



model 5500



- 55 ton Lift Capacity
- 1,281 ft-kips **Maximum Load Moment**
- 160' Heavy-Duty Boom
- 190' Fixed Jib on Heavy-Duty Boom
- 213 HP engine
- 338 fpm line speed
- 35,000 lb Maximum Line Pull
- 15,500 lb Material Rehandling **Clamshell capacity**
- Fast, efficient self-assembly and disassembly
- Manitowoc Crane CARE comprehensive support



Specifications

Outline Dimensions

Winch Performance Data

Boom Combinations

Load Chart Notes

Main Boom Range / Load Charts

Fixed Jib Range / Load Charts

Clamshell

Dragline

3 6 10

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Above. Beyond. Everywhere.™

Manitowoc

Crane Group

specifications

Upperworks



Engine

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

One diesel fuel tank, 74 gallons (280 liters).

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

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



Controls

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

Relief valve pressures:

Load hoist, boom hoist	
and propel system	. 4,120 psi (290 kg/cm2)
Swing system	. 3,200 psi (225 kg/cm2)
Control system	. 1,490 psi (105 kg/cm2)



Hydraulic System

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

Maximum pressure rating 4,125 psi (28,4 MPa)

Load hoist, boom hoist and propel 2 Pisto	on pumps
Swing 1 Pisto	on pump
Control system and auxiliary 2 Gea	r pumps

Reservoir capacity: 66 US gallon (250 liter).

Cooling: Oil-to-air heat exchanger (plate-fin type). **Filtration**: Full-flow and bypass type with replaceable paper element.

Drums

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

Clutch: internally expanding band clutch.

Brake: externally contracting spring set, hydraulically released, band type brake operated through a counterbalance valve. An external ratchet is fitted for locking the drum.

Drums: front and rear 16.5" (419 mm) P.C.D. X 16.9" (427 mm) wide, grooved for 3/4" (20 mm) wire rope.

Wire rope capacity:

Front drum 558' (170 m) working length Rear drum 426' (130 m) working length Storage length (each drum) 919' (280 m)

Line speed: Single line on the first drum layer		
Hoisting	230 ft/min (70 m/min)	
Lowering	230 ft/min (70 m/min)	
Line speed based on sing	le line on the first drum	
layer.		

Standard third drum: Third drum is powered by hydraulic variable displacement piston-type motor, driven through a planetary reducer. Powered hoisting/lowering and free-fall operation is standard. Drum turn indicator is also standard.

Clutch: internally expanding band clutch.

Brake: externally contracting spring set, hydraulically released, band type brake operated through a counterbalance valve. An external ratchet is fitted for locking the drum.

Drum: third drum 11.6" (294 mm) P.C.D. X 14.9" (378 mm), grooved for 9/16" (14,5 mm) wire rope.

Line speed: Single line on	the first drum layer
Hoisting	197 ft/min (60 m/min)
Lowering	197 ft/min (60 m/min)
Line speed based on sing	le line on the first drum
layer.	

Wire rope capacity:

Third drum 787' (240 m) working length Storage length (each drum) 787' (240 m) 3





specifications





Swing System

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

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

Swing lock: 2 Position lock for transportation.

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

Swing speed 3.5 rpm



Boom Hoist

Single drum powered by a hydraulic variable displacement piston motor through a planetary reducer. Grooved drum including 407' (124 m) of 9/16" (14,5 mm) diameter wire rope reeved with 12 parts of Iline. Boom hoist speed: 223 ft/min (68 m/min) hoisting/lowering.

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



Gantry

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



Counterweight

		UNIT WEIGHT		TOTAL	WEIGHT
QTY.	ITEM	kg	lb	kg	lb
1	Counterweight A	4 150	9,150	4 150	9,150
1	Counterweight B	5 750	12,680	5 750	12,680
1	Counterweight C	5 150	11,355	5 150	11,355
	Counte	rweight	TOTAL	15 050	33,185



Operator's Cab

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

Controls

In front of operator are the foot pedals for front, rear and third drum brakes and foot throttle pedal. At operator's right side are the travel (propel) control levers and the function lock lever. To the operator's right front are the boom hoist control lever, front and rear winch control levers and the free-fall select switches for the front and rear winches and drum turn indicators (front/rear drum). To the operators left front are the swing control lever and third drum control lever To the operator's left are the crawler extend/retract lever and the positive swing lock. The left-hand console contains switches for the anti-twoblock/boom overhoist. Directly in front of the console are the drum pawl lock for boom, front, rear and third drum and the engine ignition key. The swing brake and signal horn are mounted on the swing control lever.

