 m (40') No. 44 insert.

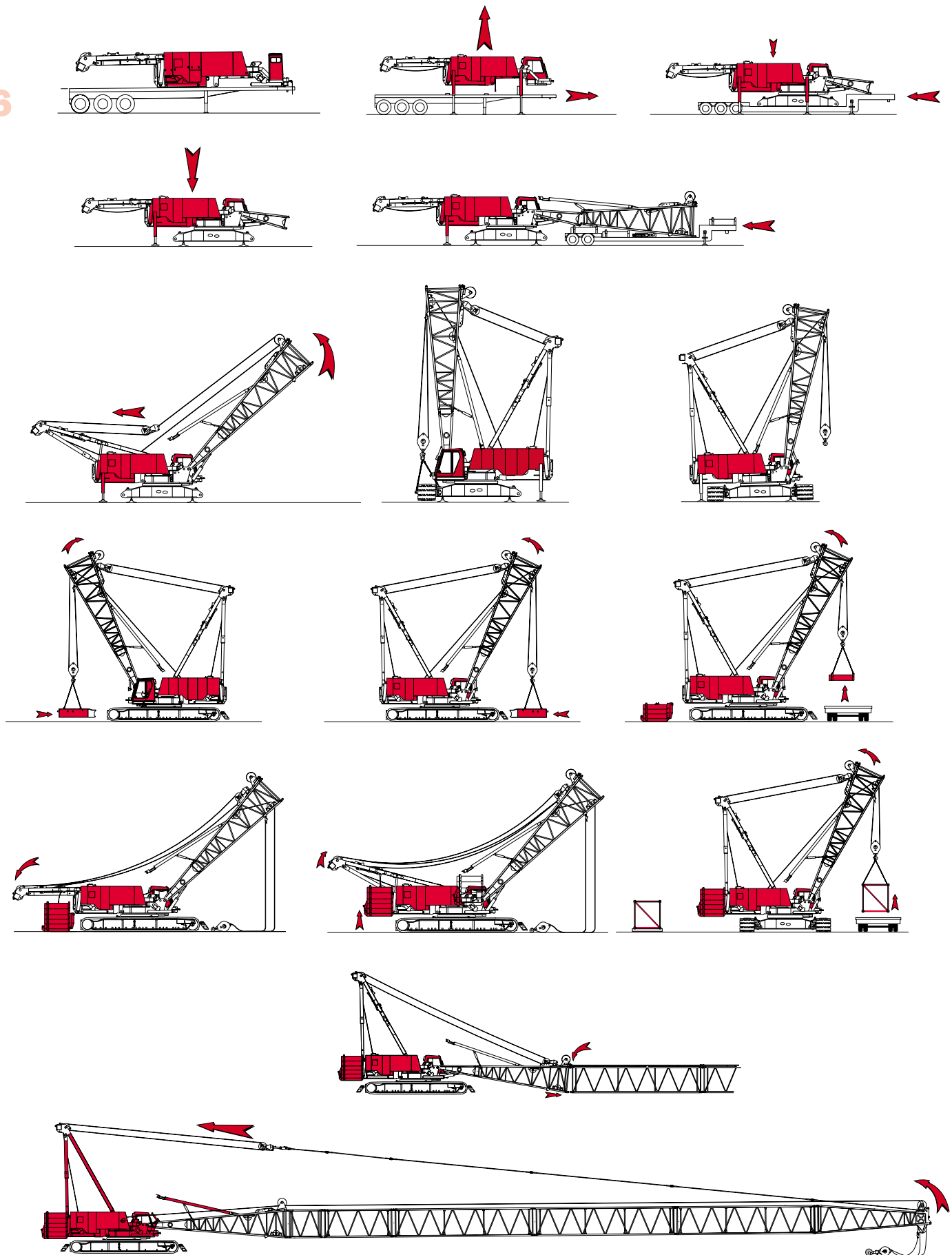
Trailer configurations - (#1) 3 axle flat; (#2) 3 axle double drop 0,61 m (24") or lower; (#3-4) 3 axle step or flat; (#5) double drop; (#6-11) step deck; (#12-15) flat.

model 2250



# assembly

16



Note: Read the assembly folio in the operator's manual for a complete description of approved crane assembly procedures.



# performance data

17

## Wire Rope Lengths

Boom No. 44 with Heavy-Lift Top

- or -

Fixed Jib No. 132 on

Boom No. 44 with Heavy-Lift Top

Boom or Boom and Fixed Jib Length	Whip Line Left Rear or Front Drum								Hoist line Right Rear Drum		
	(1 Part of Line)		(2 Parts of Line)		(3 Parts of Line)		(4 Parts of Line)				Maximum Required Parts of Line
	m	(ft)	m	(ft)	m	(ft)	m	(ft)			
21,3 (70)	58	(190)	84	(275)	–	–	–	–	442	(1,450)	18
24,4 (80)	64	(210)	91	(300)	–	–	–	–	495	(1,625)	18
27,4 (90)	70	(230)	99	(325)	–	–	–	–	526	(1,725)	17
30,5 (100)	76	(250)	107	(350)	–	–	–	–	549	(1,800)	16
33,5 (110)	82	(270)	114	(375)	–	–	–	–	549	(1,800)	13
36,6 (120)	88	(290)	130	(425)	–	–	–	–	549	(1,800)	13
39,6 (130)	94	(310)	137	(450)	–	–	–	–	549	(1,800)	12
42,7 (140)	101	(330)	145	(475)	–	–	–	–	610	(2,000)	12
45,7 (150)	107	(350)	152	(500)	–	–	–	–	610	(2,000)	11
48,8 (160)	113	(370)	160	(525)	–	–	–	–	610	(2,000)	10
51,8 (170)	119	(390)	175	(575)	221	(725)	282	(925)	610	(2,000)	10
54,9 (180)	125	(410)	183	(600)	236	(775)	297	(975)	625	(2,050)	10
57,9 (190)	131	(430)	191	(625)	251	(825)	312	(1,025)	625	(2,050)	9
61,0 (200)	137	(450)	198	(650)	259	(850)	328	(1,075)	625	(2,050)	8
64,0 (210)	143	(470)	206	(675)	274	(900)	343	(1,125)	625	(2,050)	8
67,1 (220)	149	(490)	221	(725)	282	(925)	358	(1,175)	625	(2,050)	8
70,1 (230)	155	(510)	229	(750)	297	(975)	373	(1,225)	625	(2,000)	7
73,2 (240)	162	(530)	236	(775)	312	(1,025)	387	(1,270)	625	(2,050)	7
76,2 (250)	168	(550)	244	(800)	320	(1,050)	–	–	625	(2,050)	6
79,2 (260)	174	(570)	251	(825)	335	(1,100)	–	–	625	(2,050)	6
82,3 (270)	180	(580)	259	(850)	343	(1,125)	–	–	625	(2,050)	6
85,3 (280)	186	(610)	274	(900)	358	(1,175)	–	–	625	(2,050)	5
88,4 (290)	192	(630)	282	(925)	373	(1,225)	–	–	625	(2,050)	5
91,4 (300)	198	(650)	290	(950)	381	(1,250)	–	–	625	(2,050)	5
94,5 (310)	201	(660)	297	(975)	–	–	–	–	–	–	–
97,5 (320)	207	(680)	305	(1,000)	–	–	–	–	–	–	–
100,6 (330)	213	(700)	312	(1,025)	–	–	–	–	–	–	–
103,6 (340)	219	(720)	328	(1,075)	–	–	–	–	–	–	–
106,7 (350)	226	(740)	335	(1,100)	–	–	–	–	–	–	–
109,7 (360)	232	(760)	343	(1,125)	–	–	–	–	–	–	–
112,8 (370)	238	(780)	351	(1,150)	–	–	–	–	–	–	–

**Note:** 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 hook travel for upper boom point application may be restricted when whip line length exceeds 357 m (1,170') using 622 mm (24-1/2") diameter lagging on left rear drum.

Drums each provide 133 kN (30,000 lb) maximum single line pull.

model 2250



# performance data

18

## Wire Rope Lengths Luffing Jib No. 133A or No. 133 on Boom No. 44 with Heavy-Lift Top

Boom and Luffing Jib Length m (ft)	Luffing Jib Whip Line Left Rear Drum		Luffing Jib Hoist Line Right Rear Drum when equipped with Split Rear Drums Front Drum when equipped with Tandem Drums											
	(1 Part of Line)		(7 Parts of Line)		(6 Parts of Line)		(5 Parts of Line)		(4 Parts of Line)		(3 Parts of Line)		(2 Parts of Line)	
	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)
45,7 (150)	104	(340)	389	(1,275)	-	-	-	-	-	-	-	-	-	-
48,8 (160)	110	(360)	419	(1,375)	-	-	-	-	-	-	-	-	-	-
51,8 (170)	116	(380)	434	(1,425)	-	-	-	-	-	-	-	-	-	-
54,9 (180)	122	(400)	465	(1,525)	404	(1,325)	-	-	-	-	-	-	-	-
57,9 (190)	128	(420)	488	(1,600)	427	(1,400)	366	(1,200)	-	-	-	-	-	-
61,0 (200)	134	(440)	511	(1,675)	450	(1,475)	389	(1,275)	-	-	-	-	-	-
64,0 (210)	140	(460)	541	(1,775)	472	(1,550)	404	(1,325)	-	-	-	-	-	-
67,1 (220)	146	(480)	-	-	488	(1,600)	419	(1,375)	358	(1,175)	-	-	-	-
70,1 (230)	152	(500)	-	-	511	(1,675)	442	(1,450)	373	(1,225)	-	-	-	-
73,2 (240)	158	(520)	-	-	-	-	457	(1,500)	389	(1,275)	-	-	-	-
76,2 (250)	165	(540)	-	-	-	-	472	(1,550)	396	(1,300)	320	(1,050)	-	-
79,3 (260)	171	(560)	-	-	-	-	495	(1,625)	411	(1,350)	335	(1,100)	-	-
82,3 (270)	177	(580)	-	-	-	-	511	(1,675)	427	(1,400)	343	(1,125)	-	-
85,3 (280)	183	(600)	-	-	-	-	533	(1,750)	442	(1,450)	358	(1,175)	-	-
88,4 (290)	189	(620)	-	-	-	-	-	-	457	(1,500)	373	(1,225)	-	-
91,4 (300)	195	(640)	-	-	-	-	-	-	472	(1,550)	381	(1,250)	-	-
94,5 (310)	201	(660)	-	-	-	-	-	-	488	(1,600)	396	(1,300)	-	-
97,5 (320)	207	(680)	-	-	-	-	-	-	-	-	404	(1,325)	-	-
100,6 (330)	213	(700)	-	-	-	-	-	-	-	-	419	(1,375)	-	-
103,6 (340)	219	(720)	-	-	-	-	-	-	-	-	427	(1,400)	-	-
106,7 (350)	226	(740)	-	-	-	-	-	-	-	-	442	(1,450)	335	(1,100)
109,7 (360)	232	(760)	-	-	-	-	-	-	-	-	450	(1,475)	343	(1,125)
112,8 (370)	238	(780)	-	-	-	-	-	-	-	-	-	-	351	(1,150)
115,8 (380)	244	(800)	-	-	-	-	-	-	-	-	-	-	358	(1,175)
118,9 (390)	250	(820)	-	-	-	-	-	-	-	-	-	-	366	(1,200)
121,9 (400)	256	(840)	-	-	-	-	-	-	-	-	-	-	373	(1,225)

**Note:** 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 hook travel for luffing jib application may be restricted when wire rope length exceeds 411 m (1,350') using left rear drum without lagging or when wire rope length exceeds 381 m (1,250') using 622mm (24-1/2") diameter lagging on left rear drum.

Drums each provide 133 kN (30,000 lb) maximum single line pull.

model 2250  
Manitowoc



# performance data

19

## Wire Rope Lengths - Fixed Jib No. 140 on Luffing Jib No. 133A or 133 on Boom No. 44 with Heavy-Lift Top

Boom, Luffing Jib, and Fixed Jib Length	Fixed Jib Whip Line Left Rear Drum			
	(1 Part of Line)		(2 Parts of Line)	
m (ft)	m	(ft)	m	(ft)
115,8 (380)	244	(800)	358	(1,175)
118,9 (390)	250	(820)	366	(1,200)
121,9 (400)	256	(840)	381	(1,250)
125,0 (410)	262	(860)	396	(1,300)
128,0 (420)	268	(880)	404	(1,325)
131,1 (430)	274	(900)	411	(1,350)
134,1 (440)	280	(920)	419	(1,375)
137,2 (450)	287	(940)	427	(1,400)
140,2 (460)	293	(960)	-	-
143,3 (470)	299	(980)	-	-
146,3 (480)	305	(1,000)	-	-
149,4 (490)	311	(1,020)	-	-
152,4 (500)	317	(1,040)	-	-
155,4 (510)	323	(1,060)	-	-
158,5 (520)	329	(1,080)	-	-

**Note:** 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.

Drums each provide 133 kN (30,000 lb) maximum single line pull.

model 2250  


# performance data

20

## Wire Rope Lengths

Boom No. 44 with Long-Reach Top

- or -

Fixed Jib No. 132 on

Boom No. 44 with Long-Reach Top

Boom or Boom and Fixed Jib Length	Whip Line Left Rear or Front Drum								Hoist line Right Rear Drum		
	(1 Part of Line)		(2 Parts of Line)		(3 Parts of Line)		(4 Parts of Line)				Maximum Required Parts of Line
	m	(ft)	m	(ft)	m	(ft)	m	(ft)			
57,9 (190)	131	(430)	191	(625)	—	—	—	—	488	(1,600)	7
61,0 (200)	137	(450)	198	(650)	—	—	—	—	511	(1,675)	7
64,0 (210)	143	(470)	206	(675)	—	—	—	—	533	(1,750)	7
67,1 (220)	149	(490)	221	(725)	—	—	—	—	564	(1,850)	7
70,1 (230)	155	(510)	229	(750)	297	(975)	373	(1,225)	587	(1,925)	7
73,2 (240)	162	(530)	236	(775)	312	(1,025)	389	(1,275)	625	(2,050)	7
76,2 (250)	168	(550)	244	(800)	320	(1,050)	404	(1,325)	625	(2,050)	6
79,2 (260)	174	(570)	251	(825)	335	(1,100)	—	—	625	(2,050)	6
82,3 (270)	180	(590)	259	(850)	343	(1,125)	—	—	625	(2,050)	6
85,3 (280)	186	(610)	274	(900)	358	(1,175)	—	—	625	(2,050)	5
88,4 (290)	192	(630)	282	(925)	373	(1,225)	—	—	625	(2,050)	5
91,4 (300)	198	(650)	290	(950)	381	(1,250)	—	—	625	(2,050)	4
94,5 (310)	201	(660)	297	(975)	396	(1,300)	—	—	625	(2,050)	4
97,5 (320)	207	(680)	303	(1,000)	404	(1,325)	—	—	625	(2,050)	4
100,6 (330)	213	(700)	312	(1,025)	—	—	—	—	625	(2,050)	4
103,6 (340)	219	(720)	328	(1,075)	—	—	—	—	—	—	—
106,7 (350)	226	(740)	335	(1,100)	—	—	—	—	—	—	—
109,7 (360)	232	(760)	343	(1,125)	—	—	—	—	—	—	—
112,8 (370)	238	(780)	351	(1,150)	—	—	—	—	—	—	—
115,8 (380)	244	(800)	358	(1,175)	—	—	—	—	—	—	—
118,9 (390)	250	(820)	366	(1,200)	—	—	—	—	—	—	—

**Note:** 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 hook travel for upper boom point application may be restricted when whip line length exceeds 387 m (1,270') using 622 mm (24-1/2") diameter lagging on left rear drum.

Drums each provide 133 kN (30,000 lb) maximum single line pull.

model 2250  
Manitowoc



# performance data

21

## Wire Rope Specifications 5:1 Safety Factor Boom No. 44 with Heavy-Lift or Long-Reach Top

- or -

## Fixed Jib No. 132 on Boom No. 44 with Heavy-Lift or Long-Reach Top

- or -

## Luffing Jib No. 133A or 133 on Boom No. 44 with Heavy-Lift Top

- or -

## Fixed Jib No. 140 on Luffing Jib No. 133A or 133 on Boom No. 44 with Heavy-Lift Top

	5:1 Safety Factor Rotation Resistant 1 960 N/mm <sup>2</sup>	5:1 Safety Factor Rotation Resistant 1 770 N/mm <sup>2</sup>	Only for helping reeve load lines: Regular Lay 6 x 19 Filler Wire IPS, IWRC
Function	Hoist or Whip Line	Hoist or Whip Line	Rigging Winch Line
Part Number	No. 719375	No. 719374	No. 719019
Size Wire Rope	— (1-1/8")	29 mm —	— (3/8")
Minimum Breaking Strength	70 260 kg (154,900 lb)	70 170 kg (154,700 lb)	5 940 kg (13,100 lb)
Maximum Load Per Line	13 610 kg (30,000 lb)	13 610 kg (30,000 lb)	— —
Approximate Weight	4,02 kg/m (2.70 lb/ft)	4,25 kg/m (2.85 lb/ft)	— —

## Drums & Laggings - Liftcrane

Unequal Split Rear Drums with Front Drum Optional							
Application	Drum Location	Drum Part Number	Drum Type	Drum Diameter	Drum Width	Grooved Lagging* (Optional) Part Number	Wire Rope Size
Hoist	Right Rear	171304	Bare	572 mm (22-1/2")	1 141 mm (44-29/32")	502411 with Spacer 197045	29 mm
						502402	(1-1/8")
Whip	Left Rear	171305	Bare	572 mm (22-1/2")	480 mm (18-29/32")	502412 with Spacer 197044	29 mm
						502401 with Spacer 192568	(1-1/8")
Whip (Optional)	Front	171304 with Spacer 176959	Bare	572 mm (22-1/2")	961 mm (37-53/64")	Pending	29 mm
						Pending	(1-1/8")

Note: Grooved laggings for 29 mm or (1-1/8") wire rope are optional for liftcrane application.

\*622 mm (24-1/2") diameter.

Basic  
Liftcrane

model 2250



# performance data

22

## Drums & Laggings - Liftcrane

Tandem Drums - 1 854 mm (73") Wide (Optional)							
Application	Drum Location	Drum Part Number	Drum Type	Drum Diameter	Drum Width	Grooved Lagging* (Optional) Part Number	Wire Rope Size
Basic Liftcrane	Hoist	173521 with Spacer 176961	Bare	572 mm	1 141 mm	Pending	29 mm
				(22-1/2")	(44-29/32")	502402	(1-1/8")
	Whip	173520 with Spacer 175153 or 176960	Bare	572 mm	961 mm	Pending	29 mm
				(22-1/2")	(37-53/64")	Pending	(1-1/8")

Note: Grooved laggings for 29 mm or (1-1/8") wire rope are optional for liftcrane application.

\*622 mm (24-1/2") diameter.

## Drums & Laggings - Clamshell / Bulk Material Handling

Unequal Split Rear Drums with Front Drum Optional							
Application	Drum Location	Drum Part Number	Lagging Type	Lagging Diameter	Lagging Width	Lagging Part Number	Wire Rope Size
Clamshell	Closing*	171304	Grooved	622 mm	1 141 mm	502358	29 mm
				(24-1/2")	(44-29/32")	502358	(1-1/8")
	Holding	171305	Grooved	622 mm	480 mm	502356	29 mm
				(24-1/2")	(18-29/32")	502356	(1-1/8")
Bulk Material Handling	Closing (Optional)	171304	Grooved	622 mm	961 mm	502375 with Spacer 176959	29 mm
				(24-1/2")	(37-53/64")	502375 with Spacer 176959	(1-1/8")
	Holding	171304	Grooved	622 mm	1 141 mm	-	-
				(24-1/2")	(44-29/32")	502370	(1-1/4")
	Closing	171304	Grooved	622 mm	1 141 mm	-	-
				(24-1/2")	(44-29/32")	502370	(1-1/4")

\*Holding if used with front drum

## Drums & Laggings - Container Handling / Clamshell

Equal Split Rear Drums with Front Drum Optional							
Application	Drum Location	Drum Part Number	Lagging Type	Lagging Diameter	Lagging Width	Lagging Part Number	Wire Rope Size
Container Handling	Hoist	172919	Grooved	622 mm	810 mm	Pending	29 mm
				(24-1/2")	(31-29/32")	502364	(1-1/8")
	Hoist	172920	Grooved	622 mm	810 mm	Pending	29 mm
				(24-1/2")	(31-29/32")	502364	(1-1/8")
Clamshell	Auxiliary (Optional)	171304 with Spacer 176959	Bare	-	-	-	29 mm
				-	-	-	(1-1/8")
	Closing	172919	Grooved	622 mm	810 mm	Pending	29 mm
				(24-1/2")	(31-29/32")	502365	(1-1/8")
	Holding	172920	Grooved	622 mm	810 mm	Pending	29 mm
				(24-1/2")	(31-29/32")	502365	(1-1/8")

model 2250



performance data

23

Drums & Laggings - Clamshell

Clamshell

Tandem Drums - 1 854 mm (73") Wide (Optional)							
Application	Drum Location	Drum Part Number	Lagging Type	Lagging Diameter	Lagging Width	Lagging Part Number	Wire Rope Size
Holding	Rear	173521 with Spacer 176961	Grooved	622 mm (24-1/2")	1 141 mm (44-29/32")	502358	29 mm
						502358	(1-1/8")
Closing	Front	173520 with Spacer 175153 or 176960	Grooved	622 mm (24-1/2")	961 mm (37-53/64")	502375	29 mm
						502375	(1-1/8")

Drum Capacities, Standard Drums - Wire Rope

	Maximum Length	
	No Lagging	With Lagging**
Right Rear Drum (Hoist) 29 mm Wire Rope*	730 m 8 Layers	776 m 8 Layers
(1-1/8") Wire Rope*	(2,411 ft) 8 Layers	(2,566 ft) 8 Layers
Left Rear Drum (Whip) 29 mm Wire Rope*	355 m 9 Layers	323 m 8 Layers
(1-1/8") Wire Rope*	(1,173 ft) 9 Layers	(1,068 ft) 8 Layers
Front Drum (Whip) 29 mm Wire Rope*	614 m 8 Layers	653 m 8 Layers
(1-1/8") Wire Rope*	(2,028 ft) 8 Layers	(2,158 ft) 8 Layers

\*6 m (20') is deducted from maximum spooling capacities for 3 dead wraps per drum or lagging.

\*\*Lagging diameter 622 mm (24-1/2").

Working Weight

Configuration	kg (lb)		
	Series 1	Series 2	Series 3
21,3 m (70') No. 44 Boom	203 069 (447,690)	248 485 (547,815)	293 844 (647,815)
76,2 m (250') No. 44 Main Boom with 36,6 m (120') No. 132 Fixed Jib	219 804* (484,585)*	265 776 (585,935)	311 135 (685,935)
61,0 m (200') No. 44 Main Boom with 61,0 m (200') No. 133A Luffing Jib	231 373** (510,090)**	277 803 (612,450)	323 162 (712,450)

Typical working weight includes: optional self-assembly carbody jacks, hydraulic reservoirs full, fuel half-full, drums loaded with standard lengths of wire rope, upper boom point, 272 mt (300 t) hook block, and 13,6 mt (15 t) weight ball.

Note: Upper boom point not used with fixed jib or luffing jib.

\*70,1 m (230') No. 44 main boom and 36,6 m (120') fixed jib maximum allowed for Series 1.

\*\*57,9 m (190') No. 44 main boom and 61,0 m (200') luffing jib maximum allowed for Series 1.

Drums - 133,4 kN (30,000 lb)

Layer	Single Line Pull/Single Line Speed*							
	m/min (ft/min)							
	1	2	3	4	5	6	7	8
Line Pull kN (lb)								
0 (0)	102 (335)	111 (365)	120 (394)	129 (424)	138 (453)	147 (483)	156 (512)	165 (542)
22,2 (5,000)	102 (335)	111 (365)	120 (394)	129 (424)	138 (453)	147 (481)	155 (509)	164 (537)
44,5 (10,000)	100 (328)	108 (355)	116 (381)	124 (408)	132 (433)	140 (459)	148 (484)	155 (509)
66,7 (15,000)	97 (317)	104 (342)	112 (366)	119 (390)	126 (413)	133 (436)	140 (458)	146 (480)
89,0 (20,000)	94 (307)	100 (329)	107 (351)	113 (370)	115 (378)	118 (386)	120 (394)	123 (402)
111,2 (25,000)	90 (295)	92 (303)	95 (311)	97 (319)	100 (327)	102 (336)	105 (344)	107 (352)
133,4 (30,000)	80 (261)	82 (269)	84 (277)	87 (286)	90 (294)	92 (302)	95 (310)	97 (318)

NOTE: Line pull is infinitely variable.

\*Based on lagging diameter of 622 mm (24-1/2").

model 2250



# performance data

24

## Maximum Length – Unassisted Raising

Method	Fixed Jib No. 132 on Boom No. 44 with Heavy-Lift Top Series 3	
	Main Boom	Fixed Jib
Over front, side or rear of crawlers m (ft)	91,4 (300)	–
	88,4 (290)	–
	85,3 (280)	–
	82,3 (270)	–
	79,2 (260)	24,4 (80)
	76,2 (250)	36,6 (120)

NOTE: Load block(s), hook(s) and weight ball(s) on ground at start. Upper boom point cannot be used when jib is attached.

Boom lengths of 76,2 m (250') through 91,4 m (300') require only three middle sheaves in lower boom point, all others must be removed from lower boom point.

## Maximum Length – Unassisted Raising

Method	Fixed Jib No. 132 on Boom No. 44 with Long-Reach Top Series 3	
	Main Boom	Fixed Jib
Over front, side or rear of crawlers m (ft)	100,6 (330)	–
	97,5 (320)	–
	94,5 (310)	–
	91,4 (300)	–
	88,4 (290)	–
	85,3 (280)	18,3 (60)
	82,3 (270)	36,6 (120)

NOTE: Load block(s), hook(s) and weight ball(s) on ground at start. Upper boom point cannot be used on 100,6 m (330') boom, or when jib is attached.

## Maximum Length – Unassisted Raising

Method	Luffing Jib No. 133A or 133 on Boom No. 44 with Heavy-Lift Top Series 3			
	In-Line Procedure		Layout Jack-Knife Procedure	
	Main Boom	Luffing Jib	Main Boom	Luffing Jib
Over front of crawlers m (ft)	24,4 (80)	21,3 - 61,0 (70 - 200)	33,5 (110)	61,0 (200)
	27,4 (90)	21,3 - 61,0 (70 - 200)	36,6 (120)	57,9 - 61,0 (190 - 200)
	30,5 (100)	21,3 - 61,0 (70 - 200)	39,6 (130)	51,8 - 61,0 (170 - 200)
	33,5 (110)	21,3 - 57,9 (70 - 190)	42,7 (140)	48,8 - 61,0 (160 - 200)
	36,6 (120)	21,3 - 54,9 (70 - 180)	45,7 (150)	42,7 - 61,0 (140 - 200)
	39,6 (130)	21,3 - 48,8 (70 - 160)	48,8 (160)	36,6 - 61,0 (120 - 200)
	42,7 (140)	21,3 - 45,7 (70 - 150)	51,8 (170)	30,5 - 61,0 (100 - 200)
	45,7 (150)	21,3 - 39,6 (70 - 130)	54,9 (180)	24,4 - 61,0 (80 - 200)
	48,8 (160)	21,3 - 33,5 (70 - 110)	57,9 (190)	21,3 - 61,0 (70 - 200)
	51,8 (170)	21,3 - 27,4 (70 - 90)	61,0* (200) *	21,3 - 61,0 (70 - 200)
	54,9 (180)	21,3 (70)	64,0* (210) *	33,5 - 45,7 (110 - 150)

NOTE: Load block(s), hook(s) and weight ball(s) on ground until boom and luffing jib are erected.

\*Requires only middle three sheaves to be used in lower boom point, all others must be removed from lower boom point.

Combinations of boom and luffing jib to 76,2 m (250') and 61,0 m (200') can be raised over front of blocked crawlers with outside assist.

## Maximum Length – Unassisted Raising

Method	Fixed Jib No. 140 set at 5° angle on Luffing Jib No. 133 or 133A on Boom No. 44 with Heavy-Lift Top Series 3		
	Layout Jack-Knife Procedure		
	Main Boom	Luffing Jib	Fixed Jib
Over front of blocked crawlers m (ft)	54,9 (180)	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)
	57,9 (190)	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)
	61,0* (200) *	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)

NOTE: Load block(s), hook(s) and weight ball(s) on ground until boom and luffing jib are erected.

\*Requires only middle three sheaves to be used in lower boom point, all others must be removed from lower boom point.

model 2250



# boom combinations

25

## No. 44 Main Boom with Heavy-Lift Top Combinations

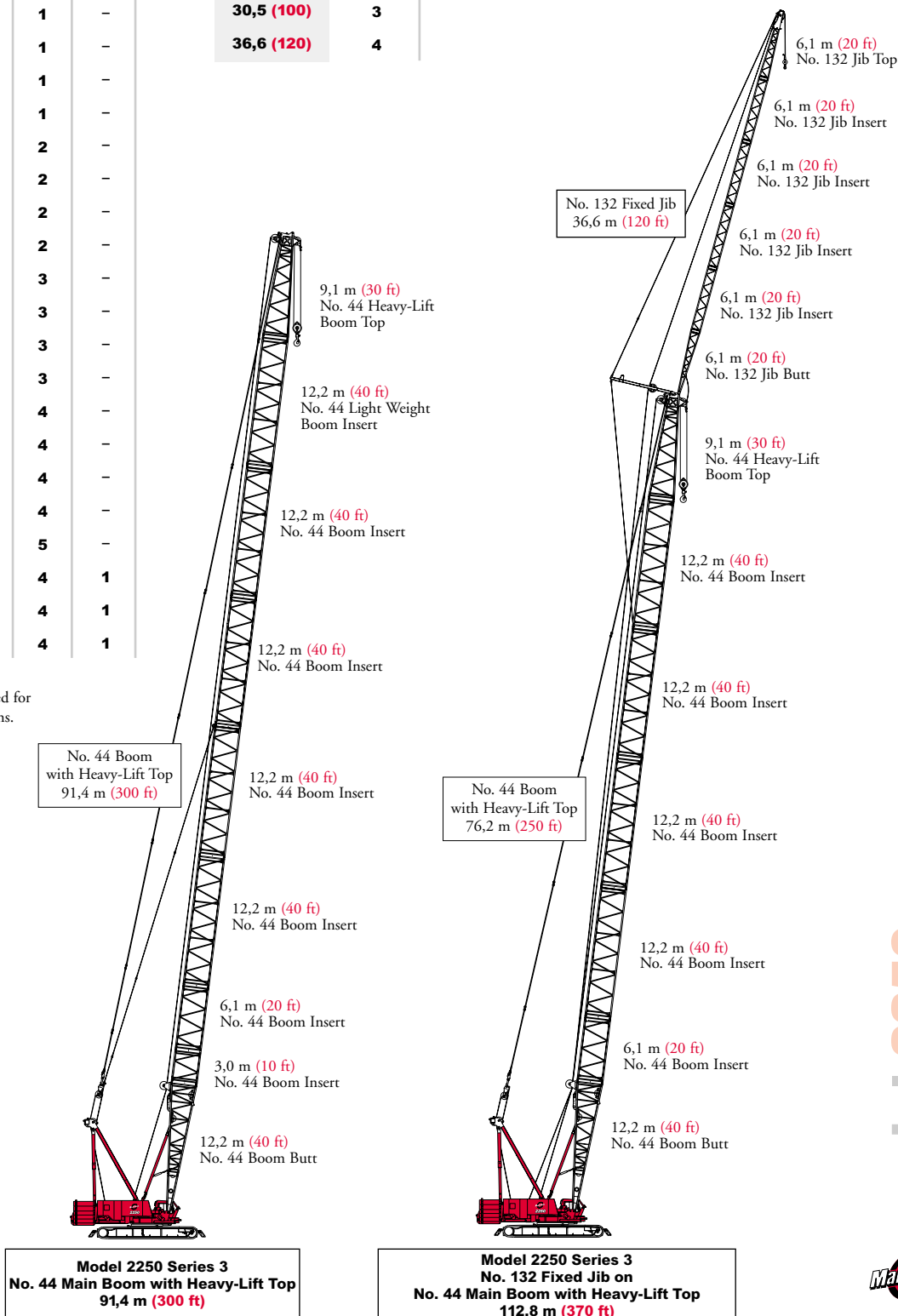
Boom Length m (ft)	Boom Inserts			
	3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)	12,2 m* (40 ft)*
24,4 (80)	1	-	-	-
27,4 (90)	-	1	-	-
30,5 (100)	1	1	-	-
33,5 (110)	-	-	1	-
36,6 (120)	1	-	1	-
39,6 (130)	-	1	1	-
42,7 (140)	1	1	1	-
45,7 (150)	-	-	2	-
48,8 (160)	1	-	2	-
51,8 (170)	-	1	2	-
54,9 (180)	1	1	2	-
57,9 (190)	-	-	3	-
61,0 (200)	1	-	3	-
64,0 (210)	-	1	3	-
67,1 (220)	1	1	3	-
70,1 (230)	-	-	4	-
73,2 (240)	1	-	4	-
76,2 (250)	-	1	4	-
79,2 (260)	1	1	4	-
82,3 (270)	-	-	5	-
85,3 (280)	1	-	4	1
88,3 (290)	-	1	4	1
91,4 (300)	1	1	4	1

\*Light weight inserts.

Note: Intermediate suspension required for 85,3 m (280') and longer boom lengths.

## No. 132 Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts	
	6,1 m (20 ft)	
12,2 (40)	-	
18,3 (60)	1	
24,4 (80)	2	
30,5 (100)	3	
36,6 (120)	4	



model 2250



# boom combinations

26

## No. 44 Long-Reach Main Boom Combinations

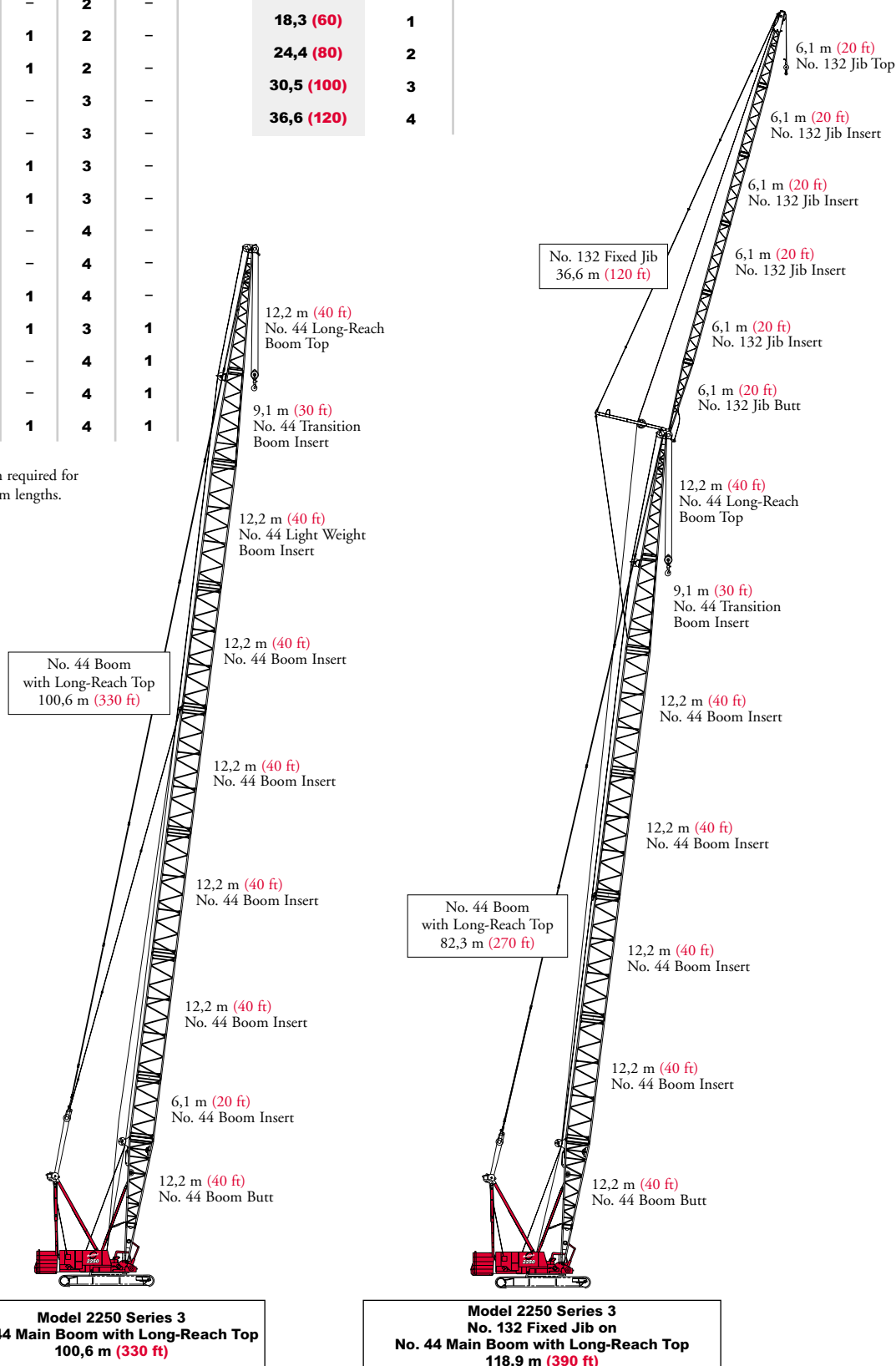
Boom Length m (ft)	Boom Inserts			
	3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)	12,2 m* (40 ft)*
57,9 (190)	-	-	2	-
61,0 (200)	1	-	2	-
64,0 (210)	-	1	2	-
67,1 (220)	1	1	2	-
70,1 (230)	-	-	3	-
73,2 (240)	1	-	3	-
76,2 (250)	-	1	3	-
79,2 (260)	1	1	3	-
82,3 (270)	-	-	4	-
85,3 (280)	1	-	4	-
88,4 (290)	-	1	4	-
91,4 (300)	1	1	3	1
94,4 (310)	-	-	4	1
97,5 (320)	1	-	4	1
100,6 (330)	-	1	4	1

\*Light weight inserts.

Note: Intermediate suspension required for 91,4 m (300') and longer boom lengths.

## No. 132 Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts 6,1 m (20 ft)
12,2 (40)	-
18,3 (60)	1
24,4 (80)	2
30,5 (100)	3
36,6 (120)	4



model 2250

Manitowoc



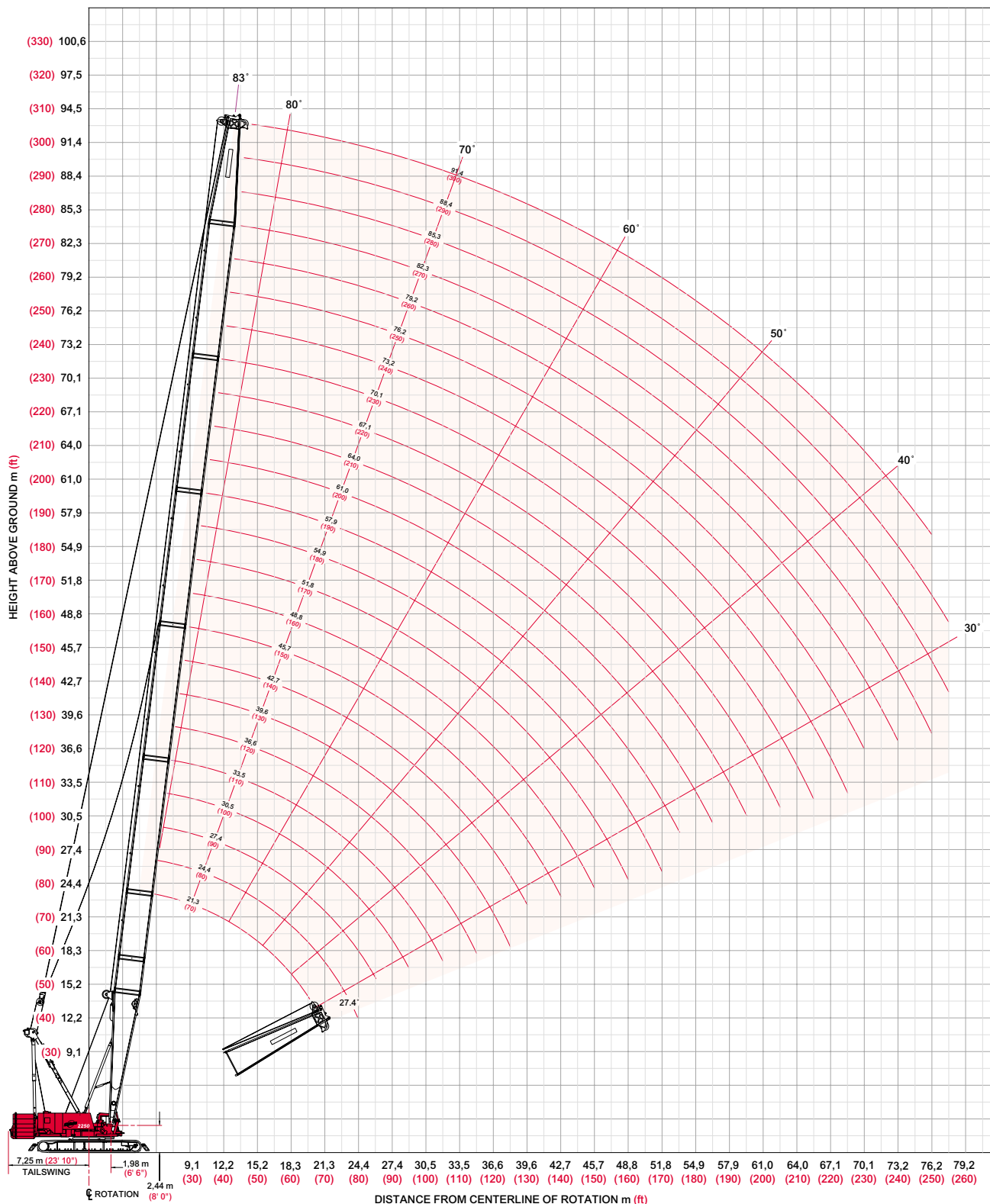




# heavy-lift boom range diagram

## No. 44 Heavy-Lift Boom

28



model 2250



# heavy-lift load charts

29

## Liftcrane Boom Capacities - 2250 Series 3

### Boom No. 44 with Heavy Lift Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

Boom m (ft)	21,3 (70)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	51,8 (170)	57,9 (190)	67,1 (220)	73,2 (240)	79,2 (260)	85,3 (280)	91,4 (300)
Radius												
5,5 (18)	272,1 (600.0)											
7,0 (22)	239,3 (541.5)	223,4 (495.6)	169,8 -									
8,0 (26)	210,8 (469.1)	210,4 (468.1)	166,2 (367.0)	158,8 (350.7)								
9,0 (30)	188,2 (408.7)	187,8 (407.7)	162,9 (358.2)	155,9 (343.0)	135,8 (298.6)	- (284.1)						
11,0 (36)	154,1 (340.9)	154,2 (340.9)	153,8 (339.8)	150,9 (333.2)	130,7 (288.3)	124,9 (275.6)	108,2 (238.8)					
12,0 (40)	135,9 (293.0)	140,7 (304.2)	140,4 (303.9)	138,0 (298.3)	128,4 (282.3)	123,1 (270.7)	106,5 (234.2)	97,7 (214.8)	- (185.8)			
14,0 (46)	109,0 (239.8)	113,0 (248.7)	112,8 (248.3)	112,6 (247.9)	110,9 (244.2)	107,4 (236.4)	103,1 (227.2)	90,8 (200.2)	80,9 (178.4)	73,8 (162.8)	64,4 (142.0)	55,9 (123.3)
15,0 (50)	98,6 (212.6)	102,5 (221.2)	102,3 (220.8)	102,2 (220.4)	101,9 (219.6)	99,1 (214.7)	96,1 (207.8)	87,5 (191.2)	78,3 (171.3)	71,5 (156.5)	63,4 (138.6)	55,6 (122.6)
18,0 (60)	74,7 (160.4)	79,8 (172.4)	79,5 (171.8)	79,4 (171.4)	78,9 (170.5)	78,8 (169.8)	77,7 (168.3)	74,4 (160.5)	70,5 (153.9)	64,4 (140.7)	58,5 (129.1)	53,0 (116.0)
22,0 (70)	- (110.2)	59,4 (137.4)	60,7 (139.5)	60,4 (139.0)	60,0 (138.1)	59,7 (137.4)	59,2 (136.4)	58,4 (133.8)	56,5 (129.5)	55,4 (125.9)	55,0 (125.0)	48,4 (108.3)
24,0 (80)		51,6 (110.7)	54,0 (116.6)	53,8 (116.1)	53,3 (115.1)	53,0 (114.5)	52,5 (113.4)	51,9 (112.0)	50,9 (110.2)	50,1 (108.3)	48,9 (105.8)	46,4 (101.7)
28,0 (90)			42,8 (97.6)	43,6 (99.0)	43,2 (98.0)	42,8 (97.3)	42,3 (96.2)	41,7 (94.8)	41,2 (93.7)	41,3 (93.6)	40,2 (91.1)	38,8 (88.0)
30,0 (100)			37,8 (80.9)	39,6 (85.6)	39,2 (84.7)	38,9 (84.0)	38,4 (82.9)	37,8 (81.5)	37,2 (80.3)	37,3 (80.5)	36,7 (79.5)	35,4 (76.6)
34,0 (110)				32,1 (72.7)	32,9 (74.1)	32,6 (73.4)	32,1 (72.3)	31,4 (70.8)	30,9 (69.6)	30,9 (69.8)	30,7 (69.2)	29,8 (67.2)
36,0 (120)				28,7 (61.1)	29,9 (64.1)	30,0 (64.7)	29,5 (63.6)	28,8 (62.1)	28,3 (60.9)	28,4 (61.1)	28,1 (60.5)	27,5 (59.4)
42,0 (140)					21,9 (46.3)	22,9 (49.1)	23,2 (49.5)	22,6 (48.8)	22,1 (47.6)	22,2 (47.8)	21,9 (47.1)	21,3 (45.4)
50,0 (160)						- (35.5)	15,8 (37.1)	16,0 (37.4)	15,8 (37.0)	16,3 (38.0)	15,2 (35.8)	13,9 (32.8)
56,0 (180)								11,8 (27.8)	11,7 (27.4)	12,2 (28.6)	11,2 (26.4)	9,8 (23.3)
62,0 (200)								8,5 (20.0)	8,4 (19.7)	8,9 (21.0)	8,1 (19.0)	6,8 (16.1)
68,0 (220)									5,6 (13.3)	6,2 (14.7)	5,5 (13.0)	4,3 (10.4)
72,0 (235)										4,7 (10.8)	4,0 (9.2)	3,0 (7.0)
74,0 (245)											3,3 (6.9)	2,4 (5.0)
76,0 (255)											2,6 (4.7)	1,9 -

### Fixed Jib No. 132 on Boom No. 44

Jib Length m (ft)	Deduct from Capacity when fixed jib is attached kg (lb)
12,2 (40)	2 900 (6,400)
18,3 (60)	3 720 (8,200)
24,4 (80)	4 670 (10,300)
30,5 (100)	5 810 (12,800)
36,6 (120)	6 940 (15,300)

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.

