

model 777

product guide

features

- 181 mton (200 ton) capacity
- 307 mton-m (2,224 kips) Maximum Load Moment
- 82,3 m (270') Heavy-Lift Boom
- 91,4 m (300') Fixed Jib on Heavy-Lift Boom
- 106,7 m (350') Luffing Jib on Heavy-Lift Boom
- 125,0 m (410') Fixed Jib on Luffing Jib on Heavy-Lift Boom
- 253 kW (340 HP) engine standard
- EPIC® controls
- 135 m/min (442 fpm) line speed standard
- 205 m/min (674 fpm) line speed optional
- 131 kN (29,500 lb) line pull standard
- 196 kN (44,000 lb) line pull optional
- 13 380 kg (29,500 lb) Clamshell capacity
- 9 072 kg (20,000 lb) Dragline capacity
- Hydraulic-cylinder Boom Hoist for maximum performance with minimum maintenance
- Fast, efficient self-assembly
- Complete crane, maximum boom, fixed jib and counterweights ship on only 8 trucks
- Manitowoc CraneCARE®

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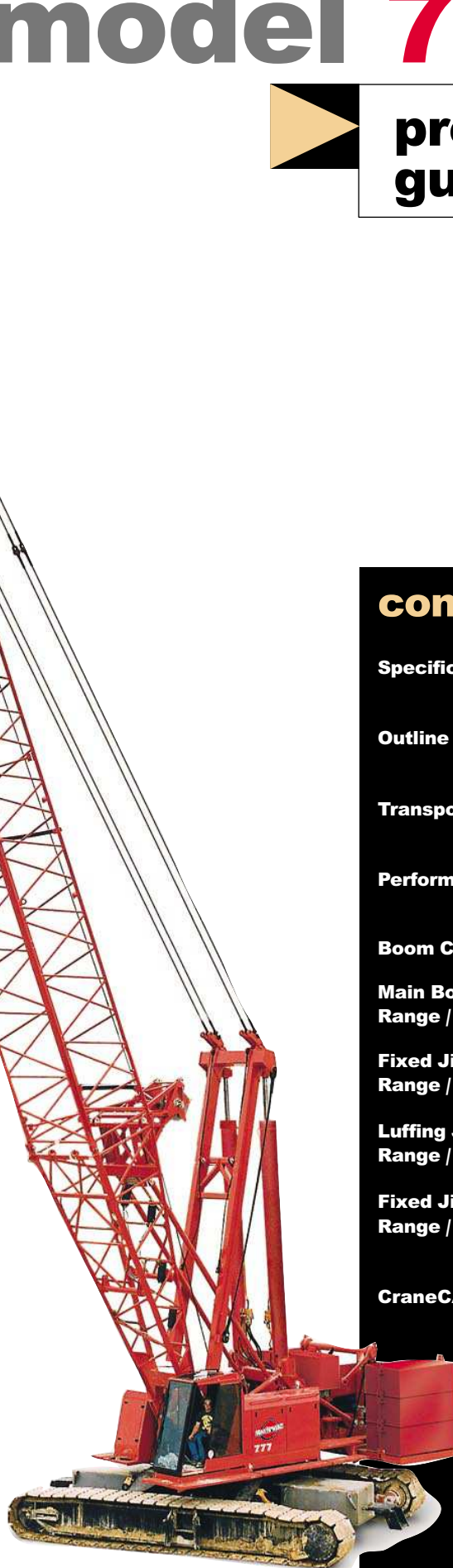
Fixed Jib on Luffing Jib
Range / Load Charts

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CraneCARESM

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	Specifications	Outline Dimensions/Weights	Wire Rope Lengths	Wire Rope Specifications	Boom Raising	Boom Combinations	Range Diagram/Capacity Charts
No. 777 Basic Crane	3-5	6-7					
Engine(s)	3						
Hydraulic System	3						
Drums & Laggings	3, 17-18						
Swing System	4						
Mast	4						
Counterweights	4	7-8					
Operator's Cab	4	7					
Carbody	5	7					
Crawlers	5	7					
Optional Equipment							
Boom point	4	10					
Hook block/weight ball	5	10					
Miscellaneous	5	10					
Working Weights	19						
Transport/Assembly	11-12						
CraneCARE SM	35-36						
No. 78 Boom							
Heavy-Lift No. 78	4	8	13	16	19	20	22-23
Heavy-Lift No. 44 with No. 134 Fixed Jib	4	8-9	13	16	19	20	24-26
Heavy-Lift No. 44 with No. 139 Luffing Jib	5	9-10	14-15	16	19	21	27-30
Heavy-Lift No. 44 with No. 138 Fixed Jib on No. 139 Luffing Jib	4-5	10	15	16	19	21	31-34
Clamshell	5						

specifications

Upperworks

Engine

Cummins Model QSC8.3 – C340 diesel, 6 cylinder, 253 kW (340 BHP) @ 2100 governed RPM.

Optional: Caterpillar Model C-9 diesel, 6 cylinder, 253 kW (340 BHP) @ 2100 governed RPM.

Includes engine block heater (120 V), ether starting aid, manually operated 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, 1400 CCA at -18°C (0° F), 24 volt starting and 120 amp alternator.

One 469 l (124 gal) capacity diesel fuel tank, mounted on rear of upperworks, with level indicator in operator's cab.

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 auxiliary lines.

Integrated Load Moment Indicator system (LMI) is standard for main boom. "Function cut-out" or "warning only" operation is selected via a keyed switch on the LMI console. Includes travel and swing alarms.

Optional: Upper boom point assembly with LMI.

Optional: Anemometer (wind indicator).

Optional: Foot controls for travel.

Hydraulic System

Six high-pressure piston pumps are driven through a multi-hydraulic pump transmission. These six pumps provide independent "closed loop" hydraulic power for front drum, rear drum, boom hoist system, swing system, and both left and right crawler operation.

System	kg/cm ² (psi)	lpm (gpm)
Front Drum	422 (6,000)	300 (79)
Rear Drum	422 (6,000)	300 (79)
Boom Hoist	422 (6,000)	300 (79)
Swing System	386 (5,500)	225 (59)
Left Crawler	422 (6,000)	225 (59)
Right Crawler	422 (6,000)	225 (59)
Auxiliary Pump*	422 (6,000)	390 (102)

*Optional pump powers auxiliary drum on liftcrane.

Hydraulic reservoir capacity is 469 l (124 gal) and is equipped with breather, dipstick, clean out access, and internal diffuser.

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

Replaceable, spin on ten micron (absolute) full flow line filter is furnished in the hydraulic circuit. All oil is filtered prior to return to the hydraulic reservoir.

Hydraulic system also includes pump transmission disconnect clutch & hydraulic oil cooler.

Drums

Two equal width winches 770 mm (30-1/8") wide and 495 mm (19-1/2") 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.

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

Optional: Free-fall operation for front and/or rear drum(s). External contracting band brake mounted on drum 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: High line speed drum 205m/min (674 fpm) can be ordered in place of standard front or rear drum.

Optional: High line pull drum 195 kN (44,000 lb) can be ordered in place of standard front or rear drum.

Optional: Auxiliary (third) hydraulic powered drum rated at 89,0 kN (20,000 lb) line pull mounted in boom butt. Includes third drum control system.

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

Optional: Bolt-on liftcrane/clamshell laggings.

Optional: Wire rope for various applications.

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specifications

Mast

4 Moving mast is 7,9 m (26') long and connects the boom hoist cylinders to the boom-support pendants.

Spring cushioned boom stop and automatic boom stop standard.

Boom Hoist

Independent boom hoist is provided by two double-acting hydraulic cylinders connected to the mast. Boom hoist provides full range of boom angles from horizontal to 88 degrees, with or without load.

Boom hoist speed: raise 82,3 m (270') full main boom from 0° - 82° in 1 minute, 40 seconds.

Swing System

High strength fabricated steel rotating bed is mounted on 2,15 m (84-1/2") diameter turntable single-row ball bearing.

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

Swing system maximum speed: 2.7 rpm.

Counterweight

QTY.	ITEM	UNIT WEIGHT		TOTAL WEIGHT	
		kg	lb	kg	lb
	Series 1				
1	Tray	15 876	35,000	15 876	35,000
4	Upper Side Box	7 938	17,500	31 752	70,000
SERIES 1 TOTAL				47 628	105,000
	Series 2				
2	Upper Side Box	7 938	17,500	15 876	35,000
2	Upper Side Plate	454	1,000	908	2,000
2	Carbody Box	9 979	22,000	19 958	44,000
SERIES 2 SUB-TOTAL				36 742	81,000
Optional: Add to SERIES 1 for SERIES 2 TOTAL				84 370	186,000

Includes connecting pins, brackets, and stops.

Operator's Cab

Fully enclosed and insulated steel module located at the left front corner of rotating bed. 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 conditioner.
- Optional: Nylon protective window covers.

Attachments

No. 78 Heavy-Lift Main Boom

The liftcrane is equipped with a 18,3 m (60') No. 78 basic heavy-lift angle chord boom consisting of a 6,9 m (22' 6") butt and 11,4 m (37' 6") top with six 76,2 cm (30") diameter roller bearing sheaves on one shaft. Includes rope guides, and boom angle indicator. The No. 78 boom utilizes pendant rigging Manitowoc's patented, exclusive FACT™ connection system. The FACT connection system consists of two vertical pins, two horizontal connection pins and alignment pads for each boom connection location.

Luffing jib preparation included as standard.

- Optional: 3,05 m (10'), 6,1 m (20'), and 12,2 m (40') No. 78 boom inserts with pendant rigging and FACT™ connection system.
- Optional: No. 78 detachable upper boom point with one 76,2 cm (30") diameter tapered roller bearing steel sheave grooved for 1-1/8" rope with rope guard for liftcrane.

No. 134 Fixed Jib

Optional: No. 134 basic fixed jib 9,1 m (30') length consisting of 4,6 m (15') jib butt and 4,6 m (15') jib top with 3,7 m (12') jib strut, pendants and backstay. Includes LMI hardware.

Optional: No. 134 fixed jib inserts 3,05 m (10') and 6,1 m (20') with pendants.

Utilize fixed jib inserts in combination with the No. 134 basic fixed jib for total lengths up to 24,4 m (80').

Note: Jib lengths greater than 18,3 m (60') require the use of at least one 6,1 m (20') No. 134 fixed jib insert.

No. 138 Fixed Jib

Optional: No. 138 basic fixed jib 9,1 m (30') length consisting of 4,6 m (15') jib butt and 4,6 m (15') jib top with 5,4 m (17' 9-7/16") jib strut, pendants and backstay. For use with No. 139 Luffing Jib.

specifications

Optional: No. 138 fixed jib inserts 3,0 m (10') and 6,1 m (20') with pendants.

Utilize fixed jib inserts in combination with the No. 138 basic fixed jib for total lengths up to 18,3 m (60').

No. 139 Luffing Jib

Optional: 21,3 m (70') basic No. 139 luffing jib assembly with LMI hardware consisting of 8,2 m (27') butt, 6,1 m (20') insert and 7,0 m (23') top with two 68,6 cm (27") straight roller bearing sheaves, pin connected jib sections, pendant rigging, fixed strut, jib strut, backstay straps, jib point wheel, 26 mm or (1") luffing jib hoist line, and 54 cm (21-1/4") grooved lagging for rear luffing drum.

Optional: 3,05 m (10'), 6,1 m (20'), and 12,2 m (40') No. 139 inserts with steel boom suspension straps.

Lowerworks

Carbody

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

Crawlers

Crawler assemblies are 7,55 m (24' 9-1/4") long with 97 cm (38") wide cast steel crawler pads and sealed "low maintenance" intermediate rollers. Each crawler is powered independently by a variable displacement hydraulic motor and includes two hydraulically powered pin actuators for fast installation and removal from carbody. Carbody mounted drive motors are connected to crawler final reduction via telescoping shafts. This permits crawlers to be removed without opening their hydraulic circuits. Crawlers provide ample tractive effort that allows counter rotation with full rated load. Maximum ground speed of 1,7 kph (1.05 mph).

Optional: Self-Erect system includes: carbody jacking cylinders with pads, controls, 41 mton (45 ton) assembly block, boom-butt installation support, and crawler handling chains.

Optional: 122 cm (48") wide-cast steel crawler pads.

Optional Equipment

Optional: Blocks and Hooks, each with 762 mm (30") roller-bearing sheaves for 26 mm or (1") wire rope, a roller-bearing swivel hook, a hook latch, and a swivel lock.

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

41,0 mton (45 ton) hook block with one 76,2 cm (30") sheave (assembly block).

54,4 mton (60 ton) hook block with two 76,2 cm (30") sheaves.

90,7 mton (100 ton) hook block with three 76,2 cm (30") sheaves .

160 mton (175 ton) hook block with six 76,2 cm (30") sheaves.

Optional: Wire rope for various applications.

Optional: Equipment and testing for special code compliance.

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 colors other than Manitowoc standard red and black.

Optional: Custom vinyl decals of customer name and/or logo from artwork supplied by customer.

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

Optional Application

Optional: For limited clamshell work: guide bars for lower boom point; Rud-O-Matic® No. 1866 spring-powered three-barrel tagline with 76,2 cm (36") diameter wheel; and pressure rollers for the front and rear hoisting drums. Front drum is closing line. Rear drum is holding line. Manitowoc's EPIC® controls can be changed from liftcrane to clamshell mode with the flip of a switch.

