Crane Institute Certification

A Higher Level of Certification

Mobile Crane Operator Certification

Lattice Boom Cranes, Carrier/Crawler

Load Chart Handout

for

Manitowoc 777T
LinkBelt HC-248H
Manitowoc 4100W

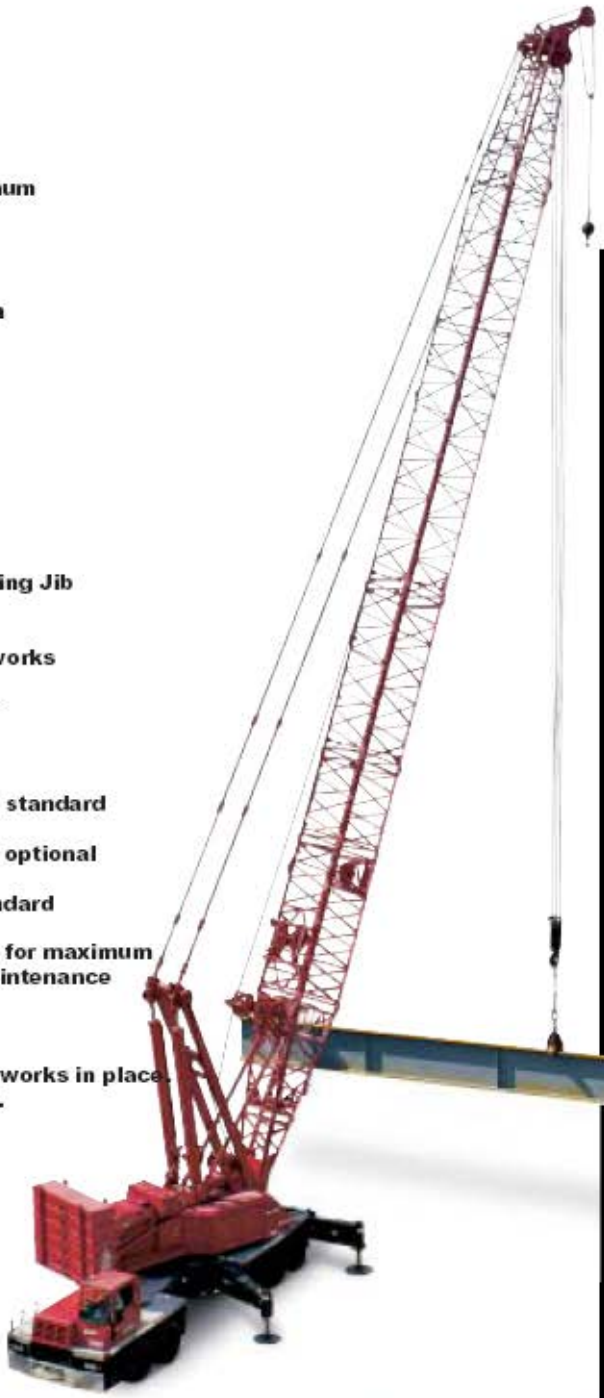
Courtesy of Manitowoc Cranes, LLC

model 777T

product guide

features

- 181 mton (200 ton) capacity
- 698 mton-m (5,050 kips) Maximum Load Moment
- 82,3 m (270') Heavy-Lift Boom
- 90,8 m (298') Long-Reach Boom
- 91,4 m (300') Fixed Jib on Heavy-Lift Boom
- 96,9 m (318') Fixed Jib on Long-Reach Boom
- 106,7 m (350') Luffing Jib on Heavy-Lift Boom
- 125,0 m (410') Fixed Jib on Luffing Jib on Heavy-Lift Boom
- 195 kW (260 HP) engine upperworks
- 373 kW (500 HP) engine carrier
- EPIC® controls
- 135 m/min (442 fpm) line speed standard
- 177 m/min (581 fpm) line speed optional
- 131 kN (29,500 lb) line pull standard
- Hydraulic-cylinder Boom Hoist for maximum performance with minimum maintenance
- Fast, efficient self-assembly
- 10x6 Carrier travels with upperworks in place. 96,6 kph (60 mph) travel speed.
- Manitowoc CraneCARE®



contents

LIFTCRANE BOOM CAPACITIES

BOOM NO. 78T WITH HEAVY LIFT TOP
0 LB. TO 95,400 LB. CRANE COUNTERWEIGHT
WITH 25,000 LB. FRONT BUMPER COUNTERWEIGHT
RATING OVER REAR OR 360 DEG. ON FULLY EXTENDED OUTRIGGERS

LIFTING CAPACITIES. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 85% of a static tipping load. Capacities based on structural competence are denoted by an asterisk(*).

Upper boom point capacity for liftcrane service with single part whip line is 29,500 lbs. or 59,000 lbs. with two part whip line. When boom butt mounted auxiliary drum is used, capacity with single part whip line is 20,000 lbs. or 40,000 lbs. with two part line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS. Machine to operate in a level position on a firm uniformly supporting surface with outriggers fully extended (22 ft. 8 in.) and set. Refer to the operators manual for outrigger positioning. Radii less than 32 feet not recommended when lifting over front of truck. Minimum boom angle over truck cab is 24 degrees.