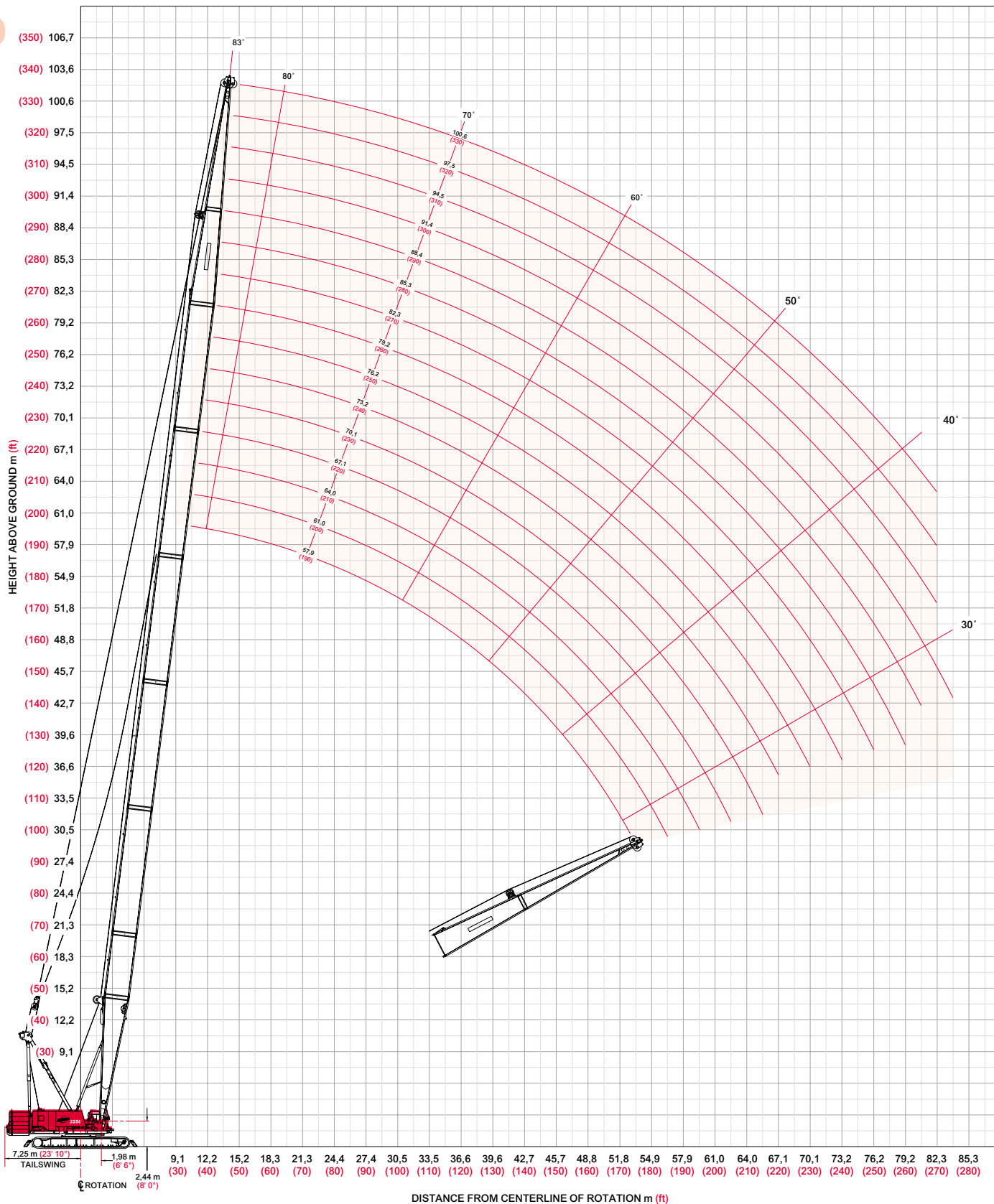
model 2250



# long-reach boom range diagram

## No. 44 Long-Reach Boom

30



model 2250



# long-reach load charts

## Liftcrane Boom Capacities - 2250 Series 3

### Boom No. 44 with Long Reach Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

Boom m (ft)	57,9 (190)	61,0 (200)	64,0 (210)	70,1 (230)	73,2 (240)	76,2 (250)	82,3 (270)	85,3 (280)	88,4 (290)	94,5 (310)	97,5 (320)	100,6 (330)
Radius												
9,8 (32)	95,2 (210.0)	95,2 (210.0)										
11,0 (36)	95,2 (210.0)	95,2 (210.0)	95,2 (210.0)	89,0 (196.3)								
12,0 (40)	95,2 (210.0)	95,2 (210.0)	95,2 (210.0)	87,5 (192.4)	84,7 (186.3)	- (178.8)						
14,0 (46)	95,2 (210.0)	95,2 (210.0)	95,2 (210.0)	84,8 (187.0)	82,3 (181.4)	79,0 (174.3)	69,3 (152.9)	64,2 (141.6)	59,8 (131.9)	48,9 (108.0)		
15,0 (50)	95,2 (210.0)	95,2 (210.0)	94,0 (205.7)	83,6 (183.8)	81,1 (178.0)	77,7 (170.1)	68,5 (150.6)	63,7 (140.2)	59,3 (130.6)	48,3 (105.9)	44,7 (98.1)	41,2 (90.2)
18,0 (60)	80,6 (173.2)	80,1 (172.7)	79,5 (171.9)	76,8 (166.3)	74,8 (163.6)	71,5 (156.4)	63,5 (139.0)	60,3 (131.7)	57,1 (125.0)	44,6 (97.8)	41,4 (90.5)	37,6 (82.4)
22,0 (70)	61,3 (140.9)	61,0 (140.3)	60,9 (140.1)	60,5 (139.0)	59,9 (137.0)	59,3 (135.7)	56,6 (127.6)	53,6 (120.7)	50,9 (114.5)	40,7 (91.2)	37,3 (83.6)	33,9 (76.1)
24,0 (80)	54,6 (118.0)	54,3 (117.4)	54,2 (117.1)	53,7 (116.1)	53,5 (115.5)	53,3 (115.1)	51,9 (112.1)	50,5 (110.2)	47,9 (104.5)	39,1 (85.6)	35,6 (77.9)	32,3 (70.8)
30,0 (100)	40,6 (87.6)	40,3 (87.0)	40,2 (86.8)	39,7 (86.8)	39,4 (85.7)	39,2 (84.7)	38,7 (83.5)	38,4 (82.9)	38,2 (82.5)	34,9 (76.5)	31,4 (68.6)	28,4 (62.2)
36,0 (120)	31,7 (68.4)	31,4 (67.8)	31,3 (67.6)	30,7 (66.4)	30,5 (65.8)	30,3 (65.5)	29,8 (64.3)	29,5 (63.6)	29,3 (63.3)	28,3 (61.2)	27,7 (59.9)	25,4 (55.5)
40,0 (130)	27,4 (61.3)	27,1 (60.6)	27,0 (60.4)	26,4 (59.2)	26,2 (58.6)	26,0 (58.3)	25,5 (57.1)	25,2 (56.4)	25,0 (56.0)	24,5 (54.8)	23,9 (53.5)	23,4 (52.1)
42,0 (140)	25,6 (55.2)	25,3 (54.6)	25,1 (54.3)	24,6 (53.2)	24,3 (52.5)	24,2 (52.2)	23,6 (51.0)	23,4 (50.3)	23,2 (49.9)	22,7 (48.9)	22,3 (48.0)	22,2 (48.1)
50,0 (160)	18,8 (43.7)	18,8 (43.7)	19,0 (44.2)	18,9 (43.4)	18,6 (42.8)	18,5 (42.5)	17,9 (41.2)	17,6 (40.6)	17,4 (40.2)	16,6 (38.8)	16,1 (37.8)	16,4 (38.4)
52,0 (170)	17,3 (38.6)	17,3 (38.6)	17,6 (39.1)	17,4 (38.8)	17,3 (38.5)	17,3 (38.5)	16,8 (37.3)	16,4 (36.6)	16,3 (36.3)	15,1 (33.7)	14,7 (32.7)	15,0 (33.4)
56,0 (185)		14,6 (31.8)	14,9 (32.5)	14,8 (32.3)	14,7 (32.0)	14,8 (32.1)	14,4 (31.4)	14,3 (31.0)	14,2 (30.8)	12,6 (27.3)	12,1 (26.3)	12,4 (26.9)
60,0 (195)			- (28.4)	12,6 (28.5)	12,4 (28.2)	12,5 (28.3)	12,2 (27.6)	12,0 (27.2)	11,9 (27.0)	10,4 (23.6)	9,9 (22.6)	10,2 (23.2)
62,0 (205)				11,5 (25.0)	11,4 (24.7)	11,5 (24.9)	11,1 (24.2)	10,9 (23.7)	10,9 (23.6)	9,4 (20.3)	8,9 (19.3)	9,2 (19.9)
66,0 (215)				- (21.4)	9,5 (21.6)	9,6 (21.8)	9,3 (21.1)	9,1 (20.6)	9,0 (20.5)	7,6 (17.3)	7,1 (16.3)	7,4 (16.9)
72,0 (240)							6,9 (14.4)	6,7 (14.0)	6,6 (13.7)	5,3 (10.9)	4,9 (10.0)	5,2 (10.6)
76,0 (250)							5,5 (12.0)	5,2 (11.4)	4,9 (10.7)	4,0 (8.7)	3,6 (7.8)	3,8 (8.4)
78,0 (265)								4,3 (6.3)	4,0 (6.3)	3,3 (5.7)	3,0 (4.9)	3,2 (5.5)
80,0 (270)									3,2 (6.3)	2,7 (4.7)	2,4 (4.0)	2,7 (4.6)
82,0 (275)										2,2 (4.7)	1,8 (4.0)	2,1 (4.6)

### Fixed Jib No. 132 on Boom No. 44

Jib Length m (ft)	Deduct from Capacity when fixed jib is attached kg (lb)
12,2 (40)	2 900 (6,400)
18,3 (60)	3 720 (8,200)
24,4 (80)	4 670 (10,300)
30,5 (100)	5 810 (12,800)
36,6 (120)	6 940 (15,300)

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 2250

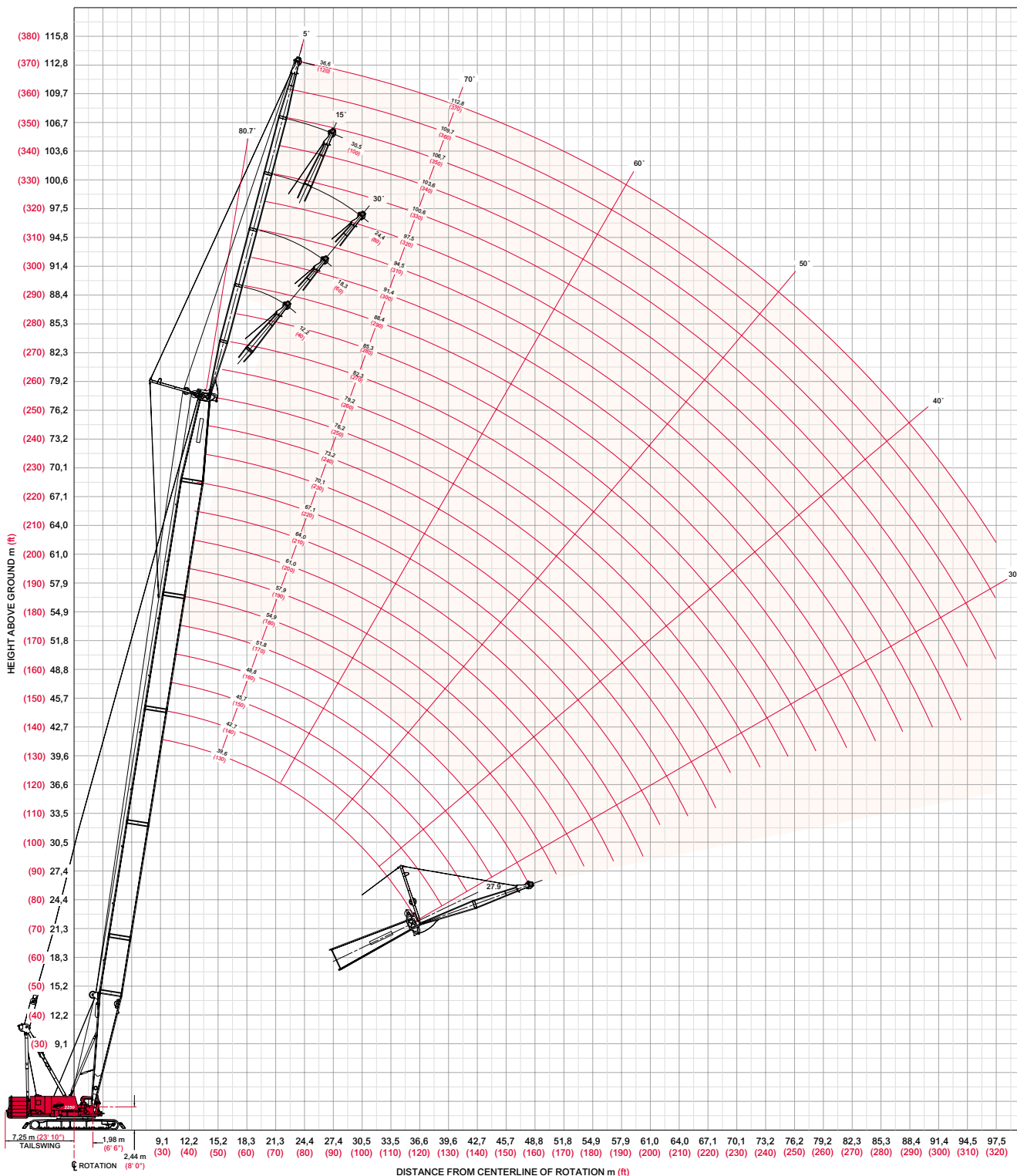





# fixed jib range diagram

## No. 132 Fixed Jib on No. 44 Heavy-Lift Boom

32



# fixed jib load charts

## Liftcrane Jib Capacities - 2250 Series 3

### Jib No. 132 with 6 096 mm (20 ft) Strut on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

33

		5° Offset					30° Offset				
Boom m (ft)		39,6 (130)	48,8 (160)	57,9 (190)	70,1 (230)	79,2 (260)	39,6 (130)	48,8 (160)	57,9 (190)	70,1 (230)	79,2 (260)
Radius											
12,2 (40)		45,3 (100.0)									
14,0 (45)		42,3 (94.2)	44,5 (99.0)								
18,0 (60)		37,6 (82.3)	40,0 (87.6)	41,9 (92.0)	40,8 (90.0)	- (90.0)	25,3 (55.5)	- (57.4)			
24,0 (80)		32,4 (71.0)	34,8 (76.2)	36,9 (80.8)	39,3 (86.1)	40,6 (89.5)	22,3 (48.8)	23,4 (51.3)	24,3 (53.3)	25,3 (55.5)	25,8 (56.8)
30,0 (110)		28,7 (59.6)	31,0 (64.5)	33,1 (68.9)	35,5 (71.4)	36,9 (70.6)	20,0 (41.9)	21,2 (44.5)	22,2 (46.7)	23,3 (49.2)	24,0 (50.8)
40,0 (140)		24,5 (52.4)	26,4 (53.2)	25,8 (51.5)	24,7 (49.2)	24,3 (48.4)	17,5 (37.7)	18,6 (39.9)	19,6 (42.1)	20,7 (44.6)	21,5 (46.3)
52,0 (170)			16,5 (36.7)	16,4 (36.6)	15,8 (35.3)	15,5 (34.5)			17,4 (38.7)	16,5 (36.7)	16,2 (36.1)
60,0 (200)				11,5 (24.3)	10,9 (23.2)	11,0 (23.2)				11,9 (25.2)	12,1 (25.5)
68,0 (230)					7,2 (14.1)	7,2 (14.2)					8,0 (15.7)
76,0 (250)					4,1 (9.1)	4,2 (9.3)					
80,0 (270)						3,0 (5.2)					

		39,6 (130)	48,8 (160)	57,9 (190)	70,1 (230)	79,2 (260)	39,6 (130)	48,8 (160)	57,9 (190)	70,1 (230)	79,2 (260)
Radius											
15,2 (50)		32,8 (72.4)									
16,0 (55)		32,5 (70.9)	- (72.5)								
20,0 (70)		30,8 (66.8)	31,6 (68.7)	32,3 (70.3)	33,0 (71.9)	- (60.0)	- (41.8)				
28,0 (90)		28,0 (62.2)	29,0 (64.4)	29,8 (66.2)	30,7 (68.2)	27,2 (60.0)	16,5 (36.8)	17,2 (38.5)	17,9 (39.9)	18,6 (41.4)	19,0 (42.4)
36,0 (120)		25,9 (56.9)	26,9 (59.2)	27,8 (61.2)	28,9 (63.4)	27,2 (60.0)	14,4 (31.6)	15,2 (33.4)	15,9 (35.0)	16,7 (36.8)	17,2 (37.9)
44,0 (150)		22,7 (48.4)	23,6 (49.2)	22,9 (47.6)	21,8 (45.3)	21,4 (44.5)	13,0 (28.1)	13,7 (29.8)	14,5 (31.4)	15,3 (33.2)	15,8 (34.4)
56,0 (180)		- (33.8)	15,3 (35.4)	15,1 (35.0)	14,4 (33.1)	14,0 (32.2)			12,9 (28.8)	13,6 (30.5)	14,2 (31.7)
64,0 (210)				10,7 (23.7)	10,1 (22.3)	10,0 (22.2)				11,2 (24.9)	11,3 (25.1)
72,0 (240)					6,7 (13.9)	6,6 (13.8)					7,6 (15.8)
80,0 (260)					3,9 (9.3)	3,9 (9.2)					
84,0 (280)						2,7 (5.3)					

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.



# fixed jib load charts

34

## Liftcrane Jib Capacities - 2250 Series 3

### Jib No. 132 with 6 096 mm (20 ft) Strut on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

		5° Offset					30° Offset				
Boom m (ft)		39,6 (130)	48,8 (160)	57,9 (190)	70,1 (220)	76,2 (250)	39,6 (130)	48,8 (160)	57,9 (190)	70,1 (220)	76,2 (250)
Radius											
18,3 (60)		18,3 (40.5)									
20,0 (70)		17,9 (38.8)	18,3 (39.7)	(40.5)							
24,0 (80)		16,9 (37.3)	17,4 (38.3)	17,8 (39.2)	18,1 (39.9)	(40.6)					
30,0 (100)		15,7 (34.4)	16,2 (35.7)	16,7 (36.8)	17,1 (37.6)	17,4 (38.4)	11,9 (26.1)	– (26.8)			
40,0 (130)		13,6 (30.3)	14,4 (32.0)	15,0 (33.4)	15,6 (34.6)	16,0 (35.5)	9,9 (22.1)	10,4 (23.2)	10,8 (24.1)	11,2 (24.9)	11,5 (25.6)
52,0 (160)		11,6 (26.8)	12,4 (28.6)	13,2 (30.2)	13,8 (31.6)	14,4 (32.8)	8,3 (19.3)	8,8 (20.4)	9,3 (21.4)	9,7 (22.2)	10,0 (23.0)
60,0 (190)		10,6 (24.0)	11,4 (25.8)	12,1 (27.4)	12,8 (28.8)	13,2 (30.1)	– (17.2)	8,1 (18.3)	8,5 (19.3)	8,9 (20.2)	9,2 (20.9)
68,0 (220)			10,5 (23.5)	10,7 (24.5)	10,1 (23.2)	9,9 (22.8)		– (16.8)	7,9 (17.7)	8,3 (18.5)	8,6 (19.3)
76,0 (250)				7,6 (16.7)	7,0 (15.4)	6,8 (15.0)				7,8 (17.2)	8,1 (18.0)
84,0 (280)					4,5 (9.2)	4,3 (8.9)					5,6 (11.6)
92,0 (300)						2,3 (5.4)					

		39,6 (130)	48,8 (160)	57,9 (190)	70,1 (220)	76,2 (250)	39,6 (130)	48,8 (160)	57,9 (190)	70,1 (220)	76,2 (250)
Radius											
18,3 (60)		14,8 (32.8)									
20,0 (70)		14,5 (31.2)	14,8 (32.1)	– (32.8)							
24,0 (80)		13,5 (29.6)	14,0 (30.7)	14,3 (31.5)	14,7 (32.3)	– (32.8)					
30,0 (100)		12,1 (26.6)	12,7 (27.9)	13,2 (28.9)	13,6 (29.9)	13,9 (30.6)					
40,0 (130)		10,1 (22.5)	10,8 (24.0)	11,4 (25.3)	11,9 (26.4)	12,3 (27.4)	7,4 (16.6)	7,7 (17.2)	7,9 (17.6)	8,1 (18.0)	8,3 (18.4)
52,0 (160)		8,1 (19.0)	8,9 (20.7)	9,5 (22.1)	10,1 (23.4)	10,6 (24.5)	6,3 (14.5)	6,6 (15.2)	6,9 (15.8)	7,1 (16.3)	7,3 (16.8)
60,0 (190)		7,1 (16.3)	7,8 (17.9)	8,5 (19.4)	9,1 (20.7)	9,6 (21.9)	5,7 (13.0)	6,0 (13.7)	6,3 (14.3)	6,6 (14.9)	6,8 (15.4)
68,0 (220)		6,2 (14.1)	6,9 (15.6)	7,6 (17.1)	8,2 (18.4)	8,8 (19.6)	– (12.0)	5,6 (12.5)	5,9 (13.1)	6,1 (13.7)	6,3 (14.2)
76,0 (250)			6,2 (13.8)	6,8 (15.1)	7,4 (16.4)	7,2 (15.9)			5,5 (12.2)	5,7 (12.7)	6,0 (13.2)
84,0 (280)				5,7 (11.7)	5,0 (10.4)	4,8 (9.8)				5,4 (12.1)	5,7 (12.5)
92,0 (310)					2,9 (5.3)	2,7 (4.9)					4,1 (–)

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.

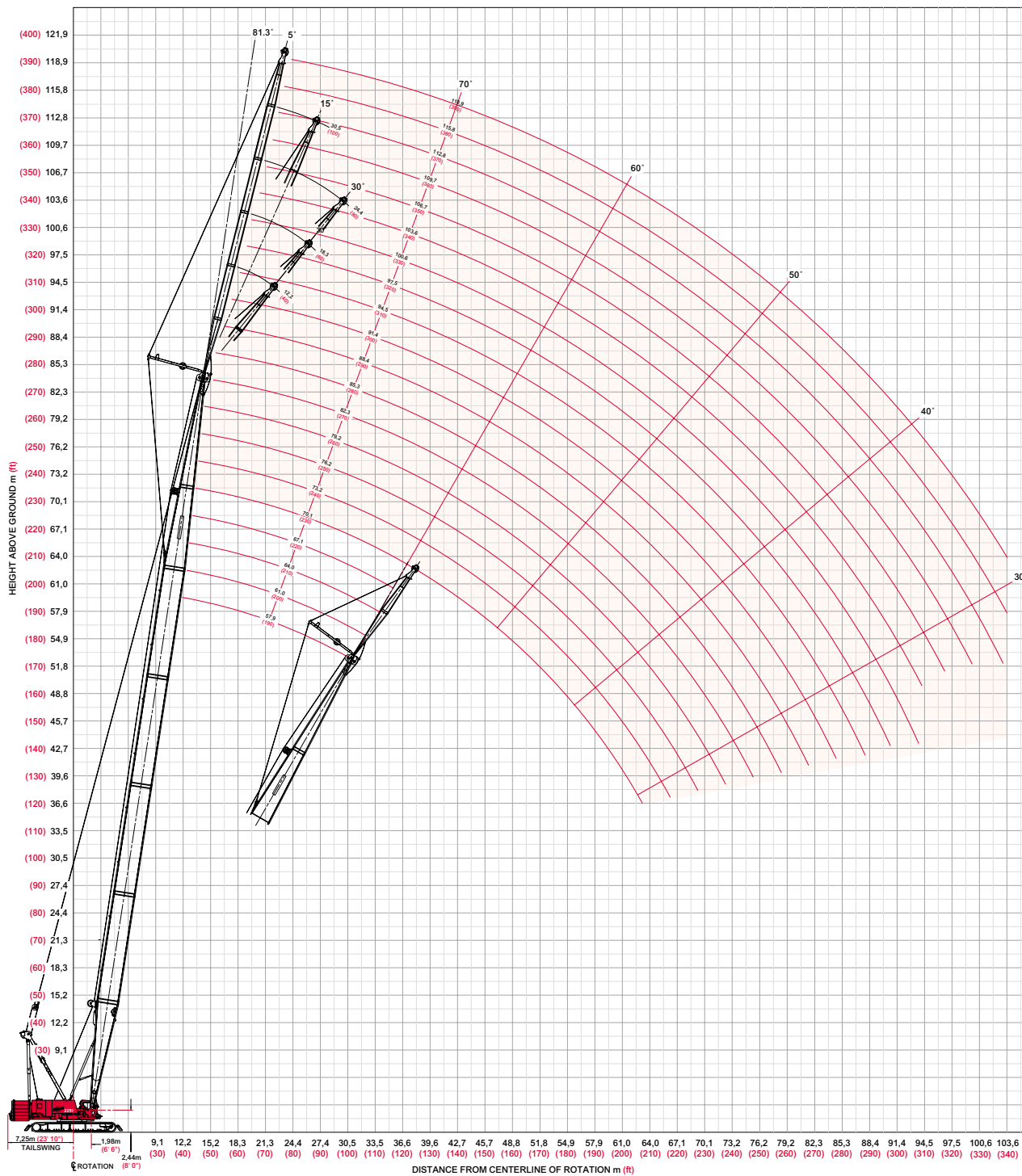
model 2250  
Manitowoc



# fixed jib range diagram

## No. 132 Fixed Jib on No. 44 Long-Reach Boom

35



# fixed jib load charts

36

## Liftcrane Jib Capacities - 2250 Series 3

### Jib No. 132 with 6 096 mm (20 ft) Strut on Boom No. 44 with Long-Reach Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

		5° Offset					30° Offset				
Boom m (ft)		57,9 (190)	64,0 (210)	70,1 (230)	79,2 (260)	85,3 (280)	57,9 (190)	64,0 (210)	70,1 (230)	79,2 (260)	85,3 (280)
Radius											
13,7 (45)		45,3 (100.0)									
16,0 (55)		43,7 (94.5)	44,6 (96.9)	— (90.0)							
22,0 (70)		38,1 (85.3)	39,3 (87.9)	40,3 (90.0)	40,8 (90.0)	37,1 (82.3)	25,2 (56.1)	25,5 (56.7)	25,8 (57.2)		
30,0 (100)		32,8 (71.9)	34,1 (74.6)	35,2 (77.1)	36,7 (80.5)	35,3 (77.8)	22,1 (48.5)	22,7 (49.9)	23,3 (51.1)	24,1 (52.9)	24,6 (53.9)
40,0 (130)		27,4 (61.3)	26,9 (60.3)	26,4 (59.1)	25,6 (57.4)	25,1 (56.2)	19,3 (42.9)	20,0 (44.3)	20,6 (45.7)	21,4 (47.5)	21,9 (48.6)
48,0 (160)		21,0 (45.4)	20,6 (44.4)	20,0 (43.2)	19,3 (41.5)	18,7 (40.2)	17,7 (38.9)	18,4 (40.3)	18,9 (41.5)	19,7 (43.0)	19,5 (41.9)
56,0 (190)		16,2 (33.3)	16,1 (33.1)	15,6 (32.4)	14,8 (30.9)	14,2 (29.6)	16,6 (—)	16,5 (34.5)	16,0 (33.4)	15,3 (31.9)	14,8 (30.8)
68,0 (220)			10,1 (23.2)	9,8 (22.5)	9,3 (21.4)	8,8 (20.3)				10,0 (23.0)	9,5 (22.1)
76,0 (250)				6,7 (14.8)	6,3 (13.9)	5,8 (12.8)					6,4 (14.1)
84,0 (270)					3,9 (9.7)	3,4 (8.8)					
88,0 (290)						2,4 (5.1)					

Boom m (ft)		57,9 (190)	64,0 (210)	70,1 (230)	79,2 (260)	85,3 (280)	57,9 (190)	64,0 (210)	70,1 (230)	79,2 (260)	85,3 (280)
Radius											
16,8 (55)		33,3 (73.5)									
20,0 (65)		32,1 (71.1)	32,5 (72.0)	32,9 (72.7)							
24,0 (80)		30,9 (67.9)	31,3 (68.9)	31,7 (69.7)	32,2 (70.8)	27,2 (60.0)	— (39.9)	— (40.6)			
34,0 (110)		28,2 (62.5)	28,7 (63.7)	28,0 (62.4)	27,4 (61.0)	26,7 (59.4)	15,6 (34.7)	16,0 (35.6)	16,3 (36.3)	16,8 (37.4)	17,1 (38.0)
44,0 (140)		24,3 (55.7)	23,9 (55.1)	23,4 (54.0)	22,6 (52.4)	22,1 (51.2)	13,8 (30.9)	14,2 (31.8)	14,6 (32.7)	15,1 (33.8)	15,4 (34.5)
52,0 (170)		19,0 (42.3)	18,6 (41.3)	18,0 (40.1)	17,3 (38.5)	16,8 (37.3)	12,7 (28.2)	13,1 (29.0)	13,5 (29.9)	14,0 (31.0)	14,3 (31.7)
60,0 (200)		15,0 (32.0)	14,7 (31.6)	14,2 (30.6)	13,5 (28.9)	12,9 (27.7)		12,3 (27.0)	12,6 (27.7)	13,1 (28.8)	13,4 (29.4)
72,0 (230)		— (22.7)	9,4 (22.5)	9,1 (21.7)	8,5 (20.5)	8,0 (19.4)				9,4 (22.5)	9,0 (21.7)
80,0 (260)				6,3 (14.6)	5,8 (13.5)	5,3 (12.4)					— (14.0)
88,0 (290)					3,6 (7.8)	3,1 (6.8)					
92,0 (300)						2,1 (5.1)					

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.



# fixed jib load charts

## Liftcrane Jib Capacities - 2250 Series 3

### Jib No. 132 with 6 096 mm (20 ft) Strut on Boom No. 44 with Long-Reach Top

113 040 kg (249,200 lb) Crane Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating kg (lb) x 1 000

37

		5° Offset					30° Offset				
Boom m (ft)		57,9 (190)	64,0 (210)	70,1 (230)	76,2 (250)	82,3 (270)	57,9 (190)	64,0 (210)	70,1 (230)	76,2 (250)	82,3 (270)
Radius											
19,8 (65)		18,6 (41.1)									
22,0 (75)		18,2 (39.8)	18,4 (40.3)	- (40.7)	- (41.1)						
30,0 (100)		16,7 (36.7)	16,9 (37.3)	17,2 (37.8)	17,4 (38.3)	17,6 (38.8)					
38,0 (125)		15,3 (33.9)	15,7 (34.6)	16,0 (35.3)	16,2 (35.9)	16,5 (36.4)	10,5 (23.2)	10,7 (23.7)	10,9 (24.2)	11,1 (24.6)	11,3 (25.0)
44,0 (150)		14,4 (31.1)	14,7 (32.0)	15,1 (32.8)	15,4 (33.6)	15,7 (34.2)	9,7 (20.9)	9,9 (21.5)	10,1 (22.0)	10,3 (22.4)	10,5 (22.9)
52,0 (180)		13,1 (28.2)	13,6 (29.1)	14,0 (30.0)	14,3 (30.9)	14,7 (31.6)	8,7 (18.8)	9,0 (19.4)	9,2 (19.9)	9,5 (20.4)	9,6 (20.8)
64,0 (210)		11,6 (25.7)	12,1 (26.7)	12,5 (27.6)	12,7 (28.0)	12,1 (26.8)	7,7 (17.7)	8,0 (17.7)	8,2 (18.2)	8,4 (18.7)	8,6 (19.1)
72,0 (240)		10,8 (23.3)	10,7 (22.7)	10,2 (21.8)	9,9 (21.0)	9,4 (19.8)		7,5 (16.4)	7,7 (16.9)	7,9 (17.3)	8,1 (17.8)
84,0 (270)		- (16.6)	6,8 (16.1)	6,4 (15.2)	6,0 (14.4)	5,5 (13.3)				7,2 (16.3)	6,9 (16.5)
88,0 (290)				5,3 (11.6)	5,0 (10.8)	4,4 (9.7)					5,6 (12.2)
96,0 (320)					3,0 (6.1)	2,6 (5.1)					

Boom m (ft)		57,9 (190)	64,0 (210)	70,1 (230)	76,2 (250)	82,3 (270)	57,9 (190)	64,0 (210)	70,1 (230)	76,2 (250)	82,3 (270)
Radius											
21,3 (70)		14,8 (32.8)									
28,0 (90)		13,5 (30.1)	13,8 (30.7)	14,0 (31.2)	14,2 (31.7)	14,4 (32.1)					
36,0 (120)		12,0 (26.4)	12,3 (27.1)	12,6 (27.8)	12,9 (28.4)	13,1 (28.9)	8,3 (18.2)	8,3 (18.4)	- (18.6)		
44,0 (140)		10,7 (24.1)	11,0 (24.9)	11,4 (25.7)	11,7 (26.3)	12,0 (26.9)	7,5 (16.9)	7,6 (17.2)	7,7 (17.4)	7,9 (17.7)	8,0 (17.9)
52,0 (170)		9,5 (21.1)	9,9 (22.0)	10,3 (22.8)	10,6 (23.5)	10,9 (24.2)	6,8 (15.2)	7,0 (15.5)	7,1 (15.8)	7,2 (16.1)	7,4 (16.4)
60,0 (200)		8,5 (18.5)	8,9 (19.4)	9,2 (20.2)	9,6 (21.0)	10,0 (21.8)	6,3 (13.8)	6,4 (14.2)	6,6 (14.5)	6,7 (14.8)	6,9 (15.1)
72,0 (230)		7,2 (16.3)	7,6 (17.2)	7,9 (18.0)	8,3 (18.8)	8,7 (19.6)	5,6 (12.7)	5,8 (13.1)	6,0 (13.4)	6,1 (13.8)	6,2 (14.1)
80,0 (260)		6,5 (14.5)	6,8 (15.3)	7,2 (16.2)	7,5 (17.0)	7,0 (16.0)	- (12.0)	5,5 (12.3)	5,6 (12.6)	5,8 (12.9)	5,9 (13.2)
88,0 (290)		5,9 (13.1)	6,1 (13.4)	5,7 (12.4)	5,3 (11.5)	4,8 (10.4)			5,4 (12.0)	5,5 (12.2)	5,6 (12.5)
96,0 (320)				3,8 (7.8)	3,4 (7.0)	2,9 (5.8)					4,1 (8.2)
100,0 (340)					2,6 (4.3)	2,1 (-)					

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 2250

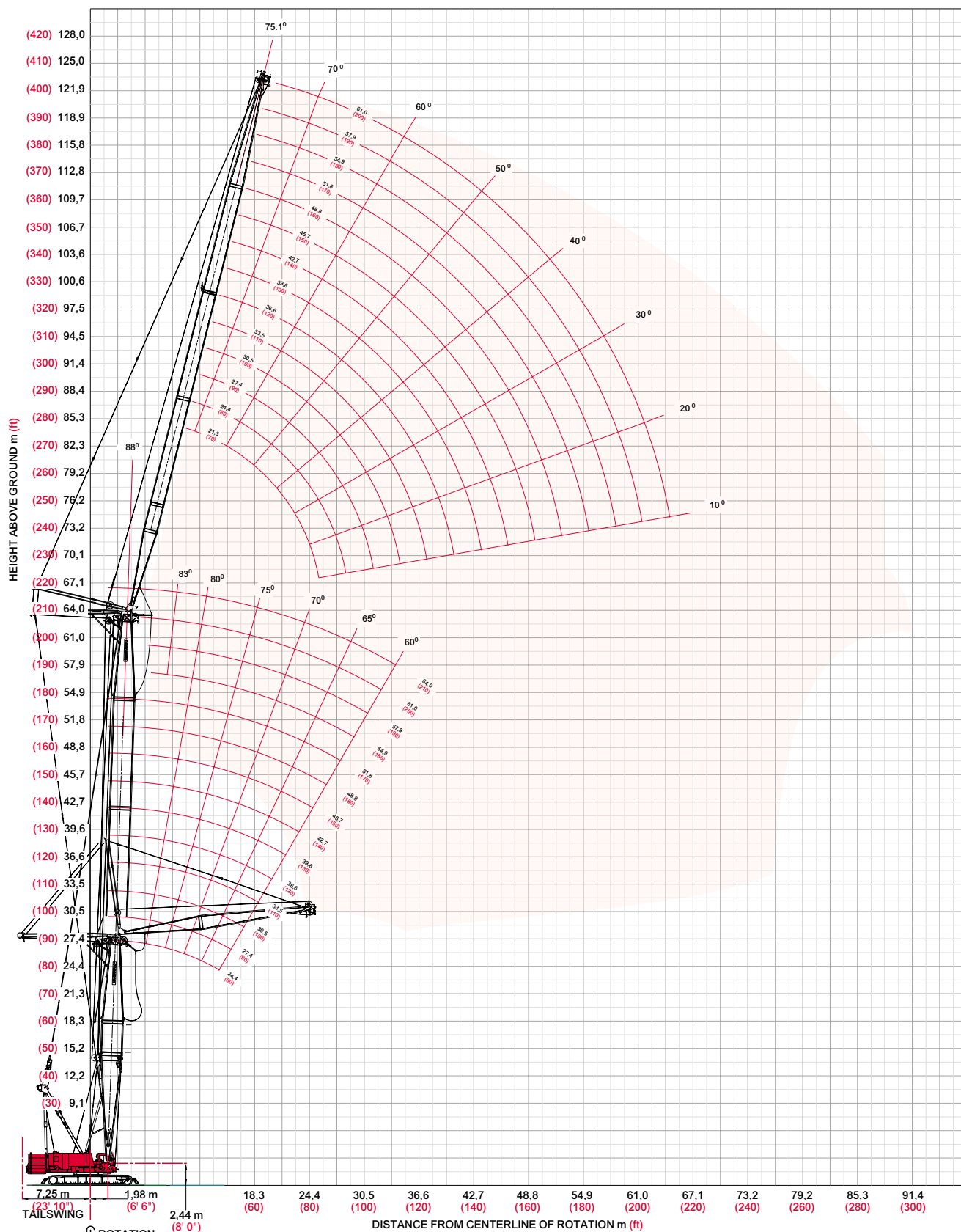




# luffing jib range diagram

## No. 133A or 133 Luffing Jib on No. 44 Heavy-Lift Boom

38



# luffing jib load charts

## Liftcrane Luffing Jib Capacities - 2250 Series 3

### Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

88° Boom Angle

39

Luffing Jib Length 21,3 m (70 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	9,8 (32)	95,2 (210.0)				
	11,0 (36)	86,9 (192.0)	83,1 (183.3)	82,5 (182.0)		
	12,0 (40)	80,6 (175.3)	78,8 (172.2)	78,7 (172.0)	— (148.7)	— (131.6)
	14,0 (45)	69,0 (156.1)	70,9 (159.8)	71,6 (160.7)	62,6 (139.7)	55,7 (124.3)
	16,0 (55)	56,9 (117.7)	58,6 (120.9)	60,6 (124.2)	57,9 (124.1)	51,8 (111.4)
	22,0 (70)	37,0 (85.0)	37,7 (86.7)	38,4 (88.5)	39,4 (90.8)	40,5 (93.0)
	26,0 (85)					
	30,0 (100)					
	34,0 (110)					
	36,0 (120)					

