model 1015

product guide

data

features

- 120 mton (132 ton) Capacity
- 493 mton-m (3,600 ft-kips) Maximum Load Moment
- 61,0 m (200') Heavy-Duty Boom
- 67,1 m (220') Fixed Jib on Heavy-Duty Boom
- 447 kW (600 HP) engine
- EPIC® controls with CAN-BUS technology
- 187 m/min (615 fpm) line speed on 196 kN (44,000 lb) drum
- 131 m/min (430 fpm) line speed on 294 kN (66,000 lb) drum
- 294 kN (66,000 lb) line pull standard
- 196 kN (44,000 lb) line pull optional
- 147 kN (33,000 lb) line pull optional - 3rd drum
- 681 l/min @ 300 bar (180 gpm @ 4300 psi) Auxiliary Hydraulic Package
- Auxiliary hydraulic power packs for attachment power
- 178 kN (40,000 lb) Material Rehandling Clamshell capacity
- 111 kN (25,000 lb) Dragline capacity
- Fast, efficient self-assembly and disassembly
- Manitowoc Crane CARE comprehensive support

foundation and duty-cycle

contents

Manitowoc Crane Group

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Upperworks

Engine

Cummins Model QSX15 diesel, 6 cylinder, 447 kW (600 BHP) @ 1800 rated RPM

Optional: Auxiliary Hydraulic Power Pack – sized to power the "high power" attachments or where crane power is required for drum performance.

Includes engine block heater, ether starting aid, disconnect clutch for cold weather starting, high silencing muffler, high performance hydraulic oil cooler, radiator and high efficiency fan.

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

Two 12 volt maintenance-free batteries, 1,300 CCA at -18° C (0° F), 24 volt system and 75 amp alternator.

One diesel fuel tank, 851 l (225 gal), with level indicator in operator's cab.

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

Controls

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

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

Travel and swing alarms are standard equipment.

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: Anemometer (wind indicator).

Optional: Foot control for travel.

Hydraulic System

Three high-pressure piston pumps, driven by a multi-pump transmission, provide independent closed-loop hydraulic power for the hoisting drums and boom hoist. Two high-pressure, open-loop piston pumps, driven by a multi-pump transmission provide 681 l/min @ 300 bar (180 gpm @ 4300 psi) hydraulic power for the left and right crawler, swing, 3rd/4th drums or attachments.

Hydraulic reservoir is equipped with breather, clean out access, and internal return filters.

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

System includes high performance hydraulic oil cooler and replaceable full flow filter. All oil is filtered before entering the hydraulic pumps and upon return to the reservoir.

Hydraulic system also includes pump transmission disconnect.

Drums

Two equal width drums, 678 mm (26-11/16") wide and 787 mm (31") diameter, are driven by independent variable displacement axial piston hydraulic motors through planetary reduction mounted on separate front and rear shafts with anti-friction bearings. Laggings are supplied with grooves for 32 mm wire rope for 20 mton (44,000 lb) and 38 mm wire rope for 30 mton (66,000 lb) drums.

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

Free-fall operation is standard for front and rear drums. Wet disc brake manually applied by foot pedal with locking latch in operator's cab. Operator may select free-fall or powered lowering mode using a selector switch.

Optional: Auxiliary (third) hydraulic powered drum rated 147 kN (33,000 lb) line pull mounted in boom butt. Includes third drum control system.

Optional: Auxiliary (fourth) hydraulic powered drum rated 66,7 kN (15,000 lb) line pull primarily for pile driving to "upright" pile, support hoses, etc. Includes fourth drum control system.

Optional: Auxiliary drum preparation includes electric wiring, controls, hydraulic pump and plumbing.

Boom Hoist

Independent boom hoist with one grooved drum. Includes wire rope for 12-part boom hoist reeving.

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

Boom hoist speed: raise 54,9 m (180') full main boom from 0- 82 degrees in 1 minute, 40 seconds.

specifications

Swing System

High strength fabricated steel rotating bed is mounted on 2 146 mm (7'-1/2") diameter heavy-duty 3-row roller bearing turntable.

Independent swing powered by two fixed displacement hydraulic motors coupled to a planetary reduction gearbox with internal brake.

Swing system maximum speed: 3.5 rpm.

Boom Support System

Moving mast is 7,6 m (25') long and connects the boom hoist reeving to the boom support pendants. When used with optional self-erect package, the mast is utilized for crane assembly and disassembly. It is capable of stacking the counterweights, and assembling the boom and jib, and attaching crawlers.

Cushioned physical boom stop and automatic electric boom stop are standard.

Counterweight tray and counterweights for the upperworks are raised by a pair of cylinders. Counterweight attaches to the rotating bed by pins.

Counterweight

QTY.	ITEM	UNIT WEIGHT kg	UNIT WEIGHT lb	TOTAL WEIGHT kg	TOTAL WEIGHT lb
	Upperworks				
1	Tray	7 961	17,550	7 961	17,550
2	Upper Box	6 123	13,500	12 250	27,000
2	Upper Box	1 951	4,300	3 001	8,600
	Pins, links, etc.	318	700	318	700
		TOTAL		**23 530**	**53,850**

Operator's Vision 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, air conditioning, and radio are standard.

- Optional: Nylon protective window covers.

- Optional: 10,7 m (35') elevated cab with catwalks and railing.

No. 83 Heavy-Lift Boom

The liftcrane is equipped with 15,2 m (50') of No. 83 basic heavy-lift angle chord boom consisting of a 6,7 m (22') butt, 7,6 m (25') transition, and 0,9 m (3') hammerhead top with four 91,4 cm (36") diameter roller bearing sheaves on one shaft. Includes LMI Hardware, rope guides, boom hoist wire rope, boom angle indicator, and 30,0 mton (33 ton) swivel hook and weight ball. The No. 83 boom utilizes boom support pendants.

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

- Optional: 3,0 m (10'), 6,1 m (20'), and 12,2 m (40') No. 83 boom inserts with boom support pendants. Utilize boom inserts in combination with No. 83 basic main boom for total length up to 54,8 m (180').

- Optional: No. 83 detachable upper boom point with one 76,2 cm (30") diameter tapered roller bearing steel sheave grooved for 32 mm or 38 mm rope with rope guard for liftcrane.

No. 134A Fixed Jib

- Optional: No. 134A basic fixed jib 6,1 m (20') length consisting of 4,6 m (15') jib butt and 1,5 m (5') jib top with 3,7 m (12') jib strut, pendants, and backstay. Includes LMI hardware. For use with No. 83 boom.

- Optional: No. 1015 fixed jib inserts 3,0 m (10') and 6,1 m (20') with pendants.

Utilize fixed jib inserts in combination with the No. 134A basic fixed jib for total lengths of to 21,3 m (70').

Lowerworks

Carbody

Heavy-duty carbody connects rotating bed and crawler frames.

Crawlers

Crawler assemblies are 7,06 m (23' 2") long with 1 000 mm (39") wide cast steel crawler pads and sealed low maintenance intermediate rollers. Each crawler is powered independently by a variable displacement hydraulic motor. Crawlers provide ample tractive effort for counter rotation with full rated load.

Maximum ground speed of 1,61 kph (1.0 mph).
Crawler track and shoe specifications:

SHOE mm (in)	**TRACK** mm (in)			
	Gauge Extended	Gauge Retracted	Width Extended	Width Retracted
Sandard: 1 000 (39)	4 000 (157.48)	2 900 (114.17)	5 000 (196.85)	3 900 (153.54)

Optional Equipment

- Optional: Self-erect system, includes sheave for counterweight and boom handling, jacking cylinders with pads, alignment device, carbody support pedestals, and 27,2-mton (30-ton) assembly block.

- 30,0 mton (33 ton) swivel hook and weight ball for auxiliary drum.

- 27,2-mton (30-ton) hook block with single roller bearing sheave grooved for 32 or 38 mm wire rope and roller bearing swivel hook with hook latch and swivel lock (assembly block).

- 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.

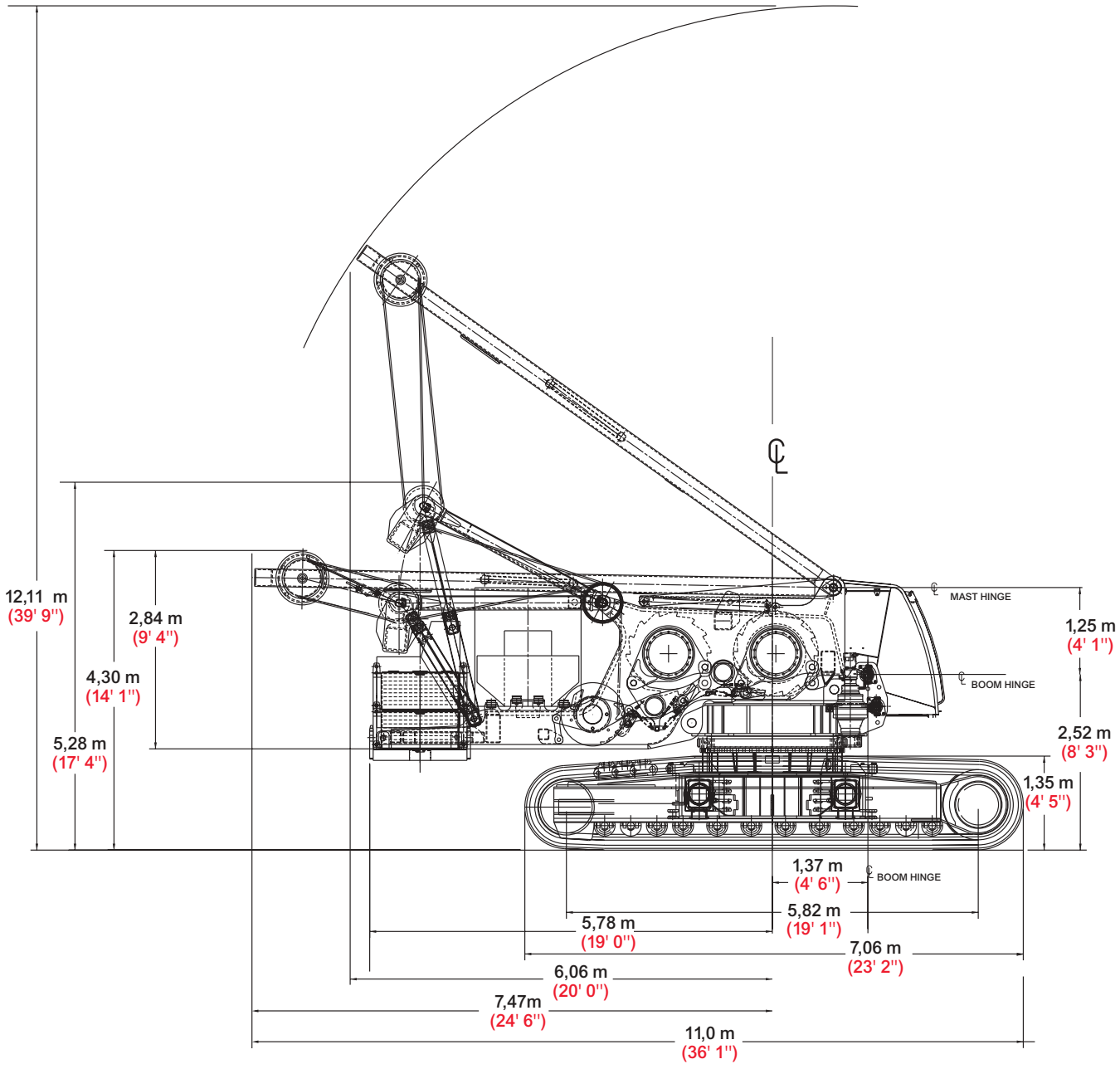
- Optional: Lighting Packages: consult dealer for available options.