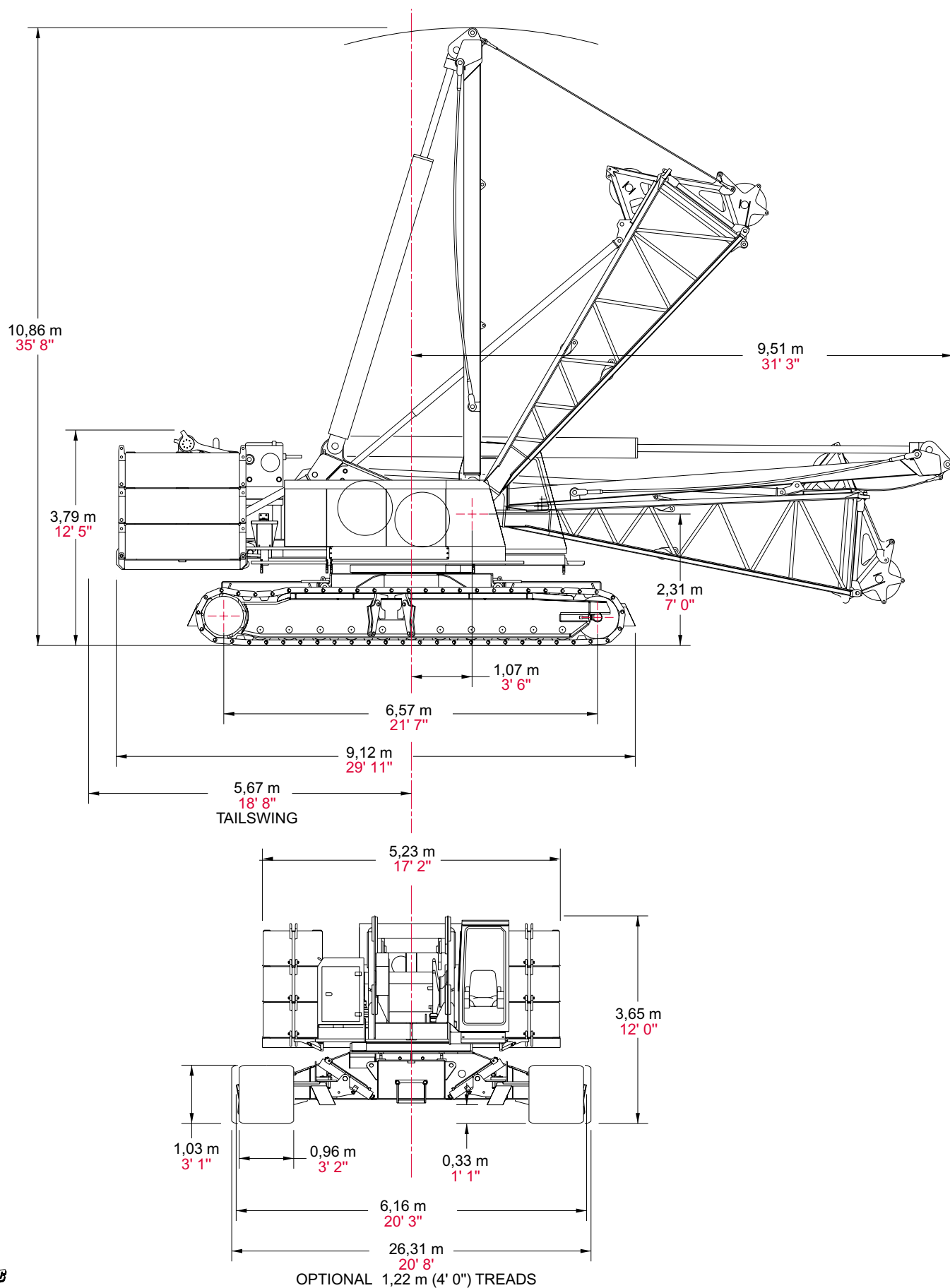
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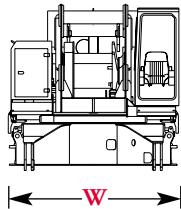
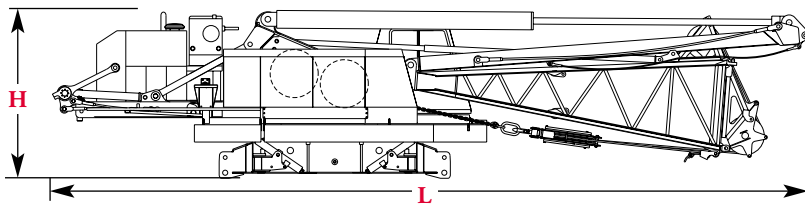
outline dimensions

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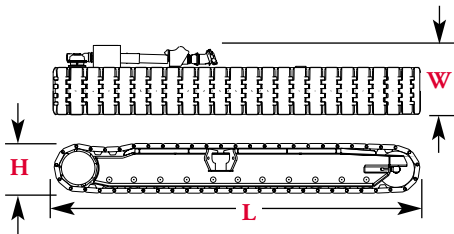
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outline dimensions



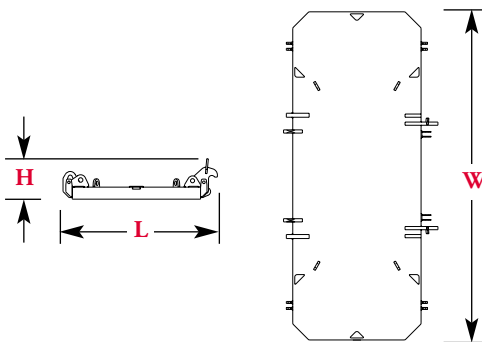
Upperworks Module		x 1
Length	15,17 m	49' 9"
Width	3,42 m	11' 1"
Height	3,36 m	11' 0"
Weight	39 065 kg	86,125 lb

Note: Weight includes carbody, upperworks, two full power drums with maximum length hoist and whip lines, diesel powerplant, operator's cab, boom hoist cylinders, mast, boom butt with integral wire rope guide, optional self assembly jacks, full hydraulic fluid reservoir, and half tank of fuel.

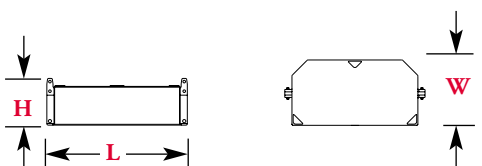


Crawlers		x 2
Length	7,56 m	24' 10"
Width	1,47 m	4' 10"
Height	1,04 m	3' 5"
Weight	15 320 kg	33,775 lb

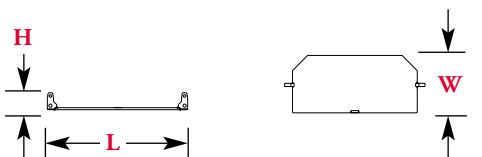
Note: 970 mm (38") wide pad, 12 795 kg (28,210 lb) weight crawlers available.



Counterweight Tray		x 1
Length	2,44 m	8' 0"
Width	6,99 m	17' 1"
Height	0,64 m	2' 1"
Weight	15 876 kg	35,000 lb



Side Counterweight		
Series 1		x 4
Series 2		x 6
Length	2,24 m	7' 4"
Width	1,07 m	3' 6"
Height	0,69 m	2' 3"
Weight	7 938 kg	17,500 lb



Side Counterweight Plate		
Series 2		x 2
Length	2,24 m	7' 4"
Width	0,90 m	3' 0"
Height	0,28 m	0' 11"
Weight	454 kg	1,000 lb

Option

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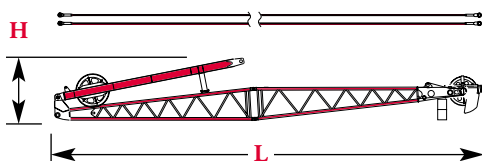
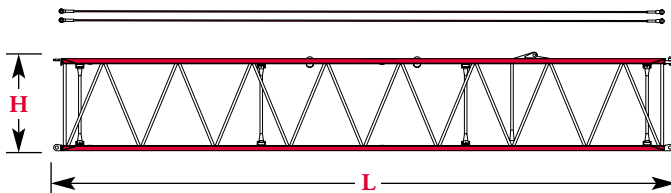
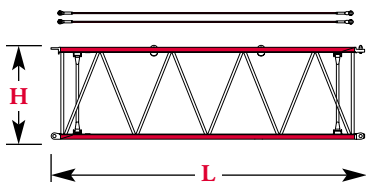
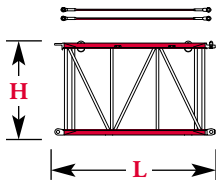
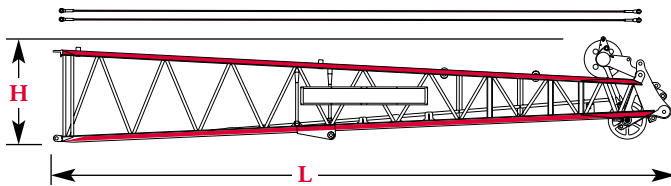
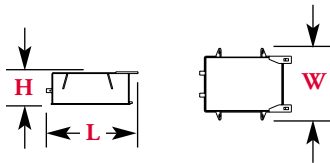
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model



outline dimensions

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Carbody Center Series 2

x 2

Length	1,90 m	6' 3"
Width	1,57 m	5' 2"
Height	0,72 m	2' 4"
Weight	9 979 kg	22,000 lb

No. 78 Boom Top 11,4 m (37' 6") & Wire Rope Guides, Pendants, Lower Point

x 1

Length	12,38 m	40' 8"
Width	2,24 m	7' 4"
Height	2,04 m	6' 11"
Weight	3 567 kg	7,865 lb

No. 78 Boom Insert 3,0 m (10') & Pendants

x 1, 2

Length	3,20 m	10' 6"
Width	2,24 m	7' 4"
Height	1,89 m	6' 3"
Weight	722 kg	1,595 lb

No. 78 Boom Insert 6,1 m (20') & Pendants

x 1, 2

Length	6,25 m	20' 6"
Width	2,24 m	7' 4"
Height	1,89 m	6' 3"
Weight	1 129 kg	2,495 lb

No. 78 Boom Insert 12,3 m (40') & Pendants

x 1, 2, 3, 4

Length	12,34 m	40' 6"
Width	2,24 m	7' 4"
Height	1,89 m	6' 3"
Weight	1 994 kg	4,290 lb

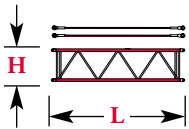
No. 134 Fixed Jib 9,1 m (30') & Strut, Pendants

x 1

Length	9,60 m	31' 6"
Width	0,86 m	2' 10"
Height	1,29 m	4' 3"
Weight	1 188 kg	2,620 lb

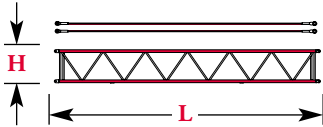
Option

outline dimensions



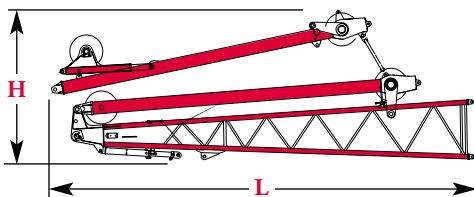
No. 134 Jib Insert 3,0 m (10') & Pendants x 1, 2, 3

Length	3,12 m	10' 3"
Width	0,78 m	2' 7"
Height	0,78 m	2' 7"
Weight	213 kg	480 lb



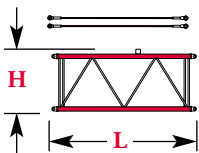
No. 134 Jib Insert 6,1 m (20') & Pendants x 1, 2

Length	6,16 m	20' 3"
Width	0,78 m	2' 7"
Height	0,78 m	2' 7"
Weight	339 kg	750 lb



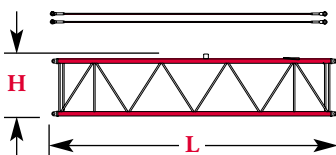
No. 139 Luffing Jib 4,6 m (27') Butt & Main Strut, Jib Strut, Guides, Pendants x 1

Length	8,78 m	28' 10"
Width	1,51 m	5' 0"
Height	3,14 m	10' 3"
Weight	5 056 kg	10,460 lb



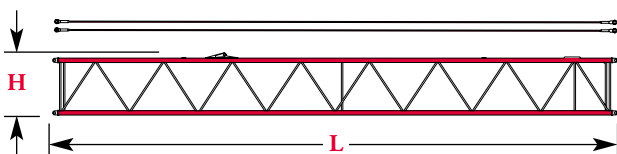
No. 139 Jib Insert 3,0 m (10') & Pendants x 1

Length	3,15 m	10' 4"
Width	1,51 m	5' 0"
Height	1,34 m	4' 5"
Weight	379 kg	840 lb



No. 139 Jib Insert 6,1 m (20') & Pendants x 1, 2

Length	6,20 m	20' 4"
Width	1,51 m	5' 0"
Height	1,34 m	4' 5"
Weight	610 kg	1,350 lb



No. 139 Jib Insert 12,3 m (40') & Pendants x 1, 2, 3

Length	12,40 m	40' 4"
Width	1,51 m	5' 0"
Height	1,34 m	4' 5"
Weight	1 048 kg	2,315 lb

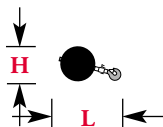
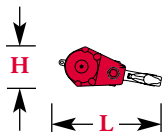
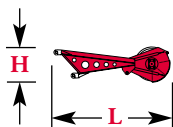
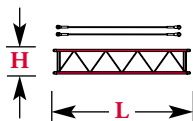
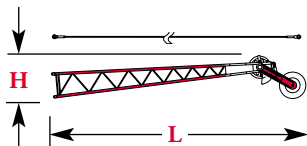
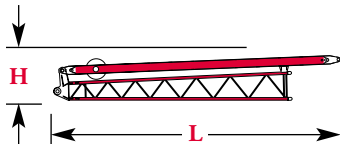
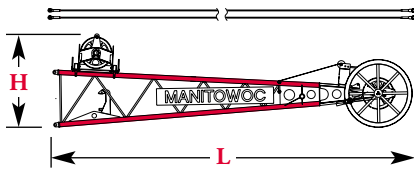
Option

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outline dimensions

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No. 139 Jib Top 7,0 m (23')

& Pendants

x 1

Length	7,83 m	25' 8"
Width	1,51 m	5' 0"
Height	2,06 m	6' 9"
Weight	2 226 kg	4,915 lb

No. 138 Fixed Jib 4,6 m (15')

Butt & Strut

x 1

Length	5,64 m	18' 6"
Width	0,75 m	2' 6"
Height	0,91 m	3' 0"
Weight	350 kg	775 lb

No. 138 Fixed Jib 4,6 m (15')

Top & Roller, Pendant

x 1

Length	5,51 m	18' 1"
Width	0,76 m	2' 6"
Height	1,05 m	3' 5"
Weight	351 kg	773 lb

No. 138 Jib Insert 3,0 m (10')

& Pendants

x 1, 2, 3

Length	3,12 m	10' 3"
Width	0,76 m	2' 6"
Height	0,58 m	1' 11"
Weight	98 kg	215 lb

No. 78 Upper Boom Point

x 1

Length	2,64 m	8' 8"
Width	0,41 m	1' 4"
Height	0,81 m	2' 8"
Weight	420 kg	925 lb

Hook block for 26 mm or (1") wire rope

Capacity	160 mt	175 t	Length	1,68 m	5' 6"
Weight	2 268 kg	5,000 lb	Width	1,29 m	4' 0"

Weight Ball

Capacity/Swivel	13,6 mt	15 t	Diameter	0,56 m	1' 10"
Weight	594 kg	1 310 lb	Length	1,07 m	3' 6"