Luffing Jib Length 33,5 m (110 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	9,8 (32)					
	11,0 (36)					
	12,0 (40)	— (159.8)	— (151.4)			
	14,0 (45)	65,5 (146.8)	63,7 (142.2)	62,4 (139.0)	55,1 (122.7)	47,1 (104.7)
	16,0 (55)	58,1 (122.4)	58,8 (125.8)	58,1 (124.8)	51,5 (110.9)	44,4 (95.6)
	22,0 (70)	38,1 (87.8)	38,9 (89.6)	39,7 (91.5)	41,1 (94.2)	35,6 (80.7)
	26,0 (85)	30,4 (67.4)	30,9 (68.6)	31,5 (69.8)	32,2 (71.4)	30,0 (66.6)
	30,0 (100)	25,0 (54.1)	25,4 (54.8)	25,8 (55.7)	26,3 (56.8)	25,3 (54.7)
	34,0 (110)	21,0 (47.4)	21,3 (48.0)	21,6 (48.7)	22,0 (49.6)	21,5 (48.3)
	36,0 (120)	18,0 (35.8)	19,0 (39.7)	19,7 (42.0)	20,1 (43.2)	19,9 (43.2)

Luffing Jib Length 48,8 m (160 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	16,0 (55)	— (102.6)	— (99.5)	— (96.3)	— (82.1)	— (69.1)
	20,0 (65)	42,8 (95.2)	42,0 (93.1)	41,0 (90.8)	34,9 (77.3)	29,4 (65.1)
	24,0 (80)	33,8 (72.9)	34,4 (74.3)	35,7 (76.6)	31,5 (68.7)	26,6 (58.2)
	30,0 (100)	24,6 (53.2)	25,0 (54.0)	25,6 (55.3)	25,9 (56.2)	22,2 (48.4)
	36,0 (120)	18,8 (40.7)	19,1 (41.3)	19,6 (42.2)	19,8 (42.7)	18,2 (39.4)
	42,0 (140)	14,8 (32.0)	15,2 (32.7)	15,4 (33.3)	15,6 (33.7)	14,9 (32.1)
	50,0 (160)	10,8 (25.6)	11,1 (26.4)	11,6 (26.8)	11,7 (27.1)	11,6 (26.5)
	56,0 (180)					
	60,0 (200)					
	64,0 (210)					

Luffing Jib Length 61,0 m (200 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	16,0 (55)					
	20,0 (65)	32,7 (72.5)	32,0 (70.9)	29,7 (65.8)	26,0 (57.6)	22,3 (49.5)
	24,0 (80)	28,9 (63.0)	28,6 (62.5)	28,1 (61.6)	24,5 (53.9)	21,1 (46.3)
	30,0 (100)	23,4 (50.9)	23,5 (51.1)	23,6 (51.3)	21,8 (47.7)	18,8 (41.0)
	36,0 (120)	18,2 (39.2)	18,4 (39.7)	18,7 (40.3)	18,8 (40.9)	16,2 (35.4)
	42,0 (140)	14,2 (30.5)	14,4 (31.0)	14,6 (31.4)	14,9 (32.1)	13,8 (30.0)
	50,0 (160)	10,4 (24.2)	10,6 (24.6)	10,8 (24.9)	11,0 (25.4)	11,0 (25.3)
	56,0 (180)	8,4 (19.3)	8,6 (19.8)	8,7 (20.0)	8,8 (20.4)	8,9 (20.6)
	60,0 (200)	7,2 (15.4)	7,4 (15.8)	7,5 (16.2)	7,7 (16.5)	7,8 (16.6)
	64,0 (210)	4,6 (10.3)	5,4 (12.1)	5,9 (13.1)	6,0 (13.4)	6,3 (14.1)

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 2250



# luffing jib load charts

40

## Liftcrane Luffing Jib Capacities - 2250 Series 3

### Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

75° Boom Angle

	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
Luffing Jib Length 21,3 m (70 ft)	20,0 (65)	66,2 (148.5)				
	22,0 (70)	55,0 (128.6)	61,5 (140.9)			
	24,0 (80)	47,0 (100.9)	55,1 (119.3)	- (115.8)		
	28,0 (90)	36,1 (82.5)	41,9 (96.2)	44,2 (100.1)	42,7 (96.7)	
	30,0 (100)		36,9 (79.2)	40,6 (87.9)	39,2 (84.9)	36,4 (78.8)
	36,0 (120)			31,2 (67.6)	28,9 (62.5)	
	42,0 (140)					
	46,0 (150)					
	48,0 (160)					
	50,0 (170)					

	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
Luffing Jib Length 33,5 m (110 ft)	20,0 (65)					
	22,0 (70)					
	24,0 (80)					
	28,0 (90)	37,3 (85.2)	43,5 (99.6)			
	30,0 (100)	33,2 (71.3)	38,1 (81.7)	- (85.9)		
	36,0 (120)	24,6 (52.9)	27,5 (59.0)	31,1 (66.4)	30,1 (65.1)	27,7 (59.9)
	42,0 (140)		21,0 (45.2)	23,2 (49.9)	24,6 (53.2)	22,5 (48.8)
	46,0 (150)			- (44.0)	21,7 (48.5)	19,9 (44.4)
	48,0 (160)				20,1 (43.0)	18,7 (40.5)
	50,0 (170)					17,7 (36.8)

	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
Luffing Jib Length 48,8 m (160 ft)	30,0 (100)					
	34,0 (110)	26,7 (60.3)				
	36,0 (120)	24,2 (52.0)	27,2 (58.3)	- (66.0)		
	42,0 (140)	18,6 (39.9)	20,5 (44.1)	23,0 (49.3)	23,4 (50.6)	21,1 (45.6)
	48,0 (160)	14,6 (31.5)	16,1 (34.7)	17,8 (38.2)	19,4 (41.8)	17,4 (37.5)
	54,0 (180)	11,7 (25.2)	13,0 (27.9)	14,2 (30.4)	15,5 (33.2)	14,5 (31.3)
	60,0 (200)			11,5 (24.7)	12,5 (26.7)	12,2 (26.4)
	68,0 (220)					- (22.1)
	72,0 (240)					
	76,0 (260)					

	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
Luffing Jib Length 61,0 m (200 ft)	30,0 (100)					
	34,0 (110)					
	36,0 (120)					
	42,0 (140)	17,9 (38.4)	19,9 (42.6)	- (46.8)		
	48,0 (160)	13,9 (29.9)	15,4 (33.0)	17,0 (36.3)	18,2 (39.2)	16,4 (35.3)
	54,0 (180)	11,1 (23.7)	12,2 (26.1)	13,3 (28.5)	14,8 (31.6)	13,5 (29.1)
	60,0 (200)	8,9 (19.0)	9,8 (21.8)	10,7 (22.8)	11,7 (25.1)	11,3 (24.2)
	68,0 (220)	6,6 (15.1)	7,4 (16.9)	8,0 (18.4)	8,8 (20.1)	8,9 (20.3)
	72,0 (240)			7,0 (14.8)	7,6 (16.3)	7,9 (16.9)
	76,0 (260)				6,6 (13.7)	7,0 (13.7)

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.



# luffing jib load charts

## Liftcrane Luffing Jib Capacities - 2250 Series 3

### Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

60° Boom Angle

41

Luffing Jib Length 21,3 m (70 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	30,0 (100)	- (87.1)				
	34,0 (110)	34,4 (77.4)				
	36,0 (120)		30,3 (65.6)			
	38,0 (130)		28,3 (59.2)	- (55.3)		
	42,0 (140)			23,2 (50.3)		
	48,0 (160)				17,9 (38.7)	- (34.0)
	54,0 (180)					
	56,0 (190)					
	60,0 (200)					
	64,0 (210)					

Luffing Jib Length 33,5 m (110 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	30,0 (100)					
	34,0 (110)					
	36,0 (120)					
	38,0 (130)	- (60.8)				
	42,0 (140)	24,6 (52.8)	- (52.0)			
	48,0 (160)		20,2 (43.7)	18,6 (40.2)		
	54,0 (180)			15,9 (34.2)	14,0 (30.3)	
	56,0 (190)			15,0 (27.9)	13,3 (27.9)	
	60,0 (200)				11,9 (25.6)	9,9 (21.3)
	64,0 (210)					8,8 (19.6)

Luffing Jib Length 48,8 m (160 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	50,0 (160)	17,1 (39.7)				
	54,0 (170)	14,6 (35.1)	16,0 (35.1)			
	56,0 (180)	13,6 (31.3)	15,1 (34.5)			
	58,0 (200)	12,6 (25.1)	14,3 (29.3)	12,8 (26.1)		
	68,0 (220)		- (24.4)	9,7 (22.1)	8,2 (18.7)	6,3 (14.4)
	72,0 (230)			- (20.4)	7,3 (17.2)	5,5 (13.1)
	76,0 (250)				6,5 (14.3)	4,8 (10.7)
	80,0 (270)					4,2 (9.5)
	84,0 (280)					
	88,0 (290)					

Luffing Jib Length 61,0 m (200 ft)	Boom m (ft)	24,4 (80)	33,5 (110)	42,7 (140)	51,8 (170)	61,0 (200)
	Radius					
	50,0 (160)					
	54,0 (170)					
	56,0 (180)					
	58,0 (200)	11,9 (23.6)	- (26.9)			
	68,0 (220)	8,2 (18.9)	9,9 (22.6)	8,6 (19.7)		
	72,0 (230)	7,1 (16.9)	8,6 (20.3)	7,7 (18.0)	6,1 (14.5)	
	76,0 (250)		7,4 (16.4)	6,8 (15.1)	5,4 (11.9)	3,6 (8.0)
	80,0 (270)			6,0 (12.5)	4,7 (9.6)	3,0 (6.1)
	84,0 (280)				4,1 (8.6)	2,5 (5.2)
	88,0 (290)				3,5 (7.6)	2,0 (4.3)

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.

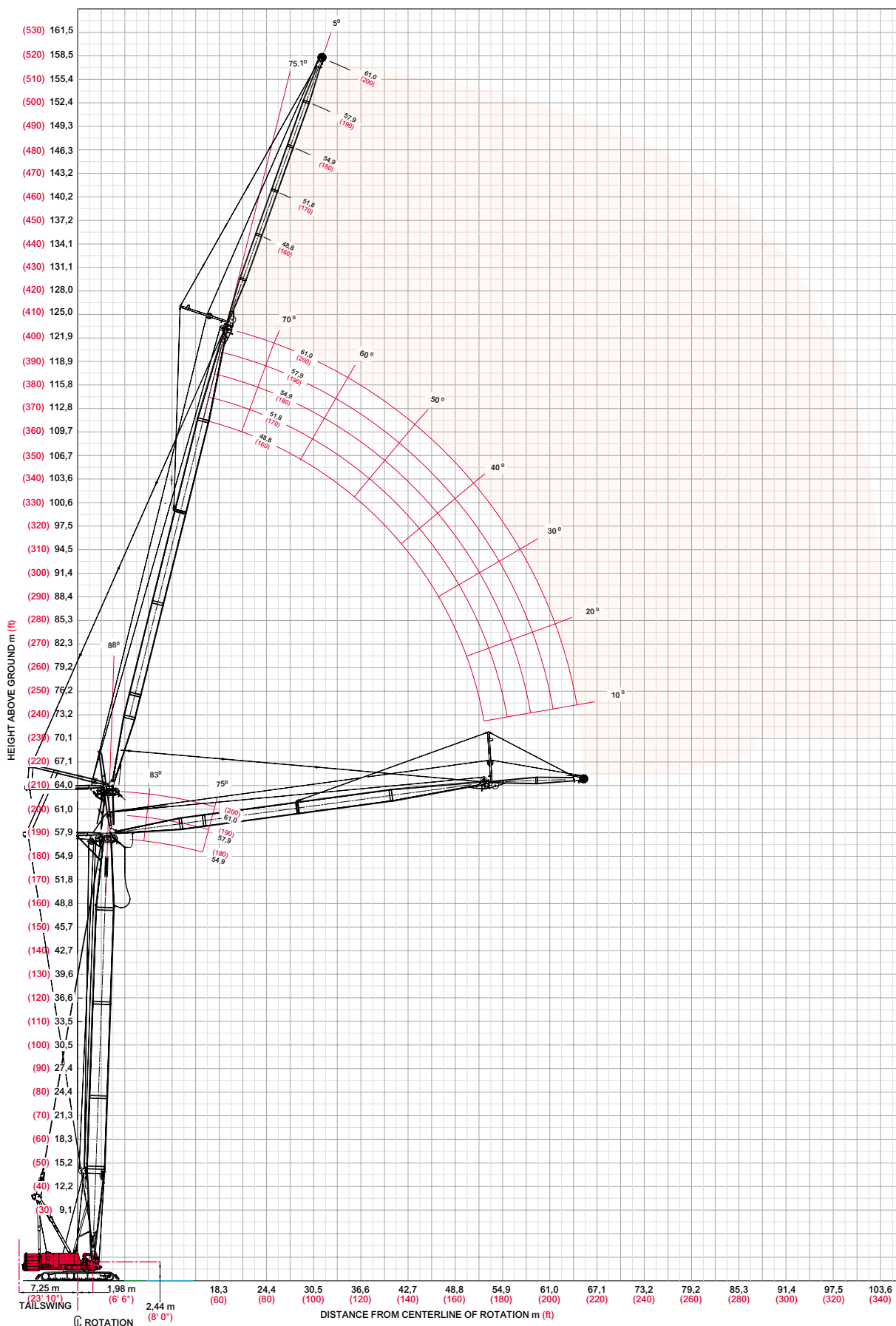
model 2250



# fixed jib on luffing jib range diagram

**No. 140 Fixed Jib on No. 133A or 133 Luffing Jib on No. 44 Heavy-Lift Boom**

42



model 2250



# fixed jib on luffing jib load charts

## Liftcrane Fixed Jib on Luffing Capacities - 2250 Series 3

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

### 88° Boom Angle

Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)		54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)
Radius													
21,3 (70)	5° offset	21,4 (47.2)	19,4 (43.7)	19,0 (42.0)	19,9 (44.0)	18,5 (40.8)	17,8 (39.4)						
26,0 (90)		19,5 (41.7)	18,1 (38.6)	17,3 (37.1)	18,3 (39.3)	17,0 (36.4)	16,3 (35.0)	15,9 (34.4)	14,8 (32.0)	14,2 (30.7)	13,5 (30.0)	13,5 (29.7)	13,2 (28.6)
32,0 (110)		16,8 (35.5)	15,6 (33.0)	14,9 (31.7)	16,0 (33.9)	14,8 (31.5)	14,2 (30.2)	14,2 (30.4)	13,2 (28.3)	12,7 (27.1)	13,3 (28.7)	12,4 (26.6)	11,9 (25.6)
38,0 (130)		14,1 (29.5)	13,1 (27.5)	12,6 (26.5)	13,5 (28.5)	12,6 (26.6)	12,1 (25.5)	12,4 (26.2)	11,5 (24.4)	11,0 (23.4)	11,8 (25.1)	10,9 (23.3)	10,5 (22.3)
44,0 (150)		11,6 (24.2)	10,8 (22.7)	10,4 (21.8)	11,3 (23.6)	10,5 (22.1)	10,1 (21.2)	10,5 (22.2)	9,8 (20.6)	9,4 (19.8)	10,1 (21.5)	9,4 (19.9)	9,0 (19.1)
50,0 (170)		9,5 (19.8)	8,9 (18.6)	8,6 (18.0)	9,3 (19.4)	8,7 (18.2)	8,4 (17.5)	8,8 (18.5)	8,2 (17.2)	7,9 (16.5)	8,6 (18.1)	8,0 (16.8)	7,6 (16.1)
56,0 (190)		7,8 (16.2)	7,3 (15.3)	7,1 (14.8)	7,7 (16.0)	7,2 (15.0)	6,9 (14.5)	7,3 (15.4)	6,8 (14.3)	6,6 (13.8)	7,2 (15.1)	6,7 (14.1)	6,4 (13.5)
64,0 (210)		5,7 (12.6)	5,8 (12.8)	5,6 (12.4)	5,8 (13.0)	5,6 (12.5)	5,4 (12.0)	5,3 (11.8)	5,3 (11.9)	5,1 (11.4)	5,3 (11.9)	5,3 (11.7)	5,0 (11.2)
68,0 (230)					4,1 (-)	4,3 (-)	4,4 (-)	4,4 (8.8)	4,4 (8.9)	4,5 (8.9)	4,4 (8.7)	4,4 (8.7)	4,4 (8.8)
76,0 (250)											2,6 (5.6)	2,6 (5.7)	2,7 (5.9)

Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)		54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)
Radius													
28,0 (95)	5° offset	- (21.0)											
32,0 (110)		9,1 (19.7)	8,9 (19.4)	8,9 (19.3)	8,9 (19.3)	8,7 (18.9)	8,4 (18.3)	8,1 (17.6)	7,6 (16.6)	7,4 (16.1)	7,5 (16.5)	7,1 (15.5)	- (15.0)
38,0 (130)		8,3 (18.0)	8,3 (17.9)	8,2 (17.7)	8,2 (17.7)	8,1 (17.6)	7,9 (17.0)	7,6 (16.6)	7,2 (15.6)	6,9 (15.1)	7,1 (15.5)	6,7 (14.5)	6,4 (14.1)
44,0 (150)		7,6 (16.4)	7,5 (16.3)	7,5 (16.3)	7,5 (16.3)	7,4 (16.1)	7,2 (15.5)	7,1 (15.3)	6,6 (14.4)	6,4 (13.9)	6,6 (14.4)	6,2 (13.5)	6,0 (13.0)
50,0 (170)		6,9 (15.1)	6,9 (15.0)	6,8 (14.6)	6,9 (14.9)	6,7 (14.5)	6,5 (14.0)	6,5 (14.0)	6,1 (13.1)	5,8 (12.6)	6,1 (13.2)	5,7 (12.3)	5,5 (11.8)
56,0 (190)		6,4 (13.9)	6,3 (13.4)	6,1 (12.9)	6,4 (13.8)	6,0 (12.9)	5,8 (12.4)	5,9 (12.6)	5,5 (11.7)	5,2 (11.2)	5,5 (11.9)	5,2 (11.1)	4,9 (10.6)
64,0 (210)		5,7 (12.6)	5,3 (11.8)	5,1 (11.3)	5,5 (12.2)	5,1 (11.4)	4,9 (10.9)	5,0 (11.2)	4,7 (10.4)	4,4 (9.9)	4,8 (10.6)	4,4 (9.8)	4,2 (9.4)
72,0 (240)		4,7 (10.2)	4,4 (9.6)	4,2 (9.2)	4,6 (9.9)	4,3 (9.2)	4,1 (8.8)	4,2 (8.9)	3,9 (8.5)	3,7 (8.1)	4,0 (8.3)	3,7 (8.1)	3,5 (7.7)
80,0 (270)		3,6 (7.1)	3,6 (7.2)	3,5 (7.2)	3,3 (6.7)	3,4 (6.7)	3,3 (6.7)	2,8 (5.4)	2,8 (5.5)	2,8 (5.5)	2,5 (4.8)	2,5 (4.9)	2,5 (4.9)
88,0 (290)		2,2 (4.6)	2,2 (4.7)	2,3 (4.9)	2,1 (4.7)	2,2 (4.8)	2,2 (4.8)						

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.

43

model 2250





# fixed jib on luffing jib load charts

44

## Liftcrane Fixed Jib on Luffing Capacities - 2250 Series 3

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

### 83° Boom Angle

Luffing Jib m (ft)				48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)				54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)
Radius															
30,0 (100)				-											
34,0 (115)				22,0 (47.9)	20,3 (44.2)	19,5 (42.4)	20,5 (44.7)	19,0 (41.4)	18,2 (39.7)	17,5 (38.4)	16,3 (35.7)	- (34.2)	- (30.0)	- (30.0)	
38,0 (130)				20,6 (44.2)	19,0 (40.8)	18,3 (39.2)	19,4 (41.8)	17,9 (38.6)	17,3 (37.1)	16,9 (36.6)	15,7 (34.0)	15,0 (32.6)	13,6 (30.0)	13,6 (30.0)	13,6 (30.0)
44,0 (150)				16,9 (34.5)	16,7 (35.1)	16,1 (34.1)	16,7 (34.1)	16,0 (34.0)	15,4 (32.8)	15,5 (32.8)	14,4 (30.8)	13,8 (29.7)	13,6 (30.0)	13,4 (29.0)	13,0 (27.9)
50,0 (170)				13,0 (26.7)	13,2 (27.1)	13,4 (27.5)	12,8 (26.2)	13,0 (26.6)	13,2 (27.0)	12,2 (25.0)	12,4 (25.4)	12,3 (25.8)	12,9 (26.2)	12,2 (26.0)	11,7 (25.0)
56,0 (190)				10,2 (20.9)	10,3 (21.2)	10,5 (21.5)	10,0 (20.4)	10,1 (20.7)	10,3 (21.0)	9,4 (19.2)	9,5 (19.5)	9,7 (19.8)	9,8 (19.8)	9,9 (20.2)	10,1 (20.5)
64,0 (210)				7,4 (16.4)	7,5 (16.6)	7,6 (16.9)	7,2 (15.9)	7,3 (16.2)	7,4 (16.4)	6,6 (14.7)	6,8 (15.0)	6,8 (15.2)	6,8 (15.0)	6,8 (15.2)	7,0 (15.5)
68,0 (230)				6,3 (11.7)	6,4 (12.4)	6,5 (13.0)	6,1 (12.4)	6,2 (12.6)	6,3 (12.8)	5,5 (11.2)	5,6 (11.4)	5,7 (11.6)	5,6 (11.2)	5,7 (11.4)	5,8 (11.6)
76,0 (250)										3,8 (8.3)	3,8 (8.4)	3,9 (8.6)	3,7 (8.1)	3,8 (8.3)	3,8 (8.5)
80,0 (270)													2,9 (5.1)	2,9 (5.5)	3,0 (5.8)

Luffing Jib m (ft)				48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)				54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)
Radius															
40,0 (135)				-											
44,0 (145)				8,0 (17.6)	7,9 (17.5)	7,9 (17.4)	7,8 (17.3)	7,8 (17.2)	7,7 (17.1)	- (16.5)	- (16.3)				
48,0 (160)				7,5 (16.5)	7,5 (16.4)	7,5 (16.4)	7,4 (16.3)	7,5 (16.9)	7,3 (16.2)	7,1 (15.8)	7,0 (15.5)	7,0 (15.4)	6,9 (15.2)	6,8 (15.0)	6,8 (14.9)
52,0 (170)				7,1 (15.9)	7,1 (15.8)	7,1 (15.7)	7,1 (15.7)	7,0 (15.6)	7,0 (15.6)	6,8 (15.1)	6,7 (15.0)	6,7 (15.0)	6,6 (14.7)	6,6 (14.6)	6,5 (14.5)
58,0 (190)				6,6 (14.6)	6,5 (14.5)	6,6 (14.6)	6,5 (14.5)	6,5 (14.4)	6,5 (14.4)	6,3 (14.1)	6,3 (14.0)	6,3 (14.0)	6,2 (13.8)	6,2 (13.7)	6,2 (13.7)
64,0 (210)				6,1 (13.5)	6,1 (13.5)	6,1 (13.5)	6,0 (13.4)	6,0 (13.4)	6,0 (13.4)	5,9 (13.2)	5,9 (13.1)	5,9 (13.1)	5,8 (12.9)	5,8 (12.9)	5,8 (12.8)
72,0 (240)				5,6 (12.2)	5,6 (12.2)	5,6 (12.2)	5,5 (12.1)	5,5 (12.1)	5,5 (12.1)	5,3 (11.2)	5,4 (11.4)	5,4 (11.6)	5,0 (10.6)	5,1 (10.8)	5,2 (11.0)
80,0 (270)				4,4 (8.9)	4,5 (9.1)	4,6 (9.2)	4,2 (8.4)	4,3 (8.6)	4,3 (8.7)	3,6 (7.2)	3,7 (7.3)	3,8 (7.5)	3,4 (6.6)	3,4 (6.7)	3,5 (6.9)
88,0 (290)				3,0 (6.7)	3,1 (6.9)	3,2 (7.0)	2,8 (6.2)	2,9 (6.4)	3,0 (6.5)	2,3 (5.0)	2,4 (5.2)	2,4 (5.3)	2,0 (4.4)	2,1 (4.5)	2,1 (4.7)
92,0 (310)				2,5 (4.3)	2,5 (4.7)	2,6 (5.0)	2,3 (4.4)	2,3 (4.5)	2,4 (4.6)						

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.



# fixed jib on luffing jib load charts

## Liftcrane Fixed Jib on Luffing Capacities - 2250 Series 3

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133 or No. 133A on Boom No. 44 with Heavy-Lift Top

113 040 kg (249,200 lb) Counterweight 54 430 kg (120,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

### 75° Boom Angle

Fixed Jib Length 12,2 m (40 ft) 5° offset	Luffing Jib m (ft)				48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
	Boom m (ft)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)			
	Radius															
	46,0 (150)	18,1 (40.3)														
	48,0 (160)	17,5 (38.1)	16,4 (35.7)	15,6 (33.9)	16,8 (36.6)	- (34.4)	- (32.5)									
	52,0 (170)	15,6 (34.8)	15,0 (33.3)	14,3 (31.8)	15,4 (34.3)	14,6 (32.4)	13,8 (30.7)	14,3 (31.7)	13,3 (29.6)	12,6 (28.0)	13,6 (30.0)					
	58,0 (190)	12,8 (28.4)	12,3 (27.4)	11,9 (26.5)	12,6 (27.9)	12,1 (26.9)	11,7 (26.0)	12,0 (26.6)	11,4 (25.3)	11,0 (24.4)	12,6 (28.0)	11,8 (26.1)	11,0 (24.5)			
	64,0 (210)	10,0 (22.2)	10,2 (22.6)	9,8 (21.8)	9,8 (21.7)	10,0 (22.1)	9,7 (21.4)	9,3 (20.5)	9,3 (20.6)	8,9 (19.8)	9,6 (21.3)	9,6 (21.3)	9,3 (20.5)			
	68,0 (230)	8,5 (17.4)	8,8 (18.0)	8,7 (18.0)	8,3 (17.0)	8,6 (17.5)	8,5 (17.6)	7,8 (15.7)	8,1 (16.3)	7,8 (16.1)	8,0 (16.1)	8,3 (16.7)	8,0 (16.4)			
	76,0 (250)	6,2 (13.6)	6,4 (14.1)	6,6 (14.6)	6,0 (13.2)	6,2 (13.7)	6,4 (14.1)	5,4 (12.0)	5,7 (12.5)	5,8 (12.9)	5,5 (12.1)	5,7 (12.5)	5,9 (13.0)			
80,0 (270)				5,0 -	5,2 -	5,4 (10.8)	4,5 (9.0)	4,7 (9.3)	4,9 (9.7)	4,5 (8.8)	4,7 (9.2)	4,8 (9.6)				
88,0 (290)										3,2 (7.0)	2,8 (6.2)	3,0 (6.5)	3,1 (6.8)			
- (300)												- (5.2)	- (5.6)			

Fixed Jib Length 36,6 m (120 ft) 5° offset	Luffing Jib m (ft)				48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
	Boom m (ft)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)	54,9 (180)	57,9 (190)	61,0 (200)			
	Radius 58,0 (195)	-														
	64,0 (210)	6,4 (14.3)	6,4 (14.3)	6,4 (14.3)	6,3 (14.1)	6,3 (14.1)	6,3 (14.1)	6,0 (13.4)								
	66,0 (220)	6,3 (13.8)	6,3 (13.9)	6,3 (13.9)	6,2 (13.7)	6,3 (14.0)	6,2 (13.6)	6,0 (13.1)	5,9 (13.0)	5,9 (13.0)	5,7 (12.7)	- (12.6)	- (12.4)			
	68,0 (230)	6,1 (13.4)	6,2 (13.4)	6,2 (13.4)	6,1 (13.2)	6,2 (13.2)	6,1 (13.2)	5,8 (12.8)	5,8 (12.7)	5,8 (12.7)	5,7 (12.4)	5,6 (12.3)	5,5 (12.2)			
	76,0 (250)	5,6 (12.5)	5,7 (12.6)	5,7 (12.6)	5,6 (12.4)	5,6 (12.4)	5,6 (12.5)	5,5 (12.1)	5,4 (12.1)	5,4 (12.0)	5,3 (11.8)	5,3 (11.8)	5,3 (11.7)			
	80,0 (270)	5,4 (11.8)	5,4 (11.8)	5,4 (11.9)	5,4 (11.7)	5,4 (11.8)	5,4 (11.8)	5,2 (10.5)	5,3 (10.9)	5,2 (11.0)	5,0 (9.9)	5,1 (10.3)	5,0 (10.2)			
	88,0 (290)	4,3 (9.5)	4,5 (9.8)	4,6 (10.2)	4,1 (9.0)	4,3 (9.3)	4,4 (9.7)	3,6 (7.8)	3,7 (8.1)	3,9 (8.5)	3,3 (7.2)	3,4 (7.5)	3,6 (7.8)			
	92,0 (310)	3,6 (7.3)	3,8 (7.5)	3,9 (7.8)	3,4 (6.8)	3,5 (7.0)	3,7 (7.3)	2,9 (5.6)	3,0 (5.8)	3,1 (6.1)	2,6 (4.9)	2,7 (5.2)	2,8 (5.5)			
100,0 (330)	2,4 (5.3)	2,5 (5.5)	2,7 (5.8)	2,2 (4.8)	2,3 (5.1)	2,4 (5.3)			1,9 (4.1)							
- (340)		- (4.5)	- (4.8)		- (4.2)	- (4.4)										

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.

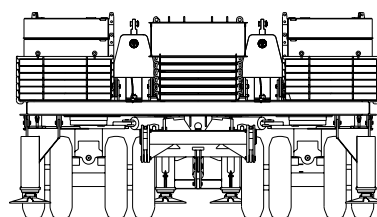
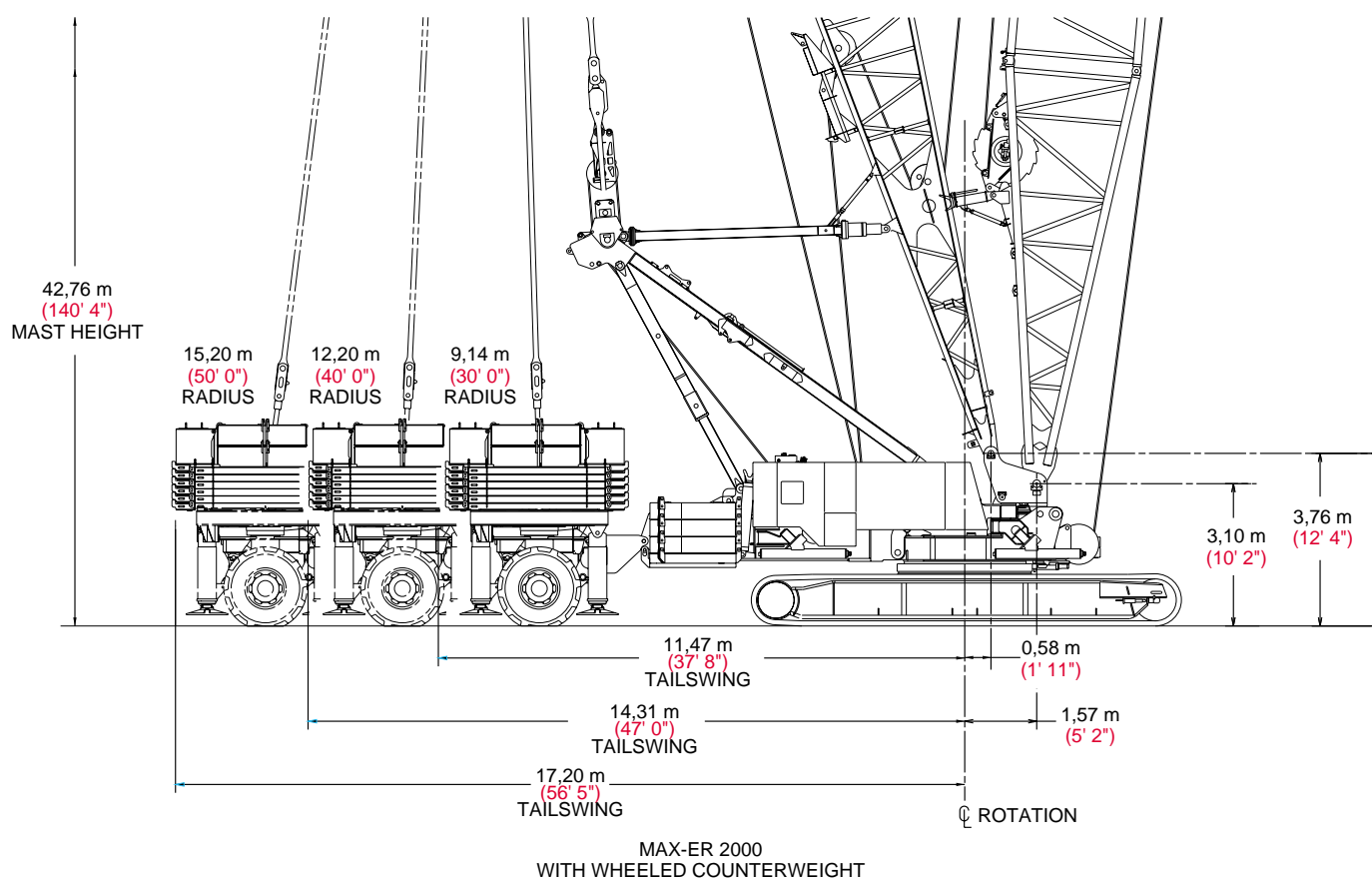
45

model 2250



# outline dimensions

46

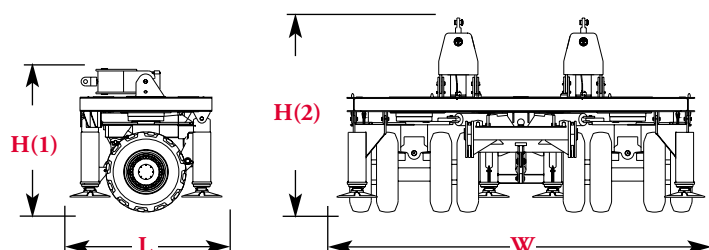


Counterweight arrangement

MAX-ER™ 2000



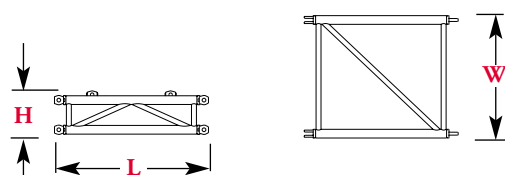
# outline dimensions



## Wheeled Carrier & Strap Cylinders x 1

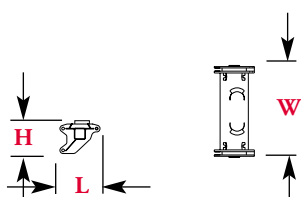
Length	3,33 m	10' 11"
Width	8,38 m	27' 6"
Height(1)	3,23 m	10' 7"
Height(2)	4,42 m	14' 6"
Weight	35 117 kg	77,420 lb

Note: side view of wheeled carrier shows hydraulic strap cylinders in optional 3,23 m (10' 7") height position for shipping .



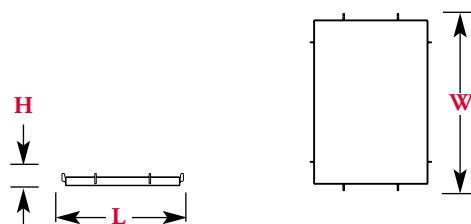
## Trailer Arm Insert 3,0 m (10') x 1, 2

Length	3,17 m	10' 5"
Width	2,51 m	8' 3"
Height	0,89 m	2' 11"
Weight	1 163 kg	2,565 lb



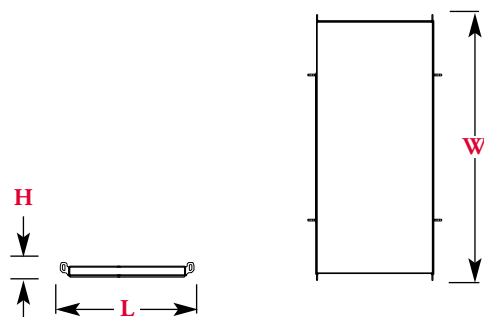
## Adapter Arm x 1

Length	1,14 m	3' 9"
Width	2,57 m	8' 5"
Height	0,91 m	3' 0"
Weight	1 270 kg	2,800 lb



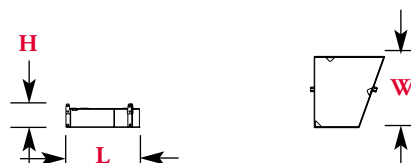
## Counterweight Box - Lower Side x 12

Length	2,16 m	7' 1"
Width	3,12 m	10' 4"
Height	0,23 m	0' 9"
Weight	5 897 kg	13,000 lb



## Counterweight Box - Lower Center x 6

Length	1,96 m	6' 5"
Width	3,89 m	12' 9"
Height	0,20 m	0' 8"
Weight	6 441 kg	14,200 lb



## Counterweight Box - Upper Side x 4

Length	2,01 m	6' 7"
Width	1,93 m	6' 4"
Height	0,48 m	1' 7"
Weight	7 030 kg	15,500 lb

Note: Two each of left- and right-side configurations required. Upper side counterweights from Series 3 liftcrane.

Option

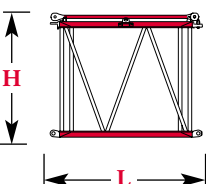
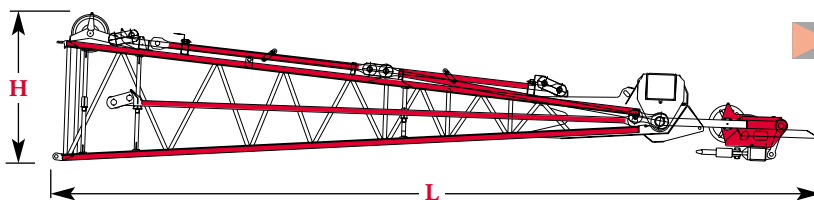
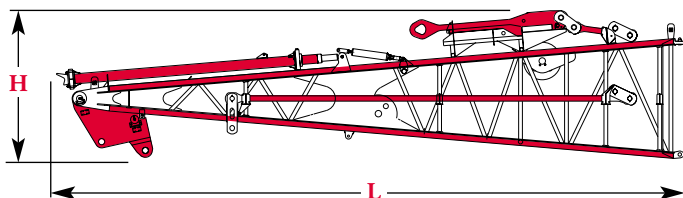
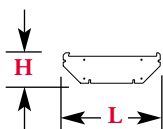
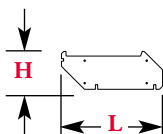
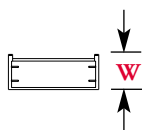
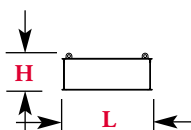
47

MAX-ER™ 2000



# outline dimensions

48



## Counterweight Box - Upper Center

x 4

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

Note: Carbody side counterweights from Model 2250 Series 3.

## Counterweight Adaptor Plate - Front

x 2

Length	1,68 m	5' 6"
Width	0,08 m	0' 3"
Height	0,63 m	2' 1"
Weight	454 kg	1,000 lb

## Counterweight Adaptor Plate - Rear

x 2

Length	2,13 m	7' 0"
Width	0,05 m	0' 2"
Height	0,66 m	2' 3"
Weight	502 kg	1,106 lb

## No. 44 Mast Butt 12,2 m (40') & Mast and Boom Adaptor Frame, Mast Stop, Beam Spreader, Sheaves, Straps, Links

x 1

Length	12,78 m	41' 11"
Width	3,02 m	9' 11"
Height	3,00 m	9' 10"
Weight	10 737 kg	23,760 lb

## No. 44 Mast Top Assembly 15,2 m (50') & Sheaves, Straps, Links with Equalizer

x 1

Length	15,52 m	50' 11"
Width	3,02 m	9' 11"
Height	3,05 m	10' 0"
Weight	12 891 kg	28,420 lb

## No. 44 Mast Insert 3,0 m (10') & Straps

x 1

Length	3,23 m	10' 7"
Width	2,59 m	8' 6"
Height	2,59 m	8' 6"
Weight	1 016 kg	2,240 lb

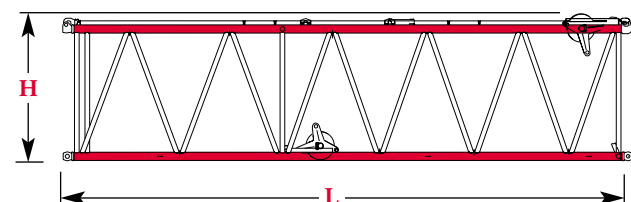
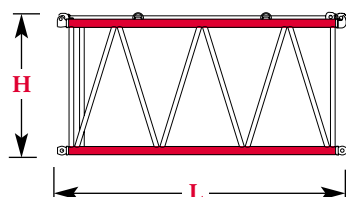
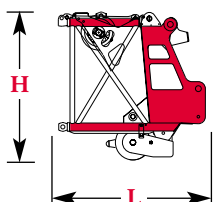
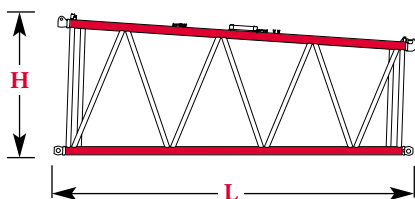
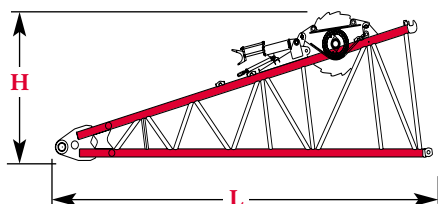
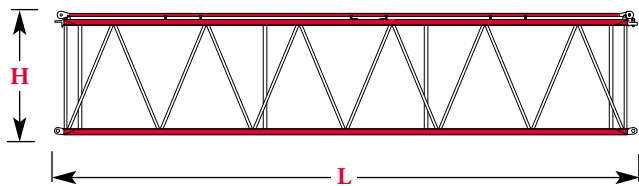
Note: Same as No. 44 3,0 m (10') boom insert.