Note: Set four main jacks first, then lower center front jack until it just contacts ground to prevent preloading of center front jack. Center front jack must be used when operating on outriggers.

Refer to boom rigging No. 192043, Wire Rope Specification chart No. 7973-A, and Operating Range Diagram chart No. 7974-A. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

OPERATING RADIUS. Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION. Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT. Machine equipped with Manitowoc 10 x 6 carrier, 277 in. wheel base, 117 in. front axle track, 100 in. rear axle track, 14.00 x 24 tires, 96 in. front outriggers, 70 in. rear outriggers, two 12 in. boom hoist cylinders, 26 ft. mast, two boom support straps, crane counterweight as specified and with 25,000 lb. front bumper counterweight.

DEDUCTIONS FOR LOAD HANDLING DEVICES

Sheave Block (200 Ton)	5,000	pounds
Sheave Block (45 Ton)	1,500	pounds
Ball (30 Ton)	1,200	pounds
Ball (15 Ton)	900	pounds
Upper Boom Point	1,200	pounds

WIRE ROPE

Line Pull (Main)	32,500	pounds
Line Pull (Auxiliary)	29,500	pounds
Hoist Line	2	pounds per foot

LIFTCRANE JIB CAPACITIES

JIB NO. 134 WITH 12 FT. 6 IN. STRUT ON
BOOM NO. 78T WITH HEAVY LIFT TOP
95,400 LB. CRANE COUNTERWEIGHT
25,000 LB. FRONT BUMPER COUNTERWEIGHT
360 DEG. RATING ON FULLY EXTENDED OUTRIGGERS

LIFTING CAPACITIES. Chart supplements boom capacity chart No. 8063-A. Lifting capacities for various boom lengths, jib lengths and jib operating radii are for freely suspended loads and do not exceed 85% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of the jib load. Boom and jib are not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS. Machine to operate in a level position on a firm uniformly supporting surface with outriggers fully extended (22 ft. 8 in.) and set. Refer to the operators manual for outrigger positioning. Radii less than 32 feet not recommended when lifting over front of truck. Minimum boom angle over truck cab is 24 degrees.

Note: Set four main jacks first, then lower center front jack until it just contacts ground to prevent preloading of center front jack. Center front jack must be used when operating on outriggers.

Refer to boom rigging No. 192043, jib assembly No. 179331, Wire Rope Specification chart No. 7973-A and Operating Range Diagram chart No. 7974-A. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

OPERATING RADIUS. Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

JIB POINT ELEVATION. Jib point elevation is vertical distance from ground level to centerline of jib point shaft.

MACHINE EQUIPMENT. Machine equipped with Manitowoc 10 x 6 carrier, 277 in. wheel base, 117 in. front axle track, 100 in. rear axle track, 14.00 x 24 tires, 96 in. front outriggers, 70 in. rear outriggers, two 12 in. boom hoist cylinders, 26 ft. mast, two boom support straps, 95,400 lb. crane counterweight and 25,000 lb. front bumper counterweight.

Maximum capacity on 26 mm or 1 in. wire rope is 29,500 lbs. per line (20,000 lbs. when auxiliary drum is used).

DEDUCTIONS FROM CAPACITIES WHEN JIB ATTACHED

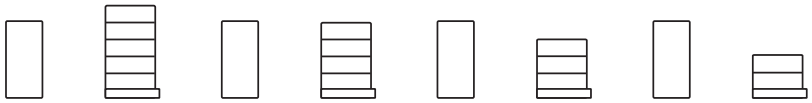
Jib Length (Feet)	Jib No. 134 (Pounds)
30	3,900
40	4,700
50	5,600
60	6,600
70	7,600
80	8,700

Liftcrane Boom Capacities

Meets ANSI B30.5 Requirements

Boom No. 78T with Heavy Lift Top
0 Lb. to 95,400 Lb. Crane Counterweight
with 25,000 Lb. Front Bumper Counterweight
Rating Over Rear or 360 Degrees on Fully Extended Outriggers