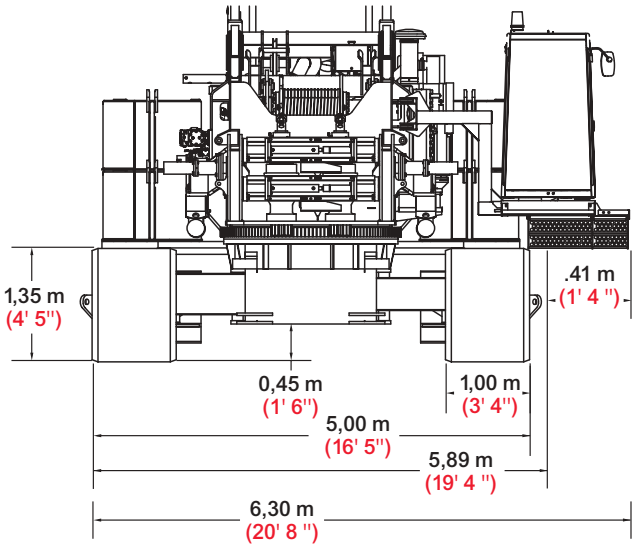
- Optional: Special Paint other than Manitowoc standard red and black.

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

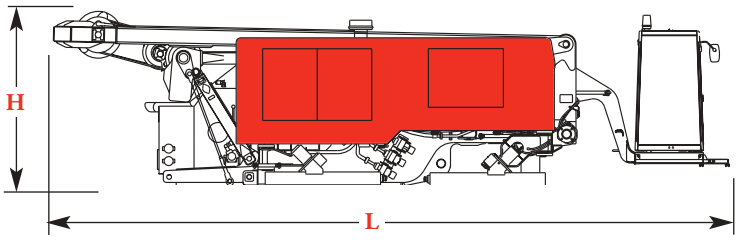
- Optional: Export Packaging: basic crane, boom and jib sections.

outline dimensions



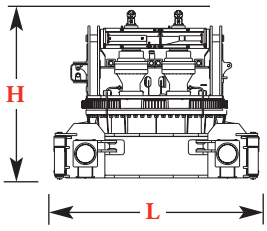


outline dimensions



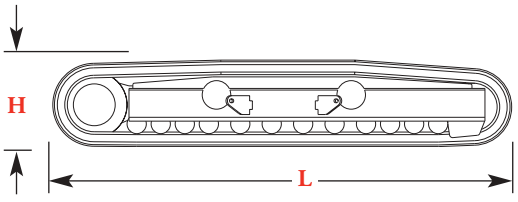
Upperworks		
Length	11,02 m	36' 2"
Width	3,50 m	11' 6"
Height	3,03 m	9' 11"
Weight	39 734 kg	87,600 lb

Note: Weight includes upperworks, operator's cab, mast, boom-hoist wire rope, optional self-assembly jacks, full hydraulic fluid reservoir, and half tank of fuel.

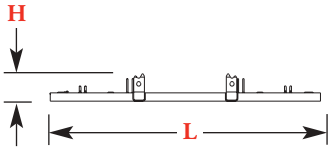


Carbody Adapter Frame		
Length	4,50 m	14' 9"
Width	3,00 m	9' 10"
Height	2,48 m	8' 2"
Weight	19 277 kg	42,500 lb

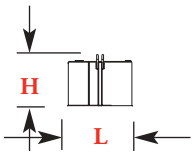
Note: Width is with crawler beams retracted, carbody rotated 90º for shipping.



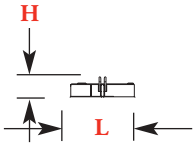
Crawlers		x 2
Length	7,15 m	23' 6"
Width	1,00 m	3' 4"
Height	1,35 m	4' 5"
Weight	15 944 kg	35,150 lb



Counterweight Tray		
Length	5,09 m	16' 8"
Width	1,49 m	4' 11"
Height	0,29 m	1' 0"
Weight	7 961 kg	17,550 lb



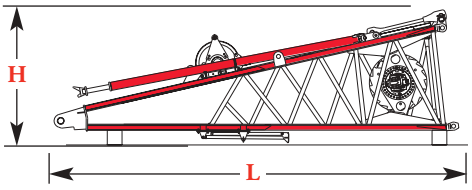
Side Counterweight Lower		x 2
Length	1,18 m	3' 11"
Width	1,12 m	3' 8"
Height	0,97 m	3' 2"
Weight	6 123 kg	13,500 lb



Side Counterweight Upper		x 2
Length	1,18 m	3' 11"
Width	1,12 m	3' 8"
Height	0,74 m	2' 5"
Weight	1 951 kg	4,300 lb

Option

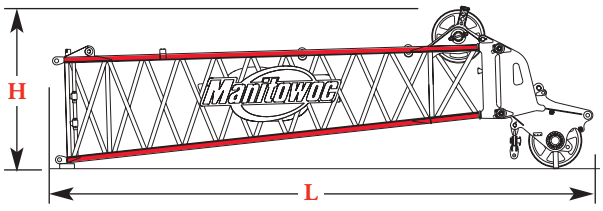
outline dimensions



No. 83 Boom Butt 6,7 m (22') & Wire Rope Guide, Boom Stop x 1

Length	6,99 m	23' 0"
Width	1,93 m	6' 4"
Height	2,29 m	7' 6"
Weight	2 680 kg	6,650 lb

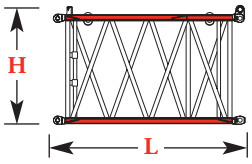
Note: Includes boom butt support for self-erect option and boom angle indicator. With optional drum total weight is 6 056 kg (13,350 lb).



No. 83 Transition 7,6 m (25') & No. 83 Hammerhead Top 0,9 m (3') & Wire Rope Guide, Pendants x 1

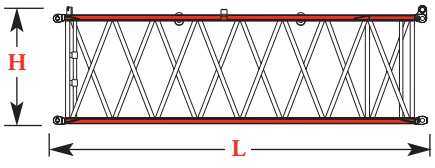
Length	9,30 m	30' 6"
Width	1,93 m	6' 4"
Height	2,77 m	9' 1"
Weight	4 209 kg	9,280 lb

Note: Wire rope guide shown in stowed position.



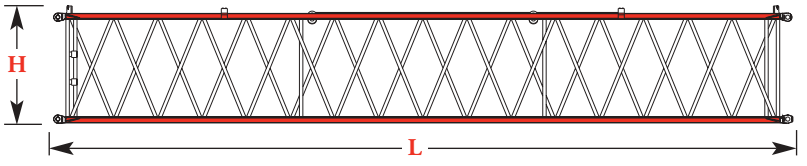
No. 83 Main Boom 3,0 m (10') Insert & Pendants x 1

Length	3,23 m	10' 7"
Width	2,08 m	6' 10"
Height	1,91 m	6' 3"
Weight	760 kg	1,675 lb



No. 83 Main Boom 6,1 m (20') Insert & Pendants x 1

Length	6,27 m	20' 7"
Width	2,08 m	6' 10"
Height	1,91 m	6' 3"
Weight	1 216 kg	2,680 lb

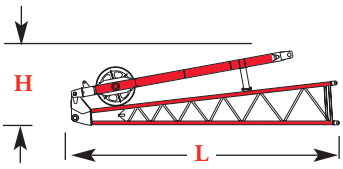


No. 83 Main Boom 12,2 m (40') Insert & Pendants x 1, 2, 3

Length	12,37 m	40' 7"
Width	2,08 m	6' 10"
Height	1,91 m	6' 3"
Weight	1 735 kg	3,825 lb

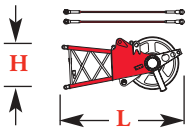
Option

outline dimensions



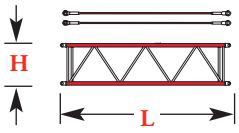
No. 134 Jib Butt 4,6 m (15') & Strut, Stop x 1

Length	4,67 m	15' 4"
Width	0,86 m	2' 10"
Height	1,29 m	4' 3"
Weight	635 kg	1,400 lb



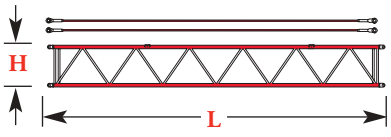
No. 134A Jib Top 1,5 m (5') & Pendants x 1

Length	2,08 m	6' 10"
Width	0,79 m	2' 7"
Height	0,79 m	2' 7"
Weight	572 kg	1,262 lb



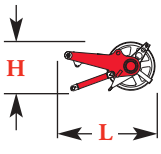
No. 134 Jib Insert 3,0 m (10') & Pendants x 1

Length	3,20 m	10' 6"
Width	0,79 m	2' 7"
Height	0,79 m	2' 7"
Weight	218 kg	480 lb



No. 134 Jib Insert 6,1 m (20') & Pendants x 1, 2

Length	6,17 m	20' 3"
Width	0,79 m	2' 7"
Height	0,79 m	2' 7"
Weight	340 kg	750 lb



No. 83 Upper Boom Point x 1

Length	1,73 m	5' 8"
Width	0,78 m	2' 7"
Height	0,91 m	3' 0"
Weight	585 kg	1,290 lb