Gauges

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

Warning display

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

Safety device

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

Lowerworks



Carbody

The durable carbody features steel welded construction with axles.



Crawlers

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

Crawler drive

The independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor driving a propel sprocket through a planetary gearbox. The hydraulic motor and gearbox





specifications

are built into the crawler side frame within the shoe width. The track rollers are sealed for maintenance-free operation.

Crawler brakes

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

Steering mechanism

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

Crawler shoes

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

Travel speed

0.87 mph (1,4 km/h)

Attachments



Boom

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

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

Optional boom inserts are available to provide extension capabilities. They also have welded lattice construction with tubular, high-tension steel chords and pin connections on each one of 10' (3,0 m), 20' (6,1 m), 30' (9,14 m) inserts.

Maximum total length of boom 160' (48,77 m).



Fixed Jib

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

Basic jib length 20' (6,10 m) consists of Jib butt section 10' (3,0 m) and Jib top section 10' (3,0 m).

Optional Jib boom inserts of 10' (3,0 m), 20' (6,1 m) are available for extension capabilities up to 60' (18,3 m).

Maximum total length of boom and jib 130' (39,6 m) + 60' (18,3 m) is 190' (57,9 m).

Tools and Accessories

A set of tools and accessories are furnished.

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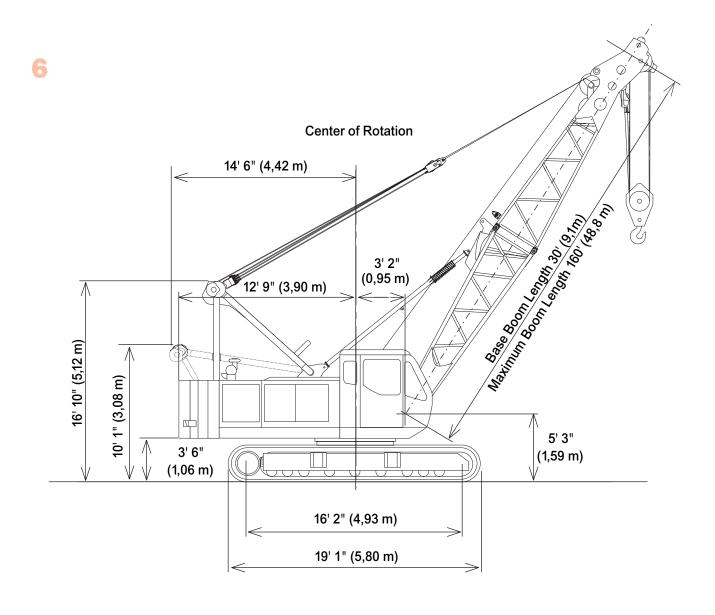
Optional Equipment

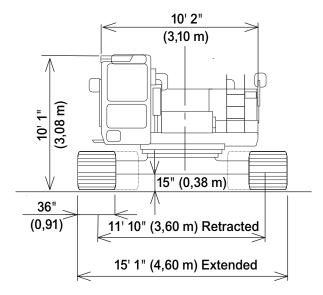
- Optional: Blocks and Hooks
- 7 US ton ball hook, 202 lbs.
- 30 US ton hook block, 670 lbs, two 16" Nom. OD roller bearing sheaves grooved for 3/4" dia. wire rope, and roller bearing swivel with hook latch.
- 55 US ton hook block, 1,089 lbs, four 16" Nom. OD roller bearing sheaves grooved for 3/4" wire rope, roller bearing swivel with hook latch.