Option

transport data

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Trailer Load Out Summary

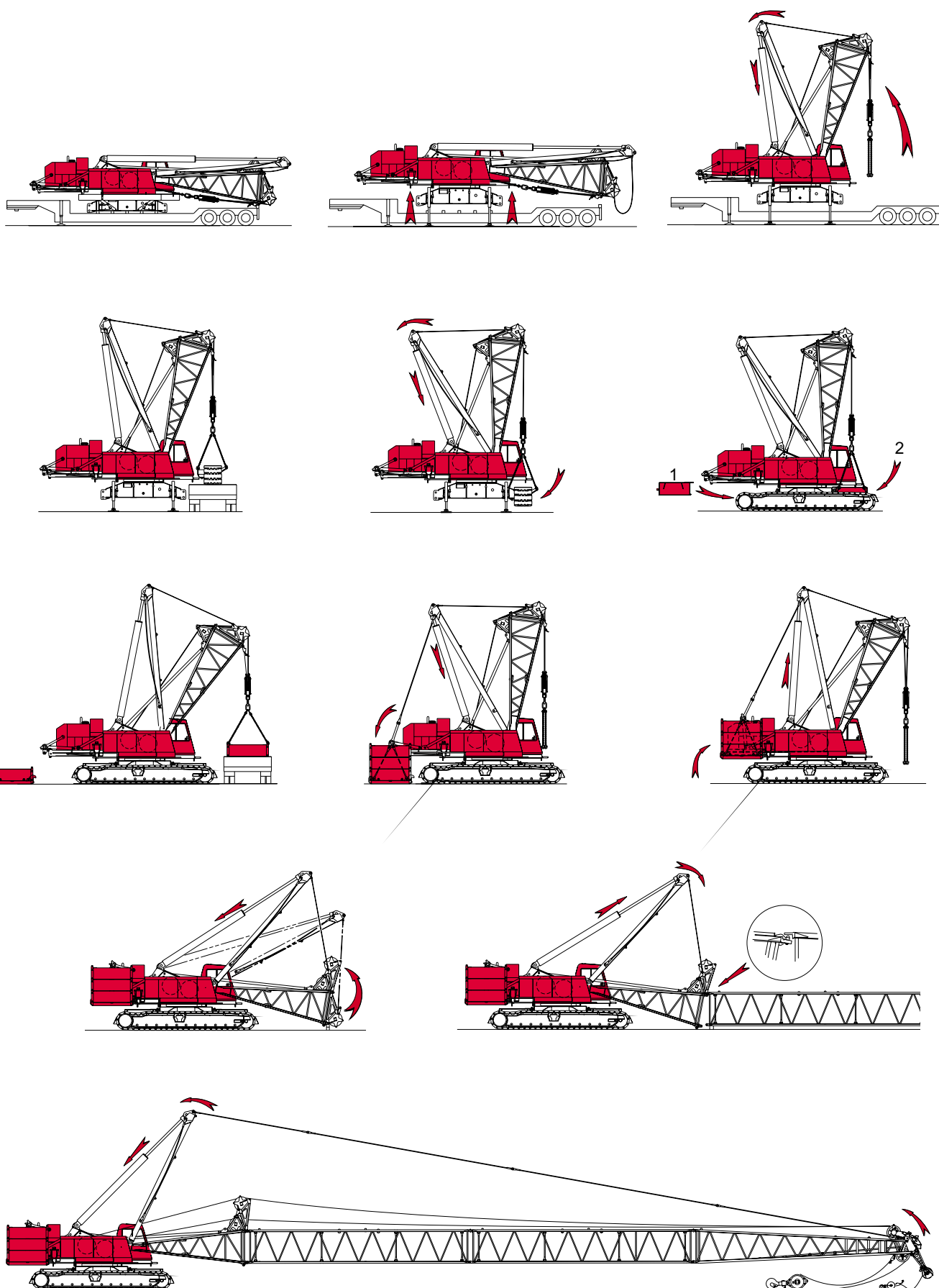
	Model 777 Series 2 No. 78 Boom 82,3 m (270') and No. 134 Fixed Jib 24,4 m (80')								
	Weight each Item	Quantity on Trailer Load #							
Item	kg (lb)	1	2	3	4	5	6	7	8
Upperworks, Carbody with No. 78 Boom Butt	39 065 (86,125)	1							
Crawler Assembly	15 320 (33,775)		1	1					
Counterweight Tray	15 876 (35,000)				1				
Upper Side Counterweight	7 938 (17,500)					2	2	1	1
Upper Side Counterweight Plate	454 (1,000)							1	1
Carbody Counterweight	9 979 (22,000)							1	1
No. 78 Mast Top, Pendants	3 567 (7,865)				1				
3,0 m (10') No. 78 Mast Insert & Pendants	722 (1,595)								1
6,1 m (20') No. 78 Mast Insert & Pendants	1 129 (2,495)							2	
12,2 m (40') No. 78 Mast Insert & Pendants	1 944 (4,290)		1	1		1	1		
9,1 m (30') No. 134 Jib & Pendants	1 586 (3,515)								1
3,0 m (10') No. 134 Jib Insert & Pendants	216 (480)						1		
6,1 m (20') No. 134 Jib Insert & Pendants	339 (750)					1	1		
160-mton (175-ton) Hook Block	2 268 (5,000)		1						
Miscellaneous*									
Approximate Total Shipping Weight Each Trailer Load kg (lb)		39 065 (86,125)	19 534 (43,065)	17 264 (38,065)	19 443 (42,865)	18 159 (40,040)	18 375 (40,520)	20 629 (45,490)	20 679 (45,610)

Trailer configurations - double drop (#2); step deck
(#'s 4-6); flat bed (#'s 7,8).

*Miscellaneous weights vary and are not itemized for
individual trailer load totals.

assembly

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

performance data

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Wire Rope Lengths Boom No. 78 - or - Fixed Jib No. 134 on Boom No. 78

Boom or Boom and Jib Length	Whip Line Front, Rear or Auxiliary Drum				Front or Rear Drum		Front Drum			Auxiliary Drum		
	(1 Part of Line)		(2 Parts of Line)		26 mm or (1") Hoist Line		32 mm or (1-1/4") Hoist Line		Maximum Required Parts of Line	26 mm or (1") Hoist Line		Maximum Required Parts of Line
	m	(ft)	m	(ft)	m	(ft)	m	(ft)		m	(ft)	
18,3 (60)	49	(160)	70	(230)	267	(875)	12	191	(625)	8	-	-
21,3 (70)	55	(180)	79	(260)	282	(925)	11	213	(700)	8	305	(1,000)
24,4 (80)	61	(200)	88	(290)	297	(975)	10	221	(725)	7	351	(1,150)
27,4 (90)	67	(220)	98	(320)	297	(975)	9	221	(725)	6	389	(1,275)
30,5 (100)	73	(240)	107	(350)	297	(975)	8	236	(775)	6	427	(1,400)
33,5 (110)	79	(260)	116	(380)	328	(1,075)	8	236	(775)	5	427	(1,400)
36,6 (120)	85	(280)	125	(410)	328	(1,075)	7	236	(775)	5	427	(1,400)
39,6 (130)	91	(300)	134	(440)	328	(1,075)	6	259	(850)	5	427	(1,400)
42,7 (140)	98	(320)	143	(470)	328	(1,075)	6	259	(850)	4	427	(1,400)
45,7 (150)	104	(340)	152	(500)	343	(1,125)	6	259	(850)	4	434	(1,425)
48,8 (160)	110	(360)	162	(530)	343	(1,125)	5	259	(850)	4	434	(1,425)
51,8 (170)	116	(380)	171	(560)	343	(1,125)	5	274	(900)	4	434	(1,425)
54,9 (180)	122	(400)	180	(590)	351	(1,150)	5	274	(900)	3	457	(1,500)
57,9 (190)	128	(420)	189	(620)	351	(1,150)	4	274	(900)	3	457	(1,500)
61,0 (200)	134	(440)	198	(650)	351	(1,150)	4	274	(900)	3	457	(1,500)
64,0 (210)	140	(460)	207	(680)	351	(1,150)	4	274	(900)	3	465	(1,525)
67,1 (220)	146	(480)	216	(710)	351	(1,150)	4	282	(975)	3	488	(1,600)
70,1 (230)	152	(500)	226	(740)	366	(1,200)	3	297	(1,000)	3	488	(1,600)
73,2 (240)	158	(520)	235	(770)	366	(1,200)	3	305	(1,000)	3	488	(1,600)
76,2 (250)	165	(540)	244	(800)	366	(1,200)	3	305	(1,000)	2	488	(1,600)
79,2 (260)	171	(560)	253	(830)	366	(1,200)	3	305	(1,000)	2	488	(1,600)
82,3 (270)	177	(580)	262	(860)	366	(1,200)	3	305	(1,000)	2	488	(1,600)
85,3 (280)	183	(600)	271	(890)								
88,4 (290)	189	(620)										
91,4 (300)	195	(640)										

Note: Line lengths are based on single part lead line. 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.

Auxiliary Drum cannot be used with 18,3 m (60') boom length.

Maximum block travel with maximum parts of line may be restricted when hoist line length exceeds 213 m (700') using 32 mm (1-1/4") wire rope.

Maximum capacity with 2 part whip line using the 32 mm or (1-1/4") wire rope is 26 760 kg (59,000 lb).

Capacity chart restrictions will occur when auxiliary drum is used. Maximum capacity is 108 860 kg (240,000 lb) with 12 parts line.

performance data

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Wire Rope Lengths

Luffing Jib No. 139 on Boom No. 78

Boom and Luffing Jib Length	Luffing Jib Hoist Line Front Drum							
	(4 Parts of Line)		(3 Parts of Line)		(2 Parts of Line)		(1 Part of Line)	
	m	(ft)	m	(ft)	m	(ft)	m	(ft)
42,7 (140)	229	(750)					95	(310)
45,7 (150)	244	(800)					101	(330)
48,8 (160)	259	(850)	213	(700)			107	(350)
51,8 (170)	274	(900)	221	(725)			113	(370)
54,9 (180)	290	(950)	236	(775)			119	(390)
57,9 (190)	305	(1,000)	244	(800)			125	(410)
61,0 (200)	320	(1,050)	259	(850)	198	(650)	131	(430)
64,0 (210)	335	(1,100)	274	(900)	206	(675)	137	(450)
67,1 (220)	-	-	282	(925)	213	(700)	143	(470)
70,1 (230)	-	-	297	(975)	229	(750)	149	(490)
73,2 (240)	-	-	305	(1,000)	236	(775)	155	(510)
76,2 (250)	-	-	320	(1,050)	244	(800)	162	(530)
79,2 (260)	-	-	335	(1,100)	251	(825)	168	(550)
82,3 (270)	-	-	343	(1,125)	259	(850)	174	(570)
85,3 (280)	-	-	-	-	267	(875)	180	(590)
88,4 (290)	-	-	-	-	282	(925)	186	(610)
91,4 (300)	-	-	-	-	290	(950)	192	(630)
94,5 (310)	-	-	-	-	297	(975)	198	(650)
97,5 (320)	-	-	-	-	305	(1,000)	204	(670)
100,6 (330)	-	-	-	-	312	(1,025)	210	(690)
103,6 (340)	-	-	-	-	320	(1,050)	216	(710)
106,7 (350)	-	-	-	-	-	-	223	(730)

Note: Line lengths are based on single part lead line. 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.

Capacity chart restrictions will occur when auxiliary drum is used. Maximum capacity is 36 290 kg (80,000 lb) with four parts of line.

performance data

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Wire Rope Lengths Luffing Jib No. 139 on Boom No. 78

Boom and Luffing Jib Length m (ft)	Luffing Jib Hoist Line Auxiliary Drum			
	(4 Parts of Line)		(3 Parts of Line)	(2 Parts of Line)
	m	(ft)	m	(ft)
42,7 (140)	229	(750)		95 (310)
45,7 (150)	244	(800)		101 (330)
48,8 (160)	259	(850)		107 (350)
51,8 (170)	274	(900)		113 (370)
54,9 (180)	290	(950)		119 (390)
57,9 (190)	305	(1,000)		125 (410)
61,0 (200)	320	(1,050)	259 (850)	131 (430)
64,0 (210)	335	(1,100)	274 (900)	137 (450)
67,1 (220)	351	(1,150)	282 (925)	143 (470)
70,1 (230)	366	(1,200)	297 (975)	149 (490)
73,2 (240)	381	(1,250)	305 (1,000)	155 (510)
76,2 (250)	396	(1,300)	320 (1,050)	162 (530)
79,2 (260)	411	(1,350)	335 (1,100)	168 (550)
82,3 (270)	427	(1,400)	343 (1,125)	174 (570)
85,3 (280)	-	-	358 (1,175)	180 (590)
88,4 (290)	-	-	366 (1,200)	186 (610)
91,4 (300)	-	-	373 (1,225)	192 (630)
94,5 (310)	-	-	-	198 (650)
97,5 (320)	-	-	-	204 (670)
100,6 (330)	-	-	-	210 (690)
103,6 (340)	-	-	-	216 (710)

Note: Line lengths are based on single part lead line. 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.

Drums each provide 000 kN (00,000 lb) maximum single line pull.

Wire Rope Lengths Fixed Jib No. 138 on Luffing Jib No. 139 on Boom No. 80

Boom, Luffing Jib and Fixed Jib Length m (ft)	Fixed Jib Whip Line Front Drum or Auxiliary Drum	
	(1 Part of Line)	
	m	(ft)
94,5 (310)	198	(650)
97,5 (320)	204	(670)
100,6 (330)	210	(690)
103,6 (340)	216	(710)
106,7 (350)	223	(730)
109,7 (360)	229	(750)
112,8 (370)	235	(770)
115,8 (380)	241	(790)
118,9 (390)	247	(810)
121,9 (400)	253	(830)
125,0 (410)	259	(850)

Note: Line lengths are based on single part lead line. 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 load on 26 mm or (1") wire rope is 12 400 kg (27,500 lb) per line. When auxiliary drum is used maximum load is 9 070 kg (20,000 lb).

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Wire Rope Specifications 5:1 Safety Factor

Boom No. 78

- or -

Fixed Jib No. 134 on Boom No. 78

- or -

Luffing Jib No. 139 on Boom No. 78

- or -

Fixed Jib No. 138 on Luffing Jib No. 139 on Boom No. 78

Part Number Function	5:1 Safety Factor 2 160 N/mm ²				
	No. 719379 Hoist Line Whip Line	No. 719378 Auxiliary Line	No. 719413* Hoist Line Whip Line (High Line Pull)	No. 719392 Hoist Line Whip Line	No. 719393 Auxiliary Line
Size Wire Rope	26 mm -	26 mm -	32 mm -	- (1")	- (1")
Minimum Breaking Strength	656,1 kN (147,500 lb)	650,6 kN (146,200 lb)	1 085,3 kN (244,000 lb)	684,2 kN (153,800 lb)	620,9 kN (139,600 lb)
Maximum Load Per Line	13 380 kg (29,500 lb)	9 070 kg (20,000 lb)	19 960 kg (44,000 lb)	13 380 kg (29,500 lb)	9 070 kg (20,000 lb)
Approximate Weight	3,17 kg/m (2.13 lb/ft)	3,17 kg/m (2.13 lb/ft)	4,381 kg/m (3.23 lb/ft)	3,02 kg/m (2.03 lb/ft)	3,02 kg/m (2.03 lb/ft)

* Right Regular Lay

Wire Rope Specifications 3.5:1 Safety Factor

Boom No. 78

- or -

Fixed Jib No. 134 on Boom No. 78

- or -

Luffing Jib No. 139 on Boom No. 78

- or -

Fixed Jib No. 138 on Luffing Jib No. 139 on Boom No. 78

Part Number Function	3.5:1 Safety Factor Right Regular Lay, 6x25 Filler Wire, Extra Improved Plow Steel, IWRC			
	No. 719387 Hoist Line Whip Line Auxiliary Line	No. 719060 Hoist Line Whip Line	No. 719278 Hoist Line Whip Line (High Line Pull)	No. 719073 Auxiliary Line
Size Wire Rope	26 mm -	- (1")	- (1-1/4")	- (1")
Minimum Breaking Strength	483,1 kN (108,600 lb)	460,0 kN (103,400 lb)	72 480 kg (159,800 lb)	40 730 kg (89,890 lb)
Maximum Load Per Line	13 380 kg (29,500 lb)	13 380 kg (29,500 lb)	19 960 kg (44,000 lb)	9 070 kg (20,000 lb)
Approximate Weight	2,89 kg/m (1.94 lb/ft)	2,75 kg/m (1.85 lb/ft)	4,30 kg/m (2.89 lb/ft)	2,75 kg/m (1.85 lb/ft)

performance data

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Drums & Laggings

	Application	Drums							Wire Rope Size
		Drum Location	Drum Part Number	Drum Type	Drum Diameter	Drum Width	Optional Grooved Lagging Part Number	Lagging Diameter	
Basic Liftcrane	Hoist	Front	178272	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
							502391	540 mm (21-1/4")	- 1"
	Hoist (Optional Dual Input Drive)	Front	178273	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
							502391	540 mm (21-1/4")	- 1"
							502395	641 mm (25-1/4")	32 mm OR 1-1/4"
	Whip	Rear	178272	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
							502391	540 mm (21-1/4")	- 1"
	Whip (Optional Dual Input Drive)	Rear	178273	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
								540 mm (21-1/4")	- 1"
	Hoist (Auxiliary)	Boom Butt	177379	Bare	495 mm (19-1/2")	940 mm (37")	502391	540 mm (21-1/4")	26 mm -
								540 mm (21-1/4")	- 1"
Luffing Jib Liftcrane	Hoist	Front	178272	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
							502391	540 mm (21-1/4")	- 1"
	Hoist (Optional Dual Input Drive)	Front	178273	Bare	495 mm (19-1/2")	765 mm (30-1/8")	502392	540 mm (21-1/4")	26 mm -
							502391	540 mm (21-1/4")	- 1"
	Hoist (Auxiliary)	Boom Butt	177379	Bare	495 mm (19-1/2")	940 mm (37")	502372	540 mm (21-1/4")	26 mm -
							502382	540 mm (21-1/4")	- 1"
Clamshell	Closing	Front	178272			765 mm (30-1/8")	502410	540 mm (21-1/4")	26 mm OR 1"
	Holding	Rear	178272			765 mm (30-1/8")	502410	540 mm (21-1/4")	26 mm OR 1"
Dragline	Drag	Front	178272			765 mm (30-1/8")	502410	540 mm (21-1/4")	26 mm OR 1"
	Hoist	Rear	178272			765 mm (30-1/8")	502410	540 mm (21-1/4")	26 mm OR 1"

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Drum Capacities - Wire Rope

	Maximum Length	
	No Lagging	With Lagging
Front Drum (Hoist or Whip)		
26 mm Wire Rope	327 m	280 m
(1") Wire Rope	(1,074 ft)	(918 ft)
32 mm Wire Rope	–	145 m
(1-1/4") Wire Rope	–	(475 ft)
Left Rear Drum (Whip)		
29 mm Wire Rope	327 m	280 m
(1-1/8") Wire Rope	(1,074 ft)	(918 ft)
Auxiliary Drum (Whip)		
26 mm Wire Rope	403 m	431 m
(1") Wire Rope	(1,323 ft)	(1,415 ft)

Note: 5 m (17') is deducted from maximum spooling capacities for 3 dead wraps per drum or lagging.