Note: Includes mounting bracket

Option

outline dimensions

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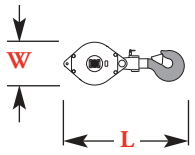
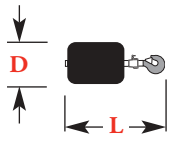


Hook Block for 32 or 38 mm Wire Rope

Capacity	27,2 mt	30 t	Length	1,89 m	6' 3"
Weight	714 kg	1,575 lb	Width	0,78 m	2'7"



Weight Ball

Capacity/Swivel	30,0 mt	33 t	Diameter	0,47 m	1' 9"
Weight	680 kg	1 500 lb	Length	1,28 m	4' 4"

Option

Trailer Load Out Summary

Model 1015
No. 83 Boom 61,0 m (200') and
No. 134A Fixed Jib 21,3 m (70')

Item	Weight each Item kg (lb)	Quantity on Trailer Load # 1	2	3*	4*	5	6**	7	8
No. 1015 Basic Crane	39 734 (87,600)	1							
Carbody Adapter Frame	00 000 (00,000)		1						
Crawler	15 944 (33,150)			1	1				
Counterweight Tray	7 961 (17,500)					1			
Upper Side Counterweight	1 951 (4,300)								2
Lower Side Counterweight	6 123 (13,500)						1	1	
6,7 m (22') No. 83 Boom Butt	3 686 (6,650)					1			
8,5 m (28') No. 83 Transition, Top, Guide	4 209 (9,280)						1		
3,0 m (10') No. 83 Boom Insert	760 (1,675)					1			
6,1 m (20') No. 83 Boom Insert	1 216 (2,680)			1					
12,2 m (40') No. 83 Boom Insert	1 735 (3,825)				1			1	1
6,1 m (20') No. 134A Jib & Strut	1 207 (2,662)			1					
3,0 m (10') No. 134 Jib Insert	218 (480)						1		
6,1 m (20') No. 134 Jib Insert	340 (750)						1		
30 mton (33 ton) Self-assembly Block	714 (1,575)							1	
30 mton (33 ton) Weight Ball	680 (1,500)							1	
No. 83 Upper Boom Point	585 (1,290)					1			
Approximate Total Shipping Weight kg (lb)		39 734 (87,600)	00 000 (00,000)	18 367 (38,492)	17 769 (36,975)	12 992 (27,115)	10 890 (24,010)	9 252 (20,400)	5 637 (12,425)

* Drop deck trailer recommended.
** Step deck trailer recommended.

Load weights do not include blocking, miscellaneous items.

assembly

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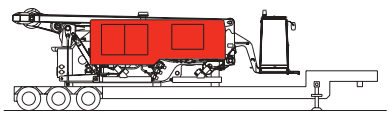
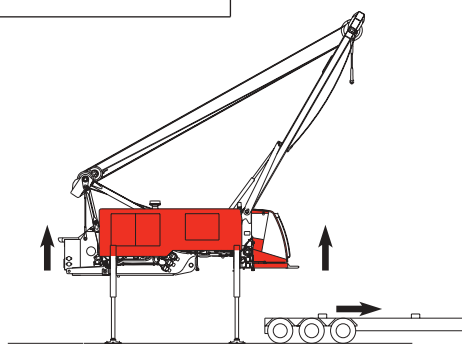
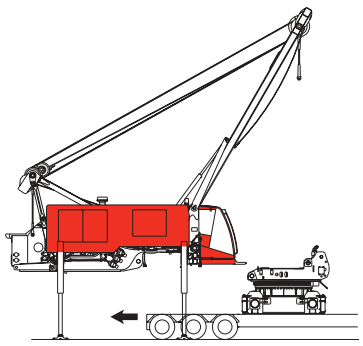
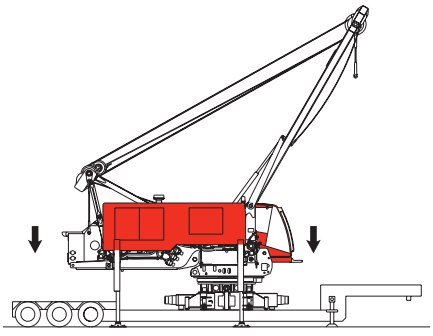
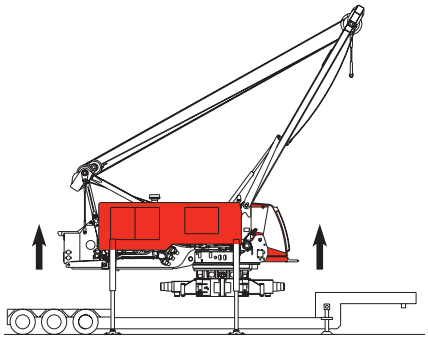
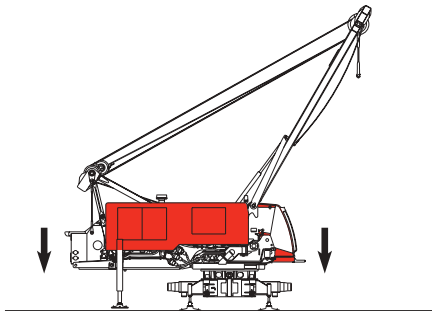


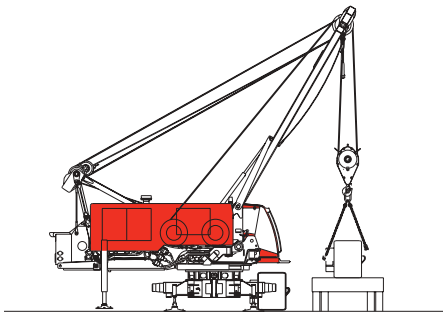


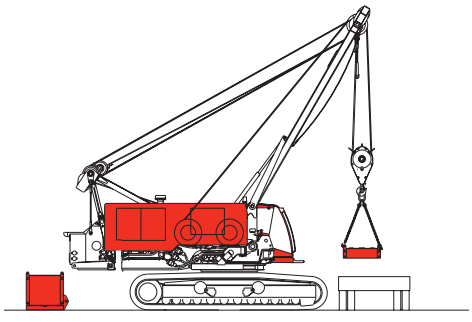


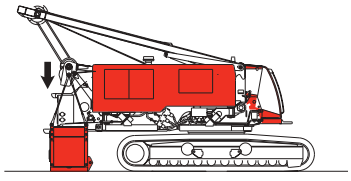


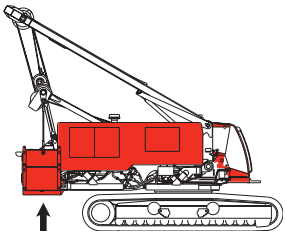


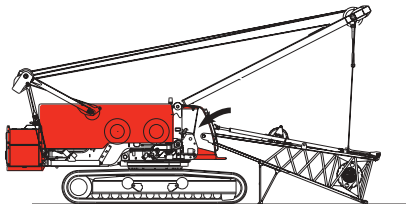


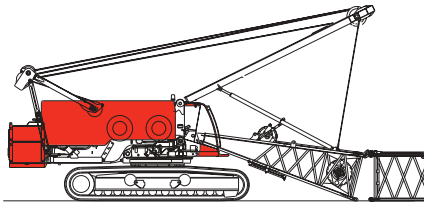


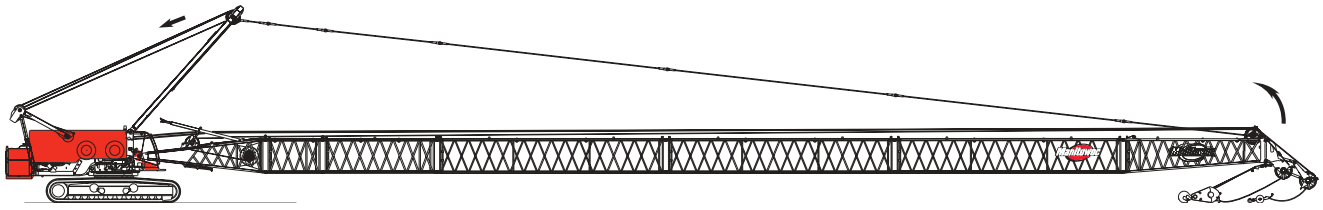












model 1015

Manitowoc

Wire Rope Lengths
Boom No. 83
- or -
Fixed Jib No. 134A on
Boom No. 83

Boom or Boom and Fixed Jib Length	Whip Line				Hoist line					
	Rear Drum (1 Part of Line)		Rear Drum (2 Parts of Line)		Front Drum 38 mm Wire Rope		Maximum Required Parts of Line	Front Drum 32 mm Wire Rope		Maximum Required Parts of Line
m (ft)	m	(ft)	m	(ft)	m	(ft)		m	(ft)	
15,2 (50)	49	(160)	64	(210)	99	(325)	4	122	(400)	5
18,3 (60)	55	(180)	73	(240)	114	(375)	4	137	(450)	5
21,3 (70)	61	(200)	82	(270)	130	(425)	4	152	(500)	5
24,4 (80)	67	(220)	91	(300)	145	(475)	4	175	(575)	5
27,4 (90)	73	(240)	101	(330)	145	(475)	3	191	(625)	5
30,5 (100)	79	(260)	110	(360)	145	(475)	3	191	(625)	4
33,5 (110)	85	(280)	119	(390)	160	(525)	3	191	(625)	4
36,6 (120)	91	(300)	128	(420)	168	(550)	3	206	(675)	4
39,6 (130)	98	(320)	137	(450)	168	(550)	2	206	(675)	3
42,7 (140)	104	(340)	146	(480)	168	(550)	2	206	(675)	3
45,7 (150)	110	(360)	155	(510)	168	(550)	2	206	(675)	3
48,8 (160)	116	(380)	165	(540)	168	(550)	2	213	(700)	3
51,8 (170)	122	(400)	174	(570)	175	(575)	2	229	(750)	3
54,9 (180)	128	(420)	183	(600)	183	(600)	2	229	(750)	2
57,9 (190)	134	(440)	192	(630)	198	(650)	2	229	(750)	2
61,0 (200)	140	(460)	201	(660)	–	–	–	–	–	–
64,0 (210)	146	(480)	–	–	–	–	–	–	–	–
67,1 (220)	152	(500)	–	–	–	–	–	–	–	–

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.

Auxiliary drum provides 147 kN (33,000 lb)) maximum single line pull.