Detachable upper boom point Custom color



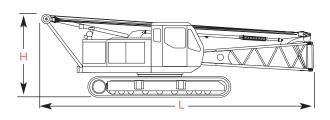


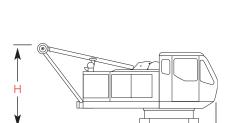


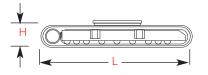


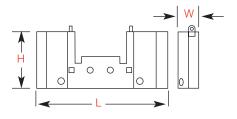


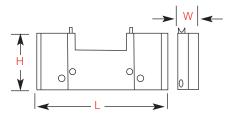


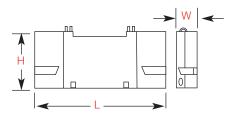












Upperworks		x 1
Length	12,05 m	39' 6"
Width	3,69 m	11' 10"
Height	3,08 m	10' 1"
Weight	30 530 kg	67,320 lb

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

Upperworks		x 1
Length	5,97 m	19' 7"
Width	3,45 m	11' 3"
Height	2,70 m	9' 9"
Weight	16 900 kg	37,265 lb

Crawlers		x 2
Length	5,81 m	19' 0"
Width	0,91 m	3' 0"
Height	0,90 m	2' 11"
Weight	12 600 kg	27,780 lb

Upper Counterweight A		x 1
Length	2,95 m	9' 8"
Width	0,47 m	1' 6"
Height	1,25 m	4' 8"
Weight	5 000 kg	11,023 lb

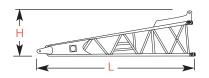
Upper Coun	iterweight B	x 1
Length	2,95 m	9' 8"
Width	0,47 m	1' 6"
Height	1,25 m	4' 8"
Weight	5 000 kg	11,023 lb

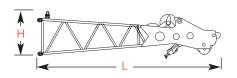
Upper Coun	terweight C	x 1
Length	2,95 m	9' 8"
Width	0,49 m	1' 7"
Height	1,25 m	4' 8"
Weight	5 400 kg	11,905 lb

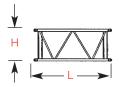


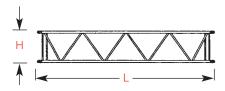


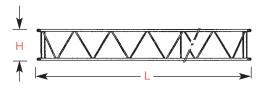
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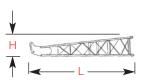


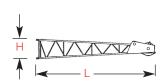












Boom Butt 15	l .	x 1
Length	4,73 m	15' 6"
Width	1,37m	4' 6"
Height	1,63 m	5' 4"
Weight	590 kg	1,300 lb

Boom Top 15'		x 1
Length	5,10 m	16' 9"
Width	1,37 m	4' 6"
Height	1,37 m	4' 6"
Weight	930 kg	2,050 lb

Boom Inser	Boom Insert 3,0 m (10')		
Length	3,15 m	10' 4"	
Width	1,37 m	4' 6"	
Height	1,50 m	4' 11"	
Weight	240 kg	530 lb	

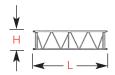
Boom Inser	t 6,1 m (20')	x 1, 2, 3
Length	6,20 m	20' 4"
Width	1,37 m	4' 6"
Height	1,50 m	4' 11"
Weight	430 kg	950 lb

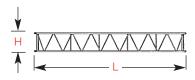
Boom Insert	9,14 m (30')	x 1, 2
Length	9,25 m	30' 4"
Width	1,37 m	4' 6"
Height	1,50 m	4' 11"
Weight	570 kg	1,260 lb

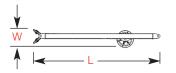
Fixed Jib Butt		x 1
Length	3,19 m	10' 6"
Width	0,57 m	1' 11"
Height	0,56 m	1' 10"
Weight	130 kg	290 lb

Fixed Jib Top		x 1
Length	3,38 m	11' 0"
Width	0,57 m	1' 11"
Height	0,47 m	1' 6"
Weight	170 kg	375 lb









Fixed Jib Ins	sert 3,0 m (10')	x 1, 2
Length	3,12 m	10' 3"
Width	0,57 m	1' 11"
Height	0,47 m	1' 6"
Weight	95 kg	210 lb



Fixed Jib Ins	ert 6,1 m (20')	x 1
Length	6,16 m	20' 3"
Width	0,57 m	1' 11"
Height	0,47 m	1' 6"
Weight	165 kg	365 lb