140 Ft. Boom



OPER. RADIUS FEET	BOOM ANGLE DEG.	BOOM POINT ELEV. FEET	95,400 LB. CRANE CTWT. 25,000 LB. BUMPER CTWT.		78,400 LB. CRANE CTWT. 25,000 LB. BUMPER CTWT.		61,400 LB. CRANE CTWT. 25,000 LB. BUMPER CTWT.		44,400 LB. CRANE CTWT. 25,000 LB. BUMPER CTWT.		OPER. RADIUS IN FEET
			BOOM CAPACITY 360 DEG. POUNDS	BOOM CAPACITY REAR POUNDS	BOOM CAPACITY 360 DEG. POUNDS	BOOM CAPACITY REAR POUNDS	BOOM CAPACITY 360 DEG. POUNDS	BOOM CAPACITY REAR POUNDS	BOOM CAPACITY 360 DEG. POUNDS	BOOM CAPACITY REAR POUNDS	
24	82.6	147.6	160,600*	160,600*	160,600*	160,600*	160,600*	160,600*	160,600*	160.600*	24
26	81.7	147.3	153,300*	153,300*	153,300*	153,300*	153,300*	153,300*	153,300*	153,300*	26
28	80.9	146.9	145,700*	145,700*	145,700*	145,700*	145,700*	145,700*	145,700*	145,700*	28
30	80.1	146.6	138,700*	138,700*	138,700*	138,700*	138,700*	138,700*	137,400*	137,400*	30
32	79.2	146.2	132,200*	132,200*	132,200*	132,200*	132,200*	132,200*	127,600*	127,600*	32
34	78.4	145.7	126,200*	126,200*	126,200*	126,200*	126,200*	126,200*	115,300	119,000*	34
36	77.6	145.3	120,600*	120,600*	120,600*	120,600*	119,100*	119,100*	104,800	111,400*	36
38	76.7	144.8	115,000*	115,000*	115,000*	115,000*	111,900*	111,900*	95,800	104,600*	38
40	75.9	144.3	109,800*	109,800*	109,800*	109,800*	103,100	105,400*	88,100	98,500*	40
45	73.7	142.8	98,300*	98,300*	97,900*	97,900*	85,700	91,800*	72,900	85,700*	45
50	71.6	141.2	88,700*	88,700*	83,900	86,500*	72,700	81,000*	61,600	75,500*	50
55	69.4	139.3	80,400*	80,400*	72,600	77,200*	62,800	72,200*	52,900	67,200*	55
60	67.2	137.2	72,500	73,200*	63,600	69,400*	54,800	64,900*	46,000	60,300*	60
65	64.9	134.9	64,400	66,900*	56,400	62,900*	48,300	58,700*	40,300	54,500*	65
70	62.6	132.3	57,600	61,200*	50,300	57,300*	43,000	53,400*	35,600	49,500*	70
75	60.3	129.5	52,000	56,100*	45,200	52,500*	38,400	48,900*	31,700	45,200*	75
80	57.9	126.4	47,100	51,700*	40,800	48,300*	34,600	44,900*	28,300	41,500*	80
85	55.4	122.9	42,900	47,800*	37,100	44,600*	31,200	41,400*	25,400	38,200*	85
90	52.8	119.2	39,200	44,300*	33,700	41,300*	28,300	38,200*	22,800	35,200*	90
95	50.2	115.1	36,000	41,200*	30,800	38,300*	25,700	35,500*	20,600	32,600*	95
100	47.4	110.5	33,100	38,400*	28,200	35,600*	23,400	32,900*	18,500	30,200*	100
105	44.5	105.5	30,500	35,700*	25,900	33,200*	21,300	30,700*	16,700	28,100*	105
110	41.5	100.0	28,200	33,300*	23,800	31,000*	19,500	28,600*	15,100	26,100*	110
115	38.2	93.8	26,100	31,000*	21,900	29,000*	17,800	26,700*	13,600	24,100	115
120	34.7	86.8	24,200	28,900*	20,200	27,200*	16,200	24,900*	12,300	22,300	120
125	30.8	78.7	22,400	26,900*	18,600	25,500*	14,800	23,300*	11,000	20,600	125
130	26.4	69.1	20,800	25,100*	17,100	23,900*	13,500	21,800*	9,900	19,100	130
135	21.1	57.2	19,200	23,400*	15,800	22,400*	12,300	20,400*	8,800	17,600	135
140	13.9	40.3	17,800	21,800*	14,400	21,000*	11,100	19,100*	7,700	16,200	140

DEDUCT 1,700 pounds from capacities when boom butt is equipped with auxiliary drum.

Liftcrane Jib Capacities

Meets ANSI B30.5 Requirements

Jib No. 134 with 12 Ft. 6 In. Strut on
Boom No. 78T with Heavy Lift Top
95,400 Lb. Crane Counterweight
25,000 Lb. Front Bumper Counterweight
360 Degree Rating on Fully Extended Outriggers