Option

MAX-ER™ 2000



# outline dimensions



## No. 44 Mast Insert 12,2 m (40') & Straps x 1

Length	12,75 m	41' 10"
Width	2,59 m	8' 6"
Height	2,59 m	8' 6"
Weight	2 948 kg	6,500 lb

Note: Same as No. 44 12,2 m (40') boom insert.

## No. 79 Boom Butt 9,1 m (30') & Main Hoist with Wire Rope, Boom Stop x 1

Length	9,42 m	30' 11"
Width	3,02 m	9' 11"
Height	3,56 m	11' 8"
Weight	14 633 kg	32,265 lb
Weight*	5 517 kg	12,165 lb

\*Weight without main hoist and wire rope.

## No. 79 Boom Transition Insert 7,6 m (25') & Straps x 1

Length	7,85 m	25' 9"
Width	3,02 m	9' 11"
Height	3,10 m	10' 2"
Weight	3 653 kg	8,053 lb

## No. 79 Boom Top 1,5 m (5') & Lower Point, Wire Rope Guide, Straps x 1

Length	3,23 m	10' 7"
Width	2,69 m	8' 10"
Height	3,12 m	10' 4"
Weight	7 370 kg	16,248 lb

## No. 79 Boom Insert 6,1 m (20') & Straps x 1

Length	6,27 m	20' 7"
Width	3,02 m	9' 11"
Height	3,09 m	10' 2"
Weight	3 252 kg	7,170 lb

## No. 79 Boom Insert 12,2 m (40') & Sheaves, Straps x 1

Length	12,37 m	40' 7"
Width	3,02 m	9' 11"
Height	3,09 m	10' 2"
Weight	5 438 kg	11,988 lb

Option

49

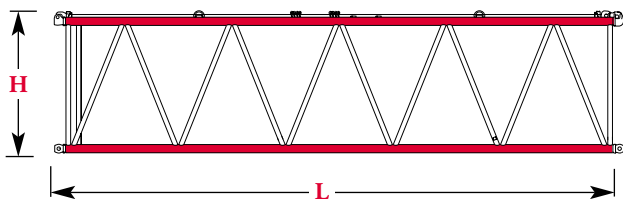
MAX-ER™ 2000





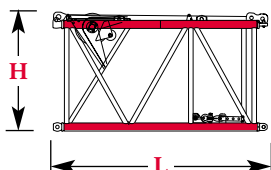
# outline dimensions

50



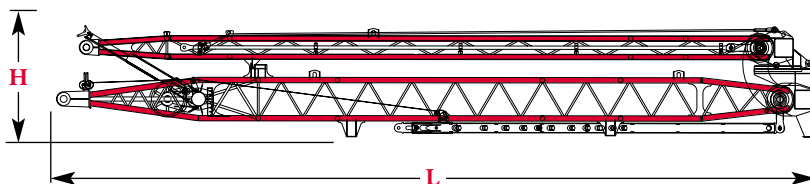
## No. 79 Boom Insert 12,2 m (40') & Straps x 1, 2, 3, 4

Length	12,37 m	40' 7"
Width	3,02 m	9' 11"
Height	3,09 m	10' 2"
Weight	5 470 kg	12,060 lb



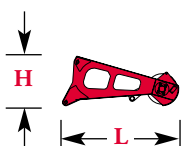
## No. 79-44 Transition Insert 4,6 m (15') & Wire Rope Guide, Straps x 1

Length	4,75 m	15' 7"
Width	2,64 m	8' 8"
Height	2,59 m	8' 6"
Weight	3 137 kg	6,915 lb



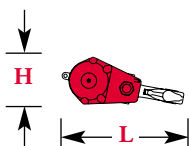
## No. 44 Luffing Jib Mast & Strut x 1

Length	16,15 m	53' 0"
Width	2,51 m	8' 3"
Height	2,36 m	7' 9"
Weight	10 544 kg	23,245 lb



## Upper Boom Point x 1

Length	2,18 m	7' 2"
Width	0,38 m	1' 3"
Height	1,04 m	3' 5"
Weight	308 kg	679 lb



## Hook block for 29 mm or (1-1/8") wire rope

Capacity	272 mt	300 t	Length	2,41 m	7' 11"
Weight	4 268 kg	9,410 lb	Width	1,14 m	3' 9"

MAX-ER™ 2000



Option



# performance data

51

## Wire Rope Lengths Boom No. 79

Boom Length	Whip Line Drum 5				Hoist line Drum 9		
	(1 Part of Line)		(2 Parts of Line)				Maximum Required Parts of Line
	m	(ft)	m	(ft)	m	(ft)	
36,6 (120)	91	(300)	130	(425)	1 097	(3,600)	26
42,7 (140)	104	(340)	152	(500)	1 219	(4,000)	26
48,8 (160)	116	(380)	168	(550)	1 280	(4,200)	24
54,9 (180)	128	(420)	191	(625)	1 341	(4,400)	22
61,0 (200)	140	(460)	206	(675)	1 341	(4,400)	20
67,1 (220)	152	(500)	221	(725)	1 341	(4,400)	18
73,2 (240)	165	(540)	244	(800)	1 341	(4,400)	16
79,2 (260)	177	(580)	259	(850)	1 341	(4,400)	14
85,3 (280)	189	(620)	282	(925)	1 341	(4,400)	12
91,4 (300)	201	(660)	297	(975)	1 341	(4,400)	12
97,5 (320)	213	(700)	312	(1,025)	1 341	(4,400)	10
103,6 (340)	226	(740)	335	(1,100)	1 341	(4,400)	8
109,7 (360)	238	(780)	351	(1,150)	1 341	(4,400)	8

**Note:** 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.

MAX-ER™ 2000



# performance data

52

## Wire Rope Lengths - MAX-ER on 2250

Luffing Jib No. 44 on

Boom No. 79

	Hoist Line - Drum 9																										
	Lengths in meters (feet) {Parts of line for maximum capacity}																										
Boom m (ft)	42,7 (140)			48,8 (160)			54,9 (180)			61,0 (200)			67,1 (220)			73,2 (240)			79,2 (260)			85,3 (280)			91,4 (300)		
Luffing Jib m (ft)																											
21,3 (70)	1 158*	(3,800)*	{16}	1 006	(3,300)	{12}	1 067	(3,500)	{12}	1 158*	(3,800)*	{12}	1 067	(3,500)	{10}	1 128	(3,700)	{10}	975	(3,200)	{8}	823	(2,700)	{6}	853	(2,800)	{6}
24,4 (80)	975	(3,200)	{12}	1 036	(3,400)	{12}	1 128	(3,700)	{12}	1 006	(3,300)	{10}	1 097	(3,600)	{10}	945	(3,100)	{8}	1 006	(3,300)	{8}	823	(2,700)	{6}	884	(2,900)	{6}
27,4 (90)	1 006	(3,300)	{12}	1 067	(3,500)	{12}	975	(3,200)	{10}	1 067	(3,500)	{10}	1 128	(3,700)	{10}	975	(3,200)	{8}	1 036	(3,400)	{8}	853	(2,800)	{6}	884	(2,900)	{6}
30,5 (100)	1 036	(3,400)	{12}	1 128	(3,700)	{12}	1 006	(3,300)	{10}	1 097	(3,600)	{10}	945	(3,100)	{8}	1 006	(3,300)	{8}	823	(2,700)	{6}	884	(2,900)	{6}	914	(3,000)	{6}
33,5 (110)	914	(3,000)	{10}	975	(3,200)	{10}	1 036	(3,400)	{10}	1 128	(3,700)	{10}	975	(3,200)	{8}	1 036	(3,400)	{8}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}
36,6 (120)	945	(3,100)	{10}	1 006	(3,300)	{10}	1 097	(3,600)	{10}	945	(3,100)	{8}	1 006	(3,300)	{8}	1 067	(3,500)	{8}	884	(2,900)	{6}	914	(3,000)	{6}	701	(2,300)	{4}
39,6 (130)	975	(3,200)	{10}	1 036	(3,400)	{10}	914	(3,000)	{8}	975	(3,200)	{8}	1 036	(3,400)	{8}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}	701	(2,300)	{4}
42,7 (140)	1 006	(3,300)	{10}	884	(2,900)	{8}	945	(3,100)	{8}	1 006	(3,300)	{8}	1 067	(3,500)	{8}	884	(2,900)	{6}	914	(3,000)	{6}	945	(3,100)	{6}	732	(2,400)	{4}
45,7 (150)	853	(2,800)	{8}	914	(3,000)	{8}	975	(3,200)	{8}	1 036	(3,400)	{8}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}	701	(2,300)	{4}	732	(2,400)	{4}
48,8 (160)	884	(2,900)	{8}	945	(3,100)	{8}	1 006	(3,300)	{8}	823	(2,700)	{6}	884	(2,900)	{6}	914	(3,000)	{6}	945	(3,100)	{6}	732	(2,400)	{4}	762	(2,500)	{4}
51,8 (170)	914	(3,000)	{8}	975	(3,200)	{8}	792	(2,600)	{6}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}
54,9 (180)	945	(3,100)	{8}	792	(2,600)	{6}	823	(2,700)	{6}	853	(2,800)	{6}	914	(3,000)	{6}	945	(3,100)	{6}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}
57,9 (190)	762	(2,500)	{6}	792	(2,600)	{6}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}
61,0 (200)	792	(2,600)	{6}	823	(2,700)	{6}	853	(2,800)	{6}	914	(3,000)	{6}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}	823	(2,700)	{4}
64,0 (210)	792	(2,600)	{6}	853	(2,800)	{6}	884	(2,900)	{6}	945	(3,100)	{6}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}	823	(2,700)	{4}
67,1 (220)	823	(2,700)	{6}	884	(2,900)	{6}	671	(2,200)	{4}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}	823	(2,700)	{4}	853	(2,800)	{4}
70,1 (230)	853	(2,800)	{6}	884	(2,900)	{6}	671	(2,200)	{4}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}	823	(2,700)	{4}	853	(2,800)	{4}
73,2 (240)	640	(2,100)	{4}	671	(2,200)	{4}	701	(2,300)	{4}	732	(2,400)	{4}	762	(2,500)	{4}	792	(2,600)	{4}	823	(2,700)	{4}	853	(2,800)	{4}	549	(1,800)	{2}

**Note:** 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 hoist line length denoted by asterisk (\*).

MAX-ER™ 2000



# performance data

## Wire Rope Lengths - MAX-ER on 2250 Luffing Jib No. 44 on Boom No. 79

53

Boom and Luffing Jib Length	Whip Line Drum 3			
	(1 Part of Line)		(2 Parts of Line)	
m (ft)	m	(ft)	m	(ft)
64,0 (210)	146	(480)	221	(725)
67,1 (220)	152	(500)	229	(750)
70,1 (230)	158	(520)	236	(775)
73,2 (240)	165	(540)	251	(825)
76,2 (250)	171	(560)	259	(850)
79,2 (260)	177	(580)	267	(875)
82,3 (270)	183	(600)	274	(900)
85,3 (280)	189	(620)	282	(925)
88,4 (290)	195	(640)	290	(950)
91,4 (300)	201	(660)	305	(1,000)
94,5 (310)	207	(680)	312	(1,025)
97,5 (320)	213	(700)	320	(1,050)
100,6 (330)	219	(720)	328	(1,075)
103,6 (340)	226	(740)	335	(1,100)
106,7 (350)	232	(760)	343	(1,125)
109,7 (360)	238	(780)	358	(1,175)
112,8 (370)	244	(800)	366	(1,200)
115,8 (380)	250	(820)	373	(1,225)
118,9 (390)	256	(840)	381	(1,250)
121,9 (400)	262	(860)	389	(1,275)
125,0 (410)	268	(880)	404*	(1,325)*
128,0 (420)	274	(900)	411*	(1,350)*
131,1 (430)	280	(920)	419*	(1,375)*
134,1 (440)	287	(940)	-	-
137,2 (450)	293	(960)	-	-
140,2 (460)	299	(980)	-	-
143,3 (470)	305	(1,000)	-	-
146,3 (480)	311	(1,020)	-	-
149,4 (490)	317	(1,040)	-	-
152,4 (500)	323	(1,060)	-	-
155,5 (510)	329	(1,080)	-	-
158,5 (520)	335	(1,100)		
161,5 (530)	341	(1,120)		
164,6 (540)	347	(1,140)		

**Note:** 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.

Wire rope lengths denoted by asterisk (\*) require bare drum (lagging removed).

MAX-ER™ 2000  
Manitowoc



# performance data

54

## Wire Rope Lengths

Boom No. 79-44

- or -

Fixed Jib No. 132 on

Boom No. 79-44

Boom or Boom and Fixed Jib Length	Whip Line Drum 5								Hoist line Drum 9		
	(1 Part of Line)		(2 Parts of Line)		(3 Parts of Line)		(4 Parts of Line)				Maximum Required Parts of Line
	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)	
61,0 (200)	140	(460)	206	(675)	–	–	–	–	1 250	(4,100)	18
67,1 (220)	152	(500)	221	(725)	–	–	–	–	1 280	(4,200)	17
73,2 (240)	165	(540)	244	(800)	–	–	396	(1,300)	1 280	(4,200)	15
79,2 (260)	177	(580)	259	(850)	343	(1,125)	427	(1,400)	1 280	(4,200)	13
85,3 (280)	189	(620)	282	(925)	366	(1,200)	457	(1,500)	1 280	(4,200)	11
91,4 (300)	201	(660)	297	(975)	389	(1,275)	488	(1,600)	1 280	(4,200)	10
97,5 (320)	213	(700)	312	(1,025)	411	(1,350)	518	(1,700)	1 280	(4,200)	9
103,6 (340)	226	(740)	335	(1,100)	434	(1,425)	549	(1,800)	1 280	(4,200)	7
109,7 (360)	238	(780)	351	(1,150)	457	(1,500)	–	–	1 280	(4,200)	6
115,8 (380)	250	(820)	366	(1,200)	488	(1,600)	–	–	1 280	(4,200)	6
121,9 (400)	262	(860)	389	(1,275)	511	(1,675)	–	–	1 280	(4,200)	5
128,0 (420)	274	(900)	404	(1,325)	533	(1,750)	–	–	–	–	–
134,1 (440)	287	(940)	419	(1,375)	556	(1,825)	–	–	–	–	–
140,2 (460)	293	(960)	442	(1,450)	–	–	–	–	–	–	–
146,3 (480)	305	(1,000)	457	(1,500)	–	–	–	–	–	–	–
152,4 (500)	317	(1,040)	472	(1,550)	–	–	–	–	–	–	–

**Note:** Hoist line 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 hook travel for whip line application may be restricted when line length exceeds 480 m (1,575').

MAX-ER™ 2000



# performance data

55

## Wire Rope Lengths Luffing Jib No. 133A or No. 133 on Boom No. 79-44

Boom and Luffing Jib Length	Luffing Jib Whip Line Drum 3		Luffing Jib Hoist Line Drum 9											
	(1 Part of Line)		(7 Parts of Line)		(6 Parts of Line)		(5 Parts of Line)		(4 Parts of Line)		(3 Parts of Line)		(2 Parts of Line)	
	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)	m	(ft)
82,3 (270)	183	(600)	693	(2,275)	-	-	-	-	-	-	-	-	-	-
85,3 (280)	189	(620)	-	-	625	(2,050)	-	-	-	-	-	-	-	-
88,4 (290)	195	(640)	739	(2,425)	648	(2,125)	-	-	-	-	-	-	-	-
91,4 (300)	201	(660)	-	-	610	(2,000)	572	(1,875)	-	-	-	-	-	-
94,5 (310)	207	(680)	792	(2,600)	693	(2,275)	594	(1,950)	-	-	-	-	-	-
97,5 (320)	213	(700)	-	-	709	(2,325)	610	(2,000)	511	(1,675)	-	-	-	-
100,6 (330)	219	(720)	838	(2,750)	732	(2,400)	632	(2,075)	526	(1,725)	-	-	-	-
103,6 (340)	226	(740)	-	-	754	(2,475)	648	(2,125)	541	(1,775)	-	-	-	-
106,7 (350)	232	(760)	-	-	777	(2,550)	671	(2,200)	556	(1,825)	-	-	-	-
109,7 (360)	238	(780)	-	-	-	-	686	(2,250)	572	(1,875)	457	(1,500)	-	-
112,8 (370)	244	(800)	-	-	-	-	701	(2,300)	587	(1,925)	472	(1,550)	-	-
115,8 (380)	250	(820)	-	-	-	-	724	(2,375)	602	(1,975)	480	(1,575)	-	-
118,9 (390)	256	(840)	-	-	-	-	-	-	617	(2,025)	495	(1,625)	-	-
121,9 (400)	262	(860)	-	-	-	-	-	-	632	(2,075)	511	(1,675)	389	(1,275)
125,0 (410)	268	(880)	-	-	-	-	-	-	948	(2,125)	518	(1,700)	396	(1,300)
128,0 (420)	274	(900)	-	-	-	-	-	-	663	(2,175)	533	(1,750)	404	(1,325)
131,1 (430)	280	(920)	-	-	-	-	-	-	-	-	549	(1,800)	411	(1,350)
134,1 (440)	287	(940)	-	-	-	-	-	-	-	-	556	(1,825)	419	(1,375)
137,2 (450)	293	(960)	-	-	-	-	-	-	-	-	572	(1,875)	434	(1,425)
140,2 (460)	299	(980)	-	-	-	-	-	-	-	-	579	(1,900)	442	(1,450)
143,3 (470)	305	(1,000)	-	-	-	-	-	-	-	-	594	(1,950)	450	(1,475)
146,3 (480)	311	(1,020)	-	-	-	-	-	-	-	-	-	-	457	(1,500)
149,4 (490)	317	(1,040)	-	-	-	-	-	-	-	-	-	-	465	(1,525)
152,4 (500)	323	(1,060)	-	-	-	-	-	-	-	-	-	-	480	(1,575)

**Note:** 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.

MAX-ER™ 2000





# performance data

56

## Wire Rope Lengths - Fixed Jib No. 140 on Luffing Jib No. 133A or No. 133 on Boom No. 79-44

Boom, Luffing Jib, and Fixed Jib Length	Fixed Jib Whip Line Drum 3			
	(1 Part of Line)		(2 Parts of Line)	
m (ft)	m	(ft)	m	(ft)
140,2 (460)	293	(960)	434	(1,425)
143,3 (470)	299	(980)	442	(1,450)
146,3 (480)	305	(1,000)	450	(1,475)
149,4 (490)	311	(1,020)	465	(1,525)
152,4 (500)	317	(1,040)	472	(1,550)
155,4 (510)	323	(1,060)	480	(1,575)
158,5 (520)	329	(1,080)	488	(1,600)
161,5 (530)	335	(1,100)	495	(1,625)
164,6 (540)	341	(1,120)	511	(1,675)
167,6 (550)	347	(1,140)	518	(1,700)
170,7 (560)	354	(1,160)	526	(1,725)
175,3 (570)	360	(1,180)	-	-
176,8 (580)	366	(1,200)	-	-
179,8 (590)	372	(1,220)	-	-
182,9 (600)	378	(1,240)	-	-
185,9 (610)	384	(1,260)	-	-
189,0 (620)	390	(1,280)	-	-

**Note:** Line lengths given in table will allow hook to touch ground. When hook 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 hook travel below ground is required.

Maximum hook travel may be restricted when whip line length exceeds 495 m (1,625') using 622 mm (24-1/2") diameter lagging on Drum 3.

MAX-ER™ 2000  
Manitowoc

# performance data

57

## Wire Rope Specifications

Boom No. 79 or No. 79-44

- or -

Fixed Jib No. 132 on

Boom No. 79-44

- or -

Luffing Jib No. 44 on

Boom No. 79

- or -

Luffing Jib No. 133A or No. 133 on

Boom No. 79-44

- or -

Fixed Jib No. 132 on

Luffing Jib No. 44 on

Boom No. 79

	5:1 Safety Factor Right Hand Regular Lay 1 960 N/mm <sup>2</sup>	5:1 Safety Factor Right Hand Regular Lay 2 160 N/mm <sup>2</sup>	5:1 Safety Factor Left Hand Regular Lay 1 960 N/mm <sup>2</sup>	
Function	Hoist Line	Hoist Line	Whip Line	
Part Number	No. 719416	No. 719421	No. 719417*	No. 719375**
Size Wire Rope	— (1-1/8")	— (1-1/8")	— (1")	— (1-1/8")
Minimum Breaking Strength	80 190 kg (176,800 lb)	78 830 kg (173,780 lb)	63 320 kg (139,600 lb)	70 260 kg (154,900 lb)
Maximum Load Per Line	15 740 kg (34,000 lb)	15 740 kg (34,000 lb)	12 560 kg (27,700 lb)	13 610 kg (30,000 lb)
Approximate Weight	3,84 kg/m (2.58 lb/ft)	4,02 kg/m (2.70 lb/ft)	3,02 kg/m (2.03 lb/ft)	4,02 kg/m (2.70 lb/ft)

\*Boom No. 79 and boom No. 79-44.

\*\*Luffing jib No. 44, luffing jib No. 133A or 133, and fixed jib No. 140.

MAX-ER™ 2000



# performance data

58

## Drums & Laggings - Liftcrane MAX-ER 2000

	Application	Drum Location	Drum Part Number	Drum Type	Drums		Grooved Lugging Part Number	Lugging Diameter	Wire Rope Size
					Drum Diameter	Drum Width			
Basic Liftcrane	Hoist	Boom Butt Drum No. 9	Pending	Grooved	641 mm	1 244 mm	-	-	29 mm
			194484	Grooved	(25-1/4")	(48-63/64")	-	-	(1-1/8")
	Whip	Front of Rotating Bed Drum No. 5	Pending	Bare	464 mm	794 mm	Pending	483 mm	26 mm
			193814	Bare	(18-1/4")	(31-17/64")	502407	(19")	(1")
Liftcrane Luffing Jib	Hoist	Boom Butt Drum No. 9	Pending	Grooved	641 mm	1 244 mm	-	-	29 mm
			194484	Grooved	(25-1/4")	(48-63/64")	-	-	(1-1/8")
	Whip	Left Rear Drum No. 3	Pending	Bare	572 mm	480 mm	Pending	622 mm	29 mm
			171305	Bare	(22-1/2")	(18-29/32")	502401 with Spacer No. 192568 or 196307	(24-1/2")	(1-1/8")
Liftcrane Fixed Jib No. 44	Hoist	Boom Butt Drum No. 9	Pending	Grooved	641 mm	1 244 mm	-	483 mm	29 mm
			194484	Grooved	(25-1/4")	(48-63/64")	-	(19")	(1-1/8")
	Hoist	Front of Rotating Bed Drum No. 5	Pending	Bare	464 mm	794 mm	Pending	622 mm	26 mm
			193814	Bare	(18-1/4")	(31-17/64")	502407	(24-1/2")	(1")
	Whip	Left Rear Drum No. 3	Pending	Bare	572 mm	480 mm	Pending	622 mm	29 mm
			171305	Bare	(22-1/2")	(18-29/32")	502401 with Spacer No. 192568 or 196307	(24-1/2")	(1-1/8")

MAX-ER™ 2000



# performance data

59

## Maximum Length – Unassisted Raising

Luffing Jib No. 44 on Boom No. 79 76 750 kg (169,200 lb) Crane Counterweight 27 220 kg (60,000 lb) Carbody Counterweight 209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') position				
Over front or rear of blocked crawlers m (ft)	In-Line Procedure		Layout Jack-Knife Procedure	
	Main Boom	Luffing Jib	Main Boom	Luffing Jib
	42,7 (140)	21,3 - 73,2 (70 - 240)	-	-
	48,8 (160)	21,3 - 73,2 (70 - 240)	-	-
	54,9 (180)	21,3 - 70,1 (70 - 230)	54,9 (180)	73,2 (240)
	61,0 (200)	21,3 - 61,0 (70 - 200)	61,0 (200)	64,0 - 73,2 (210 - 240)
	67,1 (220)	21,3 - 51,8 (70 - 170)	67,1 (220)	54,9 - 73,2 (180 - 240)
	73,2 (240)	21,3 - 42,7 (70 - 140)	73,2 (240)	45,7 - 73,2 (150 - 240)
	79,2 (260)	21,3 - 33,5 (70 - 110)	79,2 (260)	33,6 - 73,2 (120 - 240)
	-	-	85,3 (280)	21,3 - 73,2 (70 - 240)
	-	-	91,4 (300)	21,3 - 45,7 (70 - 150)
	-	-	91,4* (300)*	48,8 - 64,0 (160 - 210)
	-	-	91,4# (300)#	67,1 - 73,2 (220 - 240)

NOTE: Load block(s), hook(s) and weight ball(s) on ground until boom and luffing jib are erected.

\*Remove boom point.

#Remove boom point, rigging winch, and wire rope guides in luffing jib butt.

## Maximum Length – Unassisted Raising

Fixed Jib No. 132 on Boom No. 79-44 76 750 kg (169,200 lb) Crane Counterweight 27 220 kg (60,000 lb) Carbody Counterweight 209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') position		
Over side or end of crawlers m (ft)	Main Boom	Fixed Jib
	121,9 (400)	12,2 (40)
	115,8 (380)	36,6 (120)

NOTE: Load block(s), hook(s) and weight ball(s) on ground at start.

## Maximum Length – Unassisted Raising

Luffing Jib No. 133A or 133 on Boom No. 79-44 76 750 kg (169,200 lb) Crane Counterweight 27 220 kg (60,000 lb) Carbody Counterweight 209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') position				
Over front, rear, or side of blocked crawlers m (ft)	In-Line Procedure		Layout Jack-Knife Procedure	
	Main Boom	Luffing Jib	Main Boom	Luffing Jib
	61,0 (200)	21,3 - 61,0 (70 - 200)	-	-
	67,1 (220)	21,3 - 61,0 (70 - 200)	-	-
	73,2 (240)	21,3 - 61,0 (70 - 200)	-	-
	79,2 (260)	21,3 - 61,0 (70 - 200)	-	-
	-	-	85,3 (280)	21,3 - 61,0 (70 - 200)
	-	-	91,4 (300)	21,3 - 61,0 (70 - 200)
	-	-	-	-
	-	-	-	-

NOTE: Load block(s), hook(s) and weight ball(s) on ground until boom and luffing jib are erected.

## Maximum Length – Unassisted Raising

Fixed Jib No. 140 on Luffing Jib No. 133A or 133 on Boom No. 79-44 76 750 kg (169,200 lb) Crane Counterweight 27 220 kg (60,000 lb) Carbody Counterweight 209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') position			
Over side or end of blocked crawlers m (ft)	Layout Jack-Knife Procedure		
	Main Boom	Luffing Jib	Fixed Jib
	79,2 (260)	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)
	85,3 (280)	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)
	91,4 (300)	48,8 - 61,0 (160 - 200)	12,2 - 36,6 (40 - 120)

NOTE: Load block(s), hook(s) and weight ball(s) on ground until boom, luffing jib, and fixed jib are erected.

MAX-ER™ 2000



# boom combinations

60

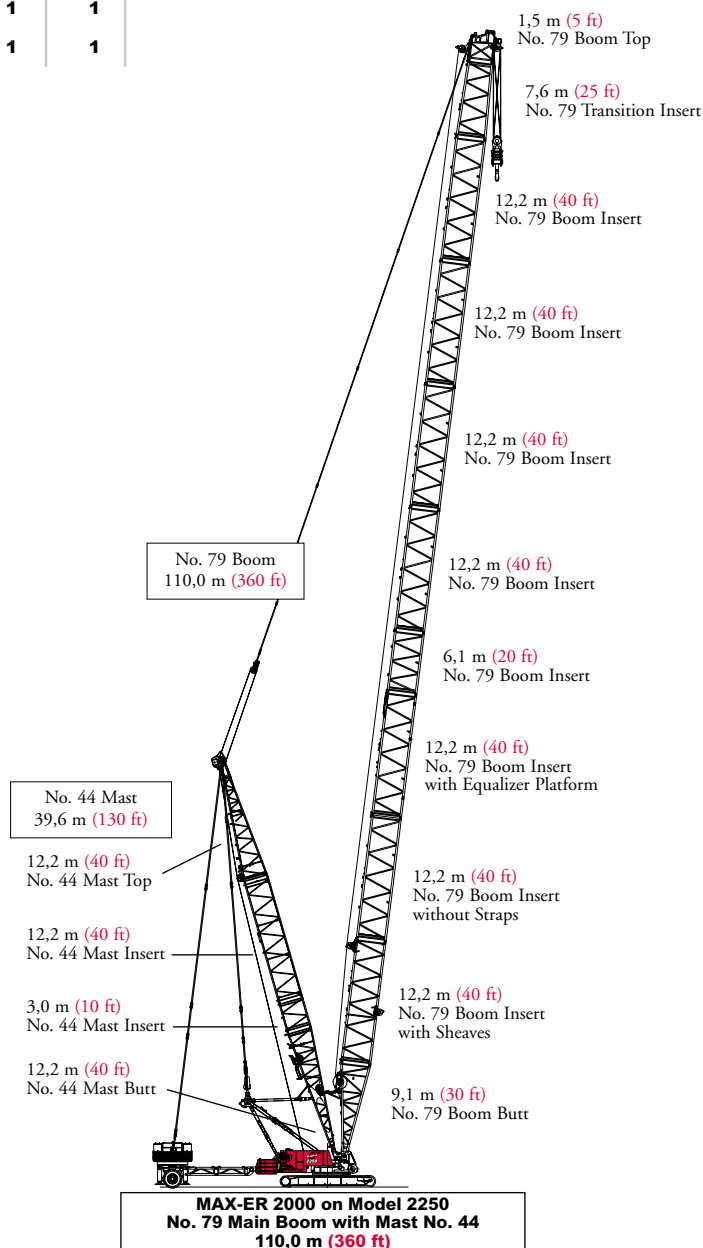
## No. 79 Boom Combinations

Boom Length m (ft)	Boom Inserts			
	6,1 m (20 ft)	12,2 m (40 ft)	12,2 m* (40 ft)*	12,2 m** (40 ft)**
36,6 (120)	1	-	-	-
42,7 (140)	-	-	-	1
48,8 (160)	1	-	-	1
54,9 (180)	-	-	1	1
61,0 (200)	1	-	1	1
67,1 (220)	-	1	1	1
73,2 (240)	1	1	1	1
79,2 (260)	-	2	1	1
85,3 (280)	1	2	1	1
91,4 (300)	-	3	1	1
97,5 (320)	1	3	1	1
103,6 (340)	-	4	1	1
110,0 (360)	1	4	1	1

\*Insert without straps.

\*\*Insert with sheaves.

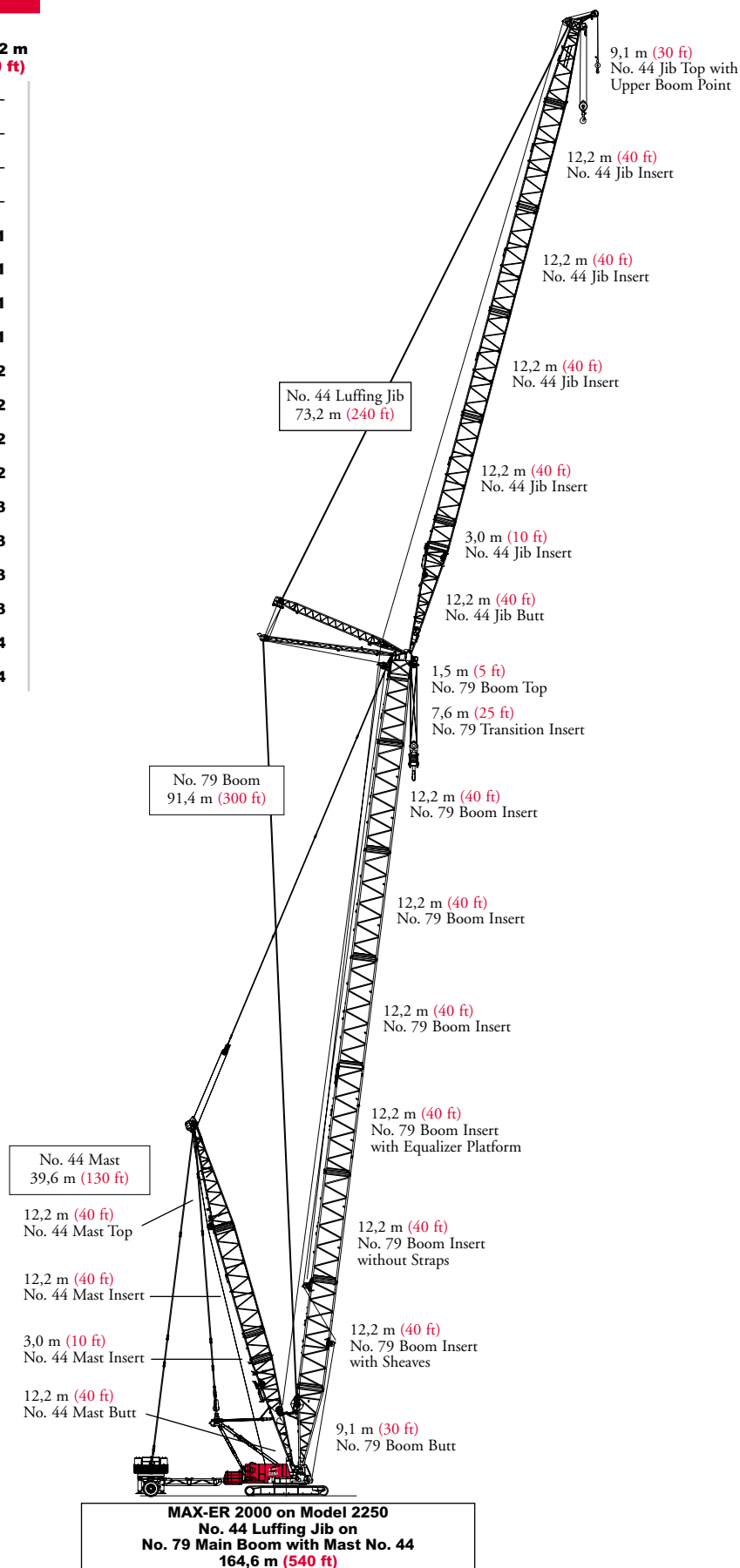
MAX-ER™ 2000  
Manitowoc



# boom combinations

## No. 44 Luffing Jib Combinations

Boom Length m (ft)	Boom Inserts		
	3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)
21,3 (70)	-	-	-
24,4 (80)	1	-	-
27,4 (90)	-	1	-
30,5 (100)	1	1	-
33,5 (110)	-	-	1
36,6 (120)	1	-	1
39,6 (130)	-	1	1
42,7 (140)	1	1	1
45,7 (150)	-	-	2
48,8 (160)	1	-	2
51,8 (170)	-	1	2
54,9 (180)	1	1	2
57,9 (190)	-	-	3
61,0 (200)	1	-	3
64,0 (210)	-	1	3
67,1 (220)	1	1	3
70,1 (230)	-	-	4
73,2 (240)	1	-	4



61

MAX-ER™ 2000





# boom combinations

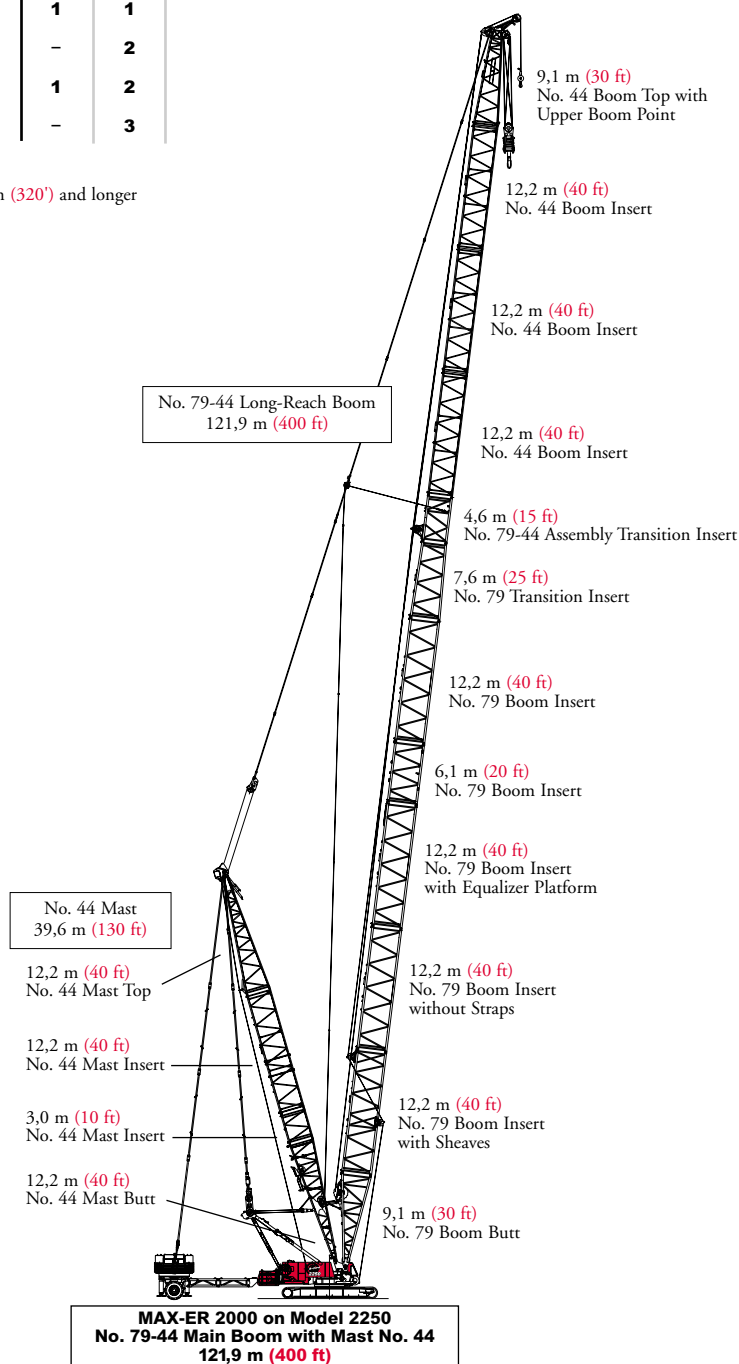
62

## No. 79-44 Long-Reach Main Boom Combinations

Boom Length m (ft)	Boom Inserts				
	No. 79			No. 44	
	6,1 m (20 ft)	12,2 m (40 ft)	12,2 m* (40 ft)*	6,1 m (20 ft)	12,2 m (40 ft)
61,0 (200)	1	-	-	-	-
67,1 (220)	-	-	1	-	-
73,2 (240)	1	-	1	-	-
79,2 (260)	1	-	1	1	-
85,3 (280)	1	-	1	-	1
91,4 (300)	1	-	1	1	1
97,5 (320)	1	1	1	-	1
103,6 (340)	1	1	1	1	1
109,7 (360)	1	1	1	-	2
115,8 (380)	1	1	1	1	2
121,9 (400)	1	1	1	-	3

\*Inserts without straps.

Note: Intermediate suspension required for 97,5 m (320') and longer boom lengths.