Fixed Jib Str	ut	x 1
Length	3,17 m	10' 5"
Width	0,62 m	2' 0"
Weight	200 ka	440 lb

winch performance data

Line pull

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	Rated line pull	*Maximum line pull
E 15	16,800 lbs	35,273 lbs
Front Drum	(7 620 kg)	(16 000 kg)
D D	16,800 lbs	35,273 lbs
Rear Drum	(7 620 kg)	(16 000 kg)
Otes ade and Out Days	N/A	11,000 lbs
Standard 3rd Drum	(N/A)	(4 990 kg)

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

Wire rope specifications

			Working	Breaking
		Diameter	Length	Strength
Use	Specs	inch (mm)	feet (m)	lbs (kg)
Front Drum	IWRC 6 X Fi (25) C/O	3/4" (19,4)	558' (170)	58,900 (26 700)
Rear Drum	IWRC 6 X Fi (25) C/O	3/4" (19,4)	426' (130)	58,900 (26 700)
Boom Hoist Drum	IWRC 6 X WS (26) C/O	9/16" (14,5)	407' (124)	33,500 (15 200)
Third Drum	IWRC 6 X WS (26) C/O	9/16" (14,5)	787' (240)	33,500 (15 200)

Model 5500 Front & Rear Winch

		Line speed (ft/min)						
	Layer	1	2	3	4	5	6	7
Line Pull	(lbs)							
	0	230	248	266	284	302	320	338
	5,000	229	246	264	282	299	317	334
	10,000	227	244	263	279	296	313	330
Rated Line pull	16,800	201	201	198	193	185	182	180
	20,000	164	158	153	153	153	151	148
	25,000	123	121	119	115			
	30,000	97		·		•		

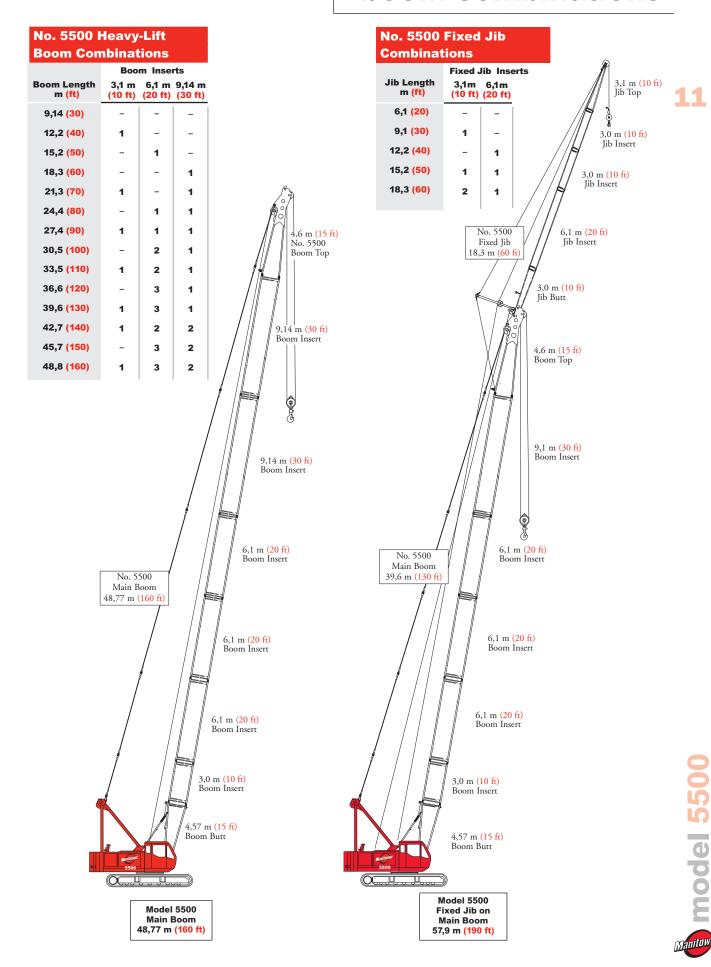
				Line	speed (m/	min)		
	Layer	1	2	3	4	5	6	7
Line Pull	(kgf)							
	0	70	76	81	87	92	97	103
	2 268	70	75	80	86	91	96	102
	4 536	69	74	80	85	90	95	101
Rated Line pull	7 620	61	61	60	59	56	55	55
	9 072	50	48	47	47	47	46	45
	11 340	37	37	36	35			
	13 608	30				•		



Line speeds and line pull based on single line. Line pulls are not based on wire rope strength.