40 Ft. Jib — 140 Ft. Boom

JIB OPER. RADIUS FEET	5 DEGREE OFFSET			15 DEGREE OFFSET			25 DEGREE OFFSET			JIB OPER. RADIUS FEET
	BOOM ANGLE DEG.	JIB POINT ELEV. FEET	JIB CAPACITY POUNDS	BOOM ANGLE DEG.	JIB POINT ELEV. FEET	JIB CAPACITY POUNDS	BOOM ANGLE DEG.	JIB POINT ELEV. FEET	JIB CAPACITY POUNDS	
40	79.8	187.6	52,700*							40
45	78.1	186.5	51,500*	80.3	185.3	46,200*				45
50	76.5	185.2	50,500*	78.7	184.1	45,400*	81.0	181.5	37,800*	50
55	74.9	183.8	49,400*	77.1	182.6	44,600*	79.3	180.1	36,400*	55
60	73.2	182.3	48,500*	75.4	181.1	43,900*	77.6	178.5	35,100*	60
65	71.6	180.6	47,500*	73.7	179.4	43,200*	75.9	176.8	34,000*	65
70	69.9	178.7	46,600*	72.0	177.5	42,600*	74.2	174.9	32,900*	70
75	68.2	176.6	45,800*	70.3	175.4	42,000*	72.5	172.8	31,900*	75
80	66.5	174.4	45,000*	68.6	173.2	41,400*	70.7	170.5	30,900*	80
85	64.7	172.0	43,400*	66.8	170.7	40,800*	68.9	168.0	30,100*	85
90	63.0	169.4	40,500	65.1	168.1	39,500*	67.1	165.4	29,300*	90
100	59.3	163.6	34,300	61.4	162.3	34,700*	63.4	159.4	27,800*	100
110	55.5	156.9	29,300	57.6	155.5	30,000	59.5	152.5	26,500*	110
120	51.6	149.1	25,300	53.5	147.7	25,900	55.3	144.5	25,400*	120
130	47.3	140.2	21,900	49.3	138.6	22,400	51.0	135.2	22,900	130
140	42.8	129.7	19,100	44.7	128.0	19,500	46.2	124.3	19,800	140
150	37.8	117.3	16,600	39.6	115.5	16,900	41.0	111.3	17,200	150
160	32.1	102.3	14,500	33.8	100.1	14,700	34.9	95.2	14,900	160
170	25.2	83.0	12,600	26.7	80.2	12,700				170
180	15.6	54.1	10,800							180

DEDUCT 1,050 pounds from jib capacities when boom butt is equipped with auxiliary drum.

HC-248H

HYLAB Series Lattice Boom Truck Crane
200-ton

Link-Belt
CONSTRUCTION EQUIPMENT

For Lattice Boom Exam Use Only 2024

Link-Belt HC-248H Lift Crane Capacities

Length	Boom			With Counterweight ABC and no bumper counterweight		
				On Outriggers		On Tires
	Radius Feet	Angle Degrees	Boom Pt. Height Feet	360° Pounds	Rear Pounds	Straight Over Rear Pounds
100 feet	18	81.5	106.8	217,000*	217,000*	78,200*
	20	80.4	106.5	211,600*	211,600*	73,900*
	25	77.5	105.5	178,000*	178,000*	64,800*
	30	74.5	104.3	143,300	143,300	57,700*
	35	71.5	102.8	112,000	113,000	47,800
	40	68.5	100.9	91,300	92,800	40,400
	50	62.1	96.3	66,000	67,800	30,400
	60	55.4	90.3	51,200	52,900	24,100
	70	48.1	82.4	41,300	42,900	19,600
	80	39.9	72.1	34,300	35,800	16,200
	90	29.9	57.7	29,200	30,400	13,600
	100	14.7	33.3	25,100	26,300	11,500
110 feet	19	81.8	116.8	200,500*	200,500*	75,400*
	20	81.3	116.6	198,000*	198,000*	73,300*
	25	78.6	115.8	177,700*	177,700*	64,200*
	30	75.9	114.6	143,200	143,200	57,100
	35	73.2	113.3	111,900	112,800	47,500
	40	70.5	111.6	91,100	92,600	40,100
	50	64.9	107.5	65,900	67,600	30,100
	60	59.0	102.2	51,000	52,700	23,900
	70	52.7	95.4	41,100	42,700	19,400
	80	45.8	86.8	34,100	35,600	16,000
	90	38.0	75.6	29,000	30,200	13,400
	100	28.4	60.3	24,900	26,200	13,400
	110	14.0	34.6	21,600	22,800	9,700
120 feet	20	82.0	126.8	186,800*	186,800*	72,600*
	25	79.6	125.9	174,600*	174,600*	63,600*
	30	77.1	124.9	143,000	143,000	56,600*
	35	74.7	123.7	111,800	112,700	47,300
	40	72.2	122.2	90,900	92,400	39,900
	50	67.1	118.5	65,600	67,400	29,900
	60	61.8	113.7	50,800	52,500	23,600
	70	56.2	107.7	40,900	42,500	19,100
	80	50.3	100.2	33,900	35,300	15,800
	90	43.7	90.9	28,800	30,000	13,200
	100	36.3	79.0	24,700	26,000	11,200
	110	27.2	62.8	21,500	22,600	9,500
	120	13.4	35.8	18,800	19,800	8,100

Counterweights:

Upper Cwt. "ABC"	63,440 lbs
Bumper Cwt. "A"	13,500 lbs
Bumper Cwt. "AB"	25,000 lbs

Deductions for Load Handling Devices:

45-Ton 1-Sheave Block	1,200 lbs
170-Ton 4-Sheave Block	3,600 lbs
25-Ton Ball	700 lbs
Hoist Line	2.5 lbs/ft

Line Pull:

Main Hoist:	Auxiliary Hoist:
30,378 lbs	18,344 lbs

Blocks, slings, and other load carrying devices are considered part of the load. The weight of standard hoisting ropes for the rating at a given radius has been calculated as part of the boom point load and need not be considered in determining net allowable loads.