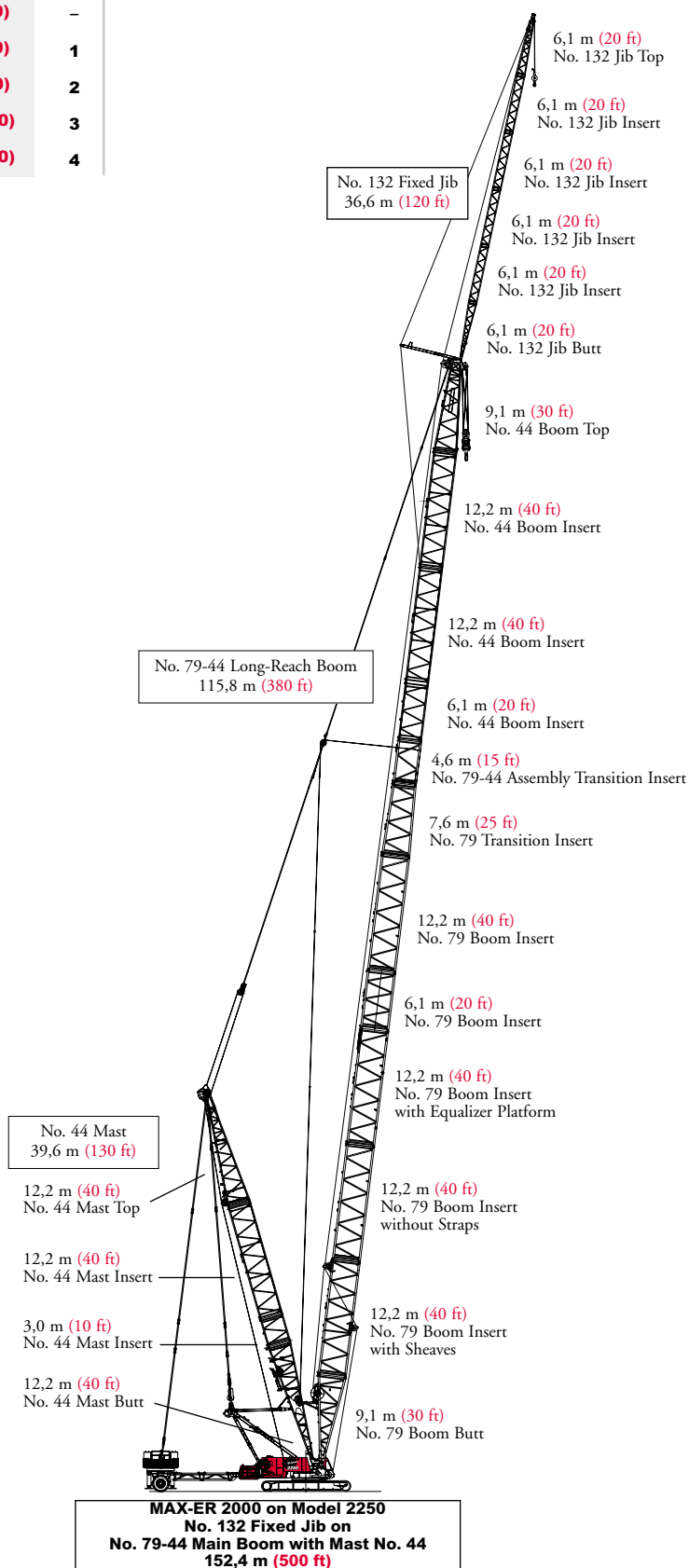
MAX-ER™ 2000  
Manitowoc

# boom combinations

## No. 132 Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts	
	6,1 m (20 ft)	
12,2 (40)	-	
18,3 (60)	1	
24,4 (80)	2	
30,5 (100)	3	
36,6 (120)	4	

63



MAX-ER™ 2000



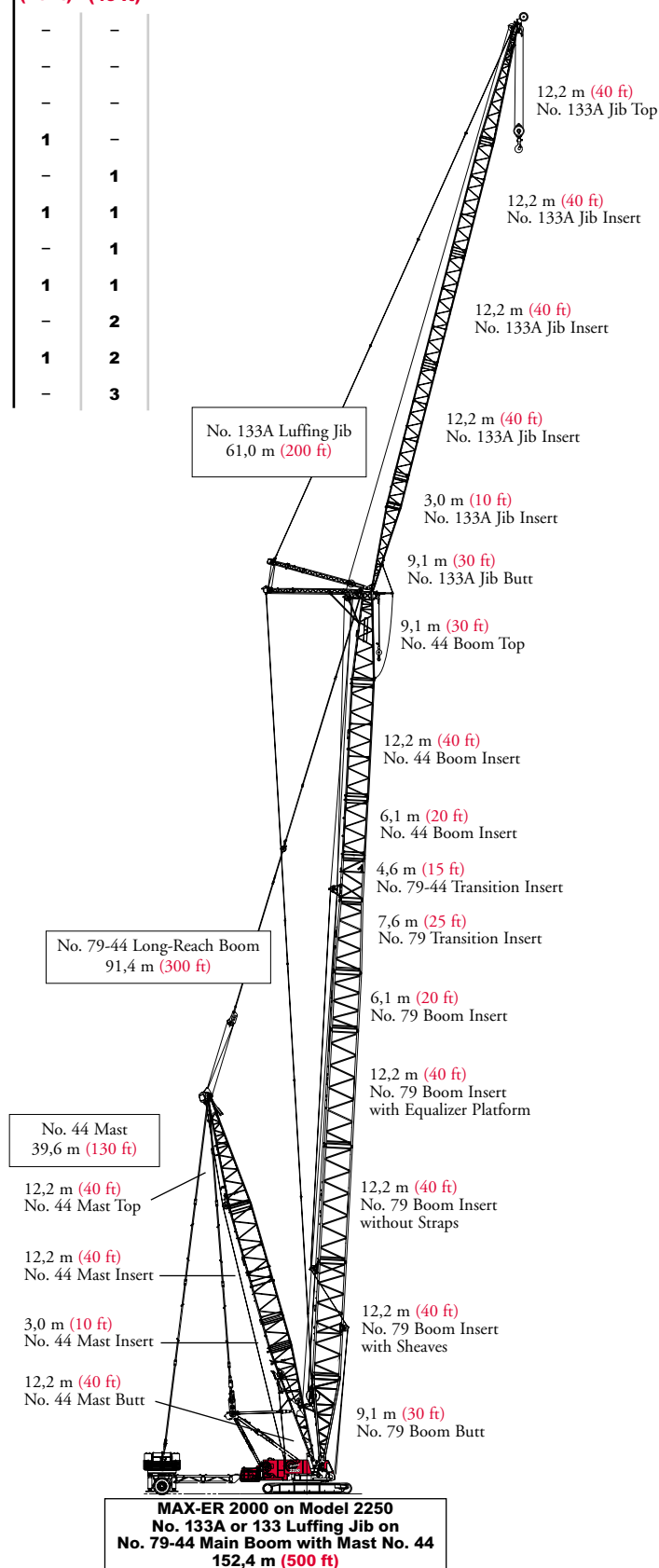
# boom combinations

64

## No. 79-44 Main Boom Combinations

Boom Length m (ft)	Boom Inserts				
	No. 79			No. 44	
	6,1 m (20 ft)	12,2 m (40 ft)	12,2 m* (40 ft)*	6,1 m (20 ft)	12,2 m (40 ft)
61,0 (200)	1	-	-	-	-
67,1 (220)	-	-	1	-	-
73,2 (240)	1	-	1	-	-
79,2 (260)	1	-	1	1	-
85,3 (280)	1	-	1	-	1
91,4 (300)	1	-	1	1	1
97,5 (320)	1	1	1	-	1
103,6 (340)	1	1	1	1	1
109,7 (360)	1	1	1	-	2
115,8 (380)	1	1	1	1	2
121,9 (400)	1	1	1	-	3

\*Inserts without straps.



MAX-ER™ 2000  
Manitowoc

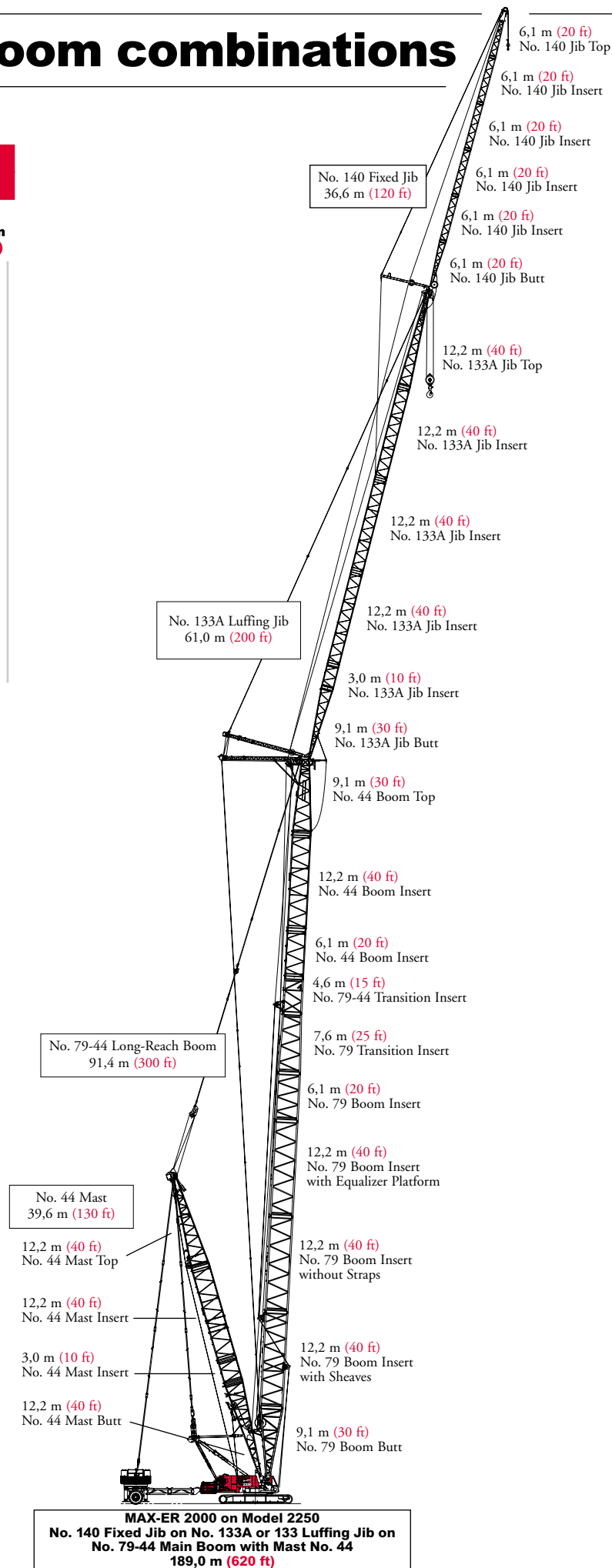
## boom combinations

## No. 133A or 133 Luffing Jlb Combinations

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

## No. 140 Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts 6,1 m (20 ft)
12,2 (40)	—
18,3 (60)	1
24,4 (80)	2
30,5 (100)	3
36,6 (120)	4



65

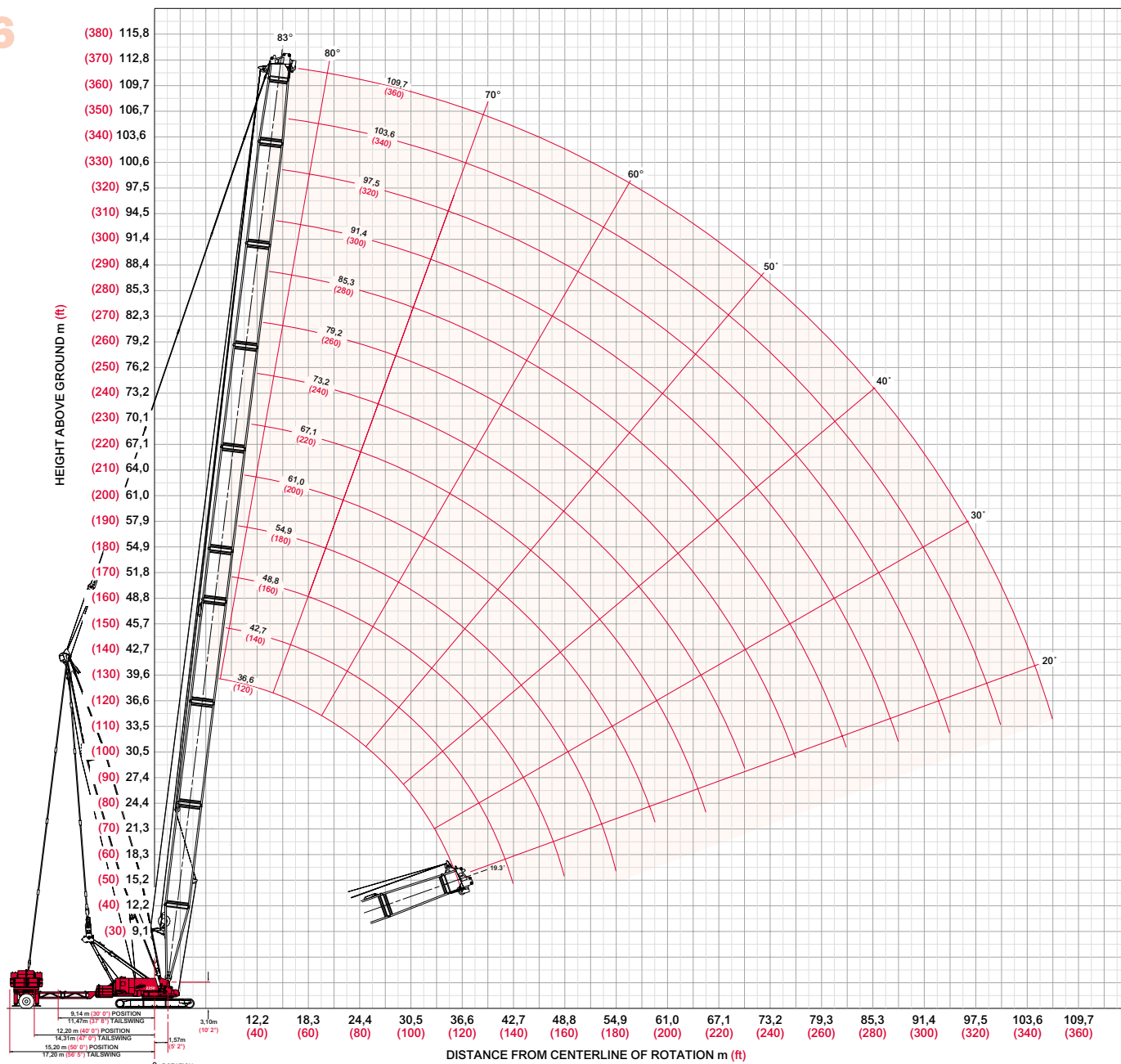
# MAX-ER™ 2000



# heavy-lift boom range diagram

## No. 79 Heavy-Lift Boom

66



MAX-ER™ 2000



# heavy-lift load charts

## Liftcrane Boom Capacities - MAX-ER 2000 on 2250

### Boom No. 79 Heavy-Lift with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

67

360° Rating

kg (lb) x 1 000

Boom m (ft)	36,6 (120)	42,7 (140)	48,8 (160)	54,9 (180)	61,0 (200)	67,1 (220)	79,2 (260)	85,3 (280)	91,4 (300)	97,5 (320)	103,6 (340)	109,7 (360)
Radius												
7,6 (25)	450,0 (1000.0)											
9,0 (30)	408,2 (900.0)	398,7 (879.0)	– (791.1)									
10,0 (34)	401,2 (862.1)	395,2 (860.0)	358,8 (791.1)	323,3 (712.9)								
12,0 (40)	338,3 (734.2)	337,4 (732.2)	337,0 (729.4)	323,3 (712.9)	291,4 (642.5)	263,0 (580.0)						
14,0 (50)	289,8 (586.5)	288,9 (584.6)	287,7 (581.9)	287,4 (580.1)	285,9 (577.5)	260,5 (569.9)	207,5 (455.3)	175,6 (387.3)	– (332.0)	– (285.0)		
18,0 (60)	224,1 (486.3)	223,3 (484.5)	222,1 (481.9)	221,3 (480.1)	220,1 (477.5)	219,8 (476.2)	203,5 (448.2)	175,6 (387.3)	150,5 (332.0)	129,2 (285.0)	112,0 (247.0)	97,2 (214.3)
20,0 (70)	200,9 (413.9)	200,1 (412.1)	198,9 (409.6)	198,1 (407.9)	196,9 (405.2)	196,3 (403.9)	194,9 (399.5)	175,6 (387.3)	150,5 (332.0)	129,2 (285.0)	112,0 (247.0)	97,2 (214.3)
24,0 (80)	165,6 (359.1)	164,8 (357.3)	163,7 (354.8)	162,9 (353.2)	161,7 (350.5)	161,2 (349.3)	159,2 (344.9)	158,3 (342.0)	150,5 (332.0)	129,2 (285.0)	112,0 (247.0)	97,2 (214.3)
26,0 (90)	151,9 (316.1)	151,1 (314.4)	150,0 (312.0)	149,3 (310.3)	148,1 (307.7)	147,5 (306.4)	145,6 (302.1)	144,2 (299.2)	143,5 (297.5)	129,2 (285.0)	112,0 (247.0)	97,2 (214.3)
30,0 (100)	129,9 (281.5)	129,1 (279.8)	128,1 (277.5)	127,3 (275.9)	126,1 (273.2)	125,6 (272.0)	123,6 (267.6)	122,3 (264.8)	121,5 (263.0)	120,7 (260.2)	112,0 (247.0)	97,2 (214.3)
36,0 (120)	95,3 (200.5)	105,1 (227.6)	104,0 (225.3)	103,4 (223.8)	102,1 (221.1)	101,6 (219.9)	99,7 (215.6)	98,4 (212.8)	97,6 (211.1)	96,3 (208.2)	95,5 (206.4)	91,2 (198.2)
42,0 (140)		84,0 (175.1)	86,7 (187.7)	86,1 (186.3)	84,9 (183.6)	84,4 (182.5)	82,4 (178.2)	81,1 (175.4)	80,4 (173.7)	79,1 (170.9)	78,2 (169.0)	76,9 (166.1)
48,0 (160)			72,4 (152.2)	73,0 (157.9)	71,8 (155.3)	71,3 (154.1)	69,4 (150.0)	68,2 (147.2)	67,4 (145.5)	66,1 (142.7)	65,3 (140.8)	64,0 (138.0)
54,0 (180)				62,4 (133.2)	61,6 (133.0)	61,1 (132.0)	59,2 (127.8)	58,0 (125.1)	57,2 (123.4)	56,0 (120.6)	55,1 (118.8)	53,8 (116.0)
60,0 (200)						52,9 (114.1)	51,0 (110.0)	49,8 (107.3)	49,1 (105.7)	47,8 (102.9)	47,0 (101.1)	45,7 (98.3)
66,0 (220)							44,3 (95.4)	43,1 (92.7)	42,3 (91.1)	41,1 (88.3)	40,2 (86.5)	39,0 (83.7)
70,0 (240)							40,4 (83.0)	39,2 (80.4)	38,5 (78.8)	37,2 (76.1)	36,4 (74.1)	35,0 (70.6)
74,0 (260)							36,9 (81.6)	35,7 (79.0)	35,0 (77.3)	33,8 (75.1)	32,8 (72.8)	31,2 (69.6)
82,0 (280)								29,6 (65.5)	28,8 (63.8)	27,2 (60.3)	26,2 (58.0)	24,7 (54.5)
90,0 (300)										21,8 (48.5)	20,9 (46.1)	19,3 (42.8)
94,0 (320)										19,3 (42.8)	18,4 (40.6)	16,9 (37.2)
102,0 (340)												12,7 (28.0)
106,0 (360)												10,8 (23.8)

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.

MAX-ER™ 2000

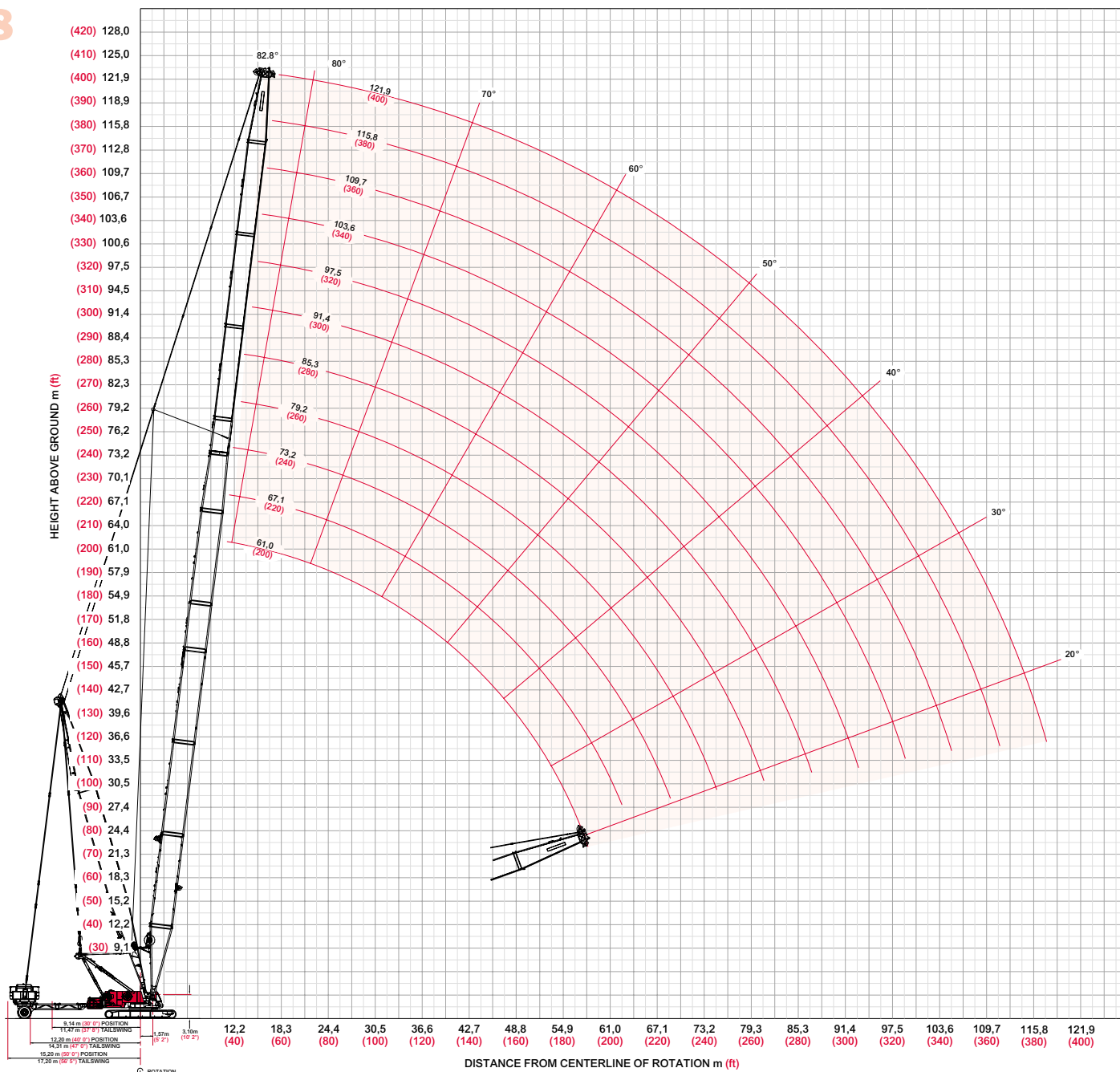




# long-reach boom range diagram

## No. 79-44 Long-Reach Boom

68



MAX-ER™ 2000



# long-reach load charts

## Liftcrane Boom Capacities - MAX-ER 2000 on 2250

### Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,220 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight  
209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

69

360° Rating

kg (lb) x 1 000

Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	79,2 (260)	85,3 (280)	91,4 (300)	97,5 (320)	103,6 (340)	109,7 (360)	115,8 (380)	121,9 (400)
<b>Radius</b>											
11,6 (38)	272,1 (600.0)	257,5 (567.9)	233,7 (515.3)								
14,0 (50)	267,5 (545.8)	252,1 (543.7)	228,7 (500.3)	200,2 (437.3)	169,1 (370.3)	142,5 (313.3)	- (280.9)	- (241.0)			
18,0 (60)	208,5 (452.3)	207,6 (450.3)	207,8 (447.6)	194,2 (427.3)	158,5 (347.4)	141,2 (311.1)	125,7 (276.9)	108,9 (239.8)	92,1 (202.4)	79,9 (175.8)	- (148.0)
20,0 (70)	186,8 (384.8)	185,9 (382.8)	184,6 (380.1)	184,9 (379.6)	151,8 (325.7)	140,2 (300.3)	124,5 (272.9)	108,2 (237.6)	90,2 (192.3)	78,7 (171.8)	64,0 (135.8)
24,0 (80)	153,9 (333.6)	153,0 (331.7)	151,8 (329.0)	151,6 (328.6)	139,7 (305.7)	128,8 (281.9)	120,1 (262.0)	106,9 (235.4)	81,5 (178.1)	74,4 (162.3)	56,9 (124.1)
26,0 (90)	141,1 (293.5)	140,2 (291.6)	139,0 (289.0)	138,8 (288.6)	134,0 (286.8)	123,7 (264.9)	114,8 (245.5)	105,7 (225.9)	77,5 (164.7)	70,5 (149.8)	53,5 (112.8)
30,0 (100)	120,6 (261.3)	119,7 (259.4)	118,5 (256.8)	118,4 (256.4)	118,5 (256.5)	114,0 (248.9)	105,3 (229.8)	96,8 (211.4)	69,7 (151.9)	63,3 (137.9)	48,2 (106.8)
32,0 (110)	112,2 (234.8)	111,4 (233.0)	110,1 (230.3)	110,0 (230.0)	110,1 (230.1)	109,4 (229.4)	100,8 (215.1)	92,8 (197.9)	66,0 (139.8)	59,9 (131.3)	48,2 (105.8)
36,0 (120)	98,1 (212.6)	97,3 (210.8)	96,2 (208.2)	96,0 (207.8)	96,1 (208.0)	95,7 (207.3)	92,3 (201.0)	85,0 (185.2)	59,2 (128.8)	58,9 (129.7)	47,6 (104.8)
38,0 (130)	92,2 (193.8)	91,4 (192.0)	90,2 (189.4)	90,1 (189.0)	90,1 (189.2)	89,9 (188.6)	87,9 (184.5)	81,4 (173.2)	57,9 (127.0)	58,4 (128.1)	47,3 (103.8)
44,0 (150)	77,6 (163.5)	76,8 (161.7)	75,6 (159.1)	75,5 (158.8)	75,6 (159.0)	75,3 (158.4)	73,4 (154.3)	72,9 (153.7)	56,4 (123.4)	57,0 (124.9)	46,4 (101.8)
50,0 (170)	66,4 (140.1)	65,6 (138.4)	64,5 (135.9)	64,3 (135.6)	64,4 (135.8)	64,2 (135.2)	62,3 (131.1)	62,0 (130.5)	54,8 (119.8)	55,6 (121.7)	45,5 (99.8)
56,0 (190)	57,5 (121.5)	56,8 (119.9)	55,6 (117.4)	55,5 (117.1)	55,6 (117.4)	55,3 (116.8)	53,5 (112.6)	53,2 (112.1)	52,9 (112.0)	53,0 (111.3)	44,6 (97.8)
64,0 (210)		47,5 (104.8)	46,4 (102.3)	46,3 (102.1)	46,4 (102.4)	46,1 (101.8)	44,3 (97.7)	44,0 (97.2)	44,0 (97.1)	43,6 (96.3)	43,4 (95.8)
68,0 (230)			42,5 (89.7)	42,4 (89.6)	42,6 (89.9)	42,3 (89.4)	40,4 (85.2)	40,2 (84.7)	40,2 (84.7)	39,9 (83.9)	39,7 (83.7)
76,0 (250)				35,9 (78.9)	36,1 (79.3)	35,8 (78.8)	34,0 (74.7)	33,8 (74.3)	33,8 (74.2)	33,4 (73.5)	33,3 (73.3)
80,0 (270)					33,1 (66.3)	33,1 (67.6)	31,2 (65.7)	31,0 (65.3)	31,0 (65.3)	30,7 (64.6)	30,6 (64.3)
88,0 (290)						23,7 (51.2)	26,4 (57.8)	26,2 (57.5)	26,3 (57.5)	25,9 (56.8)	25,8 (56.6)
92,0 (310)							24,3 (50.9)	24,2 (50.6)	24,2 (50.7)	23,8 (50.0)	23,8 (49.8)
100,0 (330)								20,2 (43.5)	20,5 (44.7)	20,2 (44.0)	20,1 (43.9)
104,0 (350)									17,6 (33.7)	18,0 (35.1)	18,4 (36.6)
112,0 (370)										12,0 (25.2)	12,9 (27.4)
116,0 (390)											10,3 (18.6)

MAX-ER™ 2000

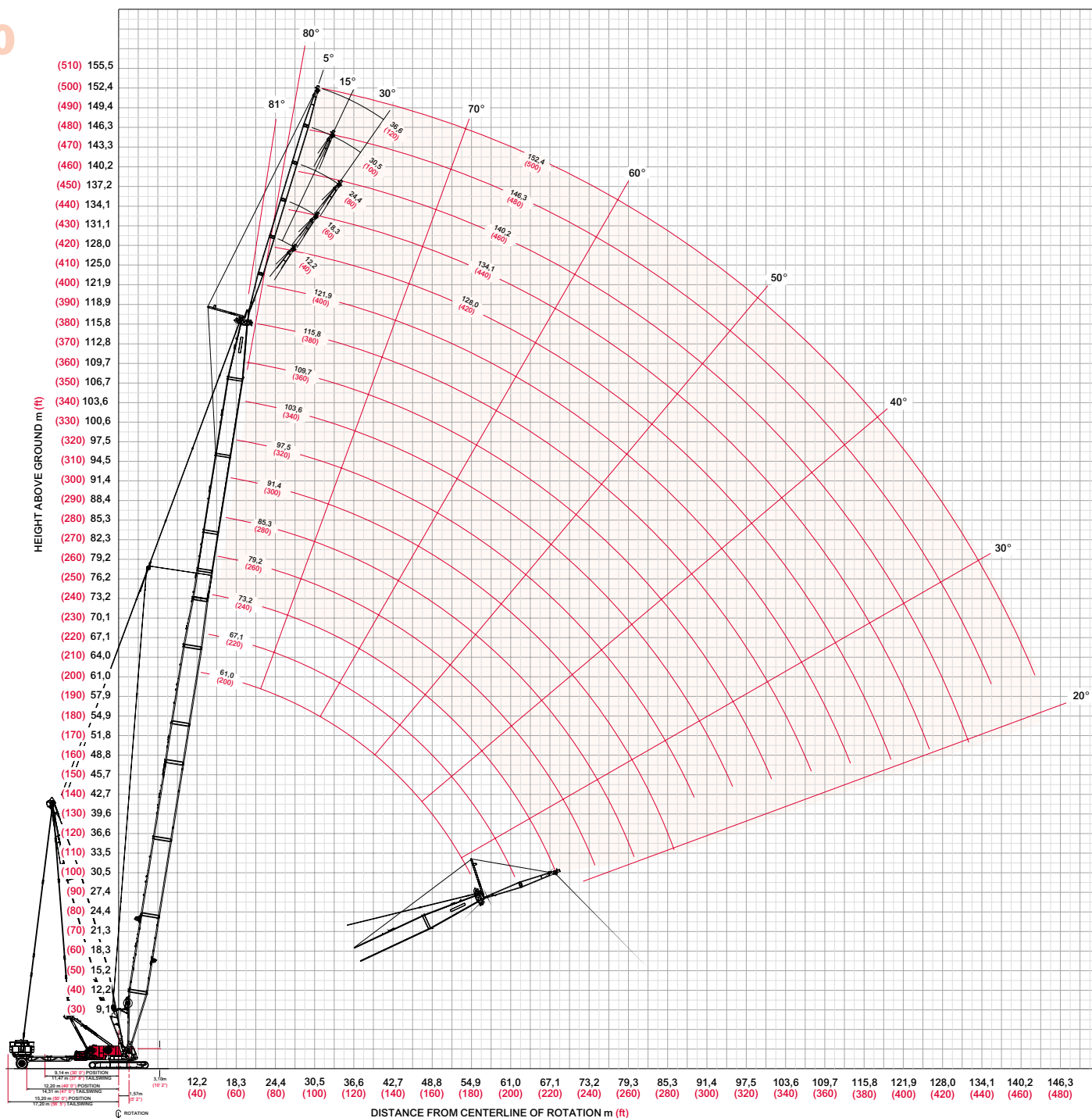
Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.  
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



# fixed jib range diagram

## No. 132 Fixed Jib on No. 79-44 Long-Reach Boom

70



# fixed jib load charts

## Liftcrane Jib Capacities - MAX-ER 2000 on 2250

Jib No. 132 with 6 096 mm (20 Ft) Strut on

Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

5° Offset						30° Offset					
Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)
Jib 12,2 m (40 ft)	Radius 15,2 (50)	45,3 (100.0)				Jib 12,2 m (40 ft)	Radius 20,0 (65)	22,9 (50.7)			
	18,0 (60)	43,3 (94.8)	- (98.5)				24,0 (80)	21,3 (46.7)	22,6 (49.7)	- (55.4)	
	24,0 (80)	38,0 (83.3)	41,3 (90.5)	41,2 (90.4)	37,6 (83.1)		30,0 (100)	19,3 (42.4)	20,8 (45.6)	25,1 (55.4)	25,1 (55.4)
	32,0 (110)	32,9 (70.9)	36,3 (78.4)	36,8 (79.8)	37,6 (82.4)		36,0 (120)	17,7 (38.9)	19,3 (42.3)	24,0 (52.7)	24,8 (54.5)
	42,0 (140)	28,4 (62.2)	31,7 (69.5)	32,7 (71.6)	34,0 (74.5)		42,0 (140)	16,5 (36.2)	18,0 (39.5)	22,5 (49.5)	23,4 (51.4)
	50,0 (170)	25,8 (55.9)	28,9 (62.6)	30,0 (65.2)	31,4 (68.2)		50,0 (170)	15,1 (33.0)	16,6 (36.2)	20,9 (45.5)	21,8 (47.5)
	66,0 (220)	22,4 (49.2)	24,9 (54.5)	26,1 (57.2)	27,3 (59.9)		58,0 (200)		15,5 (33.6)	19,6 (42.3)	20,4 (44.2)
	82,0 (270)		15,3 (32.9)	23,4 (51.7)	24,5 (54.0)		70,0 (230)		11,9 (26.2)	18,0 (39.8)	18,8 (41.6)
	94,0 (320)			22,2 (48.5)	23,0 (48.6)		78,0 (260)			17,2 (37.9)	18,0 (39.5)
	110,0 (370)				13,5 (29.7)		90,0 (300)				17,6 (38.7)
	122,0 (410)						98,0 (330)				

5° Offset						30° Offset					
Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)
Jib 18,3 m (60 ft)	Radius 15,2 (50)					Jib 18,3 m (60 ft)	Radius 20,0 (65)				
	18,0 (60)	34,2 (75.2)					24,0 (80)	- (33.8)			
	24,0 (80)	32,3 (71.1)	32,7 (72.1)	32,0 (70.4)	- (69.9)		30,0 (100)	14,0 (30.7)	14,8 (32.6)	18,8 (41.3)	- (42.3)
	32,0 (110)	30,3 (66.0)	31,0 (67.8)	30,6 (67.0)	30,5 (66.8)		36,0 (120)	12,8 (28.2)	13,8 (30.2)	17,6 (38.6)	18,1 (39.7)
	42,0 (140)	28,2 (62.0)	29,1 (64.1)	29,1 (64.0)	29,2 (64.2)		42,0 (140)	11,9 (26.2)	12,8 (28.2)	16,5 (36.3)	17,1 (37.5)
	50,0 (170)	24,5 (52.3)	27,9 (61.2)	28,0 (61.4)	28,2 (61.8)		50,0 (170)	10,9 (23.8)	11,9 (25.8)	15,4 (33.4)	15,9 (34.7)
	66,0 (220)	18,7 (40.7)	22,7 (49.3)	26,3 (57.9)	26,6 (58.6)		58,0 (200)	10,1 (22.0)	11,1 (23.9)	14,4 (31.1)	15,0 (32.4)
	82,0 (270)		14,8 (32.0)	21,8 (48.1)	23,9 (52.7)		70,0 (230)		10,2 (22.5)	13,2 (29.2)	13,7 (30.4)
	94,0 (320)			19,3 (41.3)	21,1 (45.1)		78,0 (260)			12,6 (27.8)	13,1 (28.9)
	110,0 (370)				16,2 (32.2)		90,0 (300)			12,4 (27.3)	12,8 (28.2)
	122,0 (410)						98,0 (330)				12,4 (27.2)

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.

71

MAX-ER™ 2000



# fixed jib load charts

72

## Liftcrane Jib Capacities - MAX-ER 2000 on 2250

Jib No. 132 with 6 096 mm (20 Ft) Strut on

Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

5° Offset						30° Offset					
Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)
Radius						Radius					
20,0 (65)	20,7 (45.8)					32,0 (105)	9,4 (20.8)				
26,0 (90)	19,3 (42.0)	19,7 (42.9)	19,2 (42.0)			36,0 (120)	8,8 (19.4)	9,3 (20.4)	- (27.0)		
38,0 (125)	16,8 (37.2)	17,7 (39.0)	17,5 (38.7)	17,7 (39.0)	17,5 (38.6)	42,0 (140)	8,1 (17.7)	8,6 (18.9)	11,5 (25.2)	11,8 (25.9)	12,1 (26.5)
44,0 (150)	15,6 (33.9)	16,7 (36.4)	16,7 (36.5)	16,9 (37.1)	16,9 (36.9)	50,0 (170)	7,2 (15.7)	7,8 (17.0)	10,6 (23.0)	10,9 (23.7)	11,2 (24.4)
58,0 (200)	13,3 (28.4)	14,6 (31.3)	14,9 (32.2)	15,4 (33.3)	15,5 (33.8)	58,0 (200)	6,6 (14.1)	7,2 (15.4)	9,8 (21.1)	10,1 (21.9)	10,5 (22.6)
74,0 (250)	10,8 (23.1)	12,5 (27.2)	13,1 (28.4)	13,7 (29.7)	14,0 (30.6)	70,0 (240)	5,8 (12.6)	6,4 (13.8)	8,8 (19.1)	9,2 (19.9)	9,5 (20.7)
90,0 (300)		9,2 (18.9)	11,6 (25.3)	12,2 (26.7)	12,6 (27.7)	82,0 (280)		5,8 (10.8)	8,1 (17.6)	8,4 (18.4)	8,8 (19.1)
106,0 (350)			10,4 (23.0)	11,0 (24.2)	11,5 (25.3)	94,0 (310)			7,5 (16.7)	7,9 (17.4)	8,2 (18.1)
122,0 (400)				10,2 (22.5)	10,5 (23.3)	102,0 (340)				7,6 (16.7)	7,9 (17.3)
134,0 (440)					6,9 (15.3)	110,0 (370)					7,6 (16.6)
142,0 (470)						118,0 (390)					

5° Offset						30° Offset					
Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	Boom m (ft)	61,0 (200)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)
Radius						Radius					
20,0 (65)						32,0 (105)					
26,0 (90)	15,6 (33.7)	16,1 (35.0)	15,7 (34.3)			36,0 (120)	8,0 (17.5)				
38,0 (125)	12,9 (28.4)	13,8 (30.5)	13,8 (30.5)	14,1 (31.2)	14,1 (31.2)	42,0 (140)	7,2 (15.9)	7,7 (16.9)	8,6 (19.0)	8,7 (19.3)	
44,0 (150)	11,7 (25.1)	12,8 (27.6)	12,9 (27.9)	13,3 (28.8)	13,4 (29.3)	50,0 (170)	6,4 (13.9)	6,9 (15.0)	8,0 (17.5)	8,2 (17.9)	8,3 (18.2)
58,0 (200)	9,4 (19.8)	10,6 (22.6)	10,9 (23.4)	11,5 (24.6)	11,8 (25.4)	58,0 (200)	5,7 (12.3)	6,2 (13.5)	7,5 (16.1)	7,7 (16.6)	7,8 (17.1)
74,0 (250)	7,4 (15.9)	8,7 (18.7)	9,1 (19.7)	9,7 (21.1)	10,2 (22.0)	70,0 (240)	5,0 (10.7)	5,5 (11.9)	6,8 (14.7)	7,0 (15.2)	7,2 (15.7)
90,0 (300)	6,0 (13.2)	7,2 (15.6)	7,7 (16.8)	8,3 (18.1)	8,7 (19.2)	82,0 (280)		4,9 (10.6)	6,2 (13.5)	6,5 (14.0)	6,7 (14.5)
106,0 (350)		2,8 (5.8)	6,6 (14.5)	7,1 (15.7)	7,6 (16.8)	94,0 (310)		3,0 (6.3)	5,8 (12.8)	6,0 (13.3)	6,2 (13.8)
122,0 (400)			- (12.8)	6,2 (13.8)	6,7 (14.8)	102,0 (340)			5,6 (12.3)	5,8 (12.7)	5,9 (13.2)
134,0 (440)				5,7 (12.7)	6,1 (13.5)	110,0 (370)				5,6 (12.3)	5,7 (12.6)
142,0 (470)					5,2 (10.5)	118,0 (390)					5,6 (12.4)

Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.

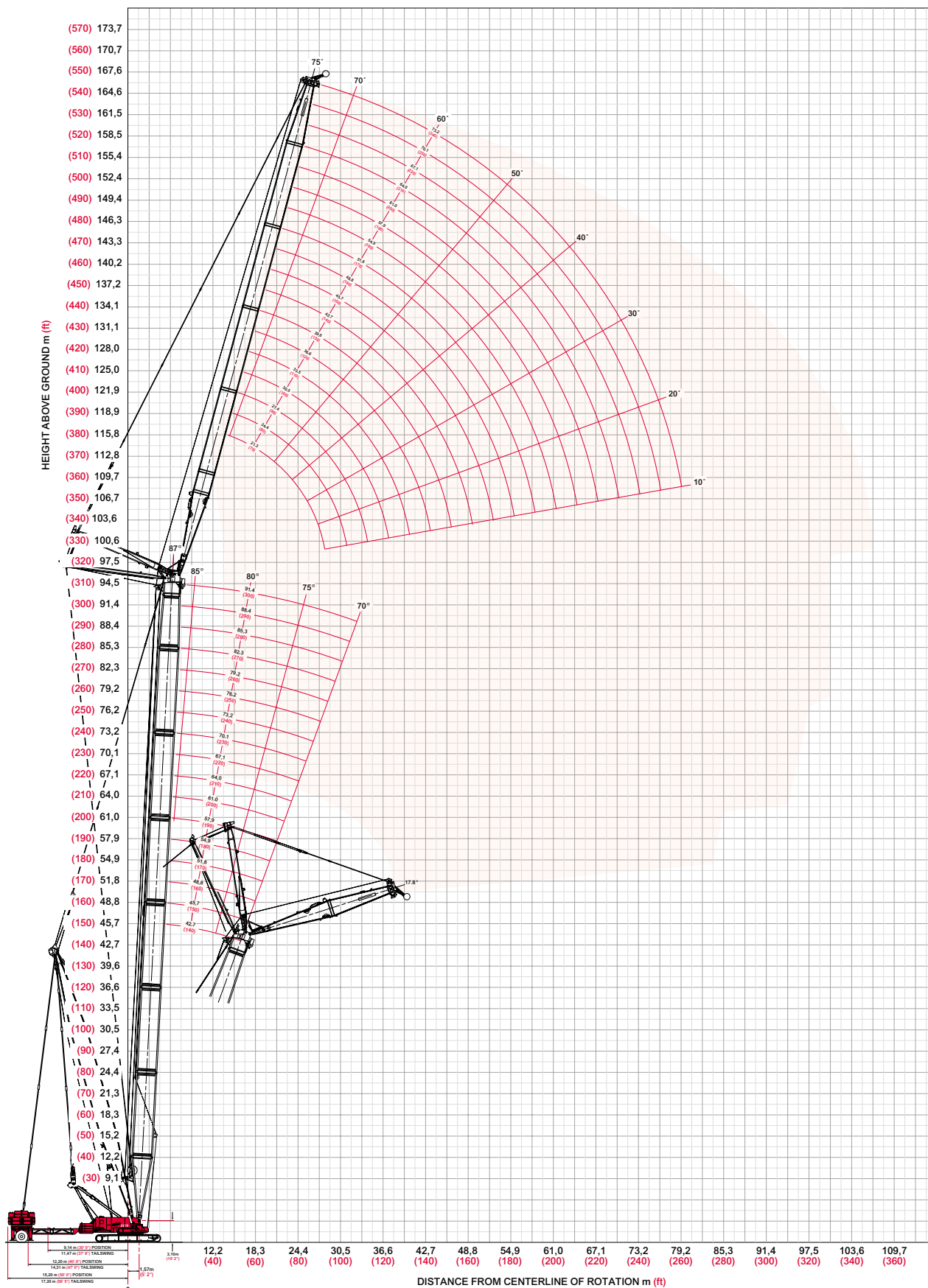
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



# luffing jib range diagram

## No. 44 Luffing Jib on No. 79 Boom

73



MAX-ER™ 2000





# luffing jib load charts

74

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 44 on

Boom No. 79 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

85° Angle for Boom less than 61,0 m (200') and

87° Angle for Boom 61,0 m (200') or longer

	Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)			Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)
	Radius								Radius					
Luffing Jib Length 21,3 m (70 ft)	13,7 (45)	226,7 (500.0)		144,6 (319.0)			Luffing Jib Length 39,6 m (130 ft)		13,7 (45)					
	16,0 (55)	184,3 (402.9)	170,1 (367.5)	140,6 (304.2)	103,8 (228.4)	76,2 (167.9)			16,0 (55)					
	18,0 (65)	175,4 (340.8)	161,2 (338.6)	134,3 (284.8)	103,0 (225.0)	75,8 (166.1)			18,0 (65)	- (303.8)		- (206.2)	- (163.1)	- (123.0)
	24,0 (80)	114,3 (246.0)	123,0 (264.1)	112,5 (242.8)	93,0 (203.3)	73,9 (162.5)			24,0 (80)	122,2 (263.9)	115,4 (252.6)	85,8 (187.7)	68,9 (150.9)	54,6 (120.0)
	28,0 (95)								28,0 (95)	102,9 (212.8)	106,4 (228.7)	77,9 (167.6)	63,4 (137.0)	51,0 (110.6)
	32,0 (105)								32,0 (105)	81,3 (179.3)	87,1 (192.2)	70,1 (154.6)	57,9 (127.8)	47,2 (104.2)
	34,0 (115)								34,0 (115)	72,9 (152.0)	78,1 (162.9)	66,5 (142.5)	55,3 (119.2)	45,4 (98.1)
	38,0 (130)								38,0 (130)	63,0 (128.0)	67,7 (137.9)	60,0 (127.3)	50,6 (108.0)	41,9 (89.9)
	42,0 (140)								42,0 (140)	50,3 (106.1)	54,6 (115.7)	51,4 (112.6)	46,8 (102.3)	39,2 (85.6)
	44,0 (150)								44,0 (150)	45,9 (84.5)	48,1 (99.0)	46,3 (-)	45,6 (92.2)	38,2 (83.3)
Luffing Jib Length 57,9 m (190 ft)	24,0 (80)	- (189.6)		61,1 (134.3)	49,6 (109.0)	38,8 (84.3)	Luffing Jib Length 73,2 m (240 ft)		24,0 (80)					
	26,0 (90)	84,1 (182.0)	77,7 (168.9)	59,6 (128.9)	48,5 (105.1)	38,8 (84.3)			26,0 (90)			44,7 (97.5)	- (79.9)	- (63.6)
	30,0 (100)	79,6 (174.4)	74,2 (162.6)	56,1 (122.9)	45,9 (100.6)	36,9 (81.0)			30,0 (100)	61,5 (134.7)	- (120.5)	43,1 (94.6)	35,3 (77.6)	28,2 (62.0)
	36,0 (120)	67,0 (146.8)	67,4 (147.1)	50,3 (109.8)	41,6 (90.8)	33,7 (73.8)			36,0 (120)	55,3 (120.7)	52,0 (114.1)	40,1 (87.7)	33,0 (72.2)	26,4 (57.9)
	42,0 (140)	54,4 (116.8)	57,5 (123.2)	44,4 (96.6)	37,1 (80.8)	30,4 (66.4)			42,0 (140)	49,2 (107.1)	48,4 (105.7)	36,6 (80.0)	30,2 (66.1)	24,3 (53.2)
	50,0 (170)	38,9 (83.2)	41,2 (88.2)	37,4 (79.4)	31,7 (67.6)	26,3 (56.3)			50,0 (170)	41,0 (84.4)	41,6 (88.4)	31,9 (68.1)	26,5 (56.7)	21,4 (46.0)
	60,0 (200)	27,1 (59.9)	28,8 (60.3)	28,8 (59.7)	26,8 (58.6)	22,6 (49.4)			60,0 (200)	28,1 (59.8)	29,7 (63.1)	26,4 (57.4)	22,2 (48.2)	18,1 (39.3)
	70,0 (230)								70,0 (230)	20,6 (45.4)	22,1 (48.6)	20,7 (45.4)	18,8 (41.4)	15,4 (34.1)
	74,0 (245)								74,0 (245)	16,7 (35.5)	18,3 (38.9)	18,1 (39.3)	17,8 (39.1)	14,7 (32.3)
	78,0 (260)								78,0 (260)	13,8 (25.1)	15,7 (31.0)		14,8 (28.4)	14,3 (31.3)

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.