boom combinations





load chart notes

- 12
- 1. Rated loads included in the charts are the maximum allowable freely suspended loads at a given boom length, boom angle and load radius, and have been determined for the machine standing level on firm supporting surface under ideal operating conditions. The user must limit or de-rate rated loads to allow for adverse conditions (such as soft or uneven ground, out-of-level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel, multiple machine lifts, and traveling with a load).
- 2. Maximum rated single line pulll is 12,566 lb. at 221 FPM when using in one to seven parts of line 13,800 lb. in eight parts of line.
- Capacities do not exceed 75% of minimum tipping loads.
 Capacities based on factors other than machine stability such as structural competence are shown by asterisk * in the charts. located in the operator's crane cab.
- 4. The machine must be reeved and set-up as stated in the operation manual and all the instruction manuals if these manuals are missing, obtain replacements. Boom backstops are required for all boom lengths. Gantry must be fully raised position for all operations. Crawlers must be fully extended and be locked in position. The crane must be leveled to within 1% on a firm supporting surface. Do not attempt to lift where no radius or load is listed as crane may tip or collapse.
- Attempting to lift more than rated loads may cause machine to tip or collapse. Do not tip machine to determine capacity.
- Weight of hooks, hook blocks, slings and other lifting devices are a part of the total load. Their total weight must be subtracted from the rated load to obtain the weight that can be lifted.
- When lifting over boom point with jib or upper boom point installed, rated loads for the boom must be deducted as shown below.

Jib length	Upper Boom Point	20'	30'	40'	50'
Deduct (lbs)	330	1,760	1,980	2,200	2,430

- The total load that can be lifted by the fixed jib is limited by rated fixed jib loads. The total load that can be lifted with the upper boom point is limited by the rated upper boom point loads.
- Boom lengths for jib mounting are 90 ft (27,43 m) to 130 ft (39,62 m).
- An upper boom point cannot be used on a 160 ft (48,77 m) boom length.

- 11. The boom should be erected over the front of the crawlers, not laterally
- 12. Least stable position is over the side.
- Maximum hoist load for number of reeving parts of line for hoist rope.

Maximum Load for Main Boom

No. of Parts of Line	1	2	3	4
Maximum Loads (lbs)	12,566	25,132	37,698	50,264

No. of Parts of Lines	5	6	7	8
Maximum Loads (lbs)	62,830	75,396	87,962	110,000

Maximum Load for Fixed Jib

No. of Parts of Line	1
Maximum Loads (lbs)	11,000

Maximum Load for Upper Boom Point

No. of Parts of Line	1
Maximum Loads (lbs)	11,000

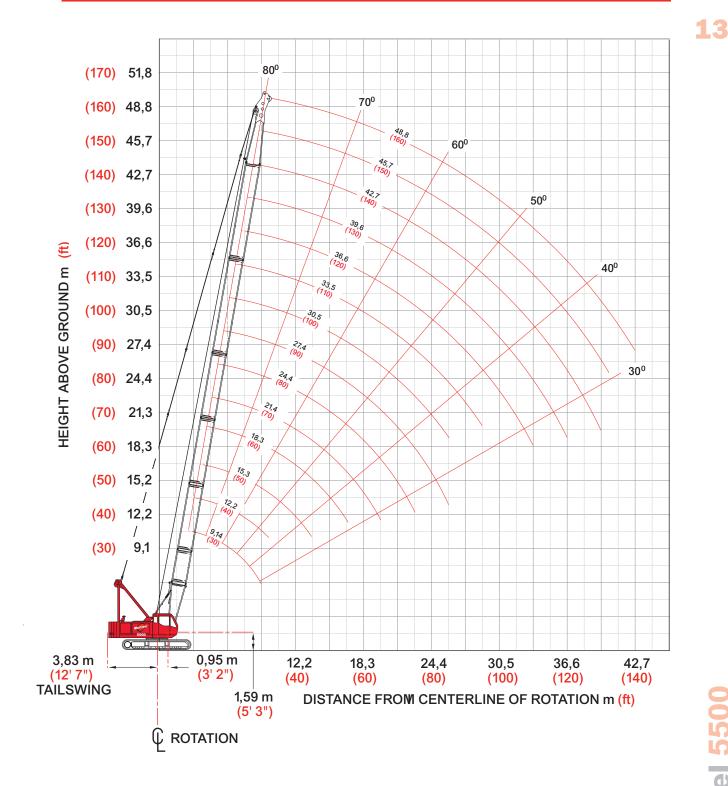
- 14. Lifting capacities listed apply only to the machine as originally manufactured for and supplied by Manitowoc Cranes, Inc. Modifications to this machine or use of equipment other than that specified can reduce operating capacity.
- 15. Designed and rated to comply with ANSI Code B30.5.