Ratings shown on this chart make no allowance for such factors as out of plumb loads, wind, poor soil conditions and dynamic effects due to excessive operating speeds. The user must exercise judgement to make allowance for these conditions.

No account is taken of the wind force on the load. This effect, which can be substantial for loads with large surface areas, must be considered by the user. In any wind it is strongly recommended that the tag lines be used to control the load.

When using main hook, while jib is attached, reduce boom capacities by the following values:

a. 30 ft jib: 2,600 lbs
b. 40 ft jib: 3,000 lbs
c. 50 ft jib: 3,400 lbs
d. 60 ft jib: 3,800 lbs
e. 70 ft jib: 4,200 lbs
f. 80 ft jib: 4,600 lbs
g. 90 ft jib: 5,000 lbs
h. 100 ft jib: 5,400 lbs

When using the main boom fall with jib in place, the main fall ratings must be reduced by the jib effective weight shown on the jib rating chart plus twice the weight of all suspended blocks, slings, rope, etc., at the jib fall.

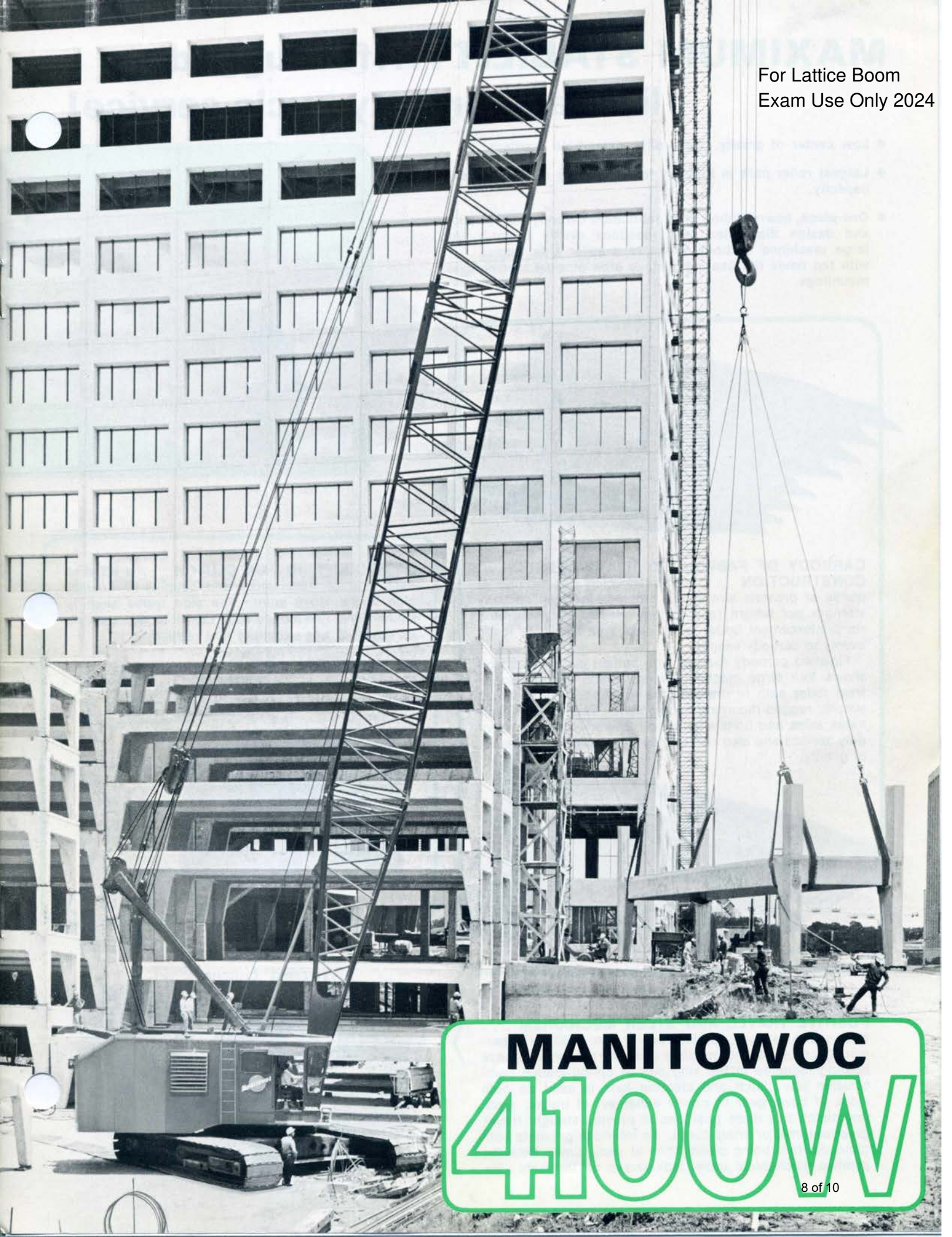
Jib capacities are for 360° swing on five outrigger jacks.