*Lagging diameter 540 mm (21-1/4").

**Lagging diameter 641 mm (25-1/4").

Main & Whip Drums - 131 kN (29,500 lb)

Layer	Full Power Drum - Continuous Duty Standard Pull/Single Line Speed				
	m/min (ft/min)				
Line Pull kg (lb)	1	2	3	4	5
0 (0)	99 (325)	108 (354)	117 (383)	126 (413)	135 (442)
2 268 (5,000)	93 (306)	101 (331)	109 (357)	116 (382)	124 (406)
4 536 (10,000)	88 (287)	94 (309)	101 (330)	107 (351)	111 (363)
6 803 (15,000)	75 (245)	76 (249)	77 (252)	78 (256)	79 (260)
9 072 (20,000)	59 (194)	60 (197)	61 (201)	63 (205)	64 (208)
11 340 (25,000)	50 (163)	51 (167)	52 (170)	53 (174)	54 (177)
13 380 (29,500)	44 (144)	45 (148)	46 (151)	47 (155)	48 (158)

NOTE: Line pull is infinitely variable. With 540 mm (21-1/4") lagging for 26 mm or (1") wire rope.

Main & Whip Drums - 131 kN (29,500 lb)

Layer	High Speed Drum - Continuous Duty Single Line Pull/Single Line Speed				
	m/min (ft/min)				
Line Pull kg (lb)	1	2	3	4	5
0 (0)	151 (496)	165 (541)	178 (585)	192 (630)	205 (674)
2 268 (5,000)	141 (462)	152 (500)	164 (537)	175 (574)	186 (611)
4 536 (10,000)	130 (427)	140 (459)	144 (471)	145 (474)	145 (477)
6 803 (15,000)	98 (321)	99 (324)	99 (326)	100 (329)	101 (332)
9 072 (20,000)	76 (249)	77 (251)	77 (254)	78 (257)	79 (260)
11 340 (25,000)	63 (205)	63 (208)	64 (211)	65 (214)	66 (217)
13 380 (29,500)	55 (179)	56 (182)	56 (185)	57 (187)	58 (190)

NOTE: Line pull is infinitely variable. With 540 mm (21-1/4") lagging for 26 mm or (1") wire rope.

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

Layer	High Pull Drum - Continuous Duty Single Line Pull/Single Line Speed		
	m/min (ft/min)		
Line Pull kg (lb)	1	2	3
0 (0)	119 (389)	130 (425)	141 (462)
2 268 (5,000)	112 (368)	122 (400)	132 (432)
4 536 (10,000)	106 (347)	114 (375)	123 (403)
9 072 (20,000)	74 (242)	74 (244)	75 (246)
13 608 (30,000)	52 (169)	52 (172)	53 (174)
18 143 (40,000)	41 (133)	42 (136)	42 (138)
19 958 (44,000)	38 (123)	38 (126)	39 (128)

NOTE: Line pull is infinitely variable. With 641 mm (25-1/4") lagging for 32 mm or (1-1/4") wire rope.

performance data

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Maximum Length – Unassisted Raising

No. 134 Fixed Jib on No. 78 Main Boom Series 2		
Method	Main Boom	Fixed Jib
m (ft)	82,3 (270)	–
Over front of blocked crawlers	79,2 (260)	–
	76,2 (250)	–
	73,2 (240)	9,1 (30)
	70,1 (230)	15,2 (50)
	67,1 (220)	24,4 (80)
Over rear of blocked crawlers	79,2 (260)	–
	76,2 (250)	–
	73,2 (240)	–
	70,1 (230)	15,2 (50)
	67,1 (220)	67,1 (70)
Over side of blocked crawlers	64,0 (210)	24,4 (80)
	70,1 (230)	–
	67,1 (220)	–
	64,0 (210)	15,2 (50)
	61,0 (200)	67,1 (70)
	57,9 (190)	24,4 (80)

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

Maximum Length – Unassisted Raising

No. 139 Luffing Jib on No. 78 Main Boom Series 2				
Method	In-Line Procedure		Jack-Knife Procedure	
	Main Boom	Luffing Jib	Main Boom	Luffing Jib
Over end of blocked crawlers m (ft)	16,8 (55)	15,2 - 36,6 (50 - 120)	16,8 (55)	39,6 - 45,7 (130 - 150)
	19,8 (65)	15,2 - 33,5 (50 - 110)	19,8 (65)	36,6 - 45,7 (120 - 150)
	22,9 (75)	15,2 - 30,5 (50 - 100)	22,9 (75)	33,5 - 45,7 (110 - 150)
	25,9 (85)	15,2 - 24,4 (50 - 80)	25,9 (85)	27,4 - 45,7 (90 - 150)
	29,0 (95)	15,2 - 21,3 (50 - 70)	29,0 (95)	24,4 - 45,7 (80 - 150)
	32,0 (105)	15,2 - 18,3 (50 - 60)	32,0 (105)	21,3 - 45,7 (70 - 150)
	–	–	35,1 (115)	15,2 - 45,7 (50 - 150)
	–	–	38,1 (125)	15,2 - 42,7 (50 - 140)
	–	–	41,1 (135)	15,2 - 30,5 (50 - 100)
	–	–	44,2 (145)	18,3 (60)

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

Maximum Length – Unassisted Raising

No. 10 Fixed Jib on No. 222 Luffing Jib on No. 260 Main Boom 222, 222EX Series B			
Method	Jack-Knife Procedure		
	Main Boom	Luffing Jib	Fixed Jib
Over end of blocked crawlers m (ft)	35,1 (115)	30,5 - 39,6 (100 - 130)	9,1 - 18,3 (30 - 60)
	38,1 (125)	30,5 - 39,6 (100 - 130)	9,1 - 18,3 (30 - 60)
	41,1 (135)	30,5 (100)	9,1 - 18,3 (30 - 60)

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

Working Weight

Configuration	kg (lb)	
	777 Series 1	777 Series 2
18,3 m (60') No. 78 Main Boom	118 655 (261,590)	155 450 (342,710)
82,3 m (270') No. 78 Main Boom combined with 24,4 m (80') No. 134 Fixed Jib	133 034 (293,290)	169 830 (374,410)

Typical working weight consists of: hydraulic reservoirs full, fuel half-full, drums loaded with standard lengths of wire rope, upper boom point, 160 mt (175 t) hook block, and standard weight ball.

Note: Upper boom point not used with fixed jib.

boom combinations

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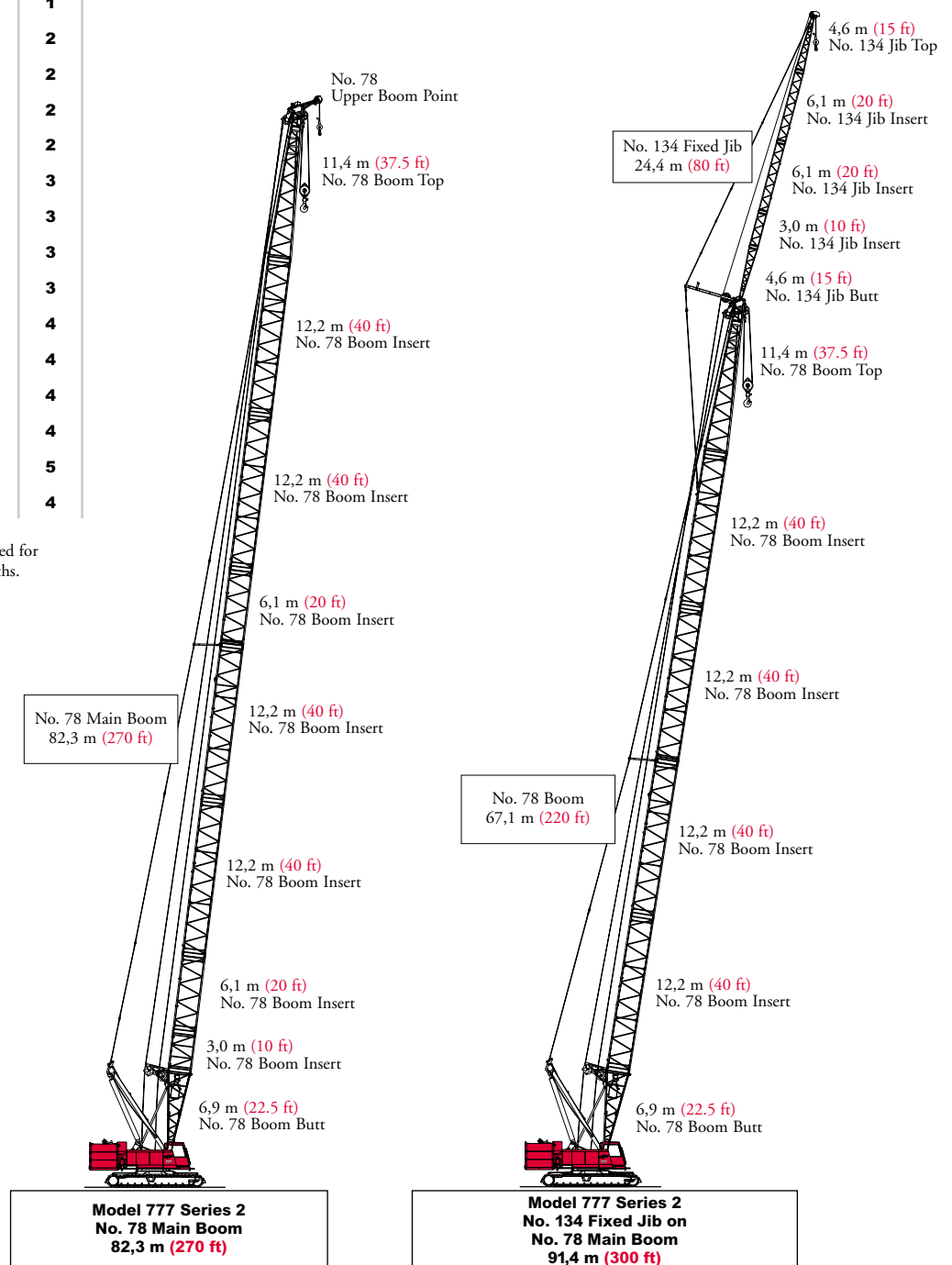
No. 78 Main Boom Combinations

Boom Length m (ft)	Boom Inserts		
	3,0 m (10 ft)	6,1 m (20 ft)	12,2 m (40 ft)
18,3 (60)	-	-	-
21,3 (70)	1	-	-
24,4 (80)	-	1	-
27,4 (90)	1	1	-
30,5 (100)	-	-	1
33,5 (110)	1	-	1
36,6 (120)	-	1	1
39,6 (130)	1	1	1
42,7 (140)	-	-	2
45,7 (150)	1	-	2
48,8 (160)	-	1	2
51,8 (170)	1	1	2
54,9 (180)	-	-	3
57,9 (190)	1	-	3
61,0 (200)	-	1	3
64,0 (210)	1	1	3
67,1 (220)	-	-	4
70,1 (230)	1	-	4
73,2 (240)	-	1	4
76,2 (250)	1	1	4
79,2 (260)	-	-	5
82,3 (270)	1	2	4

No. 134 Fixed Jib Combinations

Jib Length m (ft)	Fixed Jib Inserts	
	3,0 m (10 ft)	6,1 m (20 ft)
9,1 (30)	-	-
12,2 (40)	1	-
15,2 (50)	-	1
18,3 (60)	1	1
21,3 (70)	-	2
24,4 (80)	1	2

Note: Intermediate suspension required for 57,9 m (190') and longer boom lengths.



boom combinations

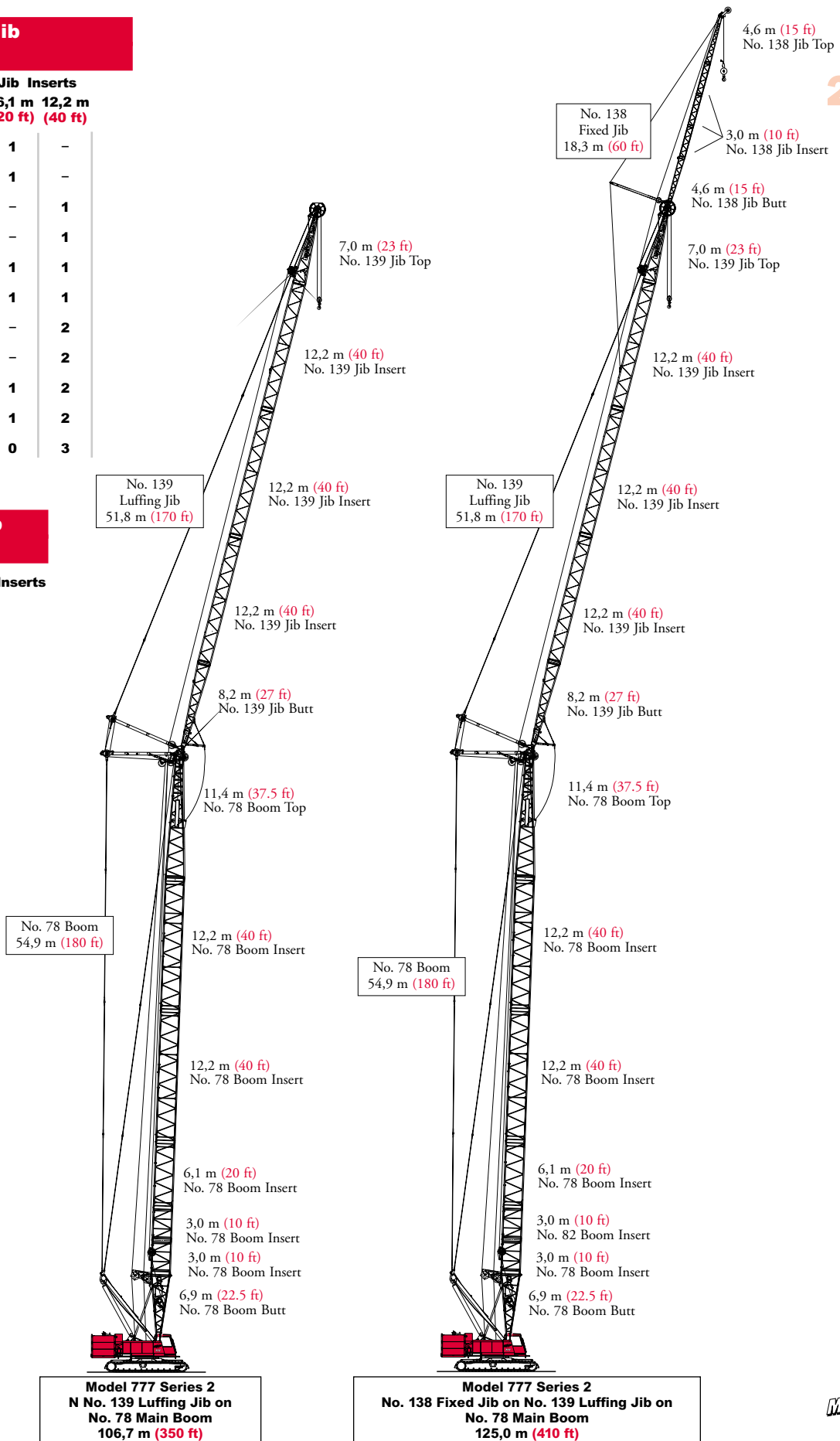
21

No. 139 Luffing Jib Combinations

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)	–	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)	0	0	3