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

model 5500

heavy-lift boom range diagram

No. 5500 Heavy-Lift Boom





heavy-lift load charts

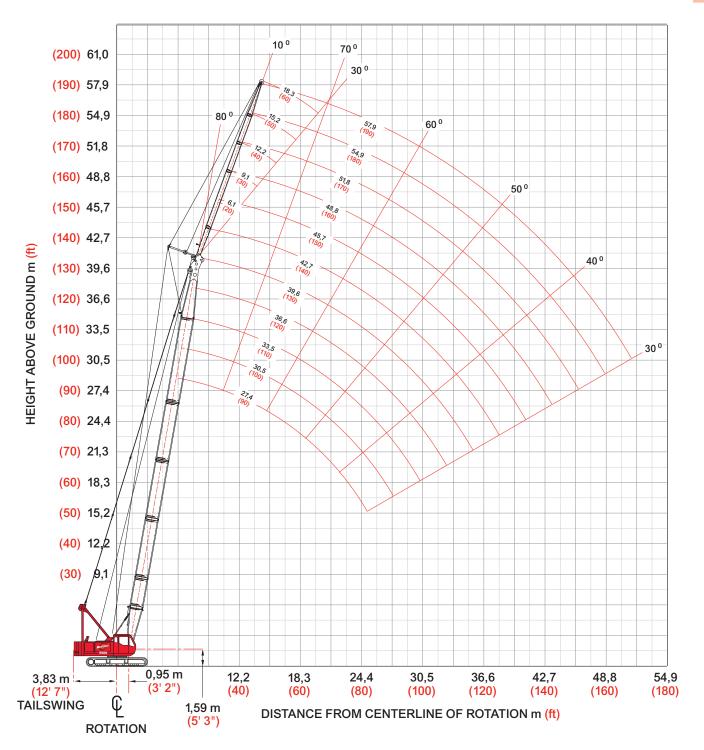
Liftcrane Boom Capacities No. 5500 Heavy-Lift Boom

360° Rating Ib x 1 000 Boom ft	130	140	150	160
ft 30 40 50 60 70 80 90 100 110 120 Radius 10.5 110.0 11	130	140	150	160
10.5 110.0				
12 100.0 100.0				
14 85.6 85.6 85.6				
16 74.1 74.1 72.2				
18 63.2 63.0 62.8 62.6 62.5 57.6				
20 53.7 53.4 53.3 53.1 53.0 52.8 50.1				
24 41.1 40.9 40.7 40.5 40.4 40.2 40.0 39.9 38.0				
28 33.2 33.0 32.8 32.6 32.4 32.3 32.1 31.9 31.8 31.7	29.0			
30 28.1 30.0 29.8 29.6 29.5 29.3 29.1 29.0 28.8 28.7	28.3	25.3	23.8	
45 17.4 17.2 17.0 16.8 16.6 16.5 16.3 16.2	16.0	15.8	15.8	15.5
55 13.2 13.0 12.8 12.6 12.4 12.3 12.2	11.9	11.8	11.7	11.5
65 10.4 10.1 9.9 9.8 9.6 9.5	9.3	9.1	9.0	8.8
75 8.3 8.1 7.9 7.7 7.6	7.4	7.2	7.1	6.9
85 6.7 6.5 6.3 6.2	6.0	5.8	5.7	5.5
95 5.3 5.1	4.9	4.7	4.6	4.4
110	3.7	3.5	3.4	3.1
120	3.1	2.9	2.7	2.5
130		2.4	2.2	2.0
140				1.5

fixed jib range diagram

No. 5500 Fixed Jib

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model 5500

fixed jib load charts

Liftcrane Jib Capacities Fixed Jib on Main Boom

33,185 lb Counterweights (3 Upper Counterweights, Crawlers Extended) 360° Rating lb x 1 000