# luffing jib load charts

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 44 on

Boom No. 79 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

80° Boom Angle

	Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)		Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)
	Radius							Radius					
Luffing Jib Length 21,3 m (70 ft)	20,0 (65)	186,5 (414.9)					Luffing Jib Length 39,6 m (130 ft)	20,0 (65)					
	22,0 (75)	169,1 (358.6)	165,6 (350.8)					22,0 (75)					
	26,0 (90)	129,4 (259.0)	139,3 (290.4)	136,0 (283.6)	108,1 (237.6)	– (173.6)		26,0 (90)	133,6 (281.8)				
	30,0 (100)	99,0 (210.7)	114,7 (244.5)	117,0 (253.7)	106,5 (234.4)	78,2 (172.2)		30,0 (100)	108,1 (231.6)	116,7 (255.1)	– (226.0)		
	36,0 (120)				93,3 (202.2)	76,5 (168.4)		36,0 (120)	82,3 (176.1)	94,0 (199.3)	94,5 (205.7)	76,5 (167.2)	57,2 (126.1)
	42,0 (140)							42,0 (140)	62,0 (138.0)	67,9 (144.6)	76,2 (162.2)	68,9 (150.1)	55,8 (121.7)
	48,0 (160)							48,0 (160)	45,9 (98.8)	52,9 (111.2)	60,2 (127.3)	60,7 (131.8)	50,2 (109.4)
	50,0 (170)							50,0 (170)		48,4 (87.8)	53,7 (105.2)	58,2 (121.6)	48,5 (103.4)
	54,0 (180)							54,0 (180)				51,5 (105.4)	45,1 (98.3)
	56,0 (190)							56,0 (190)					43,8 (95.0)

	Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)		Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)
	Radius							Radius					
Luffing Jib Length 57,9 m (190 ft)	24,0 (80)						Luffing Jib Length 73,2 m (240 ft)	24,0 (80)					
	26,0 (90)							26,0 (90)					
	30,0 (100)							30,0 (100)					
	36,0 (120)	77,7 (170.3)	75,5 (165.5)					36,0 (120)					
	44,0 (150)	57,5 (123.4)	61,4 (130.9)	62,3 (134.5)	51,1 (110.7)	40,9 (88.9)		44,0 (150)	51,3 (109.7)	51,2 (109.9)	47,0 (102.9)	– (84.7)	
	54,0 (180)	39,9 (85.0)	43,9 (93.7)	48,1 (102.5)	44,6 (97.1)	36,4 (79.5)		54,0 (180)	40,7 (89.0)	42,3 (93.1)	43,1 (93.7)	36,1 (79.1)	28,9 (63.3)
	64,0 (210)	27,7 (61.1)	31,5 (69.5)	35,0 (77.2)	37,3 (82.3)	31,1 (68.7)		64,0 (210)	28,9 (63.8)	31,6 (69.7)	34,3 (75.7)	32,0 (70.6)	25,9 (57.2)
	72,0 (240)				28,2 (57.3)	27,4 (59.7)		72,0 (240)	22,5 (49.5)	25,0 (54.9)	25,8 (57.0)	28,0 (61.2)	23,1 (50.2)
	82,0 (270)							82,0 (270)	14,2 (31.4)	16,2 (35.0)	18,6 (40.4)	20,8 (45.3)	19,9 (43.7)
	90,0 (300)							90,0 (300)					16,5 (31.0)

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.

MAX-ER™ 2000



# luffing jib load charts

76

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 44 on

Boom No. 79 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

70° Boom Angle

	Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)		Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)
	Radius							Radius					
Luffing Jib Length 21,3 m (70 ft)	30,0 (100)	- (252.0)					Luffing Jib Length 39,6 m (130 ft)	30,0 (100)					
	32,0 (110)	108,5 (227.6)						32,0 (110)					
	36,0 (120)	95,4 (206.8)	91,4 (198.2)					36,0 (120)					
	38,0 (130)	89,8 (-)	86,2 (181.3)	- (172.5)				38,0 (130)	- (186.5)				
	44,0 (150)			69,4 (146.4)	65,4 (138.0)			44,0 (150)	75,3 (156.0)	- (151.2)			
	50,0 (170)				56,2 (-)	52,3 (110.6)		50,0 (170)	61,4 (123.1)	61,9 (131.0)	58,3 (123.5)	- (115.0)	
	56,0 (190)							56,0 (190)	46,7 (-)	54,2 (114.8)	51,1 (108.2)	47,5 (100.7)	- (92.4)
	64,0 (210)							64,0 (210)			43,2 (95.4)	40,3 (89.0)	36,9 (81.5)
	70,0 (230)							70,0 (230)					32,8 (72.3)
	72,0 (240)							72,0 (240)					31,6 (68.0)
	Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)		Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)
	Radius							Radius					
Luffing Jib Length 57,9 m (190 ft)	50,0 (165)	- (132.9)					Luffing Jib Length 73,2 m (240 ft)	50,0 (165)					
	52,0 (175)	56,2 (117.5)	- (122.2)					52,0 (175)					
	56,0 (185)	47,9 (104.2)	52,3 (114.4)					56,0 (185)					
	60,0 (200)	43,4 (94.6)	48,0 (103.2)	44,9 (97.2)				60,0 (200)	41,8 (89.1)				
	66,0 (220)	35,1 (74.2)	41,9 (88.6)	39,9 (86.3)	36,7 (79.4)	- (71.7)		66,0 (220)	33,8 (71.8)	39,4 (83.7)	38,0 (82.2)		
	76,0 (250)		29,8 (65.6)	33,1 (72.9)	30,4 (66.9)	27,4 (60.3)		76,0 (250)	26,0 (57.0)	30,3 (66.8)	31,4 (69.2)	28,6 (62.8)	25,4 (55.9)
	84,0 (280)				26,4 (56.8)	23,7 (51.1)		84,0 (280)	18,8 (41.0)	22,7 (47.6)	26,8 (56.3)	24,7 (53.3)	21,8 (47.0)
	94,0 (310)							94,0 (310)		15,9 (34.8)	20,2 (43.2)	20,7 (45.4)	17,7 (38.8)
	98,0 (330)							98,0 (330)				19,3 (39.1)	16,2 (33.9)
	106,0 (350)							106,0 (350)					13,5 (29.2)

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.

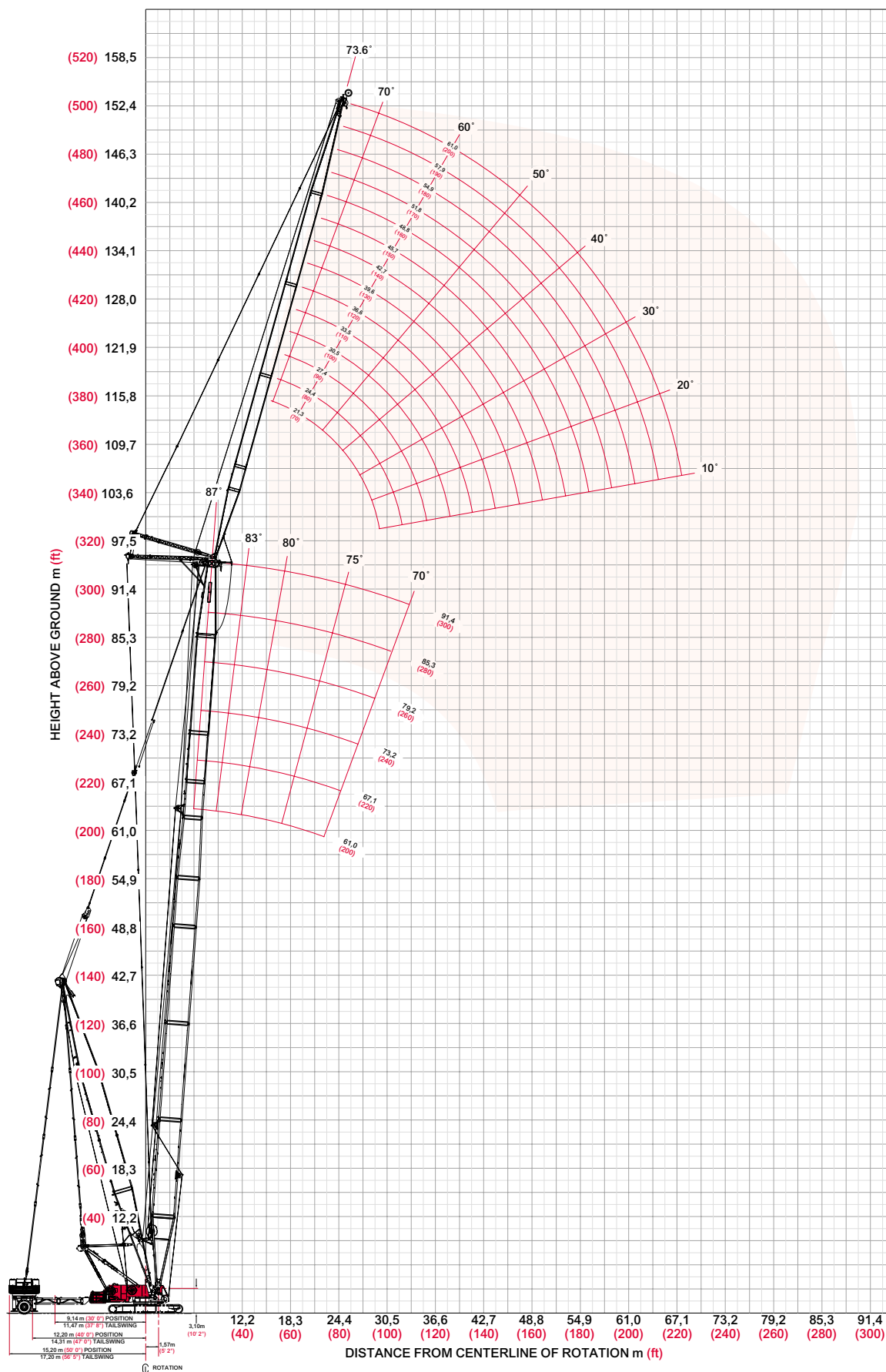


# luffing jib range diagram

## No. 133 Luffing Jib on No. 79-44 Long-Reach Boom

77

MAX-ER™ 2000



# luffing jib load charts

78

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 133A or No. 133 on

Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

85° Angle for Boom less than 67,1 m (220') and

87° Angle for Boom 67,1 m (220') or longer

	Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)			Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)
	Radius								Radius					
Luffing Jib Length 21,3 m (70 ft)	15,2 (50)	87,5 (193.0)	- (167.5)	78,7 (173.7)	71,8 (158.5)	61,0 (134.6)	Luffing Jib Length 36,6 m (120 ft)		15,2 (50)					
	18,0 (60)	69,2 (147.1)	57,6 (124.1)	59,3 (127.6)	63,7 (136.0)	61,0 (134.6)			18,0 (60)		50,9 (111.6)	50,5 (110.6)	48,0 (105.2)	42,5 (93.7)
	20,0 (70)	56,8 (112.2)	48,9 (97.8)	50,1 (100.1)	53,0 (105.3)	55,0 (108.6)			20,0 (70)	51,7 (110.3)	48,4 (102.2)	48,1 (102.8)	46,1 (98.8)	42,4 (93.5)
	24,0 (80)	41,8 (90.0)	37,2 (80.2)	37,9 (81.7)	39,6 (85.4)	40,6 (87.5)			24,0 (80)	43,9 (93.8)	38,6 (83.1)	39,4 (84.8)	41,1 (88.4)	40,1 (87.9)
	26,0 (90)	- (74.6)			- (71.2)	- (72.8)			26,0 (90)	38,2 (77.2)	34,1 (69.5)	34,8 (70.8)	36,2 (73.4)	36,9 (74.7)
	30,0 (100)								30,0 (100)	30,2 (65.1)	27,5 (59.3)	28,0 (60.3)	28,9 (62.2)	29,4 (63.3)
	32,0 (110)								32,0 (110)	27,3 (55.9)	24,9 (51.4)	25,4 (52.1)	26,1 (53.7)	26,5 (54.5)
	36,0 (120)								36,0 (120)	22,6 (48.7)	20,9 (45.0)	21,1 (45.6)	21,8 (46.9)	22,0 (47.5)
	38,0 (130)								38,0 (130)	20,7 (42.8)	19,2 (39.8)	19,4 (40.3)	20,0 (41.3)	20,2 (41.9)
	42,0 (140)								42,0 (140)	17,6 (37.9)			17,0 (36.7)	17,2 (37.1)
Luffing Jib Length 48,8 m (160 ft)	- (85)	- (77.7)	- (73.4)	- (73.0)	- (70.1)	- (65.9)	Luffing Jib Length 61,0 m (200 ft)		- (85)	- (56.8)	- (54.3)	- (53.9)	- (50.0)	- (48.1)
	28,0 (95)	33,4 (71.0)	30,8 (64.1)	31,3 (65.3)	30,6 (66.4)	28,8 (62.6)			28,0 (95)	24,8 (53.1)	23,1 (49.7)	23,2 (49.7)	22,3 (48.7)	21,5 (47.1)
	32,0 (110)	27,2 (55.7)	24,9 (51.0)	25,2 (51.8)	26,0 (53.4)	26,5 (54.2)			32,0 (110)	21,9 (46.0)	20,4 (42.9)	20,5 (43.1)	20,3 (42.9)	20,1 (42.6)
	38,0 (125)	20,5 (45.1)	18,9 (41.6)	19,2 (42.2)	19,7 (43.4)	20,0 (44.0)			38,0 (125)	17,8 (39.3)	16,6 (36.6)	16,7 (36.8)	16,8 (37.1)	16,8 (37.1)
	42,0 (140)	17,3 (37.2)	16,1 (34.6)	16,3 (35.1)	16,7 (36.0)	16,9 (36.4)			42,0 (140)	15,4 (33.3)	14,3 (30.9)	14,5 (31.3)	14,7 (31.7)	14,8 (31.9)
	46,0 (155)	14,8 (31.2)	13,8 (29.2)	14,0 (29.5)	14,3 (30.2)	14,5 (30.6)			46,0 (155)	13,3 (28.0)	12,3 (26.0)	12,5 (26.3)	12,7 (26.9)	12,8 (27.1)
	50,0 (170)	12,8 (26.5)	11,9 (24.8)	12,1 (25.1)	12,4 (25.7)	12,5 (26.0)			50,0 (170)	11,4 (23.4)	10,5 (21.7)	10,6 (22.0)	10,9 (22.5)	11,0 (22.8)
	56,0 (185)								56,0 (185)	8,9 (19.4)	8,2 (17.9)	8,3 (18.2)	8,6 (18.7)	8,7 (19.0)
	60,0 (200)								60,0 (200)	7,5 (15.9)	6,9 (14.6)	7,0 (14.9)	7,2 (15.4)	7,3 (15.6)
	64,0 (210)								64,0 (210)	6,3 (13.9)	5,7 (12.7)	5,8 (12.9)	6,0 (13.4)	6,1 (13.6)
	66,0 (220)								66,0 (220)	5,7 (12.1)			5,5 (11.8)	5,6 (11.9)

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.



# luffing jib load charts

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 133A or No. 133 on

Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

### 80° Boom Angle

	Boom m (ft)						Boom m (ft)				
	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)		61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)
Luffing Jib Length 21,3 m (70 ft)	Radius 20,0 (70)	- (190.1)					Radius 20,0 (70)				
	24,0 (80)	64,1 (136.6)	71,9 (151.5)	- (170.0)			24,0 (80)				
	26,0 (90)	53,6 (105.7)	58,8 (114.8)	64,9 (125.5)	61,2 (129.4)	- (122.3)	26,0 (90)	- (108.9)			
	30,0 (100)	40,0 (85.6)	42,9 (91.8)	46,3 (98.7)	54,0 (116.6)	51,6 (112.2)	30,0 (100)	41,8 (89.1)	44,9 (95.7)	47,4 (103.3)	
	34,0 (115)		33,4 (69.6)	35,6 (73.9)	40,8 (84.1)	44,3 (90.5)	34,0 (115)	32,5 (67.8)	34,6 (71.9)	36,9 (76.4)	40,5 (87.1)
	38,0 (130)				32,0 (72.3)	34,2 (76.6)	38,0 (130)	26,4 (54.0)	27,8 (56.7)	29,4 (59.7)	33,0 (66.6)
	44,0 (145)						44,0 (145)	20,2 (44.2)	21,1 (46.2)	22,0 (48.3)	24,3 (53.1)
	48,0 (160)						48,0 (160)	17,2 (36.9)	17,9 (38.4)	18,6 (40.0)	20,3 (43.6)
	50,0 (170)						50,0 (170)		16,6 (36.6)	17,2 (38.6)	18,8 (40.2)
	54,0 (180)						54,0 (180)				

	Boom m (ft)						Boom m (ft)				
	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)		61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)
Luffing Jib Length 48,8 m (160 ft)	Radius 34,0 (115)	33,0 (68.0)	33,6 (72.3)	33,9 (73.5)			Radius 34,0 (115)				
	38,0 (125)	26,3 (57.9)	27,8 (61.1)	29,5 (64.6)	31,2 (68.7)	29,7 (65.5)	38,0 (125)	21,5 (47.3)	- (48.5)	- (49.6)	
	42,0 (140)	21,7 (46.6)	22,8 (48.9)	24,0 (51.3)	26,6 (56.9)	27,7 (60.0)	42,0 (140)	18,8 (40.6)	19,4 (41.9)	20,0 (43.2)	20,6 (44.7)
	46,0 (155)	18,3 (38.4)	19,1 (40.1)	20,0 (41.9)	22,0 (45.9)	23,1 (48.1)	46,0 (155)	16,3 (34.5)	16,9 (35.8)	17,5 (37.0)	18,4 (39.1)
	50,0 (170)	15,6 (32.1)	16,2 (33.5)	16,9 (34.9)	18,5 (37.9)	19,3 (39.5)	50,0 (170)	14,1 (29.1)	14,6 (30.3)	15,2 (31.4)	16,2 (33.7)
	56,0 (185)	12,5 (27.2)	13,0 (28.3)	13,5 (29.4)	14,5 (31.7)	15,1 (33.0)	56,0 (185)	11,2 (24.4)	11,7 (25.4)	12,2 (26.5)	13,1 (28.6)
	60,0 (200)	10,8 (23.2)	11,2 (24.1)	11,7 (25.0)	12,6 (26.9)	13,1 (27.9)	60,0 (200)	9,5 (20.2)	9,9 (21.2)	10,4 (22.1)	11,3 (24.1)
	64,0 (215)				10,9 (22.9)	11,3 (23.8)	64,0 (215)	8,0 (16.6)	8,4 (17.4)	8,8 (18.3)	9,7 (20.1)
	70,0 (230)						70,0 (230)	6,1 (13.6)	6,5 (14.3)	6,8 (15.0)	7,5 (16.6)
	74,0 (245)						74,0 (245)		5,4 (11.8)	5,7 (12.2)	6,3 (13.5)

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.

79

MAX-ER™ 2000



# luffing jib load charts

80

## Liftcrane Luffing Jib Capacities - MAX-ER 2000 on 2250

Luffing Jib No. 133A or No. 133 on

Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

70° Boom Angle

Luffing Jib Length 21,3 m (70 ft)						Luffing Jib Length 36,6 m (120 ft)					
Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)	Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)
Radius						Radius					
34,0 (115)	- (132.8)					34,0 (115)					
38,0 (125)	47,2 (103.4)	- (122.0)				38,0 (125)					
40,0 (135)	41,0 (84.1)	47,5 (96.5)	56,3 (112.7)			40,0 (135)					
44,0 (145)	32,2 (70.3)	36,3 (79.3)	41,5 (90.4)	- (91.9)		44,0 (145)	- (72.6)				
46,0 (155)			36,5 (74.9)	39,7 (84.6)	37,4 (79.6)	46,0 (155)	29,8 (61.7)	33,5 (68.8)	- (77.5)		
50,0 (165)				35,6 (77.9)	33,5 (73.4)	50,0 (165)	24,4 (53.3)	27,0 (58.8)	30,1 (65.4)		
54,0 (180)						54,0 (180)	20,5 (43.7)	22,4 (47.7)	24,6 (52.3)	27,5 (59.7)	25,6 (55.6)
58,0 (195)						58,0 (195)	17,4 (36.5)	18,9 (39.5)	20,6 (43.0)	24,9 (51.4)	23,6 (50.5)
64,0 (210)						64,0 (210)				19,1 (42.3)	20,7 (45.7)
68,0 (225)						68,0 (225)					17,7 (38.3)
72,0 (235)						72,0 (235)					

Luffing Jib Length 48,8 m (160 ft)						Luffing Jib Length 61,0 m (200 ft)					
Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)	Boom m (ft)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)
Radius						Radius					
54,0 (180)	20,2 (43.1)	22,2 (47.2)	- (51.9)			54,0 (180)					
56,0 (190)	18,6 (38.0)	20,3 (41.4)	22,3 (45.2)	- (48.4)		56,0 (190)	- (34.1)	- (36.6)			
60,0 (200)	15,8 (33.7)	17,1 (36.5)	18,7 (39.7)	21,1 (45.9)	- (42.2)	60,0 (200)	14,3 (30.6)	15,4 (33.0)	- (35.3)		
64,0 (210)	13,6 (30.1)	14,7 (32.5)	15,9 (35.2)	18,8 (41.6)	18,1 (40.0)	64,0 (210)	12,3 (27.3)	13,4 (29.6)	14,4 (31.8)	16,2 (35.8)	
66,0 (220)	12,7 (27.0)	13,6 (29.0)	14,7 (31.4)	17,4 (36.8)	17,4 (37.8)	66,0 (220)	11,4 (24.3)	12,4 (26.4)	13,4 (28.5)	15,2 (32.6)	- (31.7)
72,0 (235)	- (23.0)	11,0 (24.7)	11,9 (26.6)	13,8 (30.9)	14,9 (33.4)	72,0 (235)	9,0 (20.2)	9,8 (22.1)	10,7 (24.0)	12,5 (28.0)	13,2 (29.4)
76,0 (250)				11,9 (26.2)	12,8 (28.2)	76,0 (250)	7,6 (16.7)	8,3 (18.3)	9,1 (20.0)	10,8 (23.7)	11,6 (25.6)
80,0 (265)					11,1 (24.0)	80,0 (265)	6,3 (13.6)	7,0 (15.0)	7,7 (16.5)	9,2 (19.8)	10,0 (21.5)
84,0 (280)						84,0 (280)		5,8 (12.3)	6,4 (13.5)	7,8 (16.3)	8,5 (17.9)
88,0 (295)						88,0 (295)				6,6 (13.4)	7,2 (14.7)
92,0 (305)						92,0 (305)					6,1 (12.9)

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.

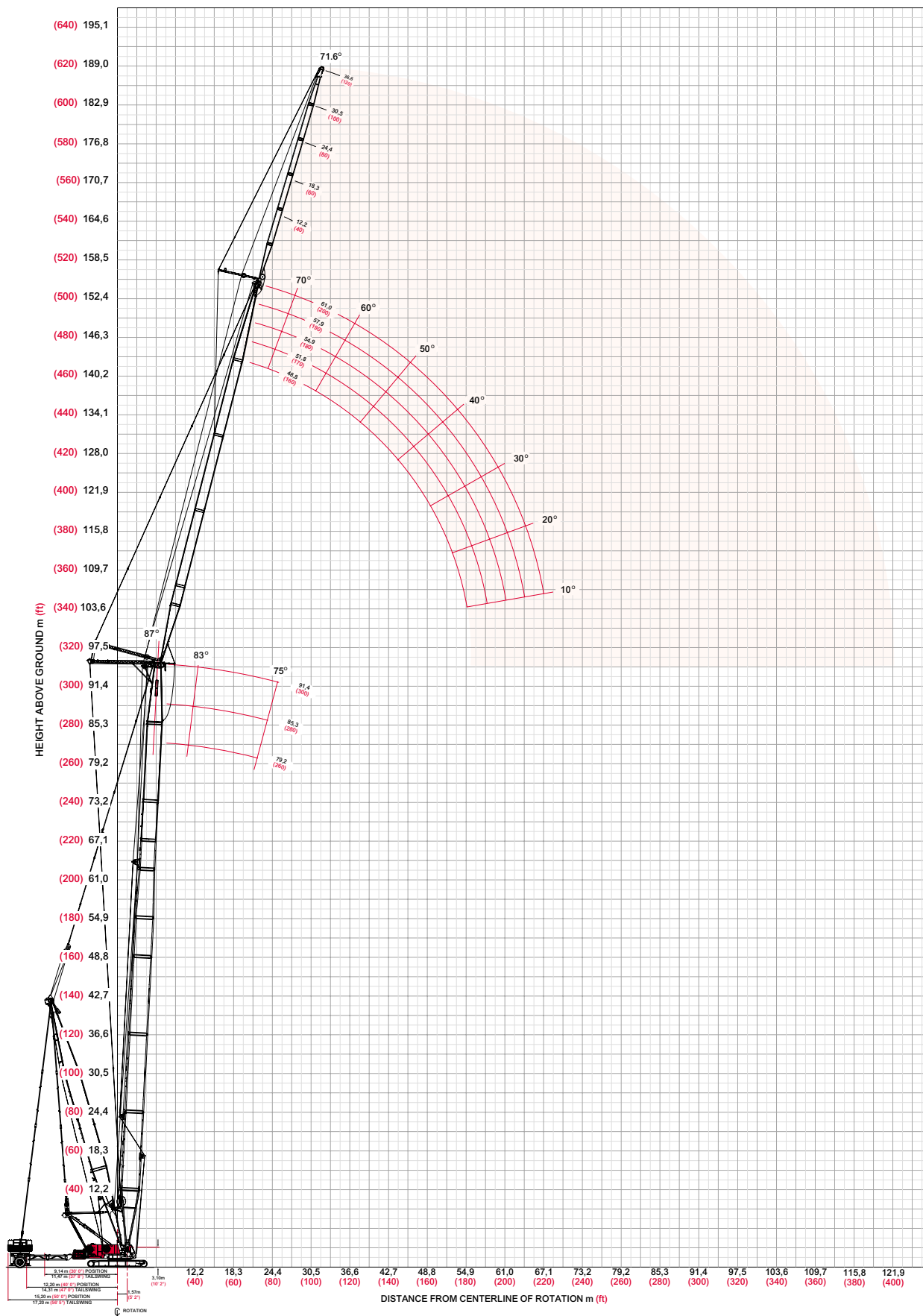




# fixed jib on luffing jib range diagram

## No. 140 Fixed Jib on No. 133A or No. 133 Fixed Jib on No. 79-44 Long-Reach Boom

81





# fixed jib on luffing jib load charts

82

## Liftcrane Fixed Jib Capacities - MAX-ER 2000 on 2250

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133A or No. 133 on Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

87° Boom Angle

Luffing Jib		48,8			51,8			57,9			61,0		
m (ft)		(160)			(170)			(190)			(200)		
Boom	Radius	79,2	85,4	91,5	79,2	85,4	91,5	79,2	85,4	91,5	79,2	85,4	91,5
m (ft)	m (ft)	(260)	(280)	(300)	(260)	(280)	(300)	(260)	(280)	(300)	(260)	(280)	(300)
Fixed Jib Length 12,2 m (40 ft) 5° offset	24,4 (80)	26,4 (58.4)	24,9 (54.9)	22,7 (50.1)									
	26,0 (90)	25,8 (55.4)	24,6 (53.9)	22,4 (49.1)	23,8 (52.5)	22,7 (49.2)	20,8 (45.5)	- (43.1)	18,7 (41.2)	- (38.8)			
	30,0 (100)	23,9 (52.3)	23,6 (51.7)	21,7 (47.8)	23,3 (50.9)	22,1 (48.8)	20,2 (44.4)	19,3 (42.6)	18,3 (40.5)	17,3 (38.1)	17,5 (38.6)	16,7 (36.8)	15,9 (35.0)
	36,0 (120)	20,5 (44.0)	20,9 (44.7)	20,4 (44.8)	20,4 (43.6)	20,5 (44.2)	19,1 (41.9)	19,0 (41.9)	18,1 (39.7)	16,5 (36.2)	17,1 (37.8)	16,4 (36.2)	15,2 (33.5)
	44,0 (150)	14,3 (29.4)	14,5 (29.8)	14,7 (30.2)	14,1 (29.0)	14,3 (29.4)	14,5 (29.8)	13,5 (27.8)	13,8 (28.2)	14,0 (28.6)	13,3 (27.2)	13,5 (27.6)	13,7 (28.0)
	54,0 (180)	9,5 (20.5)	9,7 (20.7)	9,8 (21.0)	9,4 (20.0)	9,5 (20.3)	9,6 (20.5)	8,8 (18.9)	8,9 (19.1)	9,0 (19.4)	8,5 (18.2)	8,7 (18.5)	8,8 (18.8)
	60,0 (200)	7,6 (16.2)	7,7 (16.4)	7,8 (16.6)	7,4 (15.7)	7,4 (15.9)	7,6 (16.1)	6,8 (14.6)	6,9 (14.8)	7,0 (15.0)	6,5 (14.0)	6,7 (14.2)	6,8 (14.4)
	66,0 (220)	6,0 (12.7)	6,0 (12.8)	6,1 (13.0)	5,8 (12.3)	5,9 (12.5)	5,9 (12.6)	5,2 (11.1)	5,3 (11.3)	5,4 (11.5)	5,0 (10.5)	5,1 (10.7)	5,1 (10.9)
	72,0 (240)							4,0 (8.3)	4,0 (8.5)	4,1 (8.6)	3,7 (7.7)	3,7 (7.9)	3,8 (8.0)
	76,0 (260)							3,2 (-)	3,2 (-)	3,3 (-)	2,9 (5.3)	3,0 (5.5)	3,1 (5.6)

Luffing Jib		48,8			51,8			57,9			61,0		
m (ft)		(160)			(170)			(190)			(200)		
Boom	Radius	79,2	85,4	91,5	79,2	85,4	91,5	79,2	85,4	91,5	79,2	85,4	91,5
m (ft)	m (ft)	(260)	(280)	(300)	(260)	(280)	(300)	(260)	(280)	(300)	(260)	(280)	(300)
Fixed Jib Length 36,6 m (120 ft) 5° offset	- (110)	- (18.5)	- (18.3)	- (18.1)	- (18.2)	- (17.9)							
	36,0 (120)	8,0 (17.7)	8,0 (17.5)	7,9 (17.3)	7,9 (17.4)	7,8 (17.2)	7,7 (17.0)	7,5 (16.6)	7,4 (16.4)	- (16.1)	- (16.1)	- (15.8)	- (15.5)
	42,0 (140)	7,3 (16.1)	7,3 (16.0)	7,2 (15.9)	7,2 (15.9)	7,2 (15.8)	7,1 (15.6)	7,0 (15.4)	6,9 (15.2)	6,8 (15.0)	6,8 (15.0)	6,7 (14.8)	6,6 (14.6)
	48,0 (160)	6,7 (14.7)	6,6 (14.6)	6,6 (14.5)	6,6 (14.6)	6,6 (14.5)	6,6 (14.4)	6,5 (14.2)	6,4 (14.1)	6,3 (13.9)	6,3 (13.9)	6,2 (13.7)	6,2 (13.6)
	54,0 (180)	6,2 (13.5)	6,1 (13.4)	6,1 (13.4)	6,1 (13.4)	6,1 (13.3)	6,1 (13.3)	6,0 (13.1)	5,9 (13.1)	5,9 (13.0)	5,8 (12.9)	5,8 (12.8)	5,8 (12.7)
	60,0 (200)	5,7 (12.4)	5,7 (12.4)	5,6 (12.4)	5,6 (12.4)	5,6 (12.4)	5,6 (12.3)	5,5 (12.2)	5,5 (12.1)	5,5 (12.1)	5,5 (12.1)	5,4 (11.9)	5,4 (11.9)
	66,0 (220)	5,3 (11.6)	5,3 (11.6)	5,3 (11.6)	5,3 (11.6)	5,2 (11.5)	5,2 (11.5)	5,2 (11.4)	5,1 (11.4)	5,1 (11.3)	5,1 (11.3)	5,1 (11.2)	5,0 (11.1)
	72,0 (240)	4,9 (10.9)	4,9 (10.8)	4,9 (10.8)	4,9 (10.7)	4,9 (10.8)	4,9 (10.8)	4,5 (9.5)	4,6 (9.7)	4,6 (9.8)	4,2 (8.9)	4,3 (9.1)	4,4 (9.2)
	76,0 (260)	4,5 (8.7)	4,5 (8.8)	4,6 (8.9)	4,2 (8.2)	4,3 (8.4)	4,4 (8.5)	3,7 (7.1)	3,8 (7.2)	3,8 (7.3)	3,4 (6.5)	3,5 (6.6)	3,6 (6.7)
	84,0 (280)	3,1 (6.6)	3,2 (6.7)	3,2 (6.8)	2,9 (6.2)	3,0 (6.3)	3,1 (6.4)	2,4 (5.0)	2,5 (5.1)	2,5 (5.2)	2,1 (4.4)	2,2 (4.5)	2,2 (4.6)

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.



# fixed jib on luffing jib load charts

83

## Liftcrane Fixed Jib Capacities - MAX-ER 2000 on 2250

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133A or No. 133 on Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

### 83° Boom Angle

Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
		79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)
Fixed Jib Length 12,2 m (40 ft) 5° offset	Radius	-	-	-	-	-	-	-	-	-	-	-	-
	(110)	(54.8)	(51.3)					(41.1)	(38.6)				
	36,0 (120)	23,7 (51.9)	23,2 (51.3)	21,8 (48.1)	22,6 (49.9)	21,1 (46.7)	21,1 (46.7)	-	-				
	42,0 (140)	20,1 (42.9)	20,9 (44.4)	21,3 (46.0)	19,9 (42.5)	20,5 (44.0)	19,9 (43.9)	18,4 (40.5)	17,3 (38.2)	16,4 (36.2)	16,6 (36.6)	15,7 (34.6)	14,8 (32.8)
	48,0 (160)	15,3 (32.7)	15,8 (33.8)	16,3 (34.9)	15,1 (32.3)	15,6 (33.3)	16,1 (34.4)	14,5 (31.1)	15,0 (32.1)	15,7 (33.2)	14,3 (30.5)	14,9 (31.5)	14,7 (32.5)
	54,0 (180)	11,9 (25.5)	12,3 (26.2)	12,7 (27.0)	11,7 (25.0)	12,1 (25.8)	12,4 (26.6)	11,2 (23.9)	11,5 (24.6)	11,9 (25.4)	10,9 (23.2)	11,3 (24.0)	11,6 (24.8)
	60,0 (200)	9,4 (20.1)	9,7 (20.7)	10,0 (21.3)	9,2 (19.6)	9,5 (20.2)	9,8 (20.8)	8,7 (18.4)	8,9 (19.0)	9,2 (19.6)	8,4 (17.8)	8,7 (18.4)	8,9 (19.0)
	66,0 (220)	7,4 (15.9)	7,7 (16.3)	7,9 (16.8)	7,2 (15.4)	7,5 (15.9)	7,7 (16.4)	6,7 (14.2)	6,9 (14.7)	7,2 (15.2)	6,4 (13.6)	6,7 (14.1)	6,9 (14.6)
	72,0 (240)	5,8 (12.4)	6,0 (12.8)	6,2 (13.2)	5,7 (12.0)	5,8 (12.4)	6,0 (12.8)	5,2 (10.9)	5,3 (11.3)	5,5 (11.6)	4,9 (10.3)	5,1 (10.7)	5,3 (11.0)
	76,0 (260)				4,8 (10.6)	4,9 (10.8)	5,1 (11.2)	4,3 (8.1)	4,4 (8.4)	4,6 (8.7)	4,0 (7.5)	4,2 (7.8)	4,3 (8.1)
	84,0 (280)										2,5 (5.1)	2,6 (5.4)	2,8 (5.7)

Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
		79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)
Fixed Jib Length 36,6 m (120 ft) 5° offset	Radius	-	-	-	-	-	-	-	-	-	-	-	-
	44,0 (145)	(16.9)	(16.8)					(15.3)	(15.2)				
	46,0 (155)	7,4 (16.2)	7,4 (16.1)	7,4 (16.0)	7,3 (16.0)	7,3 (15.9)	7,3 (15.8)	-	-				
	50,0 (170)	7,0 (15.1)	7,0 (15.1)	7,0 (15.1)	6,9 (15.0)	6,9 (14.9)	6,8 (14.9)	6,7 (14.5)	6,6 (14.4)	6,5 (14.3)	6,5 (14.1)	6,4 (14.0)	- (13.8)
	56,0 (185)	6,4 (14.2)	6,4 (14.2)	6,4 (14.1)	6,4 (14.1)	6,3 (14.0)	6,3 (14.0)	6,2 (13.7)	6,2 (13.6)	6,1 (13.5)	6,0 (13.4)	6,0 (13.3)	6,0 (13.2)
	60,0 (200)	6,1 (13.3)	6,1 (13.3)	6,1 (13.3)	6,0 (13.2)	6,0 (13.2)	6,0 (13.2)	5,9 (12.9)	5,9 (12.9)	5,8 (12.8)	5,8 (12.7)	5,7 (12.6)	5,7 (12.5)
	66,0 (220)	5,6 (12.3)	5,6 (12.3)	5,6 (12.3)	5,6 (12.3)	5,6 (12.2)	5,6 (12.2)	5,5 (12.0)	5,5 (12.0)	5,5 (12.0)	5,4 (11.9)	5,4 (11.8)	5,4 (11.8)
	72,0 (240)	5,2 (11.5)	5,2 (11.5)	5,2 (11.5)	5,2 (11.4)	5,2 (11.5)	5,2 (11.5)	5,1 (11.3)	5,1 (11.3)	5,1 (11.3)	5,1 (11.1)	5,1 (11.1)	5,0 (11.0)
	76,0 (260)	5,0 (10.8)	5,0 (10.8)	5,0 (10.8)	5,0 (10.4)	5,0 (10.7)	5,0 (10.7)	4,8 (9.3)	4,9 (9.6)	4,9 (9.9)	4,6 (8.7)	4,7 (9.0)	4,8 (9.3)
	84,0 (280)	4,0 (8.5)	4,2 (8.8)	4,3 (9.1)	3,8 (8.0)	4,0 (8.3)	4,1 (8.6)	3,3 (6.9)	3,4 (7.2)	3,5 (7.4)	3,1 (6.3)	3,1 (6.6)	3,3 (6.8)
	88,0 (300)	3,4 (6.5)	3,5 (6.7)	3,6 (6.9)	3,2 (6.0)	3,3 (6.2)	3,4 (6.5)	2,6 (4.9)	2,8 (5.1)	2,9 (5.3)	2,4 (4.3)	2,5 (4.5)	2,6 (4.7)

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.