No. 138 Fixed Jib Combinations

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

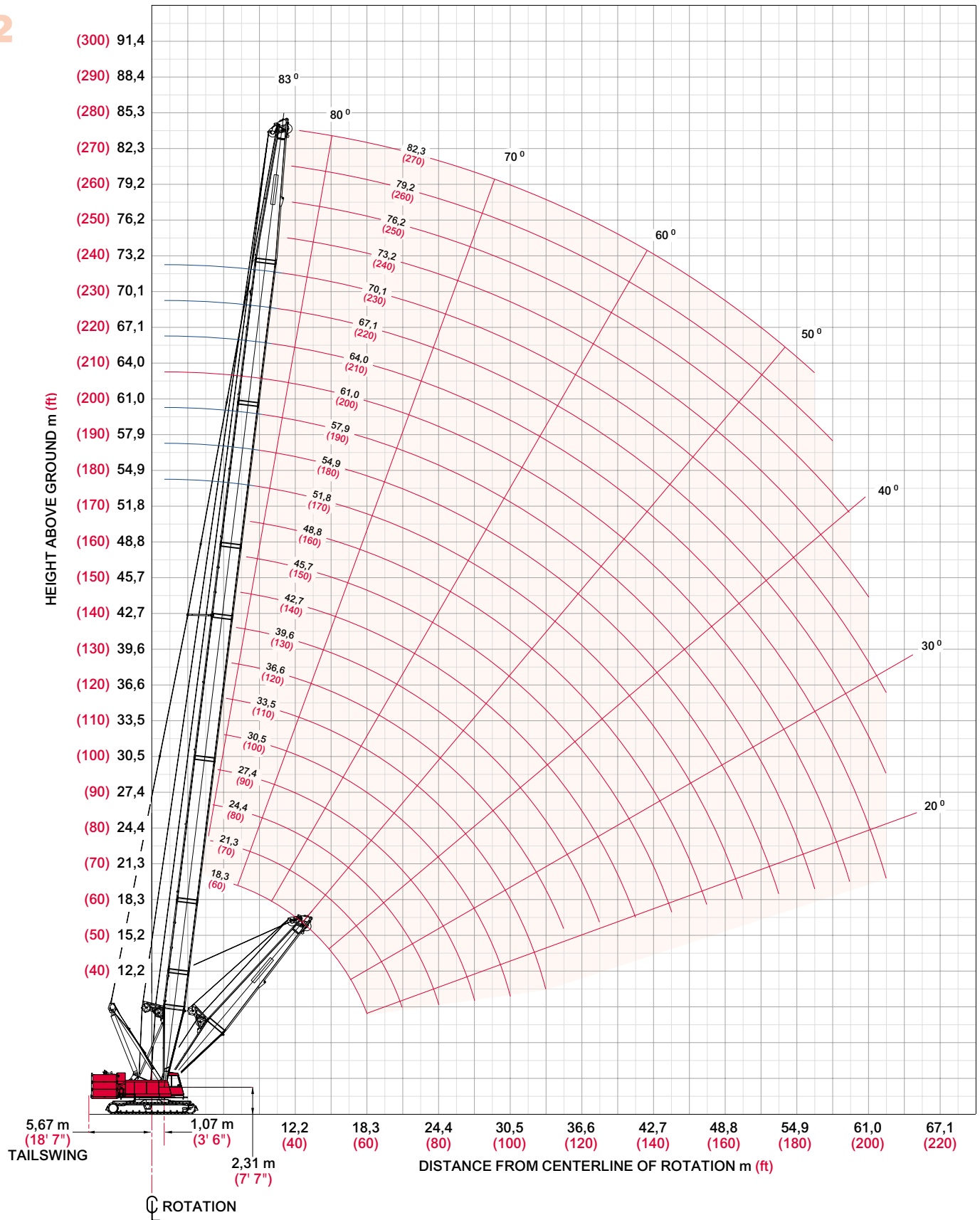


model 777
Manitowoc

heavy-lift boom range diagram

No. 78 Main Boom

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heavy-lift load charts

Liftcrane Boom Capacities - Series 2

Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Crawler Frame Counterweight

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360° Rating

kg (lb) x 1 000

Boom m (ft)	18,3 (60)	24,4 (80)	30,5 (100)	36,6 (120)	42,7 (140)	48,8 (160)	51,8 (170)	57,9 (190)	64,0 (210)	70,1 (230)	76,2 (250)	82,3 (270)
Radius												
4,0 (13)	160,0 (352.8)											
4,5 (15)	146,1 (316.7)	— (275.5)										
5,0 (17)	131,9 (281.3)	119,9 (259.9)										
6,0 (20)	110,8 (240.6)	109,6 (239.9)	96,3 (210.7)	— (192.2)								
7,0 (24)	95,2 (201.2)	95,2 (201.0)	89,0 (191.7)	81,5 (175.9)	— (157.9)							
9,0 (30)	74,1 (160.9)	74,0 (160.7)	73,9 (160.2)	70,1 (152.2)	64,3 (140.6)	58,6 (128.1)	56,3 (123.0)	— (116.6)				
10,0 (34)	64,5 (135.0)	65,0 (135.9)	65,1 (136.0)	63,2 (134.7)	60,1 (127.5)	54,9 (118.4)	52,6 (113.4)	50,7 (109.9)	47,3 (102.7)	— (97.1)		
12,0 (40)	49,6 (107.1)	49,9 (107.8)	49,9 (107.8)	50,0 (107.9)	49,8 (107.7)	47,5 (103.2)	46,2 (100.5)	44,2 (96.0)	41,3 (89.7)	39,0 (84.7)	37,1 (80.5)	
14,0 (50)	40,0 (78.4)	40,3 (79.1)	40,3 (79.1)	40,3 (79.1)	40,2 (78.8)	40,2 (78.5)	39,6 (78.3)	37,8 (76.5)	35,6 (72.5)	33,5 (68.0)	31,6 (64.0)	29,6 (59.6)
18,0 (60)	28,1 (60.6)	28,4 (61.5)	28,4 (61.5)	28,4 (61.5)	28,3 (61.1)	28,1 (60.8)	28,0 (60.6)	27,7 (59.8)	27,4 (59.3)	26,0 (56.4)	24,5 (53.3)	22,7 (49.3)
22,0 (70)		21,4 (49.5)	21,5 (49.6)	21,5 (49.6)	21,3 (49.2)	21,2 (48.9)	21,0 (48.6)	20,7 (47.8)	20,4 (47.3)	20,2 (46.7)	19,6 (44.9)	18,2 (41.8)
24,0 (80)		18,9 (40.8)	19,0 (41.0)	19,0 (41.0)	18,8 (40.6)	18,6 (40.3)	18,5 (40.0)	18,2 (39.2)	17,9 (38.7)	17,7 (38.1)	17,4 (37.4)	16,4 (35.5)
26,0 (90)			16,9 (34.5)	16,9 (34.5)	16,7 (34.1)	16,6 (33.8)	16,5 (33.5)	16,1 (32.7)	15,8 (32.2)	15,6 (31.5)	15,2 (30.9)	14,8 (30.1)
30,0 (100)			13,5 (29.2)	13,6 (29.4)	13,4 (29.0)	13,3 (28.7)	13,2 (28.4)	12,8 (27.6)	12,6 (27.1)	12,3 (26.4)	12,0 (25.8)	11,6 (25.0)
34,0 (110)				11,2 (25.3)	11,0 (25.0)	10,9 (24.6)	10,8 (24.4)	10,4 (23.5)	10,1 (23.0)	9,8 (22.3)	9,5 (21.7)	9,2 (20.9)
36,0 (120)					10,0 (21.6)	9,8 (21.2)	9,7 (21.0)	9,3 (20.1)	9,1 (19.6)	8,8 (18.9)	8,5 (18.3)	8,2 (17.5)
40,0 (130)					8,3 (18.7)	8,2 (18.4)	8,1 (18.2)	7,7 (17.3)	7,4 (16.8)	7,1 (16.1)	6,8 (15.5)	6,5 (14.7)
42,0 (140)						7,4 (16.0)	7,3 (15.8)	6,9 (14.9)	6,7 (14.4)	6,4 (13.7)	6,1 (13.1)	5,7 (12.3)
46,0 (150)						6,2 (13.9)	6,1 (13.7)	5,7 (12.8)	5,5 (12.4)	5,1 (11.6)	4,9 (11.0)	4,5 (10.2)
48,0 (160)							5,6 (11.9)	5,1 (11.0)	4,9 (10.6)	4,6 (9.9)	4,3 (9.2)	4,0 (8.4)
52,0 (170)								4,2 (9.4)	4,0 (9.0)	3,7 (8.3)	3,4 (7.6)	2,9 (6.7)
54,0 (180)								3,8 (8.0)	3,6 (7.6)	3,3 (6.9)	2,9 (6.2)	2,5 (5.2)
56,0 (185)								3,3 (7.3)	3,2 (7.0)	2,8 (6.2)	2,6 (5.6)	2,0 (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.

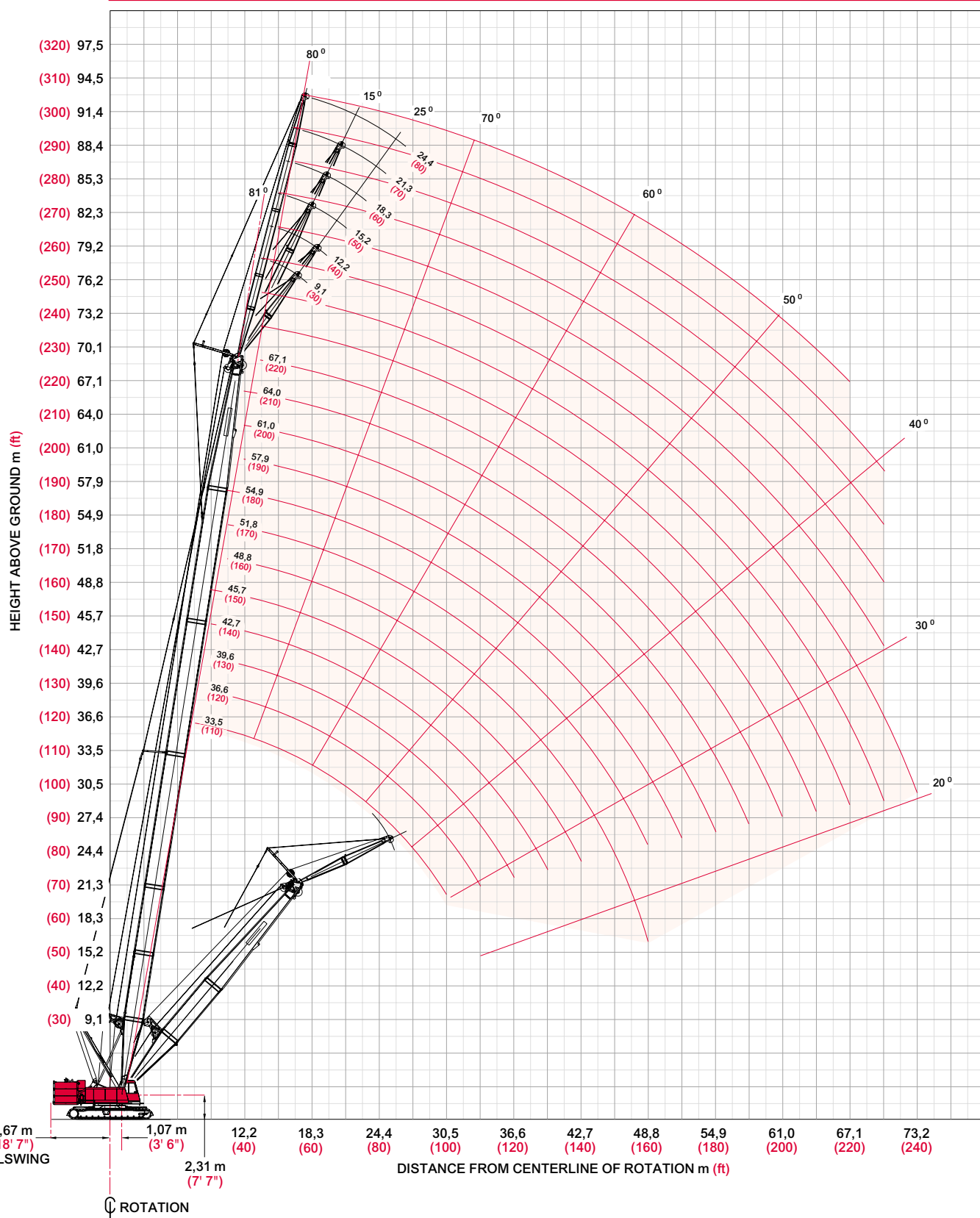
model 777



fixed jib range diagram

No. 134 Fixed Jib on No. 78 Main Boom

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fixed jib load charts

Liftcrane Jib Capacities - Series 2

Jib No. 134 with 3 810 mm (12'6") Strut on Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Crawler Frame Counterweight

360° Rating

kg (lb) x 1 000

25

		5° Offset							25° Offset				
Boom m (ft)		24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)	Boom m (ft)		24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 9,1 m (30 ft)	Radius						Jib 9,1 m (30 ft)	Radius					
	7,6 (25)	26,7 (59.0)						10,0 (35)	– (47.7)				
	10,0 (35)	26,7 (59.0)	– (59.0)					14,0 (50)	19,0 (40.2)	20,9 (44.7)	– (47.0)		
	14,0 (50)	26,6 (58.2)	26,7 (59.0)	26,7 (59.0)	– (58.3)	– (56.8)		18,0 (60)	16,7 (36.6)	18,8 (41.4)	20,1 (44.1)	– (46.5)	– (45.1)
	18,0 (60)	25,3 (55.6)	26,5 (58.5)	26,6 (58.8)	25,8 (56.8)	24,5 (53.5)		20,0 (70)	15,7 (33.7)	18,0 (38.6)	19,2 (41.5)	20,4 (44.1)	19,4 (41.2)
	20,0 (70)	24,5 (51.2)	24,8 (50.0)	24,3 (48.8)	23,4 (47.0)	21,9 (45.1)		24,0 (80)	14,3 (31.4)	16,5 (36.3)	17,9 (39.3)	18,6 (40.2)	17,3 (37.9)
	26,0 (90)	17,6 (36.1)	17,1 (34.8)	16,5 (33.6)	15,6 (31.7)	15,3 (31.0)		26,0 (90)	13,8 (29.7)	15,9 (34.3)	16,9 (34.9)	16,5 (33.4)	16,2 (32.8)
	36,0 (120)		10,3 (22.2)	9,7 (21.0)	8,8 (19.0)	8,5 (18.3)		36,0 (120)		10,6 (22.8)	10,1 (21.8)	9,3 (20.1)	9,1 (19.5)
	44,0 (150)		7,2 (14.9)	6,7 (13.7)	5,8 (11.7)	5,5 (11.0)		40,0 (140)			8,4 (16.3)	7,6 (14.6)	7,3 (14.0)
	52,0 (180)			4,6 (8.9)	3,7 (6.9)	3,4 (6.2)		48,0 (160)			5,7 (12.3)	5,0 (10.6)	4,6 (9.9)
	60,0 (200)				2,2 (4.5)			52,0 (180)				3,9 (7.4)	3,7 (6.8)
	64,0 (210)							60,0 (200)					

		Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)			Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 15,2 m (50 ft)	Radius							Jib 15,2 m (50 ft)	Radius						
	8,0 (30)		— (43.3)						14,0 (50)		— (30.9)				
	12,0 (40)		18,5 (40.7)	— (43.0)					18,0 (60)		12,6 (27.7)	14,0 (30.7)			
	14,0 (50)		17,8 (38.4)	18,9 (41.1)	19,5 (42.5)				20,0 (70)		11,8 (25.1)	13,3 (28.3)	14,0 (30.2)	— (31.9)	
	18,0 (60)		16,6 (36.5)	17,9 (39.4)	18,6 (41.0)	18,1 (40.0)			24,0 (80)		10,5 (23.0)	12,0 (26.4)	12,9 (28.3)	13,7 (30.2)	
	20,0 (70)		16,1 (34.8)	17,4 (37.8)	18,1 (39.6)	17,8 (39.0)			26,0 (90)		10,0 (21.3)	11,5 (24.7)	12,4 (26.7)	13,3 (28.7)	
	26,0 (90)		14,7 (31.9)	16,2 (35.2)	16,9 (34.4)	16,0 (32.5)			36,0 (120)			9,5 (20.9)	10,4 (22.9)	10,0 (21.5)	
	36,0 (120)		11,3 (24.5)	10,6 (23.0)	10,0 (21.6)	9,1 (19.7)			40,0 (140)			9,0 (18.5)	8,9 (17.5)	8,2 (15.9)	
	44,0 (150)			7,6 (15.7)	7,0 (14.3)	6,0 (12.3)			48,0 (160)				6,2 (13.3)	5,4 (11.6)	
	52,0 (180)			5,4 (—)	4,9 (9.5)	3,9 (7.5)			52,0 (180)				5,2 (—)	4,4 (8.4)	
	60,0 (200)				3,3 (7.1)	2,4 (5.1)			60,0 (200)					2,8 (5.8)	
	64,0 (220)				2,7 (—)	1,8 (—)			64,0 (210)					2,1 (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.

fixed jib load charts

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Liftcrane Jib Capacities - Series 2

Jib No. 134 with 3 810 mm (12'6") Strut on Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Crawler Frame Counterweight

360° Rating

kg (lb) x 1 000

5° Offset

Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 18,3 m (60 ft)					
Radius 10,0 (35)	- (35.3)				
14,0 (50)	15,0 (32.5)	15,9 (34.5)	16,4 (35.6)		
18,0 (60)	14,0 (30.9)	15,0 (33.1)	15,6 (34.4)	15,5 (34.1)	
24,0 (80)	12,7 (27.9)	13,9 (30.7)	14,6 (32.2)	14,7 (32.5)	
28,0 (100)	11,9 (25.5)	13,2 (28.4)	14,0 (29.4)	14,1 (27.5)	
36,0 (120)	9,9 (21.5)	10,7 (23.2)	10,1 (21.8)	9,2 (19.9)	
40,0 (140)	8,8 -	9,1 (18.0)	8,4 (16.6)	7,5 (14.6)	
48,0 (160)		6,6 (14.1)	5,9 (12.7)	5,0 (10.6)	
56,0 (190)		4,7 -	4,1 (8.4)	3,2 (6.4)	
64,0 (210)			2,8 (6.2)	1,9 (4.2)	
68,0 (230)					

25° Offset

Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 18,3 m (60 ft)					
Radius 16,0 (55)	- (25.4)				
18,0 (65)	11,3 (24.0)	- (25.2)			
22,0 (75)	10,0 (21.6)	11,2 (24.4)	11,4 (25.1)	- (25.5)	
26,0 (90)	8,9 (19.0)	10,2 (21.8)	11,0 (23.6)	11,3 (24.7)	
32,0 (110)	7,7 (16.4)	8,9 (19.2)	9,7 (21.0)	10,5 (22.8)	
36,0 (130)	7,0 -	8,3 (17.3)	9,1 (19.0)	9,8 (18.9)	
44,0 (150)		7,3 (15.8)	7,5 (15.7)	7,0 (14.2)	
48,0 (170)		6,8 -	6,4 (12.1)	5,7 (10.4)	
56,0 (190)			4,5 (9.1)	3,8 (7.5)	
64,0 (210)				2,3 (5.1)	
- (220)				- (4.1)	

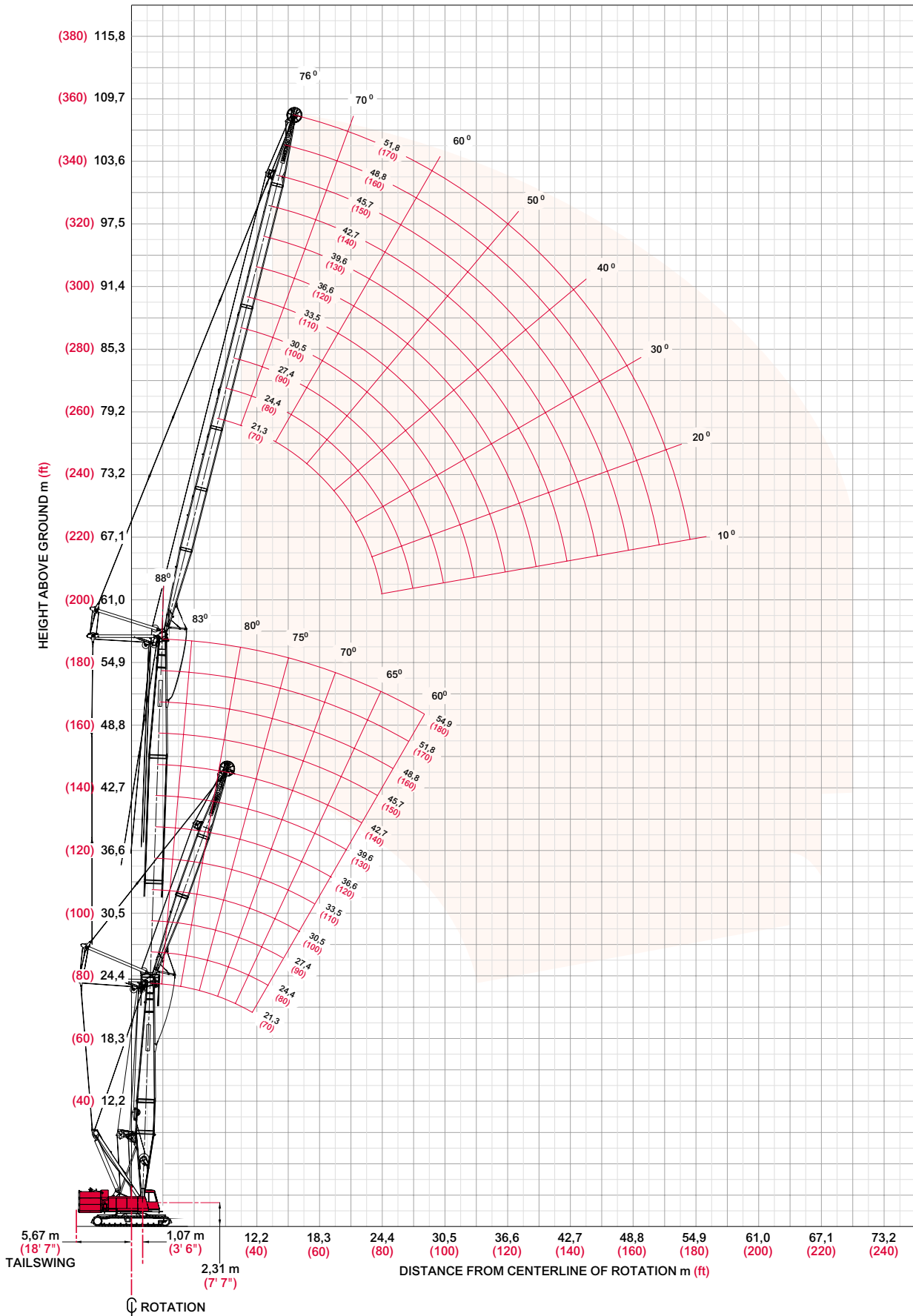
Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 24,4 m (80 ft)					
Radius 10,0 (35)	- (20.6)				
14,0 (50)	9,1 (20.1)	9,3 (20.5)	- (20.6)		
18,0 (65)	8,9 (19.6)	9,1 (20.1)	9,2 (20.3)	9,3 (20.5)	
24,0 (80)	8,4 (18.4)	8,9 (19.7)	9,0 (20.0)	9,1 (20.2)	
28,0 (100)	7,8 (16.6)	8,7 (18.6)	8,9 (19.6)	9,0 (19.8)	
36,0 (130)	6,8 (14.3)	7,8 (16.5)	8,3 (17.8)	8,4 (17.2)	
48,0 (160)	5,8 (12.7)	6,6 (14.4)	6,0 (12.9)	5,0 (10.8)	
56,0 (190)		4,9 (10.2)	4,2 (8.7)	3,3 (6.6)	
64,0 (210)			2,9 (6.6)	2,0 (4.5)	
68,0 (230)			2,4 (4.8)		
72,0 (240)			1,9 (4.0)		

Boom m (ft)	24,4 (80)	39,6 (130)	51,8 (170)	67,1 (220)	73,2 (240)
Jib 24,4 m (80 ft)					
Radius 20,0 (70)	- (17.2)				
24,0 (80)	7,7 (16.8)	- (17.4)			
26,0 (90)	7,3 (16.0)	7,6 (16.8)	- (17.2)		
32,0 (110)	7,1 (15.2)	7,4 (16.2)	7,7 (16.7)	7,8 (17.1)	
36,0 (130)	6,0 (12.8)	6,9 (15.0)	7,2 (15.8)	7,4 (16.3)	
44,0 (150)	5,4 (11.1)	6,4 (13.2)	6,9 (14.5)	7,2 (15.6)	
48,0 (170)	4,6 -	5,5 (11.8)	6,1 (13.1)	6,7 (14.3)	
56,0 (190)		5,1 (10.7)	5,7 (12.0)	5,8 (11.0)	
64,0 (210)			4,6 (9.6)	4,0 (8.0)	
68,0 (230)			3,3 (7.3)	2,4 (5.4)	

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. 134 Fixed Jib on No. 78 Main Boom



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model 777
Manitowoc

luffing jib load charts

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Liftcrane Luffing Jib Capacities - Series 2

Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

88° Boom Angle

Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
Radius					
9,1 (30)	47,4 (104.6)				
12,0 (40)	43,2 (94.7)	42,9 (94.0)	41,2 (90.3)	37,2 (81.4)	— (71.4)
14,0 (50)	37,4 (73.5)	38,7 (76.2)	37,7 (78.1)	34,2 (71.9)	30,3 (63.9)
20,0 (70)	23,1 (46.6)	23,8 (48.0)	24,4 (49.2)	25,0 (50.2)	24,2 (49.4)
26,0 (90)					
32,0 (110)					
38,0 (130)					
44,0 (150)					
50,0 (170)					
54,0 (180)					

Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
Radius					
9,1 (30)					
12,0 (40)	33,3 (73.0)	32,7 (71.9)	31,6 (69.6)	30,6 (67.4)	— (51.7)
14,0 (50)	31,1 (66.2)	31,1 (66.1)	30,4 (65.4)	29,6 (63.9)	22,9 (49.8)
20,0 (70)	23,3 (47.3)	24,0 (48.6)	24,6 (49.8)	24,6 (50.2)	20,6 (43.6)
26,0 (90)	16,3 (33.4)	16,7 (34.2)	17,1 (34.9)	17,3 (35.4)	16,5 (34.5)
32,0 (110)	11,3 (—)	11,7 (—)	12,2 (—)	12,4 (—)	12,8 (23.3)
38,0 (130)					
44,0 (150)					
50,0 (170)					
54,0 (180)					

Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
Radius					
9,1 (30)					
12,0 (40)	— (51.7)	— (49.9)			
14,0 (50)	22,7 (49.0)	22,1 (48.0)	21,1 (46.0)	20,4 (44.5)	18,8 (40.7)
20,0 (70)	19,3 (41.0)	19,4 (41.2)	19,2 (41.1)	19,1 (40.9)	16,8 (35.9)
26,0 (90)	16,2 (33.6)	16,4 (34.4)	16,5 (35.1)	16,5 (35.2)	14,3 (30.4)
32,0 (110)	12,1 (25.0)	12,4 (25.6)	12,7 (26.1)	12,8 (26.4)	11,9 (25.0)
38,0 (130)	9,2 (19.1)	9,5 (19.6)	9,7 (19.9)	9,7 (20.1)	9,8 (20.5)
44,0 (150)					
50,0 (170)					
54,0 (180)					

Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
Radius					
9,1 (30)					
12,0 (40)					
14,0 (50)	— (35.6)	— (34.3)			
20,0 (70)	13,8 (29.2)	13,8 (29.3)	13,7 (29.1)	12,2 (26.0)	11,8 (25.6)
26,0 (90)	11,2 (23.6)	11,3 (23.9)	11,4 (24.1)	10,2 (21.6)	10,2 (21.7)
32,0 (110)	9,0 (18.9)	9,2 (19.3)	9,3 (19.5)	8,4 (17.6)	8,5 (17.9)
38,0 (130)	7,2 (15.1)	7,4 (15.4)	7,5 (15.7)	6,8 (14.3)	7,0 (14.6)
44,0 (150)	5,7 (12.0)	5,9 (12.3)	6,0 (12.5)	5,5 (11.5)	5,6 (11.8)
50,0 (170)	4,4 (8.8)	4,5 (9.1)	4,6 (9.3)	4,2 (8.5)	4,3 (8.8)
54,0 (180)					3,5 (7.5)

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.