Wire Rope Lengths
Clamshell / Grapple
Boom No. 83

Boom Length	Front Drum Closing Line		Rear Drum Holding Line	
m (ft)	m	(ft)	m	(ft)
15,2 (50)	64	(210)	44	(145)
18,3 (60)	70	(230)	50	(165)
21,3 (70)	76	(250)	56	(185)
24,4 (80)	82	(270)	62	(205)
27,4 (90)	88	(290)	69	(225)
30,5 (100)	94	(310)	75	(245)
33,5 (110)	101	(330)	81	(265)
36,6 (120)	107	(350)	87	(285)

NOTE: Lengths are based on a 65 degree boom angle, 6 m (20') digging depth, and 20 m (67 ') for reeving bucket.

Rewrap on front drum (closing line) will occur if hoisting distance exceeds approximately 23 m (75') from ground level with boom at 65 degree angle and digging depth of 6 m (20'). The occurrence of rewrap may vary depending on boom angle, digging depth, bucket size or length of wire rope.

performance data

Wire Rope Specifications 5:1 Safety Factor
Boom No. 83
- or -
Fixed Jib No. 134A on Boom No. 83

5:1 Safety Factor
Rotation Resistant, Right Hand Lang Lay
Wire Rope with Pad Eye

Function	Hoist/Whip Line	Hoist/Whip Line (Optional)	Auxiliary Line
Part Number	No. A00839	No. A00218	No. A00840
Size Wire Rope	38 mm –	32 mm –	28 mm –
Minimum Breaking Strength	1 471,4 kN (330,800 lb)	980,3 kN (220,400 lb)	750,8 kN (168,800 lb)
Maximum Load Per Line	29 940 kg (66,000 lb)	19 960 kg (44,000 lb)	13 608 kg (30,000 lb)
Approximate Weight	7,32 kg/m (4.92 lb/ft)	5,01 kg/m (3.37 lb/ft)	3,91 kg/m (2.63 lb/ft)

Drum Capacities - Wire Rope

	Maximum Length
Front or Rear Drum 38 mm Wire Rope*	200 m (657 ft) 4 Layers
Front or Rear Drum 32 mm Wire Rope*	221 m (725 ft) 4 Layers
Auxiliary Drum 28 mm Wire Rope**	293 m (962 ft) 6 Layers

*9 m (28') is deducted from maximum spooling capacities for 3 dead wraps on front or rear drum.

**5 m (18') is deducted from maximum spooling capacities for 3 dead wraps on auxiliary drum.

Wire Rope Specifications 3.5:1 Safety Factor
Boom No. 83
- or -
Fixed Jib No. 134A on Boom No. 83

3.5:1 Safety Factor
6 x 36 Extra Extra Improved Plow Steel,
Right Hand Regular Lay, IWRC
Wire Rope with Pad Eye

Function	Auxiliary Line
Part Number	No. A02479
Size Wire Rope	28 mm –
Minimum Breaking Strength	603,1 kN (135,600 lb)
Maximum Load Per Line	13 608 kg (30,000 lb)
Approximate Weight	3,33 kg/m (2.24 lb/ft)

Wire Rope Specifications 5:1 Safety Factor
Clamshell / Grapple
Boom No. 83

5:1 Safety Factor
Rotation Resistant, Right Hand Lang Lay
Wire Rope with Pad Eye

Function	Closing / Holding
Part Number	No. A00218
Size Wire Rope	32 mm –
Minimum Breaking Strength	980,3 kN (220,400 lb)
Maximum Load Per Line	19 960 kg (44,000 lb)
Approximate Weight	5,01 kg/m (3.37 lb/ft)

Maximum Length – Unassisted Raising

	No. 83 Boom with Heavy-Duty Top - or - No. 134A Fixed Jib on No. 83 Boom with Heavy-Duty Top	
	Main Boom	Fixed Jib
Over front of blocked crawlers m (ft)	61,0 (200)	– –
	57,9 (190)	– –
	54,9 (180)	– –
	51,8 (190)	9,1 (30)
	48,8 (180)	15,2 (50)
	45,7 (170)	21,3 (70)

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

Working Weight

Configuration	kg (lb)
15,2 m (50') No. 83 Boom	122 942 (271,040)
42,7 m (140') No. 83 Boom* combined with 21,3 m (70') No. 134A Fixed Jib	129 365 (286,365)

Typical working weight includes optional self-assembly carbody jacks, hydraulic reservoir full, fuel half-full, drums with standard lengths of wire rope, upper boom point, and 30,0 mt (33 t) hook and weight ball.

Note: Upper boom point not used with fixed jib.

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 Part Number	Lagging Diameter	Nominal Wire Rope Size	Drum or Lagging Groove Pitch *	Minimum Wire Rope Size**
Basic Liftcrane	Hoist	Front	A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00164	857 mm (33-3/4")	38 mm	39,88 mm (1.570")	38,76 mm (1.526")
			A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00185 with A05160 Spacer	857 mm (33-3/4")	32 mm	33,45 mm (1.317")	32,64 mm (1.285")
	Whip	Rear	A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00164	857 mm (33-3/4")	38 mm	39,88 mm (1.570")	38,76 mm (1.526")
			A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00185 with A05160 Spacer	857 mm (33-3/4")	32 mm	33,45 mm (1.317")	32,64 mm (1.285")
	Auxiliary	Boom Butt	A00485	Grooved	540 mm (21-1/4")	676 mm (26-5/8")	– –	– –	28 mm	29,39 mm (1.157")	28,55 mm (1.124")
		25' Insert	A00466	Grooved	540 mm (21-1/4")	353 mm (13-57/64")	– –	– –	28 mm	29,39 mm (1.157")	28,55 mm (1.124")
Clamshell Limited Duty	Closing	Front	A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00185 with A05160 Spacer	857 mm (33-3/4")	32 mm	29,39 mm (1.157")	28,55 mm (1.124")
	Holding	Rear	A00207	Bare	787 mm (31")	678 mm (26-11/16")	A00185 with A05160 Spacer	857 mm (33-3/4")	32 mm	33,45 mm (1.317")	32,64 mm (1.285")

* Maximum wire rope diameter and width a wond on drum must not exceed drum groove pitch.
** Minimum recommended wire rope size for proper spooling.

Drums 20 metric ton (44,000 lb) - Competitive Comparison

Layer		1		2		3		4	
Manufacturer Model	Drum Diameter Rope Size	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)
Manitowoc 1015	857 mm (33.75") 32,0 mm (1.25")	196,0 (44,000)	154 (505)	196,0 (44,000)	165 (540)	196,0 (44,000)	175 (575)	196,0 (44,000)	188 (615)
Liebherr 883	630 mm (24.8") 30,0 mm (1.18")	200,0 (44,960)	72 (236)	183,3 (41,213)	78 (256)	169,2 (38,043)	85 (279)	– (–)	– (–)
Link-Belt 308	756 mm (29.76") 29,0 mm (1.13")	165,0 (37,100)	121 (397)	165,0 (37,100)	133 (436)	165,0 (37,100)	145 (476)	165,0 (37,100)	156 (512)

Drums 30 metric ton (66,000 lb) - Competitive Comparison

Layer		1		2		3		4	
Manufacturer Model	Drum Diameter Rope Size	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)	Line Pull kN (lb)	Line Speed m/min (ft/min)
Manitowoc 1015	857 mm (33.75") 38,0 mm (1.50")	294,0 (66,000)	104 (340)	294,0 (66,000)	113 (370)	294,0 (66,000)	122 (400)	294,0 (66,000)	131 (430)
Liebherr 883	630 mm (24.8") 30,0 mm (1.18")	300,0 (67,440)	47 (154)	276,0 (62,200)	51 (167)	256,8 (57,729)	55 (181)	– (–)	– (–)

NOTE: Line speed ratings at no load.

Liebherr model 883 30 ton drum line speeds are without change gear box engaged.
Comparative data is for reference only and is subject to change. Specific manufacturer(s) should be consulted to verify data shown is current and accurate.

performance data

Main & Whip Drums - 294 kN (66,000 lb)

Full Power Drum - Continuous Duty
without Diverting Valve
Single Line Pull/Single Line Speed

Layer	m/min (ft/min) 1	2	3	4
Line Pull kg (lb)				
0 (0)	105 (343)	113 (372)	122 (401)	131 (430)
4 536 (10,000)	94 (309)	101 (332)	108 (355)	115 (377)
9 072 (20,000)	71 (234)	72 (236)	73 (238)	73 (240)
13 608 (30,000)	50 (163)	50 (165)	51 (167)	52 (169)
18 144 (40,000)	39 (128)	40 (130)	40 (132)	41 (134)
22 680 (50,000)	33 (107)	33 (109)	34 (111)	34 (112)
29 937 (66,000)	26 (86)	27 (88)	27 (90)	28 (92)

Main & Whip Drums - 294 kN (66,000 lb)

Full Power Drum - Continuous Duty
with Diverting Valve
Single Line Pull/Single Line Speed

Layer	m/min (ft/min) 1	2	3	4
Line Pull kg (lb)				
0 (0)	105 (343)	113 (372)	122 (401)	131 (430)
4 536 (10,000)	99 (326)	107 (352)	115 (378)	123 (404)
9 072 (20,000)	94 (309)	101 (332)	108 (355)	115 (377)
13 608 (30,000)	89 (292)	94 (308)	95 (313)	97 (319)
18 144 (40,000)	74 (243)	76 (249)	77 (254)	79 (260)
22 680 (50,000)	63 (208)	65 (213)	67 (219)	69 (225)
29 937 (66,000)	53 (173)	55 (179)	56 (185)	58 (190)

Main & Whip Drums - 196 kN (44,000 lb)

Full Power Drum - Continuous Duty
without Diverting Valve
Single Line Pull/Single Line Speed

Layer	m/min (ft/min) 1	2	3	4
Line Pull kg (lb)				
0 (0)	154 (505)	165 (542)	176 (578)	187 (615)
4 536 (10,000)	132 (433)	140 (458)	142 (466)	144 (473)
9 072 (20,000)	75 (245)	75 (247)	76 (249)	77 (252)
13 608 (30,000)	53 (174)	54 (176)	55 (179)	55 (181)
18 144 (40,000)	42 (139)	43 (141)	44 (143)	45 (146)
22 680 (44,000)	39 (129)	40 (131)	41 (134)	42 (136)

Main & Whip Drums - 196 kN (44,000 lb)

Full Power Drum - Continuous Duty
with Diverting Valve
Single Line Pull/Single Line Speed