The information on this page is for classroom use only.

Lifting Capacities (Pounds): Tubular Jib, Open Throat Boom

Boom Length	Jib Radius Feet	30 Foot Jib			40 Foot Jib			50 Foot Jib			60 Foot Jib			Jib Radius Feet
		5°	15°	25°	5°	15°	25°	5°	15°	25°	5°	15°	25°	
140 feet	30	40,000*												30
	35	40,000*	40,000*		36,000*			32,000*						35
	40	40,000*	40,000*	40,000*	36,000*	35,900*		32,000*			26,900*			40
	50	40,000*	40,000*	40,000*	36,000*	35,500*	34,600*	32,000*	31,400*		26,600*	25,900*		50
	60	40,000*	40,000*	40,000*	36,000*	35,000*	32,000*	32,000*	30,600*	25,800*	26,400*	25,300*	22,300*	60
	70	40,000*	40,000*	39,000*	35,600*	34,600*	29,600*	31,700*	29,800*	23,800*	26,200*	24,600*	21,700*	70
	80	33,400	33,900	34,300	33,700	34,300	27,600*	30,900*	29,200*	22,100*	25,500*	23,900*	20,100*	80
	90	28,100	28,500	28,800	28,400	28,900	25,900*	28,600	27,100*	22,300*	24,900*	22,700*	18,700*	90
	100	24,000	24,300	24,600	24,300	24,700	24,400*	24,500	25,000	21,300*	24,000*	22,200*	17,600*	100
	110	21,000	21,200	21,400	21,300	21,600	21,900	21,500	22,000	20,100*	21,300*	20,700*	16,500*	110
	120	18,300	18,500	18,600	18,500	18,800	19,100	18,800	19,200	19,100*	19,000	19,300*	15,700*	120
	130	16,000	16,200	16,300	16,300	16,600	16,800	16,500	16,900	17,200	16,700	17,100	14,900*	130
	140	14,100	14,300		14,400	14,600	14,800	14,600	14,900	15,200	14,800	15,200	14,200*	140
	150	12,500			12,800	12,900		13,000	13,200	13,400	13,200	13,500	13,700*	150
	160	11,100			11,300			11,600	11,800		11,800	12,000	12,200	160
	170							10,300			10,500	10,800		170
	180										9,500			180

For Lattice Boom
Exam Use Only 2024



WEIGHT OF UPPER BOOM POINT, JIB, ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES, ETC., BENEATH BOOM AND JIB POINT SHEAVES, IS CONSIDERED PART OF THE MAIN BOOM LOAD. BOOM IS NOT TO BE LOWERED BEYOND RADII WHERE COMBINED WEIGHTS ARE GREATER THAN RATED CAPACITY. WHERE NO CAPACITY IS SHOWN, OPERATION IS NOT INTENDED OR APPROVED.

DEDUCT FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED	
ONE SHEAVE POINT:	1,200 LBS
TWO SHEAVE POINT:	1,500 LBS
TO COMPLY WITH B30.5 REQUIREMENTS, UPPER BOOM POINT CANNOT BE USED ON 260 FT BOOM.	

DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
JIB LENGTH	JIB NO. 123
30 FT	3,000 LBS
40 FT	3,600 LBS
50 FT	4,200 LBS
60 FT	4,900 LBS
JIB DEDUCTS INCLUDE JIB ADAPTER.	

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES	
200 TON BLOCK:	4,740 LBS
30 TON BLOCK:	1,200 LBS
15 TON BALL:	900 LBS

NOTE: HOIST LINE AND WHIP LINE LENGTHS GIVEN IN TABLE WILL ALLOW BLOCK TRAVEL DOWN TO LEVEL OF ROLLER PATH. WHEN BLOCK TRAVEL BELOW ROLLER PATH 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 ROLLER PATH IS REQUIRED.