Luffing jib load charts

Liftcrane Luffing Jib Capacities - Series 2

Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

75° Boom Angle

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Luffing Jib Length 21,3 m (70 ft)	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius					
	16,0 (55)	- (71.7)				
	18,0 (65)	29,8 (58.2)	- (55.9)			
	26,0 (90)	18,8 (38.8)	18,0 (37.3)	17,1 (35.3)	16,4 (33.9)	15,3 (31.6)
	32,0 (110)			13,1 -	12,6 (26.2)	11,7 (24.4)
	38,0 (130)					
	44,0 (150)					
	50,0 (170)					
	56,0 (190)					
	62,0 (210)					
	66,0 (220)					

Luffing Jib Length 30,5 m (100 ft)	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius					
	16,0 (55)					
	18,0 (65)					
	26,0 (90)	18,4 (38.0)	17,6 (36.3)	16,6 (34.3)	- (32.8)	
	32,0 (110)	14,1 (29.4)	13,5 (28.1)	12,7 (26.4)	12,1 (25.3)	11,2 (23.3)
	38,0 (130)		10,7 (22.4)	10,1 (21.1)	9,6 (20.2)	8,9 (18.6)
	44,0 (150)					7,2 (15.1)
	50,0 (170)					
	56,0 (190)					
	62,0 (210)					
	66,0 (220)					

Luffing Jib Length 39,6 m (130 ft)	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius					
	16,0 (55)					
	18,0 (65)					
	26,0 (90)	18,1 (37.4)	- (35.6)			
	32,0 (110)	13,8 (28.8)	13,2 (27.4)	12,4 (25.7)	11,8 (24.5)	
	38,0 (130)	11,0 (23.1)	10,5 (21.9)	9,8 (20.5)	9,3 (19.5)	8,6 (17.8)
	44,0 (150)	8,9 (18.3)	8,5 (17.9)	8,0 (16.7)	7,6 (15.9)	6,9 (14.5)
	50,0 (170)			6,6 -	6,2 (13.1)	5,7 (11.9)
	56,0 (190)					
	62,0 (210)					
	66,0 (220)					

Luffing Jib Length 51,8 m (170 ft)	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius					
	16,0 (55)					
	18,0 (65)					
	26,0 (90)					
	32,0 (110)	10,7 (22.6)	- (24.3)			
	38,0 (130)	8,7 (18.2)	9,5 (19.9)	9,3 (19.4)	- (18.4)	- (16.7)
	44,0 (150)	6,9 (14.5)	7,7 (16.0)	7,5 (15.7)	7,1 (14.8)	6,4 (13.3)
	50,0 (170)	5,5 (11.4)	6,1 (12.8)	6,1 (12.9)	5,8 (12.1)	5,2 (10.8)
	56,0 (190)	4,1 (8.3)	4,7 (9.5)	5,1 (10.7)	4,8 (10.0)	4,2 (8.7)
	62,0 (210)			4,0 -	3,9 (8.0)	3,3 (6.9)
	66,0 (220)					2,9 (6.2)

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 load charts

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Liftcrane Luffing Jib Capacities - Series 2

Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

60° Boom Angle

	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)		Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius							Radius					
Luffing Jib Length 21,3 m (70 ft)	26,0 (90)	-					Luffing Jib Length 30,5 m (100 ft)	26,0 (90)					
	30,0 (100)	14,0 (30.3)						30,0 (100)					
	32,0 (110)	12,9 (26.7)	11,6 (24.1)					32,0 (110)	-				
	36,0 (120)		9,9 (21.5)	-				36,0 (120)	10,6 (23.1)				
	38,0 (130)		9,2 -	8,0 (16.7)	-			38,0 (130)	9,9 (20.7)	-			
	44,0 (150)				5,7 (11.9)	-		44,0 (150)		7,1 (14.8)	6,0 (12.5)	-	
	50,0 (170)					3,5 -		50,0 (170)			4,9 (10.2)	4,2 (8.7)	-
	56,0 (190)							56,0 (190)					2,4 (4.9)
	64,0 (210)							64,0 (210)					
	70,0 (230)							70,0 (230)					

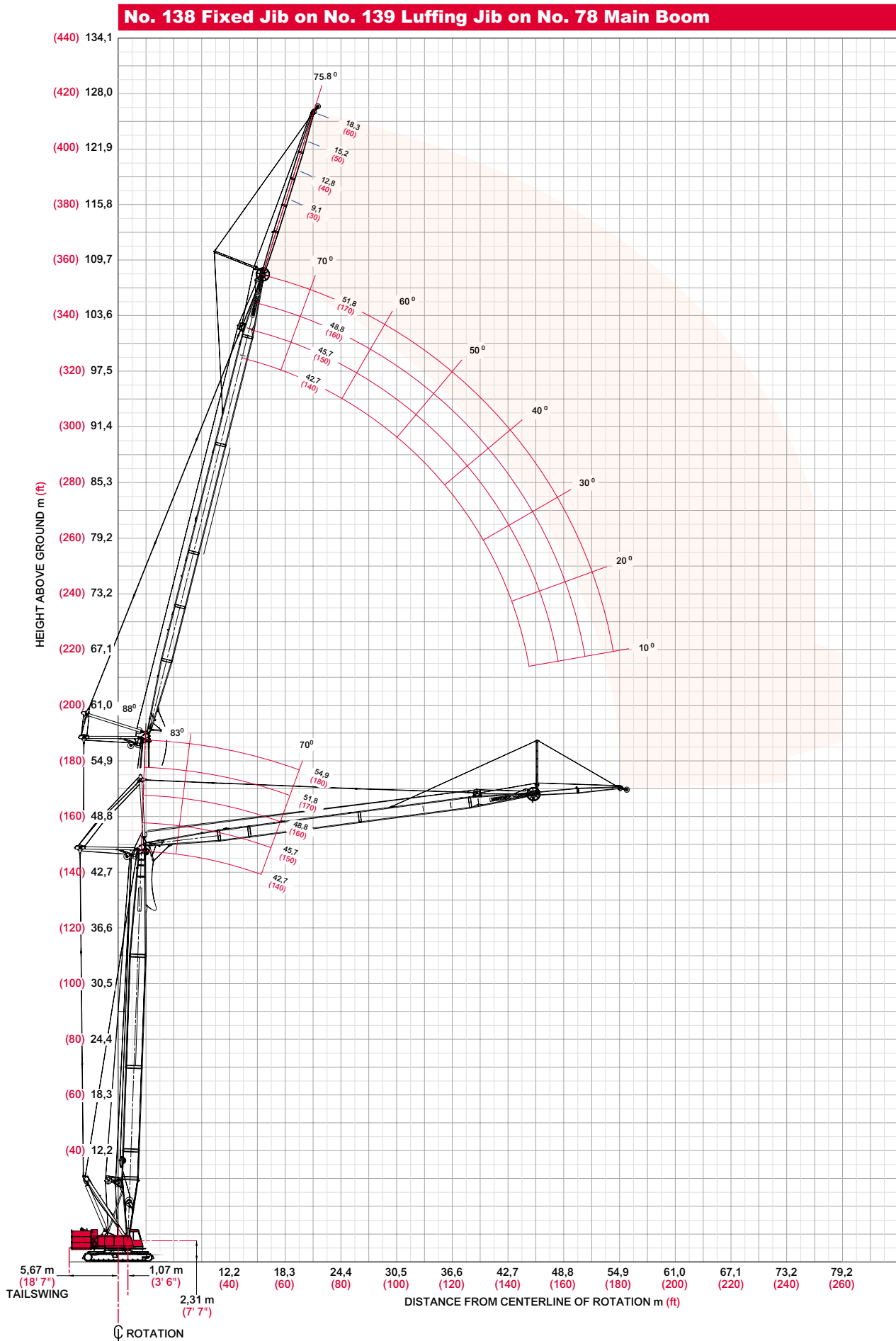
70° Boom Angle

	Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)		Boom m (ft)	21,3 (70)	30,5 (100)	39,6 (130)	45,7 (150)	54,9 (180)
	Radius							Radius					
Luffing Jib Length 39,6 m (130 ft)	26,0 (90)						Luffing Jib Length 51,8 m (170 ft)	26,0 (90)					
	30,0 (100)	-						30,0 (100)					
	32,0 (110)	13,2 (27.6)	-					32,0 (110)					
	36,0 (120)	11,3 (24.6)	10,5 (22.8)	-				36,0 (120)	-				
	38,0 (130)	10,5 (22.0)	9,7 (20.4)	8,8 (18.5)	-			38,0 (130)	9,2 (19.3)	-			
	44,0 (150)	8,6 (18.0)	7,9 (16.6)	7,2 (15.0)	6,6 (13.8)	5,7 (11.9)		44,0 (150)	7,4 (15.5)	7,4 (15.6)	6,6 (13.9)	-	
	50,0 (170)		6,5 -	5,9 (12.4)	5,4 (11.3)	4,6 (9.7)		50,0 (170)	5,9 (12.3)	6,1 (12.8)	5,4 (11.3)	4,9 (10.2)	4,1 (8.5)
	56,0 (190)				4,5 -	3,8 (7.9)		56,0 (190)	4,5 (9.1)	5,0 (10.6)	4,4 (9.3)	4,0 (8.3)	3,3 (6.8)
	64,0 (210)							64,0 (210)			3,4 (7.6)	3,0 (6.8)	2,4 (5.4)
	70,0 (230)							70,0 (230)					1,9 (4.2)

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.

fixed jib on luffing jib range diagram

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model 777
Manitowoc

fixed jib on luffing jib load charts

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Liftcrane Fixed Jib on Luffing Capacities - Series 2

Fixed Jib No. 138 at 3 Degree Angle on Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Upperworks Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

88° Boom Angle

Luffing Jib m (ft)				42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)				42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius															
Fixed Jib Length 9,1 m (30 ft)	16,8 (55)	12,2 (27.0)	12,0 (26.6)												
	20,0 (70)	12,0 (26.2)	11,8 (25.9)	11,6 (25.4)			11,7 (25.7)	11,2 (24.7)	10,6 (23.4)	10,5 (23.0)	10,1 (22.1)	9,6 (21.0)	9,4 (20.6)	9,0 (19.8)	8,6 (18.8)
	24,0 (80)	11,6 (25.7)	11,5 (25.4)	11,0 (24.3)			11,4 (25.1)	10,9 (24.1)	10,2 (22.5)	10,2 (22.5)	9,8 (21.6)	9,3 (20.6)	9,1 (20.1)	8,7 (19.3)	8,3 (18.4)
	30,0 (100)	10,0 (21.9)	10,0 (22.0)	9,8 (21.5)			9,8 (21.5)	9,8 (21.5)	9,2 (20.2)	9,6 (21.0)	9,2 (20.2)	8,5 (18.7)	8,6 (19.0)	8,3 (18.3)	7,9 (17.3)
	36,0 (120)	8,7 (19.1)	8,8 (19.2)	8,5 (18.6)			8,6 (18.8)	8,6 (18.8)	8,1 (17.7)	8,4 (18.5)	8,2 (18.0)	7,6 (16.7)	8,1 (17.8)	7,7 (16.8)	7,1 (15.6)
	42,0 (140)	7,7 (16.9)	7,8 (17.0)	7,2 (15.7)			7,6 (16.7)	7,6 (16.5)	7,0 (15.2)	7,5 (16.5)	7,2 (15.8)	6,7 (14.6)	7,3 (16.0)	6,8 (15.0)	6,3 (13.8)
	48,0 (160)	6,6 (14.2)	6,5 (14.2)	6,1 (13.2)			6,6 (14.1)	6,4 (14.0)	6,0 (13.0)	6,4 (13.9)	6,3 (13.7)	5,8 (12.6)	6,3 (13.6)	6,0 (13.1)	5,5 (12.1)
	54,0 (180)	4,9 (9.7)	5,0 (10.0)	5,0 (10.3)			5,2 (11.1)	5,2 (11.2)	5,0 (11.0)	5,1 (10.9)	5,1 (11.0)	5,0 (10.8)	5,0 (10.7)	5,0 (10.8)	4,9 (10.6)
	60,0 (200)									3,8 (7.2)	3,8 (7.5)	3,9 (7.7)	3,8 (8.2)	3,9 (8.3)	3,9 (8.4)
	64,0 (210)												2,7 (6.1)	2,8 (6.3)	2,9 (6.5)

Luffing Jib m (ft)				42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)				42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius															
Fixed Jib Length 18,3 m (60 ft)	20,0 (65)	7,1 (15.7)	6,9 (15.4)	6,8 (15.1)			6,8 (15.1)	6,6 (14.8)							
	24,0 (80)	6,7 (14.8)	6,6 (14.6)	6,5 (14.3)			6,5 (14.3)	6,3 (14.0)	6,2 (13.7)	6,2 (13.7)	6,1 (13.4)	5,9 (13.0)	5,8 (12.9)	5,7 (12.6)	5,6 (12.3)
	30,0 (100)	6,2 (13.6)	6,1 (13.5)	6,0 (13.3)			6,0 (13.2)	5,9 (13.0)	5,8 (12.8)	5,7 (12.7)	5,6 (12.5)	5,5 (12.2)	5,5 (12.1)	5,4 (11.9)	5,2 (11.6)
	36,0 (120)	5,7 (12.6)	5,6 (12.5)	5,6 (12.4)			5,6 (12.3)	5,5 (12.2)	5,4 (12.0)	5,4 (11.9)	5,3 (11.7)	5,2 (11.5)	5,1 (11.4)	5,0 (11.2)	4,9 (10.9)
	42,0 (140)	5,1 (11.2)	5,2 (11.3)	5,2 (11.4)			5,0 (11.0)	5,1 (11.1)	5,1 (11.2)	5,0 (10.9)	5,0 (10.9)	4,9 (10.9)	4,8 (10.6)	4,8 (10.6)	4,7 (10.4)
	48,0 (160)	4,5 (9.9)	4,6 (10.0)	4,6 (10.1)			4,5 (9.8)	4,5 (9.8)	4,5 (9.9)	4,4 (9.6)	4,4 (9.7)	4,4 (9.7)	4,3 (9.4)	4,3 (9.5)	4,3 (9.5)
	54,0 (180)	4,1 (8.9)	4,1 (9.0)	4,1 (9.0)			4,0 (8.8)	4,0 (8.8)	4,0 (8.9)	3,9 (8.7)	3,9 (8.7)	4,0 (8.8)	3,9 (8.5)	3,9 (8.6)	3,9 (8.6)
	58,0 (200)	3,8 (8.1)	3,8 (8.2)	3,8 (8.1)			3,8 (8.0)	3,8 (8.1)	3,8 (8.1)	3,7 (7.9)	3,7 (7.9)	3,8 (8.0)	3,6 (7.8)	3,6 (7.8)	3,7 (7.8)
	64,0 (220)	3,3 (7.3)	3,4 (7.5)	3,4 (7.6)			3,4 (6.4)	3,4 (6.7)	3,4 (6.9)	3,4 (7.3)	3,4 (7.3)	3,4 (7.0)	3,3 (7.1)	3,4 (7.2)	3,3 (6.9)
	72,0 (240)												2,4 (4.4)	2,5 (4.7)	2,5 (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.

fixed jib on luffing jib load charts

Liftcrane Fixed Jib on Luffing Capacities - Series 2

Fixed Jib No. 138 at 3 Degree Angle on Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Upperworks Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

83° Boom Angle

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Fixed Jib Length 9,1 m (30 ft)