Layer	m/min (ft/min) 1	2	3	4
Line Pull kg (lb)				
0 (0)	154 (505)	165 (542)	176 (578)	187 (615)
4 536 (10,000)	143 (469)	152 (500)	162 (531)	171 (561)
9 072 (20,000)	132 (433)	140 (458)	142 (466)	144 (473)
13 608 (30,000)	102 (334)	104 (341)	106 (348)	108 (355)
18 144 (40,000)	84 (274)	86 (282)	88 (289)	90 (296)
22 680 (44,000)	79 (258)	81 (265)	83 (272)	85 (279)

Auxiliary Drum - 147 kN (33,000 lb)

Full Power Drum - Continuous Duty
Single Line Pull/Single Line Speed

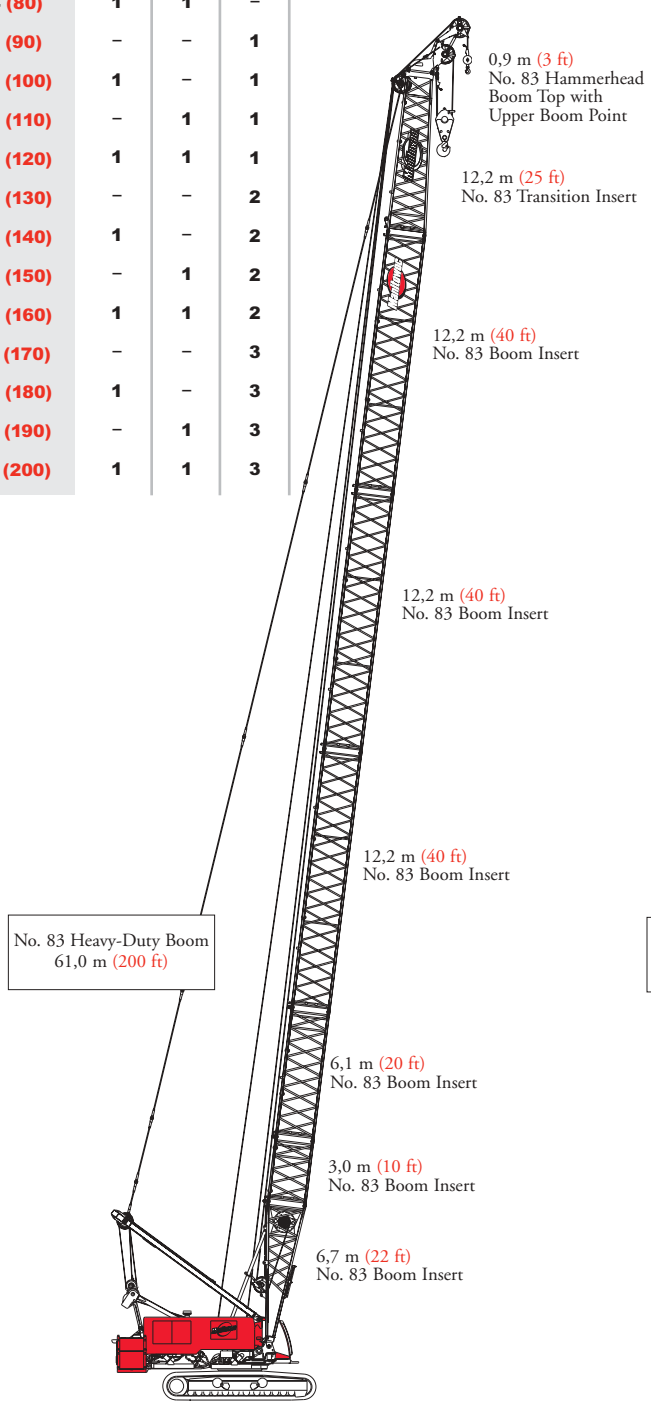
Layer	m/min (ft/min) 1	2	3	4	5	6
Line Pull kg (lb)						
0 (0)	87 (286)	96 (314)	104 (342)	113 (370)	121 (398)	130 (426)
2 268 (5,000)	84 (274)	91 (300)	99 (326)	107 (351)	115 (376)	122 (401)
4 536 (10,000)	81 (263)	87 (286)	94 (309)	102 (332)	108 (354)	115 (376)
6 803 (15,000)	77 (251)	83 (273)	89 (293)	95 (313)	97 (318)	99 (323)
9 072 (20,000)	72 (236)	74 (241)	75 (247)	77 (252)	79 (258)	80 (263)
11 340 (25,000)	61 (200)	63 (205)	64 (211)	66 (216)	68 (222)	69 (227)
13 380 (33,000)	51 (165)	52 (170)	54 (176)	55 (181)	57 (186)	59 (192)

NOTE: Line pull is infinitely variable.

boom combinations

No. 83 Boom Combinations

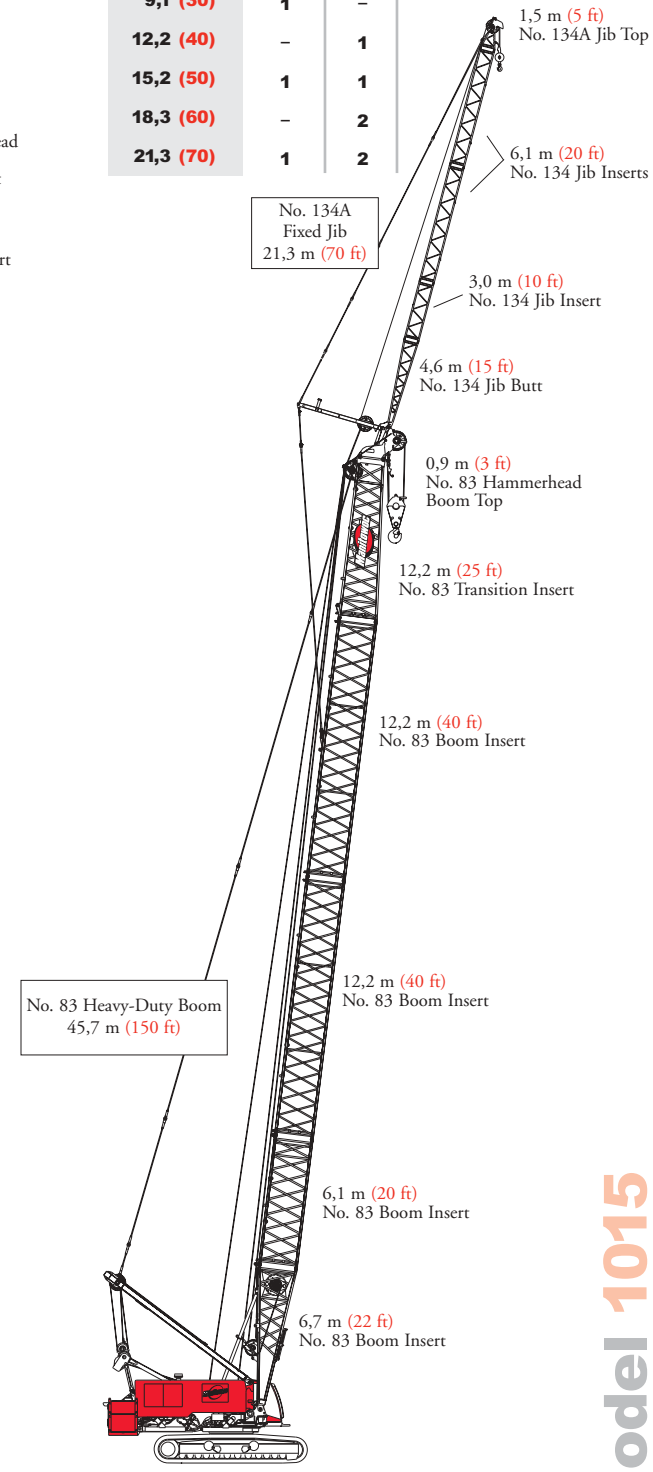
Boom Length m (ft)	Boom Inserts 3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)
15,2 (50)	–	–	–
18,3 (60)	1	–	–
21,3 (70)	–	1	–
24,4 (80)	1	1	–
27,4 (90)	–	–	1
30,5 (100)	1	–	1
33,5 (110)	–	1	1
36,6 (120)	1	1	1
39,6 (130)	–	–	2
42,7 (140)	1	–	2
45,7 (150)	–	1	2
48,8 (160)	1	1	2
51,8 (170)	–	–	3
54,9 (180)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



Model 1015
No. 83 Heavy-Duty Main Boom
61,0 m (200 ft)

No. 134A Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts 3,0 m (10 ft)	6,1 m (20 ft)
6,1 (20)	–	–
9,1 (30)	1	–
12,2 (40)	–	1
15,2 (50)	1	1
18,3 (60)	–	2
21,3 (70)	1	2



Model 1015
No. 134A Fixed Jib on
No. 83 Heavy-Duty Main Boom
67,1 m (220 ft)

Manitowoc

Duty Cycle Capacities
Boom No. 83 with Hammerhead Top

24 040 kg (53,000 lb) Counterweight 7 163 mm (23' 6") Crawlers Extended

360° Rating kg (lb) x 1 000 Limited Duty

Boom m (ft)	15,2 (50)	21,3 (70)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	51,8 (170)
Radius							
7,6 (25)			29,8 (65.9)	20,0 (44.1)	18,9 (41.7)		
9,1 (30)	29,9 (66.0)	29,9 (66.0)	– (64.1)	– (42.4)	– (39.9)	13,1 (29.1)	12,3 (27.2)
10,0 (35)	29,7 (65.4)	29,8 (65.6)	28,6 (62.3)	18,8 (40.8)	17,6 (38.2)	12,9 (28.2)	12,0 (26.2
12,0 (40)	25,4 (54.1)	25,5 (54.3)	24,9 (53.6)	17,9 (39.3)	16,6 (36.6)	12,3 (27.2)	11,4 (25.2)
14,0 (50)	20,1 (39.1)	20,2 (39.5)	19,9 (38.9)	17,0 (36.4)	15,7 (33.5)	11,8 (25.4)	10,8 (23.2)
18,0 (60)		14,0 (30.2)	13,7 (29.7)	13,8 (29.7)	13,5 (29.1)	10,8 (23.7)	9,7 (21.4)
20,0 (70)		11,9 (23.7)	11,7 (23.3)	11,7 (23.3)	11,4 (22.7)	10,3 (22.2)	9,2 (19.6)
24,0 (80)			8,7 (18.7)	8,7 (18.7)	8,4 (18.1)	8,3 (17.8)	7,9 (17.1)
26,0 (90)			7,5 (15.0)	7,5 (15.2)	7,3 (14.6)	7,2 (14.3)	6,8 (13.6)
30,0 (100)				5,8 (12.4)	5,5 (11.8)	5,3 (11.5)	5,1 (10.9)
32,0 (110)				5,0 (10.0)	4,8 (9.6)	4,7 (9.3)	4,4 (8.6)
36,0 (120)					3,6 (7.7)	3,5 (7.4)	3,2 (6.8)
38,0 (130)					3,1 (6.0)	3,0 (5.9)	2,7 (5.2)
42,0 (140)						2,1 (4.5)	

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.