HOIST REEVING FOR MAIN LOAD BLOCK						
NO. PARTS OF LINE	1	2	3	4	5	6
MAXIMUM LOAD-LBS.	32,500	65,000	97,500	130,000	162,500	195,000
MAXIMUM LOAD-kg	14 740	29 480	44 230	58 970	73 710	88 460
NO. PARTS OF LINE	7	8	9	10	11	12
MAXIMUM LOAD-LBS.	227,500	260,000	292,500	325,000	357,500	400,000
MAXIMUM LOAD-kg	103 190	117 930	132 680	147 420	162 160	181 440

HOIST LINE: 1-1/8" (29 mm) - 6 x 31 WARRINGTON-SEALE. EXTRA IMPROVED PLOW STEEL. REGULAR LAY. IWRC.
MINIMUM BREAKING STRENGTH 130,000 LBS. (58 970 kg)
APPROX. WEIGHT = 2.34 LBS. PER FT. (3.48 kg/m)

WHIP LINE: 1-1/8" (29 mm) - 6 x 31 WARRINGTON-SEAL. IMPROVED PLOW STEEL. REGULAR LAY, IWRC.
MINIMUM BREAKING STRENGTH 113,000 LBS. (51 260 kg)
MAXIMUM LOAD = 28,300 LBS. (12 840 kg) PER LINE
APPROX. WEIGHT = 2.34 LBS. PER FT. (3.48 kg/m)

SELECTED LIFTCRANE JIB CAPACITIES

JIB NO. 123 WITH 12 FT 6 INCH STRUT ON BOOM NO. 22A OR 22C WITH OPEN THROAT TOP
122,400 LB. COUNTERWEIGHT • 12 FT 6 INCH CRAWLERS EXTENDED

30 FOOT JIB

Boom Length Feet	Jib Oper Radius Feet	0 DEGREE OFFSET Boom Angle Degrees	Jib Point Elevation Feet	Capacity Pounds	10 DEGREE OFFSET Boom Angle Degrees	Jib Point Elevation Feet	Capacity Pounds	20 DEGREE OFFSET Boom Angle Degrees	Jib Point Elevation Feet	Capacity Pounds	Jib Oper Radius Feet
	30	79.9	148.1	40,000 *							30
	35	77.9	147.1	40,000 *	79.9	146.6	40,000 *				35
1	40	75.8	145.9	40,000 *	77.8	145.4	40,000 *	79.8	144.1	40,000 *	40
	45	73.8	144.5	40,000 *	75.8	144.0	40,000 *	77.7	142.7	40,000 *	45
	50	71.7	142.9	40,000 *	73.7	142.4	40,000 *	75.6	141.1	40,000 *	50
	55	69.5	141.1	40,000 *	71.5	140.6	40,000 *	73.4	139.3	40,000 *	55
1	60	67.4	139.1	40,000 *	69.4	138.6	40,000 *	71.2	137.3	40,000 *	60
	65	65.2	136.9	40,000 *	67.2	136.3	40,000 *	69.0	135.0	40,000 *	65
	70	63.0	134.4	40,000 *	64.9	133.9	40,000 *	66.8	132.5	40,000 *	70
	75	60.7	131.7	40,000 *	62.6	131.1	40,000 *	64.5	129.7	40,000 *	75
	80	58.4	128.7	40,000 *	60.3	128.1	40,000 *	62.1	126.7	39,200 *	80
0	90	53.5	121.9	35,900	55.4	121.3	36,400	57.2	119.7	36,500 *	90
	100	48.4	113.6	31,000	50.2	113.0	31,300	51.9	111.3	31,700	100
	110	42.7	103.7	27,000	44.6	103.0	27,300				110
	120	36.4	91.4	23,700							120

SELECTED LIFTCRANE BOOM CAPACITIES

BOOM NO. 22C WITH OPEN THROAT TOP

122,400 LB. COUNTERWEIGHT • 360 DEGREE RATING

Boom Length Feet	Oper Radius Feet	Boom Angle Degrees	Boom Point Elev Feet	Capacity Crawlers Retracted Pounds	Capacity Crawlers Extended Pounds
160	28	81.4	165.2	153,900	180,200
	30	80.6	164.9	139,200	162,100
	32	79.9	164.5	126,800	147,100
	34	79.2	164.2	116,400	134,500
	36	78.5	163.8	107,400	123,800
	38	77.7	163.4	99,600	114,500
	40	77.0	162.9	92,700	106,400
	45	75.2	161.7	78,800	90,100
	50	73.3	160.3	68,200	77,800
	55	71.4	158.7	59,800	68,100
	60	69.5	156.9	53,000	60,300
	65	67.6	154.9	47,400	54,000
	70	65.6	152.8	42,600	48,600
	75	63.7	150.4	38,600	44,100
	80	61.6	147.8	35,200	40,200
	85	59.5	145.0	32,200	36,800
	90	57.5	141.9	29,500	33,800
	95	55.3	138.6	27,200	31,200
	100	53.1	135.0	25,100	28,800
	105	50.9	131.1	23,200	26,800
	110	48.5	126.9	21,500	24,900
	115	46.1	122.2	20,000	23,200
	120	43.5	117.2	18,600	21,600
	125	40.9	111.7	17,300	20,200
	130	38.0	105.6	16,100	18,900
	135	35.0	98.9	15,100	17,700
	140	31.8	91.3	14,100	16,600
	145	28.2	82.6	13,100	15,500
	150	24.1	72.5	12,300	14,600
	155	19.3	59.9	11,400	13,700
170	30	81.2	175.0	138,800	161,700
	32	80.5	174.7	126,400	146,700
	34	79.8	174.3	116,000	134,100
	36	79.2	174.0	107,000	123,400
	38	78.5	173.6	99,100	114,100
	40	77.8	173.1	92,300	106,000
	45	76.0	172.0	78,400	89,700
	50	74.3	170.7	67,700	77,400
	55	72.5	169.2	59,300	67,700
	60	70.8	167.5	52,500	59,900
	65	69.0	165.7	46,900	53,500
	70	67.2	163.7	42,200	48,200
	75	65.3	161.5	38,200	43,600
	80	63.4	159.1	34,700	39,700
	85	61.5	156.5	31,700	36,300
	90	59.6	153.6	29,100	33,400
	95	57.6	150.6	26,700	30,700
	100	55.6	147.3	24,600	28,400
	105	53.6	143.7	22,800	26,300
	110	51.4	139.9	21,100	24,400
	115	49.2	135.8	19,500	22,700
	120	47.0	131.3	18,100	21,100
	125	44.6	126.4	16,900	19,700
	130	42.2	121.1	15,700	18,400
	135	39.6	115.4	14,600	17,200
	140	36.9	109.0	13,600	16,100
	145	34.0	102.0	12,700	15,100
	150	30.8	94.1	11,800	14,100
	155	27.3	85.1	11,000	13,200
	160	23.4	74.6	10,200	12,400
	165	18.7	61.6	9,500	11,600