MAX-ER™ 2000



# fixed jib on luffing jib load charts

84

## Liftcrane Fixed Jib Capacities - MAX-ER 2000 on 2250

Fixed Jib No. 140 Set at 5 Degree Offset Angle on

Luffing Jib No. 133A or No. 133 on Boom No. 79-44 with 39,6 m (130 Ft) Mast No. 44

76 750 kg (169,200 lb) Crane Counterweight, 27 220 kg (60,000 lb) Carbody Counterweight

209 560 kg (462,000 lb) Wheeled Counterweight at 15,2 m (50') Position

360° Rating

kg (lb) x 1 000

75° Boom Angle

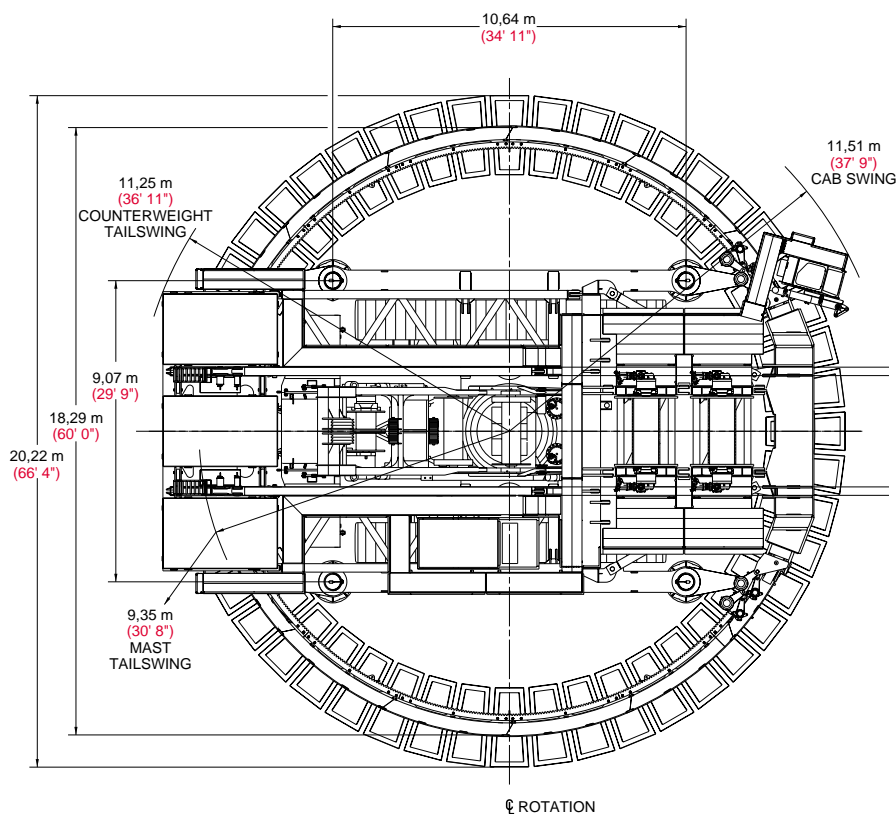
Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)		79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)
Radius													
Fixed Jib Length 12,2 m (40 ft) 5° offset	- (170)	- (46.8)											
	54,0 (180)	19,1 (40.5)	20,0 (43.6)	- (41.8)	18,9 (40.1)	- (40.7)							
	56,0 (190)	17,4 (35.4)	18,8 (37.9)	19,1 (40.7)	17,2 (34.9)	18,2 (37.5)	- (38.3)	- (33.7)	- (33.4)		- (32.2)		
	60,0 (200)	14,6 (31.1)	15,6 (33.2)	16,8 (35.5)	14,4 (30.6)	15,4 (32.8)	16,7 (35.1)	13,9 (29.4)	15,0 (31.6)	14,2 (31.4)	13,7 (28.8)	13,6 (30.1)	- (28.2)
	66,0 (220)	11,4 (24.3)	12,2 (25.8)	13,0 (27.5)	11,2 (23.8)	12,0 (25.4)	12,8 (27.1)	10,7 (22.6)	11,4 (24.2)	12,3 (25.9)	10,4 (22.0)	11,1 (23.6)	12,0 (25.3)
	72,0 (240)	9,0 (19.1)	9,6 (20.3)	10,2 (21.6)	8,8 (18.7)	9,4 (19.9)	10,0 (21.2)	8,3 (17.5)	8,9 (18.7)	9,5 (20.0)	8,0 (16.9)	8,6 (18.1)	9,2 (19.4)
	76,0 (260)	7,7 (15.1)	8,2 (16.1)	8,7 (17.1)	7,5 (14.7)	8,0 (15.6)	8,5 (16.7)	7,0 (13.5)	7,5 (14.5)	8,0 (15.5)	6,7 (12.9)	7,2 (13.9)	7,7 (14.9)
	84,0 (280)		6,0 (12.6)	6,4 (13.4)	5,4 (11.4)	5,8 (12.2)	6,2 (13.0)	4,9 (10.3)	5,3 (11.1)	5,7 (11.9)	4,6 (9.7)	5,0 (10.5)	5,4 (11.3)
	88,0 (300)					4,9 (-)	5,2 (-)	4,1 (7.6)	4,4 (8.3)	4,7 (8.9)	3,8 (7.0)	4,1 (7.7)	4,4 (8.4)
	96,0 (320)									3,1 (-)	2,4 (-)	2,6 (5.3)	2,9 (5.9)

Luffing Jib m (ft)		48,8 (160)			51,8 (170)			57,9 (190)			61,0 (200)		
Boom m (ft)		79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)	79,2 (260)	85,4 (280)	91,5 (300)
Radius													
Fixed Jib Length 36,6 m (120 ft) 5° offset	- (215)	- (14.2)											
	68,0 (225)	6,2 (13.6)	6,2 (13.7)	- (13.7)	6,1 (13.5)	- (13.5)							
	72,0 (240)	5,9 (12.8)	5,9 (12.9)	5,9 (13.0)	5,8 (12.8)	5,8 (12.8)	5,9 (12.8)	5,6 (12.4)	5,6 (12.4)	- (12.3)	5,5 (12.1)	- (12.0)	
	76,0 (250)	5,6 (12.4)	5,6 (12.5)	5,6 (12.5)	5,5 (12.3)	5,6 (12.4)	5,6 (12.4)	5,4 (12.0)	5,4 (12.0)	5,4 (12.0)	5,3 (11.8)	5,3 (11.7)	5,2 (11.6)
	80,0 (270)	5,3 (11.6)	5,4 (11.6)	5,4 (11.7)	5,3 (11.5)	5,4 (11.6)	5,3 (11.6)	5,2 (11.3)	5,2 (11.3)	5,2 (11.3)	5,1 (11.1)	5,1 (11.1)	5,0 (11.0)
	88,0 (290)	4,9 (10.8)	4,9 (10.9)	5,0 (11.0)	4,9 (10.8)	4,9 (10.9)	4,9 (10.9)	4,6 (10.1)	4,8 (10.6)	4,8 (10.7)	4,3 (9.5)	4,6 (10.2)	4,7 (10.5)
	92,0 (310)	4,6 (9.2)	4,7 (9.8)	4,8 (10.4)	4,3 (8.7)	4,6 (9.3)	4,7 (10.0)	3,8 (7.6)	4,1 (8.2)	4,4 (8.8)	3,6 (7.0)	3,9 (7.6)	4,2 (8.2)
	100,0 (330)	3,2 (7.0)	3,5 (7.6)	3,7 (8.1)	3,0 (6.6)	3,3 (7.1)	3,5 (7.6)	2,5 (5.4)	2,8 (6.0)	3,0 (6.5)	2,2 (4.8)	2,5 (5.4)	2,7 (5.9)
	104,0 (350)	2,7 (5.2)	2,9 (5.6)	3,1 (6.1)	2,4 (4.7)	2,7 (5.2)	2,9 (5.7)	1,9 (-)	2,2 (4.1)	2,4 (4.5)			2,1 (-)
	108,0 (360)	2,1 (-)	2,3 (4.7)	2,5 (5.2)	1,9 (-)	2,1 (4.3)	2,3 (4.8)			1,8 (-)			

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.



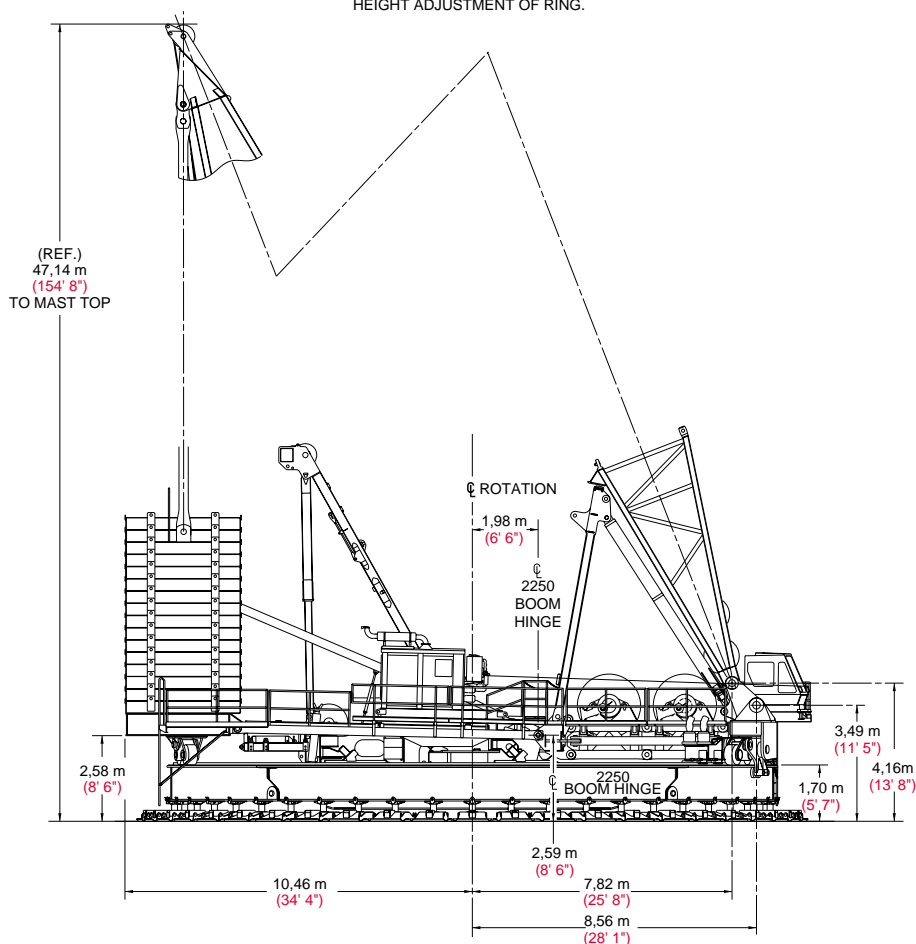
# outline dimensions



85

NOTE: ALL VERTICAL DIMENSIONS ARE BASED ON 0,61 m (2') CLEARANCE BETWEEN UNDERSIDE OF RING AND GROUND.

VERTICAL DIMENSIONS WILL VARY DEPENDING ON HEIGHT ADJUSTMENT OF RING.



M-1200 RINGER®



# performance data

86

## M-1200 RINGER® CONFIGURATIONS

Maximum Capacity m-ton (U.S. ton)	800 (882)	1 300 (1,433)	800 (882)
Configuration	Single Engine, One Hoist Drum	Dual Engines, Two Hoist Drums	Dual Engines, Two Hoist Drums
Boom Number	75A	72 or 72 A	75 Jib on 72 or 72A Boom
Basic Length	45,7 m (150')	46,6 m (153')	30,5 m (100')
Maximum Length	121,9 m (400')	122,8 m (403')	76,2 m (250')
Mast Number	75A	75A	75A
Mast Length	45,7 m (150')	45,7 m (150')	45,7 m (150')
Number of RINGER- SWINGER® Drives	2	4	4
Boom Hoist	One or two full-width hoist drums of Model 2250 crane	Two full-width hoist drums of Model 2250 crane	Two full-width hoist drums of Model 2250 crane
Load Hoist	One or two full-width drums mounted to RINGER attachment	Two full-width drums mounted to RINGER attachment	Two full-width drums mounted to RINGER attachment

## M-1200 RINGER SYSTEM FUNCTIONS

Component or System	One RINGER Hoist Drum	Two RINGER Hoist Drums
2250 Front Drum	Boom Hoist	Boom Hoist
2250 Rear Drum	Boom Hoist - Optional	Boom Hoist
2250 Boom Hoist	Mast Hoist	Mast Hoist
RINGER Front Hoist Drum	None	Load Hoist
RINGER Rear Hoist Drum	Load Hoist	Load Hoist
2250 Engine	Powers Swing, Load Hoist, Travel, and Boom Hoist	Powers Half of Swing and Load Hoist, all of Travel and Boom Hoist
RINGER Auxiliary Engine	Optional. Complements power for Load Hoist and Swing	Complements power for Load Hoist and Swing

M-1200 RINGER®



# performance data

87

## Wire Rope Lengths Boom No. 72 or No. 72A with Mast No. 75 or No. 75A

Boom Length	Tandem Drums				Maximum Required Parts of Line	Whip Line			
	Hoist Line Rear RINGER Drum		Hoist Line Front RINGER Drum			Auxiliary (4 Parts of Line)		RINGER Drum (6 Parts of Line)	
	m	(ft)	m	(ft)		m	(ft)	m	(ft)
46,6 (153)	1 219	(4,000)	1 219	(4,000)	48	290	(950)	396	(1,300)
54,3 (178)	1 402	(4,600)	1 402	(4,600)	48	335	(1,100)	457	(1,500)
61,9 (203)	1 585	(5,200)	1 585	(5,200)	48	366	(1,200)	503	(1,650)
69,5 (228)	1 646	(5,400)	1 646	(5,400)	44	411	(1,350)	564	(1,850)
77,1 (253)	1 676	(5,500)	1 676	(5,500)	40	442	(1,450)	610	(2,000)
84,7 (278)	1 676	(5,500)	1 676	(5,500)	36	488	(1,600)	671	(2,200)
92,4 (303)	1 676	(5,500)	1 676	(5,500)	32	518	(1,700)	716	(2,350)
100,0 (328)	1 676	(5,500)	1 676	(5,500)	28	549	(1,800)	777	(2,550)
107,6 (353)	1 676	(5,500)	1 676	(5,500)	28	594	(1,950)	823	(2,700)
115,2 (378)	1 676	(5,500)	1 676	(5,500)	24	625	(2,050)	884	(2,900)
122,8 (403)	1 676	(5,500)	1 676	(5,500)	20	671	(2,200)	930	(3,050)

**Note:** Hoist line lengths are based on tandem drums both reeved to main load block. Each drum is dead-ended in main load block reeving. Total parts of line requires use of both RINGER® drums. 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.

## Wire Rope Lengths Boom No. 75A with Mast No. 75/49A, No. 75 or No. 75A

Boom Length	Hoist Line		Maximum Required Parts of Line	Whip Line			
	Rear RINGER Drum			Auxiliary (4 Parts of Line)		RINGER Drum (6 Parts of Line)	
	m	(ft)		m	(ft)	m	(ft)
45,7 (150)	1 524	(5,000)	32	290	(950)	396	(1,300)
53,3 (175)	1 798	(5,900)	32	335	(1,100)	457	(1,500)
61,0 (200)	1 798	(5,900)	28	366	(1,200)	503	(1,650)
68,6 (225)	1 798	(5,900)	24	411	(1,350)	564	(1,850)
76,2 (250)	1 981	(6,500)	24	442	(1,450)	610	(2,000)
83,8 (275)	1 981	(6,500)	20	488	(1,600)	671	(2,200)
91,4 (300)	1 981	(6,500)	20	518	(1,700)	716	(2,350)
99,1 (325)	1 981	(6,500)	16	549	(1,800)	777	(2,550)
106,7 (350)	1 981	(6,500)	16	594	(1,950)	823	(2,700)
114,3 (375)	1 981	(6,500)	12	625	(2,050)	884	(2,900)
121,9 (400)	1 981	(6,500)	12	671	(2,200)	930	(3,050)

**Note:** Line lengths given in table are based on single-part lead line and 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.

M-1200 RINGER®



performance data

88

Wire Rope Lengths  
Jib No. 75 on  
Boom No. 72 or No. 72A with  
Mast No. 75 or No. 75A

Boom Length m (ft)	RINGER® Tandem Drums - Hoist Line											
	(32 Parts of Line)				(28 Parts of Line)				(24 Parts of Line)			
	Rear m (ft)	Front m (ft)	Rear m (ft)	Front m (ft)	Rear m (ft)	Front m (ft)	Rear m (ft)	Front m (ft)	Rear m (ft)	Front m (ft)	Rear m (ft)	Front m (ft)
92,4 (303)	1 615 (5,300)	1 615 (5,300)										
100,0 (328)	1 737 (5,700)	1 737 (5,700)										
107,6 (353)	1 859 (6,100)	1 859 (6,100)	1 646 (5,400)	1 646 (5,400)								
115,2 (378)	1 981 (6,500)	1 981 (6,500)	1 768 (5,800)	1 768 (5,800)	1 524 (5,000)	1 524 (5,000)						
122,8 (403)	-	-	1 859 (6,100)	1 859 (6,100)	1 615 (5,300)	1 615 (5,300)						
130,5 (428)	-	-	-	-	1 707 (5,600)	1 707 (5,600)	1 463 (4,800)	1 463 (4,800)				
138,1 (453)	-	-	-	-	1 829 (6,000)	1 829 (6,000)	1 554 (5,100)	1 554 (5,100)				
145,7 (478)	-	-	-	-	-	-	1 615 (5,300)	1 615 (5,300)				
153,3 (503)	-	-	-	-	-	-	1 707 (5,600)	1 707 (5,600)				

Note: Hoist line lengths are based on tandem drums both reeved to main jib block. Each drum is dead ended in main jib block reeving. Total parts of line requires use of both RINGER® drums. 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.

Drums & Laggings - M-1200 RINGER®

Application	Tandem RINGER Drums					
	Drum Location	Part Number	Type of Drum or Lagging	Diameter	Width	Wire Rope Size
Liftcrane	Hoist	Rear	173396	Bare Drum	749 mm (29-1/2")	1 972 mm (77-5/8") 42 mm (1-5/8")
	Hoist (Optional)	Front	173396	Bare Drum	749 mm (29-1/2")	1 972 mm (77-5/8") 42 mm (1-5/8")
	Hoist (Optional)	Rear	502368	Grooved Lagging	826 mm (32-1/2")	1 972 mm (77-5/8") 42 mm (1-5/8")
	Hoist (Optional)	Front	502368	Grooved Lagging	826 mm (32-1/2")	1 972 mm (77-5/8") 42 mm (1-5/8")
	Whip (Optional)	Auxiliary	175812	Bare Drum	724 mm (28-1/2")	1 397 mm (55") 29 mm (1-1/8")

Note: Rear drum application required with boom No. 75A.  
Tandem drum application required with boom No. 72, No. 72A, or No. 72/75A, and with jib No. 75 on boom No. 72 or No. 72A.

M-1200 RINGER®

Manitowoc



# performance data

89

## Drums - 266,9 kN (60,000 lb)

Single Line Pull/Single Line Speed\* at Low or High Range

m/min (ft/min)

Layer	1		2		3		4		5		6		7		8		9		10		11	
Line Pull kN (lb)	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
0 (0)	25 (82)	45 (149)	27 (90)	50 (163)	30 (97)	54 (177)	32 (105)	59 (192)	34 (113)	63 (206)	37 (121)	67 (220)	39 (128)	71 (234)	41 (136)	76 (248)	44 (144)	80 (263)	46 (152)	84 (277)	49 (160)	89 (291)
44,5 (10,000)	25 (81)	44 (145)	27 (89)	48 (159)	30 (97)	52 (172)	32 (104)	56 (185)	34 (112)	60 (196)	36 (119)	64 (211)	39 (127)	69 (225)	41 (135)	72 (237)	43 (142)	76 (250)	46 (150)	80 (263)	48 (157)	84 (276)
89,0 (20,000)	25 (81)	43 (141)	27 (88)	47 (154)	29 (96)	51 (166)	31 (103)	55 (179)	34 (111)	58 (191)	36 (118)	62 (203)	38 (126)	66 (215)	41 (133)	69 (227)	43 (141)	73 (238)	45 (148)	76 (250)	47 (155)	80 (261)
133,4 (30,000)	24 (80)	42 (137)	27 (88)	45 (149)	29 (95)	49 (161)	31 (102)	52 (172)	34 (110)	56 (183)	36 (117)	59 (194)	38 (124)	62 (205)	40 (132)	66 (216)	42 (139)	69 (226)	45 (146)	72 (236)	47 (153)	75 (246)
18 144 (40,000)	24 (80)	-	27 (87)	-	29 (94)	-	31 (101)	-	33 (109)	-	35 (116)	-	37 (123)	-	40 (130)	-	42 (137)	-	44 (144)	-	46 (151)	-
22 680 (50,000)	24 (79)	-	26 (86)	-	28 (93)	-	31 (101)	-	33 (108)	-	35 (115)	-	37 (122)	-	39 (129)	-	41 (136)	-	43 (142)	-	45 (149)	-
27 216 (60,000)	24 (78)	-	26 (86)	-	28 (93)	-	30 (100)	-	33 (107)	-	34 (113)	-	37 (120)	-	39 (127)	-	41 (134)	-	43 (140)	-	45 (147)	-

NOTE: Line pull is infinitely variable.

\*Based on lagging diameter of 826 mm (32-1/2").

## Wire Rope Specifications

Boom No. 72, No. 72A or No. 75A with  
Mast No. 75, No. 75A

- or -

Boom No. 75A with  
Mast No. 75/49A, No. 75 or No. 75A

- or -

Fixed Jib No. 75 on  
Boom No. 72, No. 72A or No. 75A

## Drum Capacities - Wire Rope

RINGER Drums	Maximum Length	
	Bare Drum	With Lagging*
Front or Rear Drum (Hoist) 42 mm (1-5/8") Wire Rope	1 995 m (6,544 ft) 12 Layers	1 923 m (6,309 ft) 11 Layers
Auxiliary Drum (Whip) 29 mm (1-1/8") Wire Rope	1 047 m (3,522 ft) 8 Layers	- -

8 m (27") is deducted from maximum spooling capacities for 3 dead wraps per drum or lagging.

\*Lagging diameter 826 mm (32-1/2").

Function	5:1 Safety Factor Rotation Resistant 1 960N/mm <sup>2</sup> , Right Hand Regular Lay Hoist Line	5:1 Safety Factor Rotation Resistant 1 960N/mm <sup>2</sup> Whip Line
Part Number	No. 719404	No. 719375
Size Wire Rope	- (1-5/8")	- (1-1/8")
Minimum Breaking Strength	147 200 kg (324,520 lb)	70 260 kg (154,900 lb)
Maximum Load Per Line	27 088 kg (59,719 lb)	13 610 kg (30,000 lb)
Approximate Weight	7,89 kg/m (5.30 lb/ft)	4,02 kg/m (2.70 lb/ft)

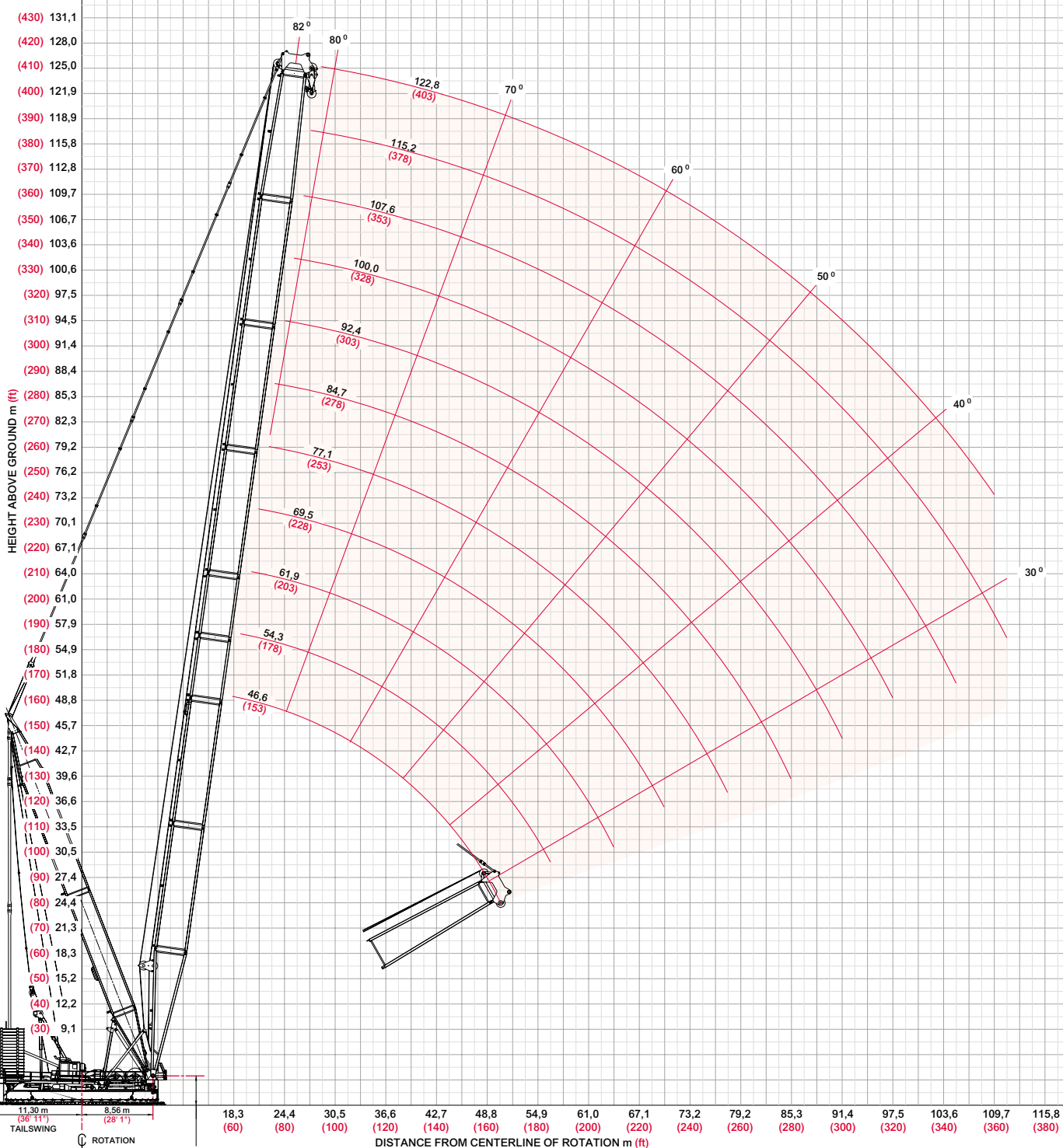
M-1200 RINGER®



# heavy-lift boom range diagram

## No. 72 or 72A Boom

90



M-1200 RINGER®



# heavy-lift load charts

## Liftcrane Capacities - M-1200

Boom No. 72 with 1 300 m-ton (1,433 ton) Boom Point

Mast No. 75 or No. 75A

18,3 m (60') RINGER Attachment on Screw Jack Pedestals

23 590 kg (52,000 lb) Crane Counterweight

915 170 kg (2,017,600 lb) Auxiliary Counterweight

360° Rating

kg (lb) x 1 000

Boom m (ft)	46,6 (153)	54,3 (178)	61,9 (203)	69,5 (228)	77,1 (253)	84,7 (278)	92,4 (303)	100,0 (328)	107,6 (353)	115,2 (378)	122,8 (403)
Radius											
17,1 (56)	1 300,0 (2,866.5)										
18,0 (60)	1 300,0 (2,866.5)										
20,0 (70)	1 160,7 (2,277.2)	1 155,9 (2,269.2)	1 153,3 (2,263.2)	- (2,254.8)	- (2,246.3)						
24,0 (80)	847,5 (1,821.7)	843,8 (1,813.4)	841,0 (1,807.4)	837,1 (1,798.6)	833,1 (1,789.9)	832,4 (1,783.8)	- (1,741.3)				
26,0 (90)	745,6 (1,511.5)	741,8 (1,503.2)	739,0 (1,497.0)	735,0 (1,488.1)	731,0 (1,479.2)	728,2 (1,473.0)	722,3 (1,464.2)	679,9 (1,393.5)	640,4 (1,311.5)	- (1,241.6)	
30,0 (100)	597,7 (1,286.8)	593,9 (1,278.3)	591,0 (1,272.1)	587,0 (1,263.1)	582,9 (1,254.1)	580,0 (1,247.8)	576,0 (1,238.8)	561,6 (1,213.2)	527,9 (1,140.1)	498,9 (1,077.2)	472,1 (1,017.6)
34,0 (110)	495,9 (1,116.3)	492,1 (1,107.9)	489,3 (1,101.6)	485,1 (1,092.5)	481,0 (1,083.4)	478,1 (1,077.1)	474,0 (1,068.0)	471,0 (1,061.3)	449,1 (1,008.1)	423,5 (950.9)	398,9 (895.9)
36,0 (120)	456,1 (982.6)	452,2 (974.2)	449,4 (967.9)	445,2 (958.7)	441,0 (949.6)	438,2 (943.2)	434,0 (934.0)	431,0 (927.3)	417,7 (902.7)	393,6 (850.4)	370,0 (799.2)
42,0 (140)	364,8 (786.3)	361,0 (777.8)	358,1 (771.6)	354,0 (762.4)	349,8 (753.1)	346,9 (746.7)	342,7 (737.5)	339,6 (730.6)	335,4 (721.4)	323,4 (698.9)	302,9 (654.2)
48,0 (160)	287,2 (608.5)	297,3 (640.6)	294,4 (634.3)	290,3 (625.1)	286,1 (615.9)	283,2 (609.4)	278,9 (600.1)	275,8 (593.2)	271,6 (584.0)	268,4 (576.8)	254,4 (549.2)
54,0 (180)		250,2 (539.0)	247,5 (533.0)	243,3 (523.8)	239,1 (514.5)	236,1 (508.0)	231,9 (498.7)	228,8 (491.8)	224,6 (482.5)	221,3 (475.3)	216,8 (466.0)
60,0 (200)			211,3 (454.9)	207,2 (445.8)	203,0 (436.5)	200,1 (430.1)	195,8 (420.8)	192,7 (413.9)	188,5 (404.5)	185,2 (397.3)	180,9 (388.0)
66,0 (220)				178,5 (383.9)	174,3 (374.7)	171,4 (368.3)	167,2 (359.0)	164,1 (352.0)	159,8 (342.7)	156,5 (335.4)	152,3 (326.1)
72,0 (240)					151,1 (324.4)	148,2 (318.1)	144,0 (308.7)	140,8 (301.8)	136,6 (292.5)	133,3 (285.2)	129,0 (275.9)
78,0 (260)						128,9 (276.4)	124,7 (267.1)	121,6 (260.2)	117,3 (250.8)	114,0 (243.6)	109,8 (234.2)
84,0 (280)							108,5 (231.9)	105,4 (225.1)	101,1 (215.8)	97,8 (208.5)	93,6 (199.2)
90,0 (300)							94,6 (201.9)	91,5 (195.1)	87,3 (185.8)	84,0 (178.6)	79,7 (169.2)
96,0 (320)								79,5 (169.1)	75,3 (159.9)	72,0 (152.7)	67,8 (143.4)
100,0 (330)									68,1 (148.2)	64,9 (141.0)	60,7 (131.7)
102,0 (340)									64,8 (137.2)	61,6 (130.1)	57,3 (120.8)
106,0 (350)										55,3 (119.8)	51,1 (110.5)
108,0 (360)										52,4 (110.0)	48,1 (100.8)
110,0 (365)										49,3 (102.1)	

91

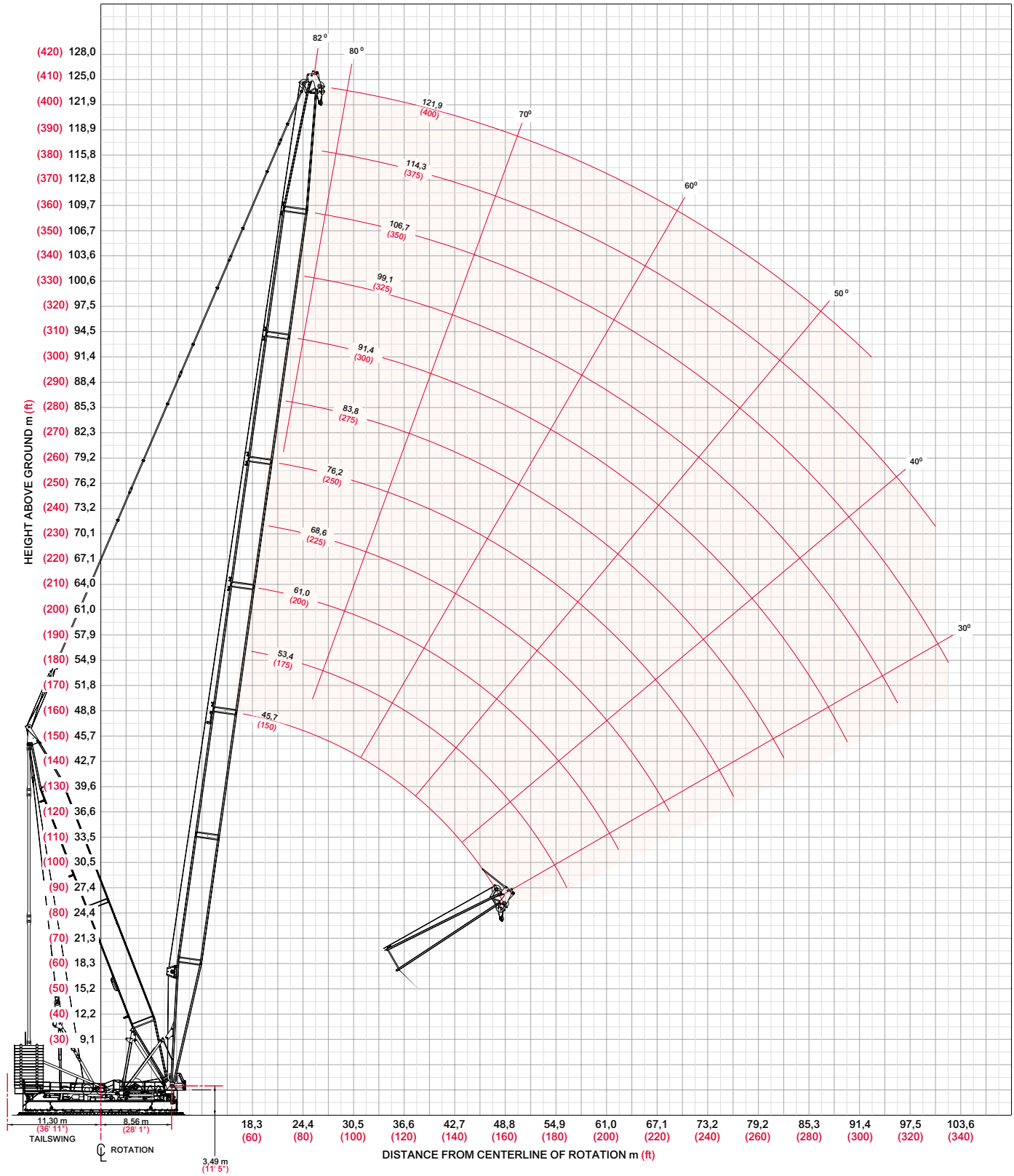
M-1200 RINGER®



# heavy-lift boom range diagram

## No. 75A Boom

92



M-1200 RINGER®



# heavy-lift load charts

## Liftcrane Capacities - M-1200

### Boom No. 75A

### Mast No. 75 or No. 75A

### 18,3 m (60') RINGER Attachment on Screw Jack Pedestals

23 590 kg (52,000 lb) Crane Counterweight

715 590 kg (1,577,600 lb) Auxiliary Counterweight

360° Rating

kg (lb) x 1 000

Boom m (ft)	45,7 (150)	53,3 (175)	61,0 (200)	68,6 (225)	76,2 (250)	83,8 (275)	91,4 (300)	99,1 (325)	106,7 (350)	114,3 (375)	121,9 (400)
Radius											
16,8 (55)	816,4 (1,800.0)	720,2 (1,587.8)									
18,0 (60)	816,4 (1,800.0)	720,2 (1,587.8)	— (1,444.7)								
20,0 (70)	814,4 (1,764.0)	720,2 (1,587.8)	650,1 (1,417.7)	578,9 (1,263.9)	— (1,132.1)	— (1,016.4)					
24,0 (80)	699,4 (1,494.8)	688,8 (1,490.6)	628,9 (1,382.2)	561,8 (1,235.1)	504,2 (1,108.6)	453,7 (997.9)	405,0 (890.8)	— (784.5)	— (695.5)		
30,0 (90)	478,1 (1,228.7)	491,6 (1,240.2)	489,4 (1,235.5)	488,9 (1,205.9)	478,7 (1,084.5)	429,0 (978.2)	375,2 (856.4)	331,6 (755.9)	294,6 (671.0)	260,7 (593.1)	229,3 (516.2)
36,0 (100)	348,5 (1,026.1)	377,3 (1,058.8)	375,1 (1,054.1)	373,4 (1,050.2)	371,2 (1,045.3)	364,2 (939.3)	343,2 (821.9)	305,7 (726.6)	271,4 (645.6)	239,4 (571.3)	208,6 (501.8)
42,0 (120)	261,4 (747.1)	292,7 (813.4)	301,6 (808.7)	299,8 (804.8)	297,6 (799.9)	296,0 (786.7)	284,5 (746.5)	270,5 (668.6)	246,8 (593.4)	216,3 (523.0)	187,7 (455.5)
48,0 (140)	194,4 (558.2)	228,3 (627.5)	247,0 (650.4)	248,5 (646.5)	246,3 (641.6)	244,6 (638.0)	239,7 (614.8)	229,0 (584.9)	217,1 (538.1)	194,4 (471.5)	167,1 (408.8)
54,0 (160)	— (411.2)	176,3 (487.6)	198,5 (529.5)	210,1 (535.9)	208,5 (531.1)	206,8 (527.4)	204,6 (517.6)	196,8 (495.0)	187,1 (469.4)	173,3 (422.6)	147,8 (362.8)
60,0 (180)		— (373.3)	157,8 (424.1)	172,9 (450.4)	179,1 (449.5)	177,8 (445.8)	175,5 (440.8)	170,6 (424.9)	162,9 (404.3)	153,3 (375.9)	129,0 (320.0)
66,0 (200)			— (334.6)	140,7 (369.5)	150,0 (383.8)	153,6 (383.1)	152,2 (378.1)	148,6 (367.9)	142,5 (351.5)	134,1 (331.1)	111,0 (278.0)
72,0 (220)				— (298.5)	124,2 (320.4)	130,5 (329.3)	131,3 (327.0)	129,5 (319.8)	125,1 (307.2)	116,5 (288.8)	94,4 (238.1)
76,0 (240)					107,7 (263.4)	116,4 (278.8)	118,7 (281.4)	118,1 (278.2)	114,6 (269.0)	105,4 (249.7)	84,0 (201.5)
78,0 (250)					— (235.8)	109,6 (255.3)	112,7 (260.4)	112,7 (259.2)	109,7 (251.7)	100,1 (231.3)	79,1 (184.3)
82,0 (260)						96,2 (232.5)	101,0 (240.4)	102,3 (241.2)	100,3 (235.3)	89,8 (213.6)	69,5 (167.7)
84,0 (270)						— (209.9)	95,4 (221.0)	97,3 (224.0)	95,8 (219.7)	84,8 (196.4)	64,9 (151.8)
88,0 (280)							84,3 (202.2)	87,7 (207.5)	87,1 (204.8)	75,2 (179.9)	56,0 (136.4)
90,0 (290)							— (183.5)	83,0 (191.4)	83,0 (190.4)	70,5 (163.9)	51,7 (121.6)
94,0 (300)								73,7 (175.9)	74,9 (176.6)	61,5 (148.3)	— (107.2)
96,0 (310)								69,0 (160.0)	70,9 (163.1)	57,1 (133.3)	
98,0 (320)									67,0 (149.8)	52,7 (118.6)	
100,0 (330)									63,0 (136.5)	48,5 (104.3)	
102,0 (335)									59,1 (129.9)		

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.

M-1200 RINGER®

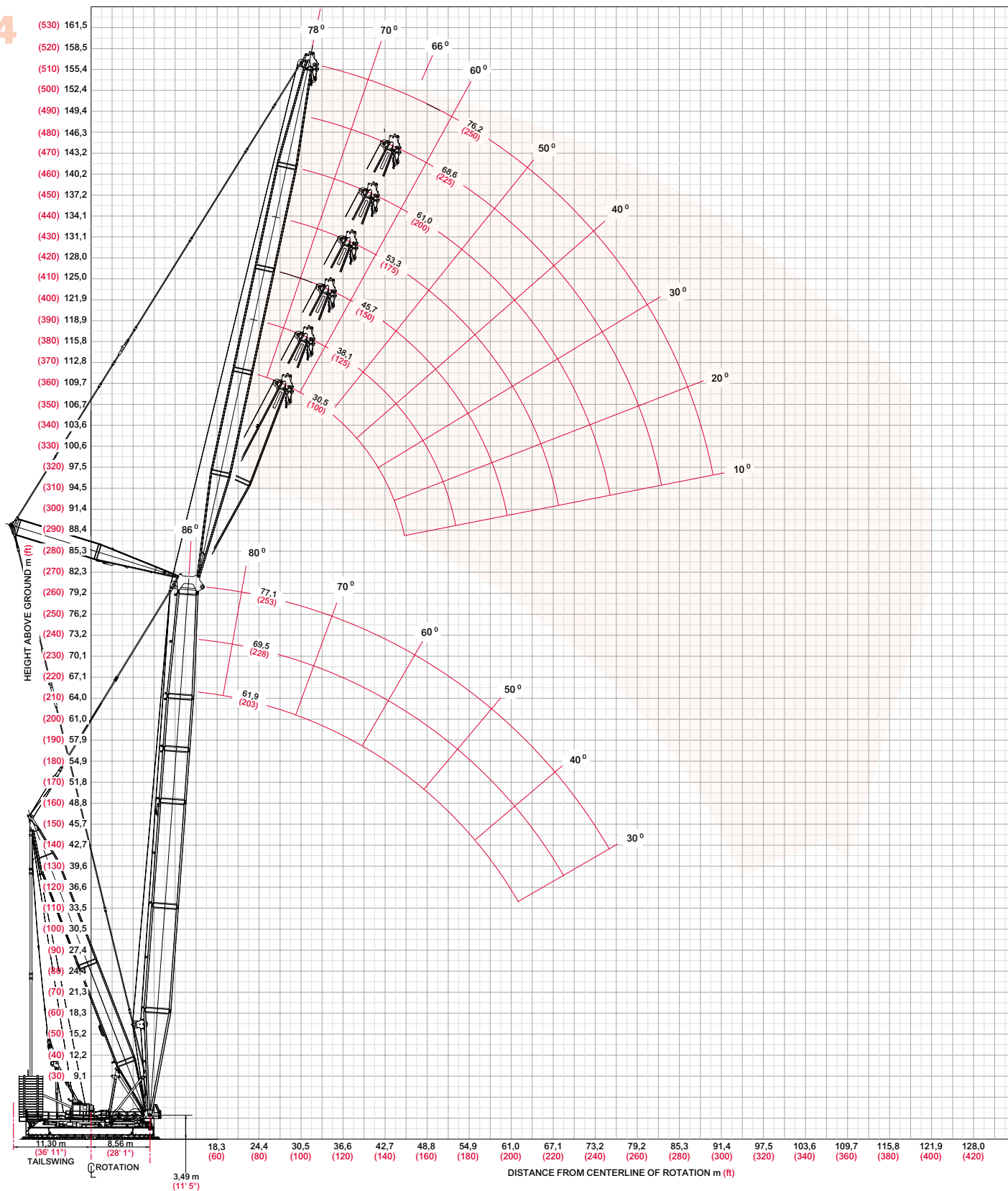


# fixed jib range diagram

## No. 75 Jib on No. 72 Boom

94

M-1200 RINGER®





# fixed jib load charts

95

## Liftcrane Capacities - M-1200

Jib No 75 with 25,1 m (82' 6") Strut on Boom No. 72

Mast No. 75 or No. 75A

18,3 m (60') RINGER Attachment on Screw Jack Pedestals

23 590 kg (52,000 lb) Crane Counterweight

915 170 kg (2,017,600 lb) Auxiliary Counterweight

360° Rating

kg (lb) x 1 000

8° Offset

20° Offset

Jib Length 30,5 m (100 ft)	Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
	Radius			
	22,9 (75)	781,0 (1,721.9)	800,0 (1,764.0)	800,0 (1,764.0)
	26,0 (90)	683,1 (1,423.9)	729,2 (1,512.1)	745,4 (1,505.1)
	32,0 (105)	539,2 (1,188.7)	535,9 (1,181.4)	532,3 (1,173.5)
	38,0 (125)	412,8 (906.4)	409,2 (898.5)	405,2 (889.8)
	44,0 (150)	328,8 (682.9)	325,1 (674.6)	320,9 (665.3)
	58,0 (200)	211,6 (429.4)	207,7 (420.8)	203,2 (410.9)
	74,0 (250)	138,4 (288.9)	134,4 (280.2)	129,9 (270.1)
	90,0 (300)	91,3 (187.9)	89,5 (190.2)	84,9 (180.2)
	98,0 (330)		71,4 (137.4)	68,2 (139.9)
	106,0 (350)			52,0 (110.3)
	110,0 (370)			

Jib Length 30,5 m (100 ft)	Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
	Radius			
	30,0 (95)	352,2 (797.1)	374,7 (846.6)	387,9 (874.7)
	32,0 (105)	335,4 (739.5)	357,8 (788.9)	371,7 (819.6)
	36,0 (120)	306,0 (666.3)	328,2 (715.0)	343,3 (748.8)
	42,0 (140)	270,1 (587.7)	291,5 (634.8)	307,9 (671.1)
	50,0 (170)	232,9 (497.8)	253,2 (542.1)	268,8 (560.5)
	62,0 (210)	191,7 (405.7)	190,9 (398.3)	187,1 (389.7)
	74,0 (250)	141,8 (295.9)	138,4 (288.4)	134,4 (279.6)
	86,0 (290)	104,9 (217.9)	101,7 (210.9)	97,7 (202.1)
	98,0 (330)		73,8 (144.9)	70,3 (143.9)
	106,0 (350)			54,5 (117.0)
	110,0 (370)			

Jib Length 45,7 m (150 ft)	Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
	Radius			
	25,9 (85)	613,3 (1,352.3)	652,2 (1,438.0)	652,7 (1,439.0)
	26,0 (90)	611,1 (1,270.1)	650,1 (1,360.5)	651,8 (1,406.6)
	32,0 (105)	486,1 (1,071.7)	523,7 (1,154.5)	536,8 (1,183.4)
	38,0 (125)	401,5 (882.7)	412,8 (906.5)	409,2 (898.6)
	44,0 (150)	332,1 (689.9)	328,4 (681.8)	324,5 (673.1)
	58,0 (200)	214,6 (435.9)	210,7 (427.3)	206,4 (417.7)
	74,0 (250)	141,3 (295.4)	137,3 (286.5)	132,8 (276.6)
	90,0 (300)	96,4 (205.6)	92,4 (196.8)	87,8 (186.7)
	98,0 (330)	79,6 (160.0)	75,8 (156.8)	71,3 (146.7)
	106,0 (350)	56,6 (120.4)	61,8 (134.0)	57,3 (124.0)
	110,0 (370)			51,1 (103.8)

Jib Length 45,7 m (150 ft)	Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
	Radius			
	30,0 (95)			
	32,0 (115)	— (627.6)	— (643.1)	— (652.4)
	36,0 (120)	278,4 (605.6)	285,8 (622.3)	290,2 (632.3)
	42,0 (140)	243,8 (530.1)	252,7 (550.1)	258,2 (562.4)
	50,0 (170)	208,1 (443.8)	218,4 (466.9)	224,6 (480.8)
	62,0 (210)	169,1 (361.2)	180,4 (386.5)	187,0 (401.0)
	74,0 (250)	141,2 (301.9)	143,8 (300.2)	140,1 (292.0)
	86,0 (290)	110,2 (229.6)	106,8 (222.2)	103,0 (213.6)
	98,0 (330)	82,6 (171.0)	79,3 (163.8)	75,4 (155.2)
	106,0 (350)	62,4 (132.6)	64,4 (139.6)	60,6 (131.1)
	110,0 (370)		57,5 (110.4)	53,9 (109.4)

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.