Clamshell/Grapple Capacities
Boom No. 83 with Hammerhead Top

24 040 kg (53,000 lb) Counterweight 7 163 mm (23' 6") Crawlers Extended

360° Rating kg (lb) x 1 000

Boom m (ft)	15,2 (50)	18,3 (60)	21,3 (70)	24,4 (80)	27,4 (90)	30,5 (100)	33,5 (110)	36,6 (120)
Radius								
9,1 (30)	18,1 (40.0)	18,1 (40.0)						
10,0 (35)	18,1 (40.0)	18,1 (40.0)	– (40.0)					
12,0 (40)	18,1 (40.0)	18,1 (40.0)	18,1 (40.0)	– (40.0)				
14,0 (50)	18,0 (39.1)	18,0 (39.4)	18,1 (39.5)	18,0 (39.1)	18,0 (38.9)	– (38.6)	– (36.4)	
18,0 (60)		13,8 (29.9)	14,0 (30.2)	13,8 (29.8)	13,7 (29.7)	13,6 (29.4)	13,8 (29.7)	13,6 (29.4)
20,0 (70)			11,9 (23.7)	11,7 (23.4)	11,7 (23.3)	11,6 (23.0)	11,7 (23.3)	11,5 (23.0)
24,0 (80)				8,7 (18.7)	8,7 (18.7)	8,5 (18.4)	8,7 (18.7)	8,5 (18.4)
26,0 (90)					7,5 (15.0)	7,4 (14.8)	7,5 (15.2)	7,4 (14.9)
30,0 (100)						5,5 (11.9)	5,8 (12.4)	5,6 (12.1)
32,0 (110)							5,0 (10.0)	4,9 –

Dragline Capacities
Boom No. 83 with Heavy-Duty Top

24 040 kg (53,000 lb) Counterweight

360° Rating kg (lb) x 1 000

Boom m (ft)	21,3 (70)	24,4 (80)	27,4 (90)	30,5 (100)
Radius				
16,8 (55)	11,3 (25.0)			
18,3 (60)	11,3 (25.0)	11,3 (25.0)		
21,3 (70)	10,9 (24.0)	10,8 (23.9)	10,9 (24.0)	
24,4 (80)		8,4 (18.6)	8,5 (18.8)	8,4 (18.6)
27,4 (90)			6,7 (14.8)	6,7 (14.7)
29,0 (95)				5,9 (13.0)

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.

heavy-lift boom range diagram

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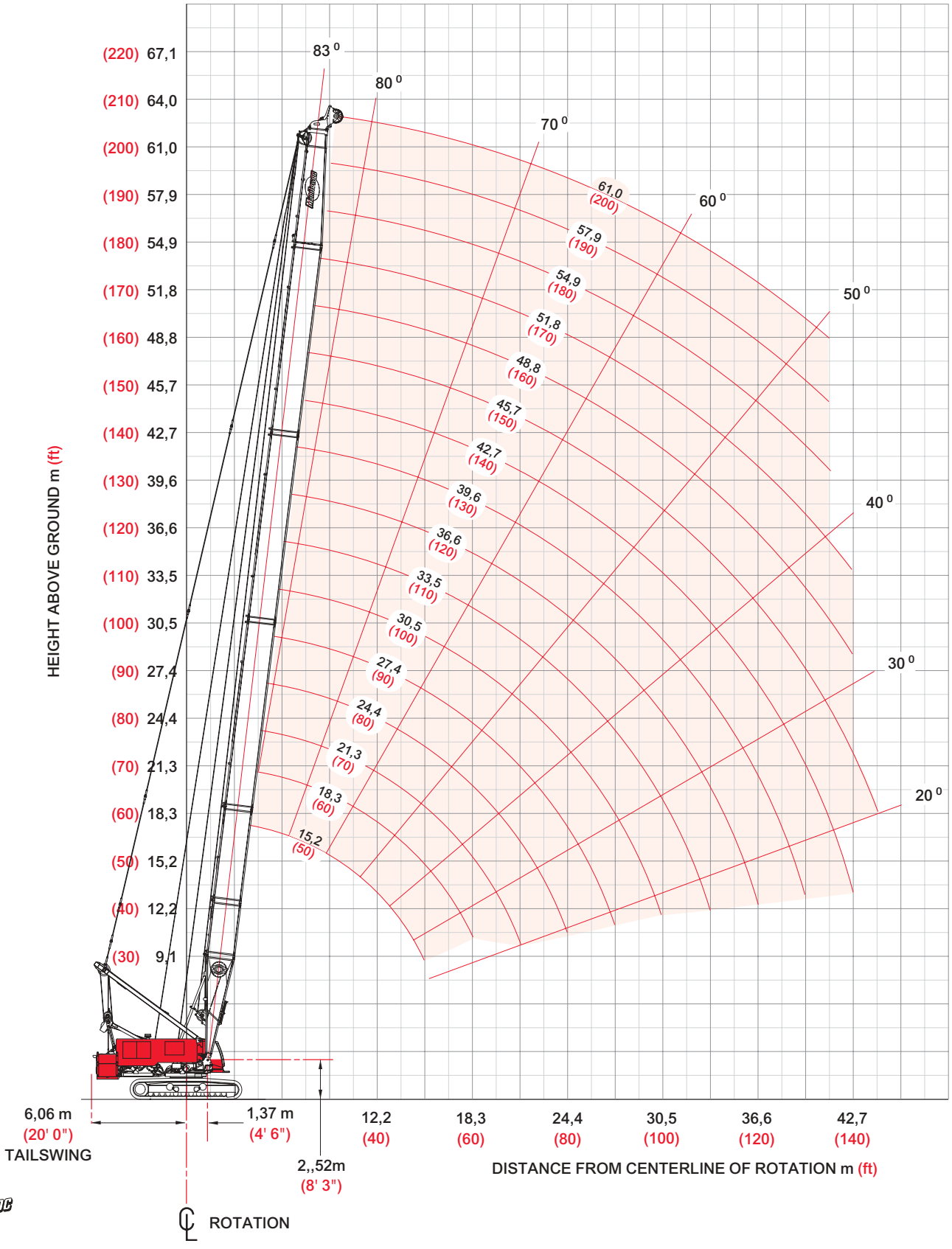


model 1015

Manitowoc

Liftcrane Boom Capacities
Boom No. 83 with Hammerhead Top

24 040 kg (53,000 lb) Counterweight 7 163 mm (23' 6") Crawlers Extended

360° Rating kg (lb) x 1 000

Boom m (ft)	15,2 (50)	18,3 (60)	24,4 (80)	27,4 (90)	33,5 (110)	36,6 (120)	39,6 (130)	45,7 (150)	48,8 (160)	51,8 (170)	57,9 (190)	61,0 (200)
Radius												
4,3 (14)	120,0 (264.4)											
4,5 (15)	115,8 (252.7)	106,7 (254.9)										
5,0 (17)	106,5 (218.2)	104,9 (218.8)	– (218.0)									
5,5 (18)	89,2 (197.7)	89,5 (198.2)	89,2 (197.5)	89,5 (197.4)								
6,0 (20)	77,2 (166.1)	77,4 (166.5)	77,1 (165.8)	77,1 (165.7)								
7,0 (24)	60,0 (125.0)	60,7 (125.3)	60,4 (124.6)	60,3 (124.5)	60,7 (124.6)	60,0 (124.5)	– (124.2)					
8,0 (26)	49,5 (110.9)	49,7 (111.2)	49,4 (110.5)	49,3 (110.4)	49,3 (110.4)	49,3 (110.3)	49,1 (110.0)	49,1 (109.8)				
9,0 (30)	41,7 (90.0)	41,8 (90.2)	41,5 (89.6)	41,3 (89.4)	41,4 (89.4)	41,4 (89.2)	41,2 (88.9)	41,1 (88.7)	41,1 (88.5)	40,9 (88.1)		
10,0 (34)	35,8 (75.2)	35,9 (75.4)	35,7 (74.8)	35,6 (74.6)	35,6 (74.6)	35,5 (74.4)	35,3 (74.1	35,2 (73.8)	35,1 (73.5)	35,0 (73.2)	29,9 (66.0)	– (66.0)
11,0 (36)	31,3 (69.3)	31,4 (69.5)	31,1 (69.0)	31,0 (68.8)	31,0 (68.8)	30,9 (68.5)	30,8 (68.2)	30,6 (67.9)	30,5 (67.7)	30,4 (67.3)	29,8 (66.0)	29,8 (66.0)
12,0 (40)	27,6 (59.6)	27,7 (59.8)	27,5 (59.3)	27,4 (59.2)	27,4 (63.6)	27,3 (58.8)	27,1 (58.5)	27,0 (58.2)	26,8 (57.9)	26,7 (57.6)	26,5 (57.1)	26,4 (56.8)
14,0 (45)	22,1 (50.3)	22,2 (50.6)	22,0 (50.1)	22,0 (50.0)	21,9 (49.9)	21,8 (49.6)	21,6 (49.3)	21,5 (49.0)	21,3 (48.6)	21,2 (48.3)	21,0 (47.8)	20,8 (47.5)
16,0 (50)	– (43.0)	18,3 (43.4)	18,1 (43.1)	18,1 (42.9)	18,0 (42.8)	17,9 (42.5)	17,7 (42.2)	17,6 (41.8)	17,4 (41.5)	17,3 (41.2)	17,0 (40.7)	16,9 (40.4)
18,0 (60)		15,3 (32.9)	15,2 (32.8)	15,1 (32.7)	15,1 (32.7)	15,0 (32.3)	14,8 (32.0)	14,6 (31.6)	14,5 (31.9)	14,3 (30.9)	14,1 (30.4)	14,0 (30.1)
20,0 (70)			12,9 (25.8)	12,9 (25.7)	12,9 (25.7)	12,7 (25.3)	12,5 (25.0)	12,4 (24.7)	12,2 (24.3)	12,0 (23.9)	11,8 (23.4)	11,7 (23.0)
24,0 (80)			9,5 (20.5)	9,5 (20.5)	9,6 (20.6)	9,4 (20.2)	9,2 (19.9)	9,1 (19.6)	8,9 (19.2)	8,7 (18.8)	8,5 (18.3)	8,3 (17.9)
26,0 (90)				8,2 (16.5)	8,3 (16.7)	8,2 (16.3)	8,0 (16.0)	7,8 (15.7)	7,7 (15.3)	7,5 (14.9)	7,2 (14.4)	7,1 (14.0)
30,0 (100)					6,3 (13.6)	6,1 (13.2)	6,0 (13.0)	5,9 (12.6)	5,7 (12.2)	5,5 (11.9)	5,3 (11.4)	5,1 (11.0)
36,0 (110)					– (11.0)	4,9 (10.7)	3,9 (10.5)	3,8 (10.2)	3,6 (9.8)	3,4 (9.4)	3,2 (8.9)	3,0 (8.5)
38,0 (120)						4,0 (8.6)	3,3 (8.4)	3,2 (8.1)	3,1 (7.7)	2,9 (7.3)	2,7 (6.9)	2,5 (6.5)
40,0 (130)							– (6.5)	2,8 (6.4)	2,6 (6.0)	2,4 (5.6)	2,2 (5.2)	2,0 (4.7)
42,0 (140)								2,3 (4.9)	2,1 (4.5)	2,0 (4.1)		
44,0 (145)								1,9 (4.2)				