	Boom ft	90	100	110	120	130
	Radius					_
	30	11.0	11.0			
	40	11.0	11.0	11.0	11.0	11.0
	50	11.0	11.0	11.0	11.0	11.0
	60	10.2	10.0	9.9	9.7	9.5
# 0	70	7.9	7.7	7.6	7.2	7.1
Jib 20 ft	80	6.2	6.0	5.9	5.6	5.3
	90	5.0	4.6	4.4	4.2	3.9
	95	4.4	4.0	3.8	3.6	3.3
	100		3.5	3.3	3.0	2.8
	110			2.4	2.1	1.9

	Boom ft	90	100	110	120	130
	Radius					
	30					
	40	9.9	9.9	9.9	9.9	
	50	9.9	9.9	9.9	9.9	9.9
	60	9.8	9.8	9.7	9.7	9.7
Jib 20 ft	70	8.2	7.9	7.8	7.7	7.5
Jib	80	6.4	6.2	6.1	6.0	5.6
	90	5.1	4.7	4.6	4.4	4.2
	95	4.4	4.1	4.0	3.8	3.5

3.5

3.2

2.2

2.9

2.0

100

110

30° Offset

	Boom ft	90	100	110	120	130
	Radius					
	30					
	40	11.0	11.0	11.0	11.0	11.0
	50	11.0	11.0	11.0	11.0	11.0
	60	10.5	10.3	10.1	10.0	9.8
Jib 30 ft	70	8.2	8.0	7.9	7.7	7.5
Jib	80	6.5	6.3	6.2	6.0	5.6
	90	5.2	4.9	4.8	4.5	4.2
	95	4.6	4.4	4.1	3.9	3.6
	100		3.8	3.6	3.4	3.0
	110		2.9	2.7	2.4	2.1

9.0
7.9
6.2
4.6
4.0
3.4
2.4





fixed jib load charts

Liftcrane Jib Capacities Fixed Jib on Main Boom

33,185 lb Counterweights (3 Upper Counterweights, Crawlers Extended) 360° Rating

lb x 1 000

10° Offset

	Boom ft	90	100	110	120	130
	Radius					
	40	7.0	7.0			
	50	6.7	6.9	6.9	6.9	7.0
	55	6.5	6.7	6.7	6.8	7.0
	60	6.4	6.6	6.6	6.6	6.8
0#	70	6.0	6.2	6.2	6.3	6.5
Jib 50 ft	80	5.8	5.9	6.1	5.8	6.0
	90	5.5	5.4	5.2	4.9	4.6
	95	5.1	4.8	4.6	4.2	4.0
	100		4.2	4.0	3.7	3.5
	110		3.3	3.1	2.8	2.5

	30° Offset					
	Boom ft	90	100	110	120	130
	Radius					
	40					
	50					
	55	5.0				
	60	5.0	5.0	5.0	5.0	5.0
Jib 50 ft	70	5.0	5.0	5.0	5.0	5.0
lib (80	5.0	5.0	5.0	5.0	5.0
	90	5.0	5.0	5.0	5.0	5.0
	95	5.0	4.9	4.9	4.8	4.7
	100	4.9	4.6	4.6	4.3	4.1
	110	3.9	3.6	3.4	3.2	3.0

		Boom ft	90	100	110	120	130
		Radius					
		40					
		50	4.9	4.9	4.9		
		55	4.8	4.8	4.8	4.8	4.8
		60	4.6	4.6	4.6	4.8	4.8
3	109	70	4.3	4.3	4.5	4.5	4.5
-		80	3.9	4.1	4.1	4.2	4.3
		90	3.7	3.8	4.0	3.9	4.0
		95	3.6	3.7	3.9	3.8	3.9
		100	3.5	3.6	3.7	3.7	3.7
		110	3.3	3.3	3.2	3.0	2.7

	Boom ft	90	100	110	120	130
	Radius					
	40					
	50					
	55					
	60	3.4	3.4			
Jih 60 ft	70	3.4	3.4	3.4	3.4	3.4
ij	80	3.4	3.4	3.4	3.4	3.4
	90	3.4	3.4	3.4	3.4	3.4
	95	3.4	3.4	3.4	3.4	3.4
	100	3.3	3.3	3.3	3.3	3.4
	110	3.2	3.2	3.2	3.2	3.3





Boom:

Welded lattice construction using tubular, high-tensile steel

clamshell

chords with pin connections between sections.