Luffing Jib m (ft)	42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius												
24,0 (80)	- (26.4)											
26,0 (90)	11,8 (26.0)	11,7 (25.7)	11,1 (24.6)	11,1 (24.5)	- (23.4)	- (22.0)	- (21.7)	- (20.7)		- (19.3)		
30,0 (100)	11,2 (24.5)	11,4 (25.0)	11,0 (24.4)	10,9 (23.9)	10,4 (23.1)	9,9 (21.9)	9,7 (21.4)	9,3 (20.5)	8,8 (19.5)	8,6 (19.0)	8,2 (18.2)	7,9 (17.4)
36,0 (120)	9,6 (21.0)	9,8 (21.5)	10,0 (21.9)	9,4 (20.6)	9,6 (21.0)	9,7 (21.4)	9,2 (20.2)	9,0 (19.9)	8,6 (19.0)	8,3 (18.2)	8,0 (17.6)	7,6 (16.9)
42,0 (140)	8,4 (18.4)	8,6 (18.8)	8,2 (17.8)	8,3 (18.1)	8,4 (18.5)	8,1 (17.5)	8,1 (17.8)	8,3 (18.1)	7,9 (17.1)	7,8 (17.2)	7,7 (17.0)	7,4 (16.4)
48,0 (160)	7,5 (16.4)	7,1 (15.4)	6,6 (14.3)	7,4 (16.2)	7,0 (15.2)	6,5 (14.1)	7,3 (15.8)	6,8 (14.7)	6,3 (13.7)	7,0 (15.4)	6,7 (14.4)	6,2 (13.3)
54,0 (180)	6,1 (13.0)	5,9 (12.6)	5,4 (11.7)	6,1 (13.0)	5,8 (12.4)	5,3 (11.5)	5,9 (12.7)	5,5 (12.0)	5,1 (11.0)	5,8 (12.5)	5,4 (11.6)	5,0 (10.7)
60,0 (200)				4,7 (10.1)	4,7 (10.2)	4,4 (9.4)	4,7 (10.0)	4,5 (9.8)	4,1 (8.9)	4,6 (9.8)	4,4 (9.4)	4,0 (8.6)
62,0 (210)					4,3 (9.6)	4,1 (9.1)	4,3 (8.7)	4,2 (8.8)	3,9 (8.1)	4,2 (8.6)	4,1 (8.5)	3,7 (7.7)
64,0 (220)							3,9 (8.7)	3,9 (8.8)	3,6 (8.1)	3,9 (7.4)	3,8 (7.6)	3,4 (6.9)

Fixed Jib Length 18,3 m (60 ft)

Luffing Jib m (ft)	42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius												
28,0 (95)	- (14.3)	- (14.1)		- (13.8)								
32,0 (105)	6,2 (13.8)	6,2 (13.7)	6,1 (13.5)	6,0 (13.3)	5,9 (13.2)	5,8 (12.9)	5,7 (12.7)	5,6 (12.5)	5,5 (12.2)	5,4 (12.0)	5,3 (11.8)	
36,0 (120)	5,9 (13.1)	5,9 (13.0)	5,8 (12.9)	5,7 (12.7)	5,7 (12.6)	5,6 (12.4)	5,5 (12.2)	5,4 (12.0)	5,3 (11.8)	5,2 (11.6)	5,1 (11.4)	5,0 (11.1)
42,0 (140)	5,5 (12.2)	5,5 (12.2)	5,5 (12.1)	5,4 (11.9)	5,3 (11.8)	5,3 (11.7)	5,2 (11.5)	5,1 (11.4)	5,0 (11.2)	5,0 (11.0)	4,9 (10.8)	4,8 (10.6)
48,0 (160)	4,9 (10.8)	5,0 (11.0)	5,1 (11.3)	4,9 (10.6)	5,0 (10.9)	5,0 (11.1)	4,8 (10.5)	4,8 (10.7)	4,8 (10.7)	4,7 (10.2)	4,7 (10.3)	4,6 (10.2)
54,0 (180)	4,4 (9.6)	4,5 (9.8)	4,6 (10.0)	4,3 (9.5)	4,4 (9.7)	4,5 (9.8)	4,2 (9.3)	4,3 (9.5)	4,4 (9.7)	4,2 (9.2)	4,3 (9.3)	4,3 (9.5)
62,0 (200)	3,8 (8.7)	3,9 (8.8)	4,0 (9.0)	3,8 (8.6)	3,8 (8.7)	3,9 (8.9)	3,7 (8.4)	3,8 (8.6)	3,8 (8.7)	3,7 (8.3)	3,7 (8.4)	3,7 (8.5)
68,0 (220)	- (8.0)	3,6 (8.1)	3,6 (8.2)	3,5 (7.8)	3,5 (7.9)	3,5 (8.1)	3,4 (7.7)	3,5 (7.8)	3,3 (7.6)	3,3 (7.6)	3,4 (7.7)	3,2 (7.3)
72,0 (240)							3,2 (6.7)	3,2 (6.9)	2,9 (6.2)	3,1 (6.5)	3,0 (6.6)	2,7 (5.8)
76,0 (250)										2,5 (5.6)	2,6 (5.9)	2,3 (5.2)

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.

model 777
Manitowoc

fixed jib on luffing jib load charts

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Liftcrane Fixed Jib on Luffing Capacities - Series 2

Fixed Jib No. 138 at 3 Degree Angle on Luffing Jib No. 139 on Boom No. 78

64 410 kg (142,000 lb) Upperworks Counterweight 19 960 kg (44,000 lb) Carbody Counterweight

360° Rating

kg (lb) x 1 000

70° Boom Angle

Luffing Jib m (ft)		42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)		42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius													
-	(150)	(13.6)											
48,0	(160)	5,6 (12.2)	5,1 (11.0)	- (9.3)	5,6 (12.1)	- (10.9)		- (11.7)					
50,0	(170)	5,3 (11.1)	4,8 (10.0)	4,0 (8.5)	5,2 (10.9)	4,7 (9.8)	- (8.2)	5,0 (10.6)	- (9.4)				
54,0	(180)	4,6 (10.0)	4,2 (9.0)	3,6 (7.8)	4,6 (9.9)	4,1 (8.8)	3,5 (7.5)	4,4 (9.5)	3,9 (8.5)	3,2 (7.0)	4,2 (9.2)	3,8 (8.2)	- (6.7)
56,0	(190)	4,3 (9.1)	3,9 (8.1)	3,4 (7.0)	4,3 (9.0)	3,8 (8.0)	3,2 (6.9)	4,1 (8.6)	3,6 (7.6)	3,0 (6.3)	4,0 (8.3)	3,5 (7.3)	2,9 (6.1)
60,0	(200)	3,8 (8.3)	3,4 (7.3)	2,9 (6.3)	3,8 (8.2)	3,3 (7.2)	2,8 (6.2)	3,6 (7.8)	3,1 (6.8)	2,6 (5.7)	3,5 (7.5)	3,0 (6.5)	2,5 (5.4)
64,0	(210)	3,4 (7.5)	2,9 (6.6)	2,5 (5.7)	3,3 (7.4)	2,9 (6.5)	2,4 (5.5)	3,1 (7.0)	2,7 (6.1)	2,3 (5.1)	3,0 (6.8)	2,6 (5.9)	2,1 (4.8)
68,0	(230)		2,6 (5.4)	2,2 (4.5)	2,9 (6.1)	2,5 (5.3)	2,1 (4.4)	2,7 (5.7)	2,4 (4.9)	2,0 (4.0)	2,6 (5.5)	2,2 (4.7)	1,8 (-)
72,0	(240)					2,2 (4.7)		2,4 (5.1)	2,0 (4.4)		2,3 (4.9)	1,9 (4.1)	
76,0	(250)										2,0 (4.4)		

Luffing Jib m (ft)		42,7 (140)			45,7 (150)			48,8 (160)			51,8 (170)		
Boom m (ft)		42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)	42,7 (140)	48,8 (160)	54,9 (180)
Radius													
50,0	(165)	(11.8)											
52,0	(175)	5,0 (10.7)	4,5 (9.6)		5,0 (10.5)	- (9.4)		- (10.2)					
56,0	(190)	4,4 (9.3)	3,9 (8.3)	3,3 (6.9)	4,4 (9.2)	3,9 (8.1)	- (6.6)	4,2 (8.8)	- (7.7)	- (6.1)	4,0 (8.5)	- (7.4)	
60,0	(200)	3,9 (8.5)	3,5 (7.5)	2,9 (6.3)	3,8 (8.3)	3,4 (7.4)	2,8 (6.1)	3,7 (8.0)	3,2 (7.0)	2,5 (5.6)	3,6 (7.7)	3,1 (6.7)	2,4 (5.3)
62,0	(210)	3,7 (7.8)	3,3 (6.8)	2,7 (5.8)	3,6 (7.6)	3,2 (6.7)	2,6 (5.5)	3,5 (7.2)	3,0 (6.3)	2,4 (5.1)	3,3 (7.0)	2,9 (6.0)	2,3 (4.8)
64,0	(230)	3,5 (6.5)	3,0 (5.6)	2,6 (4.7)	3,4 (6.3)	3,0 (5.5)	2,4 (4.5)	3,2 (6.0)	2,8 (5.1)	2,3 (4.1)	3,1 (5.7)	2,7 (4.8)	2,1 (-)
68,0	(240)	3,1 (5.9)	2,7 (5.1)	2,2 (4.2)	3,0 (5.8)	2,6 (5.0)	2,2 (4.0)	2,9 (5.4)	2,5 (4.6)	1,9 (-)	2,7 (5.1)	2,3 (4.3)	1,8 (-)
72,0	(250)	2,7 (5.4)	2,4 (4.6)	2,0 (-)	2,6 (5.2)	2,3 (4.5)	1,9 (-)	2,5 (4.9)	2,1 (4.1)		2,4 (4.6)	2,0 (-)	
76,0	(260)	2,4 (-)	2,1 (4.1)		2,3 (4.7)	2,0 (4.0)		2,2 (4.4)	1,8 (-)		2,1 (4.2)		
80,0	(270)							1,9 (4.0)					

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.

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/Masters** – 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. 495138-0

Consists of the following:

- Filter Element - No substitutions allowed (1x Part No. 427283-0)
- Filter Element (1x Part No. 427292-0)

- Filter Element (Spin on) - No substitutions allowed (1x Part No. 427282-0)

Cummins Model QSC8.3 – C340 Diesel – Part No. 414176-0 Service Interval Kits

200 Hour Kit – Part No. 495198-0

Consists of the following:

Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413653-0)
- Water Filter (1x Part No. 413654-0)
- Separator - Fuel/Water (1x Part No. 413652-0)

1,000 Hour Kit – Part No. 495199-0

Consists of the following:

Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413653-0)
- Water Filter (1x Part No. 413654-0)
- Separator - Fuel/Water (1x Part No. 413652-0)

Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427283-0)
- Filter Element (1x Part No. 427292-0)
- Filter Element (Spin on) - No substitutions allowed (1x Part No. 427282-0)

2,000 Hour Kit – Part No. 495202-0

Consists of the following:

Engine

- Air Cleaner - Disposable (1x Part No. 347066-0)
- Oil Filter (1x Part No. 413653-0)
- Water Filter (1x Part No. 413654-0)
- Separator - Fuel/Water (1x Part No. 413652-0)
- Belt - Alternator & Fan (1x Part No. 413650-0)
- Belt - Compressor (1x Part No. 413651-0)

Hydraulic

- Filter Element - No substitutions allowed (1x Part No. 427283-0)
- Filter Element (1x Part No. 427292-0)
- Filter Element (Spin on) - No substitutions allowed (1x Part No. 427282-0)
- Filter Element (Spin on) - Hydraulic (3x Part No. 427278-0)
- Filter Element (Spin on) - Hydraulic (1x Part No. 427291-0)
- Filter Element (Spin on) - Hydraulic (1x Part No. 427279-0)

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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. 4299791-6) plus a custom heavy-duty carrying case.

U.S. Standard Tools Kit – Part No. 22205-1

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 Chart Manual – Part No. 899794
- Attachment Capacity Chart Manual – Part No. 899795

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

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

Also available are the following CDs:

- 777 Service – Yearly subscription CD – Part No. 899760-0
- Ground Bearing Pressure Estimator CD – Part No. 899765-0
- Crane Selection and Planning Software (CompuCRANE®) CD – Part No. 899766-0

- EPIC® Crane Library consisting of capacity charts, range diagrams, wire rope specifications, travel specifications, crane weights, counter weight arrangement, luffing jib raising procedures, operating range diagrams, drum and lagging charts, and wind condition charts. CD – Part No. 899801-0

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

- Model 777 Assembly Video – Part No. 899826-0
- Model 777 Operation Video – Part No. 899827-0
- Model 777 Lubrication Video – Part No. 899828-0
- 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, CDs, and videos listed above plus several Manitowoc premiums into one complete CraneCARE Package.



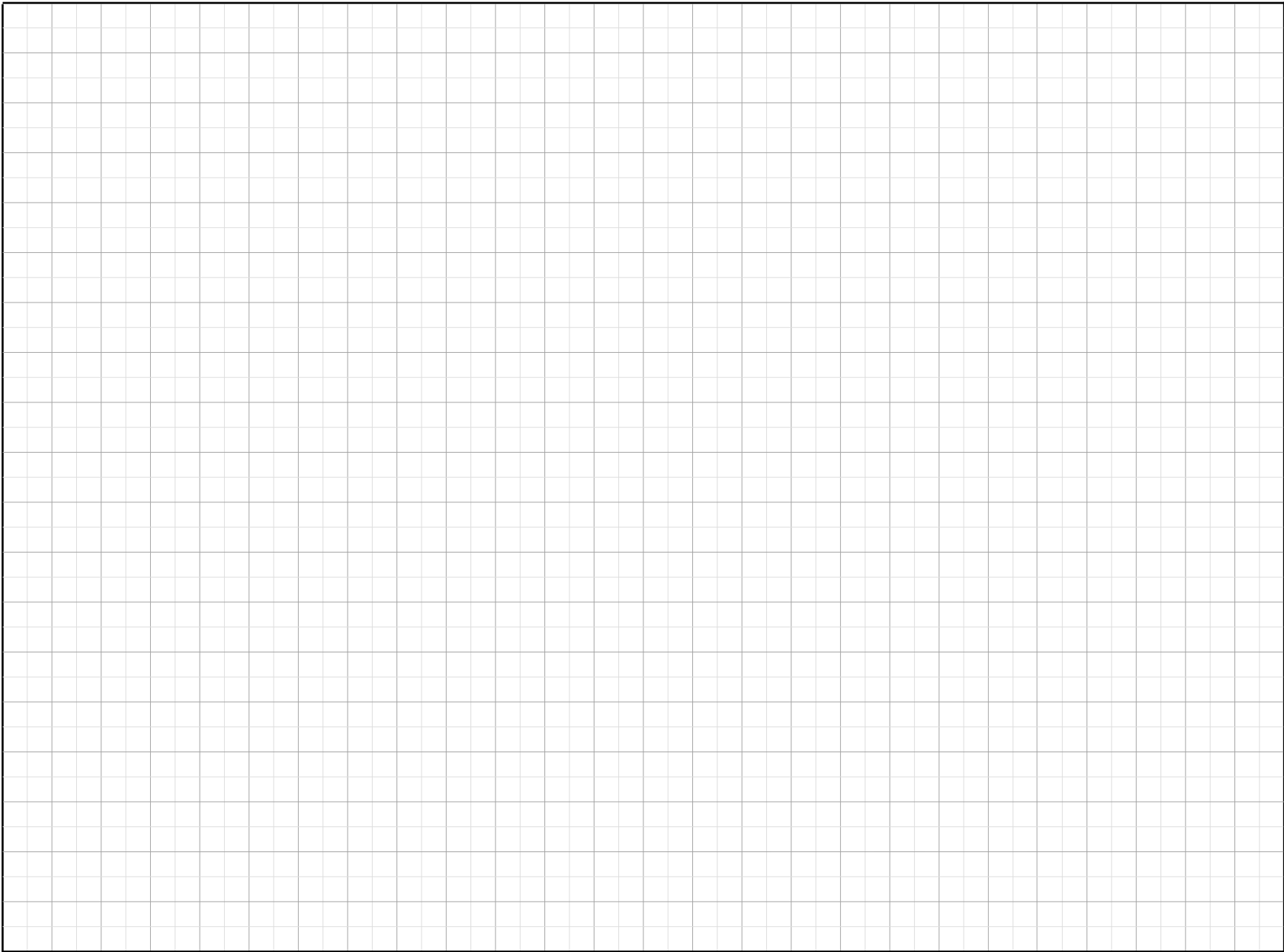


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Notes







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CraneCARE is Maniowoc'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 Maniowoc cranes currently in use throughout the world. That's commitment you won't find anywhere else. That's CraneCARE.