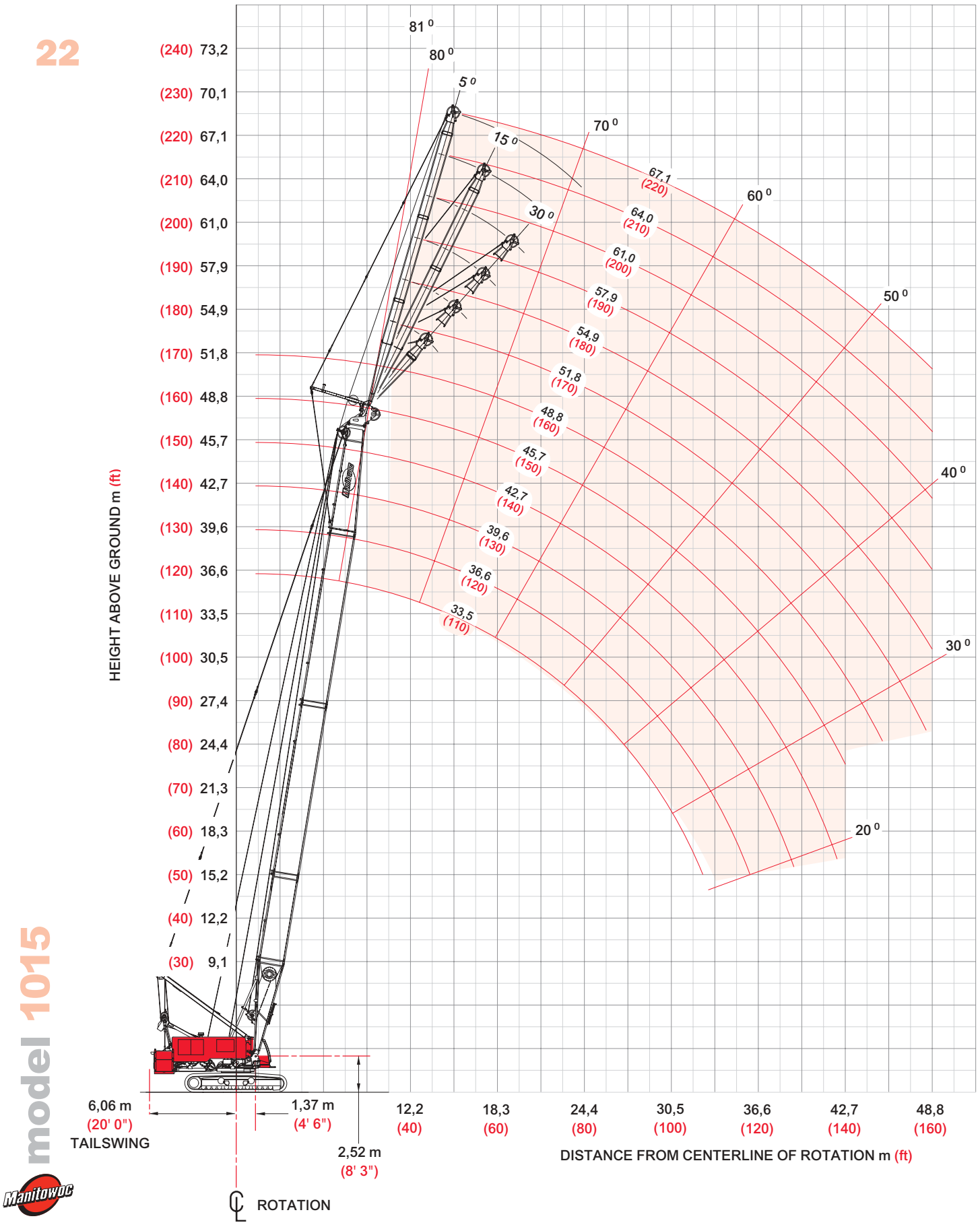
Fixed Jib No. 134A on Boom No. 83

Jib Length m (ft)	Deduct from Capacity when fixed jib is attached kg (lb)
6,1 (20)	1 950 (4,300)
9,1 (30)	2 310 (5,100)
12,2 (40)	2 770 (6,100)
15,2 (50)	3 220 (7,100)
18,3 (60)	3 540 (7,800)
21,3 (70)	4 040 (8,900)

Deduct 500 kg (1,100 lb) from capacities when upper boom point is attached.

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



Liftcrane Boom Capacities
Fixed Jib No. 134A with 3 810 mm (12' 6") Strut on Boom No. 83

24 040 kg (53,000 lb) Counterweight

360° Rating — **kg (lb) x 1 000**

5° Offset

Jib 6,1 m (20 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
9,1 (30)	29,9 (66.0)	29,9 (66.0)			
10,0 (35)	29,9 (66.0)	29,9 (66.0)	– (66.0)		
12,0 (40)	27,3 (59.5)	27,2 (59.2)	26,9 (58.5)	– (58.0)	– (57.4)
14,0 (50)	22,0 (43.1)	21,9 (42.7)	21,5 (42.0)	21,4 (41.5)	21,2 (40.7)
18,0 (60)	15,2 (32.8)	15,0 (32.4)	14,7 (31.6)	14,4 (31.1)	14,2 (30.3)
24,0 (80)	9,6 (20.6)	9,4 (20.3)	9,0 (19.4)	8,8 (18.9)	8,6 (18.1)
28,0 (100)	7,2 (13.6)	7,1 (13.3)	6,7 (12.4)	6,5 (11.9)	6,3 (11.1)
36,0 (120)		4,1 (8.7)	3,7 (7.9)	3,5 (7.4)	3,2 (6.5)
40,0 (140)			2,6 (4.6)	2,4 (4.1)	2,2 –
44,0 (150)					
48,0 (160)					

30° Offset

Jib 6,1 m (20 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
10,0 (35)	– (51.9)				
12,0 (40)	22,3 (49.0)	– (51.0)	– (52.7)		
14,0 (50)	20,8 (44.3)	21,7 (44.3)	22,4 (43.8)	22,4 (43.4)	22,3 (42.9)
18,0 (60)	15,7 (34.0)	15,6 (33.7)	15,3 (33.1)	15,2 (32.7)	15,0 (32.0)
20,0 (70)	13,4 (26.6)	13,2 (26.4)	12,9 (25.7)	12,8 (25.3)	12,6 (24.6)
24,0 (80)	9,9 (21.3)	9,8 (21.1)	9,5 (20.4)	9,2 (19.9)	9,1 (19.2)
28,0 (100)		7,4 (13.7)	7,0 (13.0)	6,9 (12.6)	6,7 (11.9)
36,0 (120)			3,9 (8.2)	3,7 (7.9)	3,5 (7.1)
40,0 (140)					2,4 –
44,0 (150)					
48,0 (160)					

5° Offset

Jib 12,2 m (40 ft)

Boom m (ft)	27,4 (90)	30,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
9,1 (30)					
10,0 (35)	– (42.4)				
12,0 (40)	18,6 (41.0)	– (42.0)			
14,0 (50)	17,9 (38.5)	18,4 (39.7)	18,8 (40.7)	19,1 (41.5)	19,2 (41.8)
18,0 (60)	15,8 (34.3)	15,9 (33.9)	15,4 (33.1)	15,2 (32.6)	15,0 (32.2)
24,0 (80)	10,2 (22.0)	10,0 (21.5)	9,6 (20.7)	9,3 (20.1)	9,1 (19.7)
28,0 (100)	7,8 (14.9)	7,6 (14.4)	7,2 (13.5)	7,0 (12.9)	6,8 (12.5)
36,0 (120)	4,7 (10.1)	4,5 (9.7)	4,2 (8.9)	3,9 (8.3)	3,7 (7.9)
40,0 (140)		3,4 (6.4)	3,1 (5.6)	2,8 (5.0)	2,6 (4.6)
44,0 (150)		2,6 –	2,2 (4.2)	1,9 –	
48,0 (160)					

30° Offset

Jib 12,2 m (40 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
10,0 (35)					
12,0 (40)					
15,0 (50)	– (27.7)				
18,0 (60)	11,6 (25.4)	12,0 (26.3)	12,3 (27.1)	– (27.8)	– (28.1)
20,0 (70)	11,0 (23.4)	11,4 (24.5)	11,8 (25.4)	12,2 (26.2)	12,3 (26.5)
24,0 (80)	10,0 (21.9)	10,5 (23.0)	10,4 (22.4)	10,3 (22.1)	10,2 (21.8)
28,0 (100)	8,3 (15.7)	8,2 (15.4)	7,9 (14.8)	7,7 (14.3)	7,5 (14.0)
36,0 (120)		4,9 (10.4)	4,5 (9.7)	4,4 (9.3)	4,2 (9.0)
40,0 (140)				2,3 (5.7)	2,1 (5.4)
44,0 (150)					
48,0 (160)					

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 Boom Capacities
Fixed Jib No. 134A with 3 810 mm (12' 6") Strut on Boom No. 83