Basic boom length: 30 ft (9,14 m) Max. boom length: 60 ft (18,3 m)

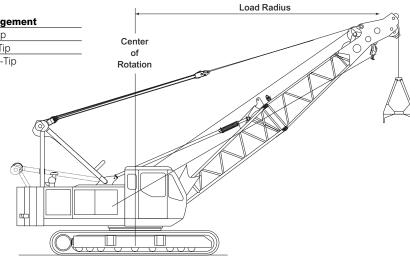
Limit on clamshell bucket weight: 4,600 lbs (2 100 kg)
Optional tagline: hydraulic operated type and spring type.

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Boom Component Chart

•	
Boom length ft (m)	Boom arrangement
40 (12,2)	Base-Tip
50 (15,2)	Base-A-Tip
60 (18,3)	Base-A-B-Tip

Base = 15 ft (4,57 m) Insert: A = 10 ft (3,05 m) B = 20 ft (6,10 m) Tip = 15 ft (4,57 m)



Clamshell Capacities

22,045 lb Counterweight (2 Upper Counterweight, Crawlers Extended)

lb x 1 000

Boom ft	30	40	50	60
Radius				
18	15.5			
20	15.5			
24	15.5	15.5		
28	15.5	15.5	15.5	
32		15.5	15.5	15.5
34		15.5	15.5	15.5
36		15.5	15.5	15.5
40			14.3	14.1
45				12.0
50				10.4

Notes: Figures represent maximum allowable capacity, and assume level, firm ground and ideal working conditions. Capacities are calculated at 67.5% of the minimum clamshell tipping load. Capacities are the maximum recommended by PCSA Standard #4. Allowances must be made by the user for such unfavorable conditions as a soft or uneven supporting surface, rapid cycle operations, or bucket suction. The combined weight of the bucket and load must not exceed these capacities. Boom length for clamshell operation should not exceed 60′ (18.29 m). Consult your authorized distributor for rated loads during rapid cycle operations.





dragline

Boom:

Welded lattice construction using tubular, high-tensile steel chords with pin connections between sections.

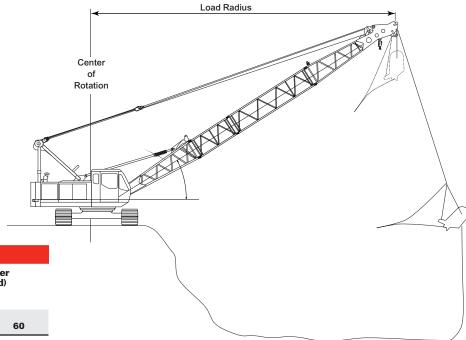
Basic boom length: 30 ft (9,14 m)
Max. boom length: 60 ft (18,3 m)
Optional fairlead: Full-revolving type.

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Boom Component Chart

Boom length ft (m)	Boom arrangement		
40 (12,2)	Base-A-Tip		
50 (15,2)	Base-B-Tip		
60 (18,3)	Base-A-B-Tip		

Base = 15 ft (4,57 m) Insert: A = 10 ft (3,05 m) B = 20 ft (6,10 m) Tip = 15 ft (4,57 m)



Dragline Capacities

22,045 lb Counterweight (2 Upper Counterweight, Crawlers Extended)

lb x 1 000

Boom ft	30	40	50	60
Radius				
26	15.5			
28	15.5			
30	15.5			
34		15.5		
38		15.5		
42			14.9	
46			13.2	
50				11.6
54				10.5
56				10.0

Notes: Figures represent maximum allowable capacity, and assume level, firm ground and ideal working conditions. Capacities are calculated at 75.0% of the minimum dragline tipping load. Capacities are the maximum recommended by PCSA Standard #4. Allowances must be made by the user for such unfavorable conditions as a soft or uneven supporting surface, rapid cycle operations, or bucket suction. The combined weight of the bucket and load must not exceed these capacities. Do not operate the dragline using boom angles of less than 30 degree. Boom length for dragline operation should not exceed 60' (18,29 m). Consult your authorized distributor for rated loads during rapid cycle operations.







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