M-1200 RINGER®





# fixed jib load charts

96

## Liftcrane Capacities - M-1200

Jib No 75 with 25,1 m (82' 6") Strut on Boom No. 72

Mast No. 75 or No. 75A

18,3 m (60') RINGER Attachment on Screw Jack Pedestals

23 590 kg (52,000 lb) Crane Counterweight

915 170 kg (2,017,600 lb) Auxiliary Counterweight

360° Rating

kg (lb) x 1 000

### 8° Offset

Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
Radius			
29,0 (95)	455,4 (1,004.2)	485,3 (1,070.1)	502,2 (1,107.3)
32,0 (105)	406,5 (896.2)	434,9 (958.7)	457,6 (1,008.8)
34,0 (115)	379,2 (807.4)	406,9 (866.7)	428,9 (915.2)
38,0 (125)	333,5 (733.2)	359,1 (789.4)	380,3 (836.1)
44,0 (150)	280,8 (591.6)	303,9 (641.2)	323,6 (679.1)
58,0 (200)	200,8 (416.0)	212,6 (431.3)	208,6 (422.4)
74,0 (250)	142,8 (298.6)	138,9 (290.0)	134,7 (280.6)
90,0 (300)	97,9 (208.9)	93,9 (200.1)	89,5 (190.4)
106,0 (350)	67,4 (146.3)	63,4 (137.5)	59,0 (127.7)
110,0 (370)	58,7 (115.3)	57,2 (117.4)	52,8 (107.6)
118,0 (390)			

Jib Length 61,0 m (200 ft)

### 20° Offset

Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
Radius			
42,0 (135)	216,6 (486.6)	222,0 (498.3)	225,3 (505.3)
44,0 (145)	207,3 (455.3)	213,1 (468.0)	216,6 (475.9)
48,0 (160)	190,8 (414.3)	197,0 (428.0)	201,0 (437.1)
54,0 (180)	169,8 (368.4)	176,4 (383.1)	180,8 (393.0)
58,0 (200)	157,8 (330.2)	164,6 (345.6)	169,2 (356.0)
70,0 (230)	128,8 (283.6)	136,1 (299.7)	141,0 (310.4)
82,0 (270)	107,3 (235.7)	114,8 (252.3)	117,6 (257.6)
94,0 (310)	90,8 (199.0)	90,8 (198.0)	87,1 (189.9)
106,0 (350)	71,0 (154.1)	67,7 (146.8)	63,9 (138.4)
114,0 (380)	56,8 (115.1)	54,9 (115.4)	51,1 (107.0)
118,0 (400)		49,2 (-)	

Jib Length 61,0 m (200 ft)

Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
Radius			
29,0 (95)			
32,0 (105)	362,1 (798.3)	384,2 (847.1)	385,3 (849.5)
34,0 (115)	336,7 (715.7)	359,7 (765.2)	376,5 (804.9)
38,0 (125)	294,3 (646.9)	315,6 (693.8)	333,1 (732.2)
44,0 (150)	245,6 (516.1)	264,9 (557.5)	281,1 (592.4)
58,0 (200)	172,0 (354.8)	187,6 (387.9)	201,3 (416.9)
74,0 (250)	122,5 (258.9)	135,4 (286.5)	135,0 (281.2)
90,0 (300)	90,8 (195.3)	94,0 (200.2)	89,7 (190.9)
106,0 (350)	67,5 (146.4)	63,5 (137.8)	59,2 (128.2)
110,0 (370)	61,3 (126.4)	57,4 (117.7)	53,0 (108.2)
118,0 (390)	47,4 (100.9)		

Jib Length 76,2 m (250 ft)

Boom m (ft)	61,9 (203)	69,5 (228)	77,1 (253)
Radius			
42,0 (135)			
44,0 (155)	- (361.4)	- (381.9)	- (392.3)
48,0 (160)	161,2 (349.5)	170,5 (370.1)	175,3 (380.8)
54,0 (180)	142,0 (307.7)	151,2 (328.0)	156,5 (339.7)
58,0 (200)	131,1 (273.0)	140,2 (292.8)	145,6 (305.1)
70,0 (230)	104,7 (230.6)	113,3 (249.5)	119,2 (262.5)
82,0 (270)	85,1 (186.9)	93,2 (204.7)	99,4 (218.2)
94,0 (310)	70,1 (153.4)	77,6 (170.0)	83,9 (183.8)
106,0 (350)	58,1 (126.8)	65,2 (142.4)	65,8 (142.6)
114,0 (380)	51,4 (110.3)	56,8 (119.1)	53,0 (111.1)
118,0 (400)	48,4 (100.7)	50,9 (100.8)	47,3 (-)

Jib Length 76,2 m (250 ft)

M-1200 RINGER®

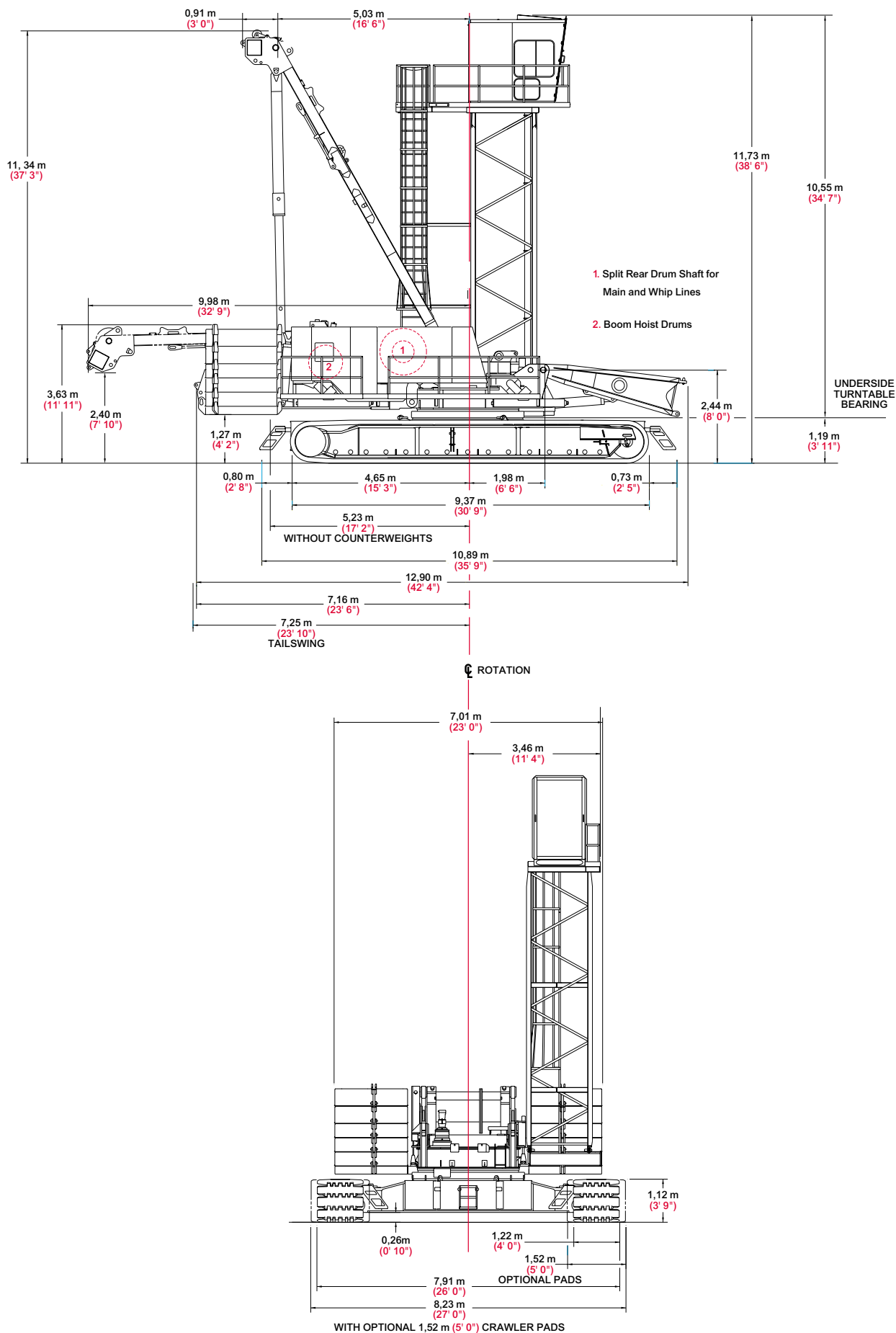


Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.  
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.



# outline dimensions

97



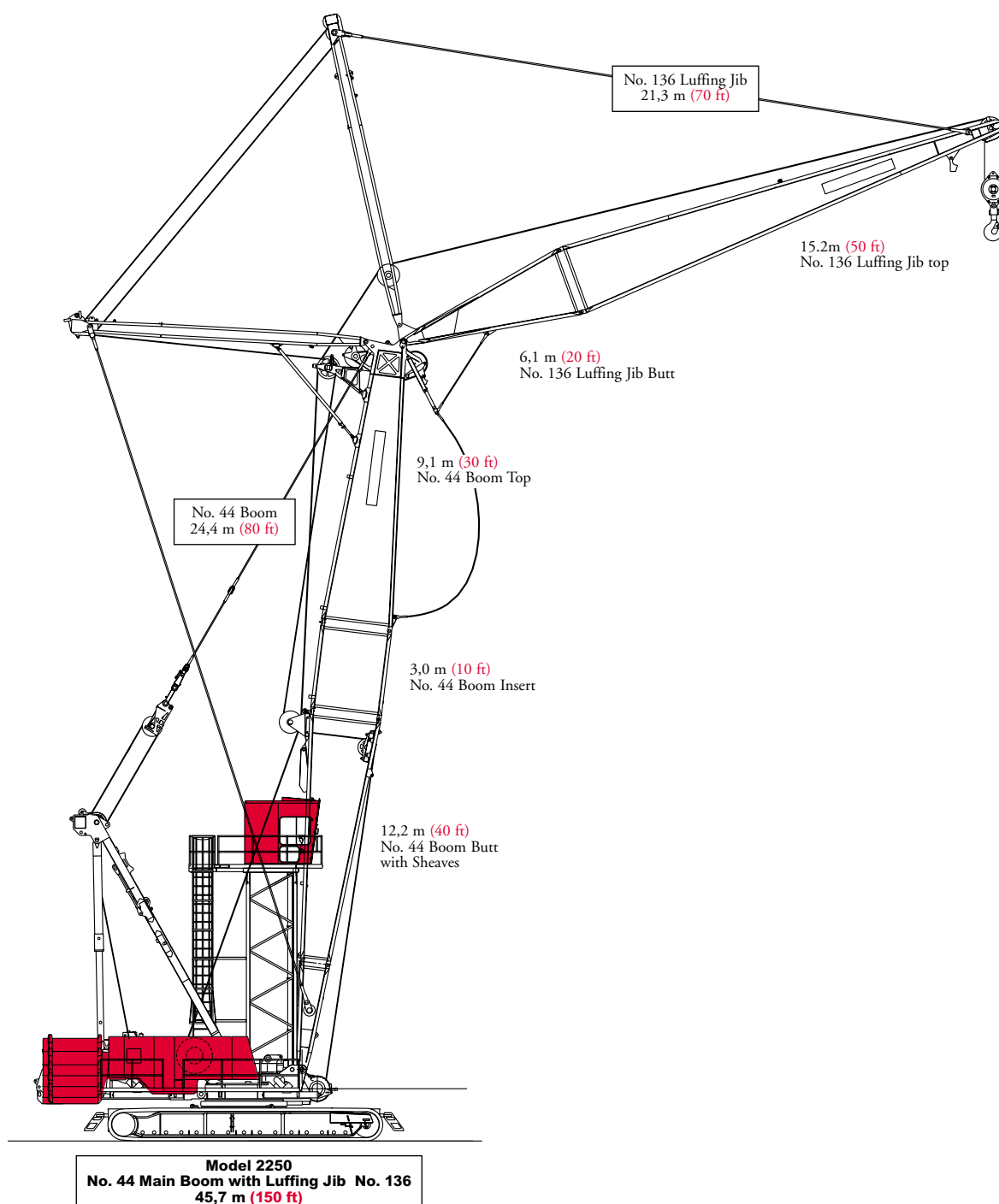
model 2250 Elevated Cab



# boom combinations

98

model 2250 Container Handling



# performance data

PRELIMINARY

## Liftcrane Luffing Jib Capacities - 2250 Series 2 Special Container Handling

Luffing Jib No. 136 on

Boom No. 44 with Heavy Lift Top

99

94 890 kg (209,200 lb) Crane Counterweight

68 040 kg (150,000 lb) Carbody Counterweight

6 800 kg (15,000 lb) Minimum weight required on capacities indicated by (b)

24,4 m (80') Boom with 21,3 m (70') Luffing Jib shown.

For other combinations, consult factory.

360° Rating

kg (lb) x 1 000

Boom Angle	88°	83°	80°	75°	70°	65°	60°
<b>Jib Radius</b>							
8,5 (28)	45,3b (100.0)b	-	-	-	-	-	-
9,0 (30)	45,3b (100.0)b	-	-	-	-	-	-
10,0 (32)	45,3b (100.0)b	-	-	-	-	-	-
- (34)	- (100.0)b	-	-	-	-	-	-
11,0 (36)	45,3b (100.0)b	-	-	-	-	-	-
- (38)	- (100.0)	-	-	-	-	-	-
12,0 (40)	45,3b (100.0)b	-	-	-	-	-	-
14,0 (45)	45,3b (100.0)b	45,3b (100.0)b	-	-	-	-	-
16,0 (50)	45,3b (100.0)b	45,3b (100.0)b	45,3b (100.0)b	-	-	-	-
18,0 (55)	45,3 (100.0)b	45,3b (100.0)b	45,3b (100.0)b	-	-	-	-
20,0 (60)	42,9 (100.0)	45,2b (100.0)b	45,3b (100.0)b	-	-	-	-
- (65)	- (95.4)	- (100.0)b	- (100.0)b	- (100.0)b	-	-	-
22,0 (70)	39,1 (89.1)	43,6 (98.4)	44,8b (100.0)b	45,3b (100.0)b	-	-	-
24,0 (75)	30,8 (82.4)	39,6 (91.8)	42,1 (97.4)	45,3 (100.0)b	45,3b (100.0)b	-	-
- (80)	- (61.4)	- (86.0)	- (91.0)	- (100.0)	- (100.0)b	-	-
26,0 (85)	-	- (76.2)	38,4 (85.2)	42,2 (93.6)	45,2 (100.0)	45,1b (100.0)b	-
28,0 (90)	-	-	- (75.7)	38,7 (87.6)	42,6 (96.0)	41,4 (93.6)	-
- (95)	-	-	-	- (82.2)	- (89.9)	- (87.6)	-
30,0 (100)	-	-	-	-	38,9 (84.2)	38,0 (82.2)	- (80.1)
32,0 (105)	-	-	-	-	35,7 (78.8)	35,1 (77.4)	34,2 (75.5)
- (110)	-	-	-	-	-	- (73.0)	- (71.3)
34,0 (115)	-	-	-	-	-	-	31,7 (67.4)

model 2250 Container Handling

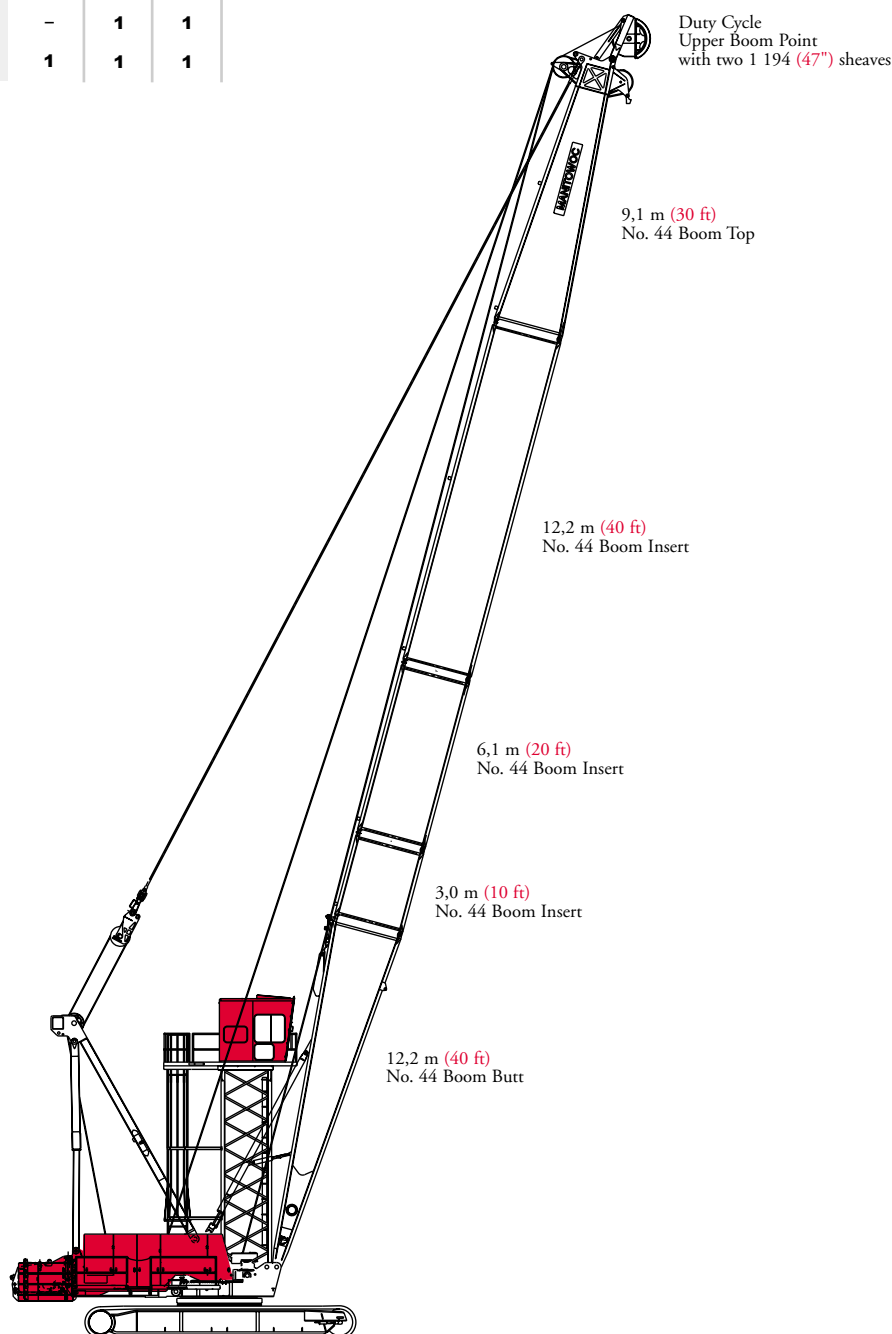


# boom combinations

100

## No. 44 Main Boom with Heavy-Lift Top Combinations

Boom Length m (ft)	Boom Inserts		
	3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)
21,3 (70)	-	-	-
24,4 (80)	1	-	-
27,4 (90)	-	1	-
30,5 (100)	1	1	-
33,5 (110)	-	-	1
36,6 (120)	1	-	1
39,6 (130)	-	1	1
42,7 (140)	1	1	1



**Model 2250**  
No. 44 Main Boom with Duty Cycle Upper Boom Point  
42,7 m (140 ft)

model 2250 Bulk Material



# performance data

## Liftcrane Boom Capacities - 2250 Series 1 Bulk Material Handling Boom No. 44 with Heavy Lift Top

76 750 kg (169,200 lb) Counterweight  
Crawler

360° Rating

kg (lb) x 1 000

Boom m (ft)	21,3 (70)	24,4 (80)	27,4 (90)	30,5 (100)	33,5 (110)	36,6 (120)	39,6 (130)	42,7 (140)
Radius								
12,2 (40)	22,6 (50.0)							
14,0 (45)	22,6 (50.0)	22,6 (50.0)						
16,0 (50)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)					
18,0 (60)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	– (50.0)		
22,0 (70)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)
24,0 (80)		22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)	22,6 (50.0)
30,0 (100)				18,7 (40.8)	18,7 (40.8)	18,7 (40.8)	18,7 (40.8)	18,7 (40.8)
36,0 (120)						13,5 (28.5)	13,8 (29.3)	14,1 (29.9)
42,0 (140)								8,9 (18.7)

## Wire Rope Specifications Bulk Material Handling Boom No. 44 with Heavy-Lift Top 22 600 kg (50,000 lb) Rating

Function	6x41 EIPS, Regular Lay, IWRC
Part Number	Closing or Holding Line No. 719315
Size Wire Rope	– (1-3/8")
Minimum Breaking Strength	87 090 kg (192,000 lb)
Approximate Weight	5,21 kg/m (3.5 lb/ft)

## Wire Rope Lengths - Clamshell/Grapple Boom No. 44 with Heavy-Lift Top

Boom, Length m (ft)	Independently Powered Full Width Front and Rear Drums			
	Front Drum Closing Line		Rear Drum Holding Line	
	m	(ft)	m	(ft)
21,3 (70)	94	(310)	73	(240)
24,4 (80)	101	(330)	79	(260)
27,4 (90)	107	(350)	85	(280)
30,5 (100)	113	(370)	91	(300)
33,5 (110)	119	(390)	98	(320)
36,6 (120)	122	(400)	102	(335)
39,6 (130)	128	(420)	108	(355)
42,7 (140)	134	(440)	114	(375)

Note: Line lengths are based on a 65 degree boom angle, 23 m (75') digging depth from boom hinge, and 22 m (73') for reeving bucket.

Rewrap on drum will occur if hoisting distance above boom hinge exceeds approximately 18 m (60') with boom at 65 degree angle and digging depth of 23 m (75'). The occurrence of rewrap may vary depending on boom angle, digging depth, bucket size or length of wire rope.

## Drums & Laggings

Application	Drum Location	Drum Part Number	Lagging Type	Lagging Part Number	Lagging Diameter	Lagging Width	Wire Rope Size
Closing	Front	192771	Grooved	502403	622 mm (24-1/2")	1 143 mm (45")	– (1-3/8")
Holding	Rear	192665	Grooved	502403	622 mm (24-1/2")	1 143 mm (45")	– (1-3/8")

Clamshell

model 2250 Bulk Material



# performance data

102

## Liftcrane Boom Capacities 2250 Series 1 Clamshell (digging) / Grapple 14 500 kg (32,000 lb) Capacity Boom No. 44 with Heavy Lift Top

48 580 kg (107,100 lb) Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	21,3 (70)	33,5 (110)	42,7 (140)
<b>Radius</b>			
10,7 (35)	14,5 (32.0)		
14,0 (45)	14,5 (32.0)		
16,0 (55)	14,5 (32.0)	14,5 (32.0)	
20,0 (65)	14,5 (32.0)	14,5 (32.0)	14,5 (32.0)
22,0 (75)		14,5 (32.0)	14,5 (32.0)
26,0 (85)		14,5 (32.0)	14,5 (32.0)
30,0 (95)		14,5 (32.0)	14,5 (32.0)
32,0 (105)		14,5 (32.0)	14,0 (31.0)
36,0 (115)			11,3 (26.0)
38,0 (125)			10,2 (23.0)
40,0 (135)			9,3 (19.0)

## General Specifications -

### Drums:

Standard unequal-split rear drums and optional front drum with clamshell laggings grooved for 29 mm or (1-1/8") wire rope.

Closing: Right rear, 1 141 mm (44-29/32") wide x 622 mm (24-1/2") diameter. If optional front drum is used, right rear drum becomes holding line.

Holding: Left rear, 480 mm (18-29/32") wide x 622 mm (24-1/2") diameter.

Optional Closing: Front, 1 141 mm (44-29/32") wide x 622 mm (24-1/2") diameter.

### Wire Rope Length:

Closing: 126 m (415') maximum.

Holding: 107 m (350') maximum.

### Wire Rope Specifications:

29 mm: 6 x 25 filler wire, 1 960 N/mm<sup>2</sup>, IWRC, Minimum breaking strength, 601,0 kN (135,100 lb) Part No. 719405.

(1-1/8"): 6 x 25 filler wire, EIPS, Right regular lay, IWRC, Minimum breaking strength, 58 970 kg (130,000 lb) Part No. 719062.

**Special Equipment:** Pressure rollers on holding and closing drums, Rud-O-Matic No. 1866 three-barrel tagline with 762 mm (30") wheel.

## Liftcrane Boom Capacities 2250 Series 1 Clamshell (digging) / Grapple 18 100 kg (40,000 lb) Capacity Boom No. 44 with Heavy Lift Top

48 580 kg (107,100 lb) Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	21,3 (70)	33,5 (110)	42,7 (140)
<b>Radius</b>			
12,2 (40)	18,1 (40.0)		
16,0 (50)	18,1 (40.0)		
18,0 (60)	18,1 (40.0)	18,1 (40.0)	
20,0 (70)	18,1 (40.0)	18,1 (40.0)	18,1 (40.0)
22,0 (80)	18,1 (40.0)	18,1 (40.0)	18,1 (40.0)
24,0 (90)		18,1 (40.0)	18,1 (40.0)
28,0 (100)		18,1 (36.9)	18,0 (36.0)
32,0 (110)		15,4 (31.6)	15,0 (30.7)
36,0 (120)			12,3 (26.4)
40,0 (130)			10,1 (22.7)
42,0 (140)			9,0 (18.7)

## General Specifications -

### Drums:

Independently powered full-width front and rear drums with double brakes. Each drum 1 695 mm (66-3/4") wide, 572 mm (22-1/2") diameter.

Holding: Rear drum lagging, 1 143 mm (45") wide x 622 mm (24-1/2") diameter.

Closing: Front drum lagging, 1 143 mm (45") wide x 622 mm (24-1/2") diameter.

### Wire Rope Length:

Closing: 131 m (430') maximum.

Holding: 107 m (350') maximum.

### Wire Rope Specifications:

(1-3/8"): 6 x 36, IPS, Right regular lay, IWRC, Minimum breaking strength, 75 750 kg (167,000 lb) Part No. 719418.

**Special Equipment:** Please see specifications, page 8.

model 2250  
Manitowoc





# performance data

103

## Liftcrane Boom Capacities 2250 Series 1 Bulk Material Handling 18 100 kg (40,000 lb) Capacity Boom No. 44 with Heavy Lift Top

76 750 kg (169,200 lb) Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	21,3 (70)	33,5 (110)	42,7 (140)
Radius			
9,1 (30)	18,1 (40.0)		
12,0 (40)	18,1 (40.0)	— (40.0)	
16,0 (50)	18,1 (40.0)	18,1 (40.0)	18,1 (40.0)
18,0 (60)	18,1 (40.0)	18,1 (40.0)	18,1 (40.0)
20,0 (70)		18,1 (40.0)	18,1 (40.0)
24,0 (80)		18,1 (40.0)	18,1 (40.0)
28,0 (90)		18,1 (40.0)	18,1 (40.0)
30,0 (100)		17,8 (39.0)	18,1 (40.0)
32,0 (110)			14,4 (33.0)
36,0 (120)			12,5 (26.5)
40,0 (130)			10,8 (21.0)

## General Specifications -

### Drums:

Standard unequal-split rear drums and optional front drum with clamshell laggings grooved for (1-1/4") wire rope.

Closing: Right rear, 1 141 mm (44-29/32") wide x 622 mm (24-1/2") diameter. If optional front drum is used, right rear drum becomes **holding** line.

Holding: Left rear, 480 mm (18-29/32") wide x 622 mm (24-1/2") diameter.

Optional Closing: Front, 1 141 mm (44-29/32") wide x 622 mm (24-1/2") diameter.

### Wire Rope Length:

Closing: 134 m (440') maximum.

Holding: 114 m (375') maximum.

### Wire Rope Specifications:

(1-1/4"): 6 x 25 filler wire, EIPS, Regular lay, IWRC, Minimum breaking strength, 72 480 kg (159,800 lb) Part No. 719118.

**Special Equipment:** Please see specifications, page 8.

## Upper Boom Point Capacities 2250 Special Tunneling 36 200 kg (80,000 lb) Capacity Boom No. 44 with Heavy Lift Top

76 750 kg (169,200 lb) Upperworks Counterweight

27 220 kg (60,000 lb) Carbody Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	21,3 (70)	42,7 (140)	61,0 (200)
Radius			
6,1 (20)	36,2 (80.0)		
12,0 (40)	36,2 (80.0)	36,2 (80.0)	36,2 (80.0)
18,0 (60)	36,2 (80.0)	36,2 (80.0)	36,2 (80.0)
24,0 (80)		36,2 (80.0)	36,2 (80.0)
30,0 (100)		29,5 (63.7)	28,2 (60.8)
36,0 (120)		22,3 (48.1)	21,0 (45.2)
42,0 (140)		17,3 (37.3)	16,0 (34.4)
48,0 (160)			12,4 (26.5)
54,0 (180)			9,6 (20.4)
56,0 (190)			8,8 (17.9)
58,0 (195)			8,0 (16.7)

## General Specifications -

### Drums:

Independently powered full-width front and rear drums with double brakes. Each drum 1 695 mm (66-3/4") wide, 572 mm (22-1/2") diameter.

Rear drum lagging, 1 143 mm (45") wide x 622 mm (24-1/2") diameter.

Front drum lagging, 1 143 mm (45") wide x 622 mm (24-1/2") diameter.

Optional auxiliary drum, 794 mm (31-1/4") wide x 483mm (19") diameter, grooved for (1") wire rope.

### Wire Rope Length:

Hoist line: 480 m (1,576') reeved continuously between front and rear drums.

Auxiliary line: 336 m (1,104') maximum.

### Wire Rope Specifications:

Hoist line: (1-3/8") 1 960 N/mm<sup>2</sup>, rotation resistant, minimum breaking strength, 109 134 kg kN (240,600 lb).

Auxiliary line: (1") 1 960 N/mm<sup>2</sup>, rotation resistant, Left hand regular lay, Minimum breaking strength, 63 321 kg (139,600 lb), Maximum load, 12 565 kg (27,700 lb) Part No. 719417.

**Special Equipment:** Duty cycle upper boom point with two 1 194 mm (47") diameter sheaves, dual swing drives and larger swing pump, 392 kW (525 BHP) diesel engine, plus 392 kW (525 BHP) engine mounted to counterweights.

model 2250




# CraneCARE<sup>SM</sup>

104

**CraneCARE** 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 — for every one of the more than 7,000 Manitowoc cranes currently in use throughout the world.

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

That's **CraneCARE**.

## Service Training

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

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

- **Basic** – Provides technicians with the basic skills required in our Level I and II classes covering hydraulic and electrical theory and schematics, pump, motor, control, and LMI operation, and the use of meters and gauges.
- **Level 1** – This model-specific class covers theory and offers hands-on training and trouble shooting for all crane systems.
- **Level 2** – This model-specific class provides in depth coverage of all crane systems and components, and advanced troubleshooting of simulated faults. (Requires Level 1.)
- **Level 3/Master** – Covering all EPIC models and the 4100W, this class stresses high level system knowledge and trouble shooting of simulated faults. (Requires Level 2.)

## 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

Provides all the parts required by Manitowoc's Preventative Maintenance Checklist.

### Hydraulic Filter Kit – Part No. 495139-0

Consists of the following:

- Filter Element - No substitutions allowed (1x Part No. 427264-0)

### Cummins Model N14-C450 Diesel

#### – Part No. 414157-0 Service Interval Kits

#### 200 Hour Kit – Part No. 495120-0

Consists of the following:

##### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (2x Part No. 413358-0)

#### 1,000 Hour Kit – Part No. 495121-0

Consists of the following:

##### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (2x Part No. 413358-0)

##### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)

#### 2,000 Hour Kit – Part No. 495122-0

Consists of the following:

##### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (2x Part No. 413358-0)
- Belt, Alternator - set of two (1x Part No. 413608-0)
- Belt, Water Pump (1x Part No. 413373-0)

##### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)
- Filter - Hydraulic In-tank Suction (2x Part No. 427258-0)
- Seal Kit (1x Part No. 427258-5)

### Cummins Model N14-C525E-CELECT Diesel

#### – Part No. 414168-0 Service Interval Kits

#### 200 Hour Kit – Part No. 495160-0

Consists of the following:

##### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (1x Part No. 970063-2)

#### 1,000 Hour Kit – Part No. 495161-0

Consists of the following:

##### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (1x Part No. 970063-2)

##### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)

model 2250  
Manitowoc

# CraneCARE<sup>SM</sup>

## 2,000 Hour Kit – Part No. 495162-0

Consists of the following:

### Engine

- Air Cleaner - Element (1x Part No. 347037-6)
- Oil Filter (1x Part No. 413616-0)
- Water Filter (1x Part No. 413612-0)
- Fuel Filter (1x Part No. 970063-2)
- Belt, Alternator - set of two (1x Part No. 413608-0)
- Belt, Water Pump (1x Part No. 413373-0)

### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)
- Filter - Hydraulic In-tank Suction (2x Part No. 427258-0)
- Seal Kit (1x Part No. 427258-5)

## Caterpillar Model 3406C Diesel

### – Part No. 414150-0 Service Interval Kits

## 200 Hour Kit – Part No. 495203-0

Consists of the following:

### Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413202-0)
- Water Filter (1x Part No. 413211-0)
- Fuel Filter - Final (1x Part No. 413216-0)
- Fuel Filter - Primary (1x Part No. 413213-0)

## 1,000 Hour Kit – Part No. 495204-0

Consists of the following:

### Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413202-0)
- Water Filter (1x Part No. 413211-0)
- Fuel Filter - Final (1x Part No. 413216-0)
- Fuel Filter - Primary (1x Part No. 413213-0)

### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)

## 2,000 Hour Kit – Part No. 495205-0

Consists of the following:

### Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413202-0)
- Water Filter (1x Part No. 413211-0)
- Fuel Filter - Final (1x Part No. 413216-0)
- Fuel Filter - Primary (1x Part No. 413213-0)
- Belt - Alternator (1x Part No. 412610-0)

### Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427264-0)
- Filter - Hydraulic In-tank Suction (2x Part No. 427258-0)
- Seal Kit (1x Part No. 427258-5)

## Hydraulic Test Kit – Part No. 499791-6

Protect your investment by demanding Genuine Manitowoc Parts Service Kits. The Hydraulic Service Kit consist of the following:

- All hydraulic fittings to access all pressures and flows
- Hydraulic flow meters and pressure gauges to record hydraulic data.
- Electrical “Break out” harnesses to access voltages on all electrical circuits on all machines.
- Fluke® Digital volt ohm meter, as used in all Manitowoc service literature.

## Hydraulic Test Kit with case – Part No. 499792-9

The above kit (Part No. 499791-6) plus a custom heavy-duty carrying case.

## U.S. Standard Tools Kit – Part No. 499976-0

All standard tools needed to properly maintain and service your crane. (Does not include torque wrench.)

## 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.manitowoccranes.com](http://www.manitowoccranes.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.manitowoccranes.com](http://www.manitowoccranes.com)

## Technical Documentation

Manitowoc has the industry's most extensive documentation, and the easiest to understand, available in major languages and formats that include print, disk, and videotape.

A complete set of Operator's, Parts, Capacity, Vendor, and Service Technician's Manuals are shipped with each crane.

Additional copies available through your Authorized Manitowoc Distributor.

- **Crane Operator's Manual – Part No. 899721**
- **Crane Parts Manual – Part No. 899720**
- **Crane Capacity Manual – Part No. 899730**
- **Crane Vendor Manual – Part No. 899722**
- **Service Technician's Manual (EPIC) – Part No. 899732**
- **Luffing Jib Operator's/Parts Manual – Part No. 899726**

105

model 2250



# CraneCARE<sup>SM</sup>

106

- **Max-Spander/MAX-ER Operator's/Parts Manual**  
– Part No. 899727
- **M-1200 Operator's/Parts Manual**  
– Part No. 899728
- **Capacity Chart Manual - Attachments**  
– Part No. 899795

CD rom versions of the Operator's and Parts Manuals are shipped with each crane.

Also available are the following CDs:

- **2250 Service – Yearly subscription (Distributors)**  
CD – Part No. 899767
- **Owner Master CD (specify crane serial number)**  
CD – Part No. 899810
- **Ground Bearing Pressure Estimator**  
CD – Part No. 899765
- **Crane Selection and Planning Software (CompuCRANE®)**  
CD – Part No. 899766
- **EPIC® Crane Library** 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.

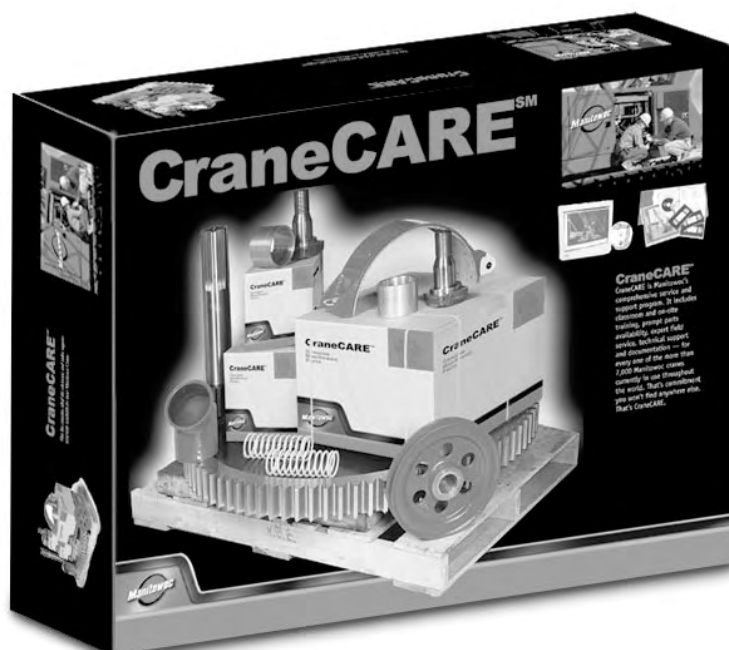
CD – Part No. 899801

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

- **Model 2250 Assembly Video – Part No. 899830**
- **Model 2250 Operation Video – Part No. 899831**
- **Model 2250 Lubrication Video – Part No. 899832**
- **Your Capacity Chart Video – Part No. 899737**
- **Respect the Limits Video – Part No. 899734**
- **Crane Safety Video – Part No. 899736**
- **Boom Inspection/Repair Video – Part No. 899738**

## CraneCARE Package

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



model 2250




## 107

# model 2250





**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](mailto:info@bigge.com)  
Web site: [www.bigge.com](http://www.bigge.com)



Manitowoc Cranes, Inc.  
P.O. Box 70  
Manitowoc, WI, USA 54221-0070  
Telephone 920-684-6621  
Facsimile 920-683-6277  
[www.manitowoccranes.com](http://www.manitowoccranes.com)

**Backed by Manitowoc****CraneCARE<sup>SM</sup>**

CraneCARE 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 — for every one of the more than 7,000 Manitowoc cranes currently in use throughout the world. That's commitment you won't find anywhere else. That's CraneCARE.