24 040 kg (53,000 lb) Counterweight

360° Rating — **kg (lb) x 1 000**

5° Offset

Jib 15,2 m (50 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
9,1 (30)					
10,0 (35)					
12,0 (40)	– (35.0)	– (35.8)			
14,0 (50)	15,2 (32.9)	15,7 (33.8)	15,9 (34.6)	– (35.2)	– (35.4)
18,0 (60)	14,1 (31.0)	14,5 (32.0)	14,9 (32.9)	15,1 (33.0)	15,0 (32.7)
24,0 (80)	10,4 (22.4)	10,0 (21.9)	9,7 (21.0)	9,5 (20.4)	9,3 (20.1)
28,0 (100)	8,0 (15.3)	7,8 (14.7)	7,4 (13.9)	7,1 (13.3)	6,9 (12.8)
36,0 (120)	4,9 (10.6)	4,7 (10.1)	4,3 (9.2)	4,0 (8.6)	3,8 (8.2)
40,0 (140)	3,8 –	3,6 (6.7)	3,2 (5.9)	2,9 (5.3)	2,8 (4.9)
44,0 (150)		2,7 (5.4)	2,3 (4.6)	2,1 (4.0)	1,9 –
48,0 (160)					

30° Offset

Jib 15,2 m (50 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)	48,8 (160)
Radius					
10,0 (35)					
12,0 (40)					
15,0 (50)					
18,0 (60)	10,3 (22.7)	– (23.5)			
20,0 (70)	9,7 (20.9)	10,1 (21.7)	10,4 (22.4)	10,7 (23.0)	– (23.3)
24,0 (80)	8,8 (19.3)	9,2 (20.2)	9,6 (21.0)	9,9 (21.7)	10,0 (22.0)
28,0 (100)	8,0 (16.4)	8,4 (16.1)	8,2 (15.5)	8,0 (15.0)	7,9 (14.7)
36,0 (120)		5,1 (11.0)	4,8 (10.3)	4,6 (9.9)	4,5 (9.6)
40,0 (140)			3,7 (6.7)	3,4 (6.3)	3,3 (5.9)
44,0 (150)				2,5 (4.8)	2,3 (4.4)
48,0 (160)					

5° Offset

Jib 21,3 m (70 ft)

Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)
Radius				
9,1 (30)				
10,0 (35)				
12,0 (40)	– (26.0)			
14,0 (50)	11,3 (24.0)	11,5 (25.0)	– (25.5)	– (25.9)
18,0 (60)	10,4 (22.8)	10,7 (23.6)	11,0 (24.2)	11,2 (24.8)
24,0 (80)	9,0 (19.8)	9,5 (20.8)	9,8 (21.5)	9,7 (20.9)
28,0 (100)	8,2 (15.8)	8,0 (15.2)	7,6 (14.3)	7,3 (13.7)
36,0 (120)	5,2 (11.2)	4,9 (10.6)	4,5 (9.7)	4,2 (9.1)
40,0 (140)	4,1 (7.9)	3,9 (7.3)	3,4 (6.4)	3,2 (5.8)
44,0 (150)	3,3 (6.6)	3,0 (6.0)	2,6 (5.1)	2,3 (4.5)
48,0 (160)		2,3 (4.9)	1,9 (4.0)	

30° Offset

Jib 21,3 m (70 ft)

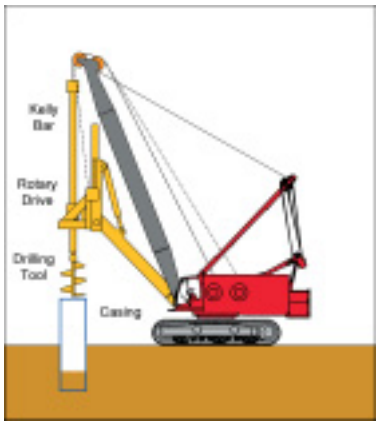
Boom m (ft)	27,4 (90)	33,5 (110)	39,6 (130)	45,7 (150)
Radius				
10,0 (35)				
12,0 (40)				
15,0 (50)				
18,0 (60)				
22,0 (70)	– (16.7)	– (17.0)		
24,0 (80)	7,4 (15.7)	7,3 (16.1)	7,5 (16.5)	7,6 (16.7)
28,0 (100)	6,5 (13.5)	6,8 (14.3)	7,0 (15.0)	7,2 (15.4)
36,0 (120)	5,3 (11.7)	5,6 (12.0)	5,3 (11.4)	5,1 (11.0)
40,0 (140)	4,6 –	4,4 (8.4)	4,1 (7.7)	3,9 (7.3)
44,0 (150)		3,4 (6.9)	3,1 (6.2)	2,9 (5.8)
48,0 (160)			2,3 (4.9)	2,1 (4.5)

Manitowoc

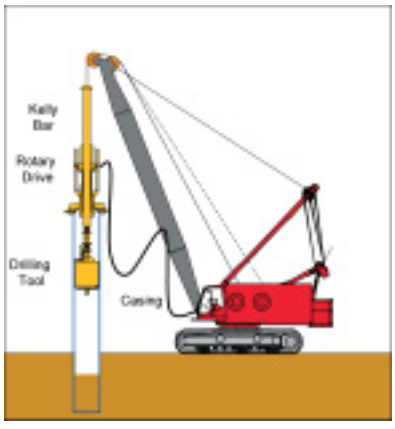
Meets ANSI B30.5 Requirements - Capacities do not exceed 75% of static tipping load.
NOTICE: This capacity chart is for reference only and must not be used for lifting purposes.

Diaphragm Wall Hydraulic Grab

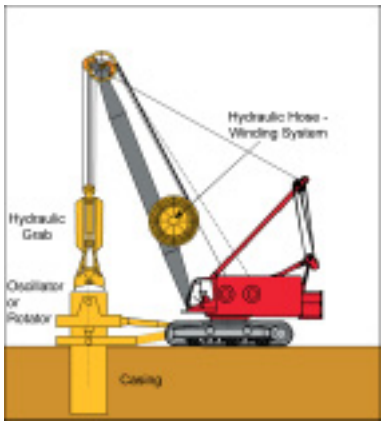
Drill Rig Hanging from Lattice Boom with Spotter



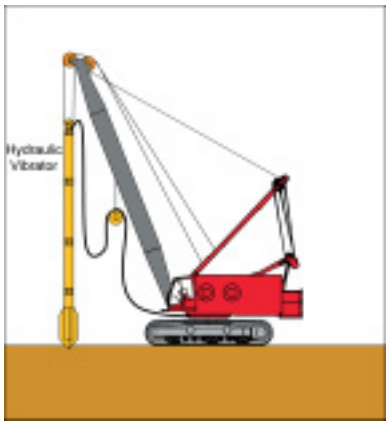
Casing Clamped Fly Drill



Casing Oscillator or Rotator with Hydraulic Grab

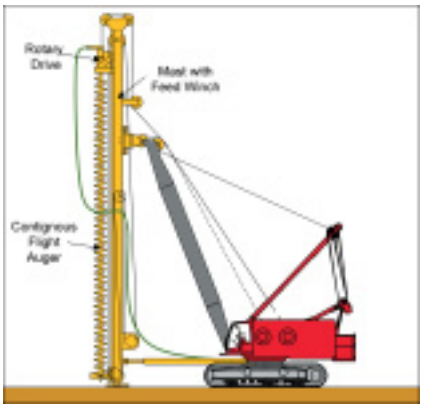


Deep Compaction Vibrator

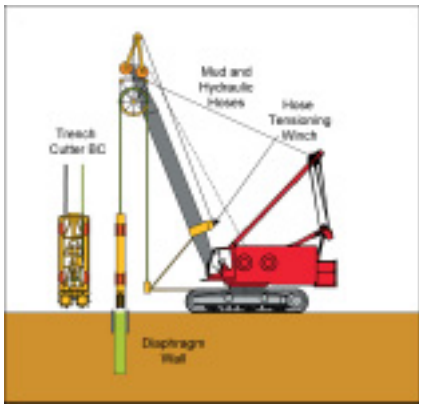


Pile Driving

Drill Rig with Mast Fixed to Lattice Boom



Hydraulic Trench Cutter



Dynamic Compaction

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 troubleshooting 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 troubleshooting 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. A06022
No substitutions allowed.
Consists of the following:
- Filter Element - Hydraulic In-Tank (3x Part No. **A00652**)
- Element - Hydraulic Tank Breather (1x Part No. **A06021**)

Cummins Model QSX15-C600 Diesel – Part No. A01868 Service Interval Kits

200 Hour Kit – Part No. A06023
Consists of the following:

Engine
- Air Cleaner - Element (1x Part No. **A06016**)
- Oil Filter (1x Part No. **A04795**)
- Water Filter (1x Part No. **A04794**)
- Fuel Filter (1x Part No. **A04793**)

1,000 Hour Kit – Part No. A06024
Consists of the following:

Engine
- Air Cleaner - Element (1x Part No. **A06016**)
- Oil Filter (1x Part No. **A04795**)
- Water Filter (1x Part No. **A04794**)
- Fuel Filter (1x Part No. **A04793**)

Hydraulic
- Filter Element - Hydraulic In-Tank (3x Part No. **A00652**)
- Element - Hydraulic Tank Breather (1x Part No. **A06021**)

2,000 Hour Kit – Part No. A06025
Consists of the following:

Engine
- Air Cleaner - Element (1x Part No. **A06016**)
- Air Cleaner (1x Part No. **A06017**)
- Oil Filter (1x Part No. **A04795**)
- Water Filter (1x Part No. **A04794**)
- Fuel Filter (1x Part No. **A04793**)
- Belt, Alternator (1x Part No. **A04792**)
- Belt, Fan (1x Part No. **A04791**)
- Ether Bottle (1x Part No. **A06019**)
- Sensor, Coolant Level (1x Part No. **A06020**)

Hydraulic
- Filter Element - Hydraulic In-tank (3x Part No. **A00652**)
- Element - Hydraulic Tank Breather (1x Part No. **A06021**)

Hydraulic Seal Kit
- Seal Kit - Hydraulic In-Tank (1x Part No. **A00651-5**)

Radial Seal Kit
- Radial Seal Kit - Air Cleaner (1x Part No. **A06018**)

Engine SCA Kit
- Engine Coolant Additive Kit (1x Part No. **A05360**)

Hydraulic Test Kit – Part No. 499791-6
Protect your investment by demanding Genuine Manitowoc Parts Service Kits. The Hydraulic Service Kit consists 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**

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**

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. 899794**
- **Crane Vendor Manual – Part No. 899722**
- **Service Technician's Manual (EPIC) – Part No. 899732**
- **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:

- **1015 Distributor Service CD**
  CD – Part No. 899842
- **Owner Service 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.

- **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.

Backed by Manitowoc

CraneCARE℠

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.

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