Boom Length Feet	Oper Radius Feet	Boom Angle Degrees	Boom Point Elev Feet	Capacity Crawlers Retracted Pounds	Capacity Crawlers Extended Pounds
180	32	81.1	184.8	126,000	146,300
	34	80.4	184.5	115,500	133,700
	36	79.8	184.1	106,500	122,900
	38	79.1	183.8	98,600	113,600
	40	78.5	183.4	91,800	105,500
	45	76.8	182.3	77,900	89,200
	50	75.2	181.0	67,200	76,900
	55	73.5	179.6	58,800	67,200
	60	71.9	178.1	52,000	59,400
	65	70.2	176.4	46,400	53,000
	70	68.5	174.5	41,700	47,600
	75	66.8	172.4	37,600	43,100
	80	65.0	170.2	34,200	39,200
	85	63.3	167.8	31,200	35,800
	90	61.5	165.1	28,500	32,800
	95	59.6	162.3	26,200	30,200
	100	57.8	159.3	24,100	27,900
	105	55.9	156.0	22,200	25,800
	110	53.9	152.5	20,500	23,900
	115	51.9	148.7	19,000	22,200
	120	49.9	144.6	17,600	20,600
	125	47.8	140.3	16,300	19,200
	130	45.6	135.6	15,100	17,900
	135	43.3	130.5	14,000	16,700
	140	40.9	124.9	13,000	15,500
	145	38.4	118.9	12,100	14,500
	150	35.8	112.3	11,200	13,600
	155	33.0	105.0	10,400	12,700
	160	29.9	96.8	9,700	11,800
	165	26.6	87.5	9,000	11,100
	170	22.7	76.6	8,300	10,300
	175	18.2	63.2	7,600	9,600
190	32	81.5	194.9	125,500	145,900
	34	80.9	194.6	115,000	133,300
	36	80.3	194.3	106,000	122,500
	38	79.7	193.9	98,200	113,200
	40	79.1	193.6	91,300	105,100
	45	77.5	192.5	77,400	88,800
	50	76.0	191.4	66,700	76,400
	55	74.4	190.0	58,300	66,700
	60	72.9	188.6	51,500	59,000
	65	71.3	186.9	45,900	52,500
	70	69.7	185.2	41,200	47,200
	75	68.1	183.2	37,200	42,600
	80	66.4	181.1	33,700	38,700
	85	64.8	178.9	30,700	35,300
	90	63.1	176.4	28,100	32,400
	95	61.4	173.8	25,700	29,700
	100	59.7	171.0	23,600	27,400
	105	57.9	167.9	21,700	25,300
	110	56.1	164.7	20,000	23,400
	115	54.3	161.2	18,500	21,700
	120	52.4	157.5	17,100	20,100
	125	50.4	153.5	15,800	18,700
	130	48.5	149.2	14,600	17,400
	135	46.4	144.6	13,600	16,200
	140	44.3	139.7	12,600	15,100
	145	42.1	134.4	11,600	14,000
	150	39.8	128.6	10,800	13,100
	155	37.4	122.3	10,000	12,200
	160	34.8	115.5	9,200	11,400
	165	32.1	107.9	8,500	10,600
	170	29.1	99.4	7,700	9,900
	175	25.8	89.8	7,100	9,200
	180	22.1	78.6	6,400	8,500
	185	17.7	64.8	5,900	7,800

Boom Length Feet	Oper Radius Feet	Boom Angle Degrees	Boom Point Elev Feet	Capacity Crawlers Retracted Pounds	Capacity Crawlers Extended Pounds
200	34	81.4	204.7	114,700	132,900
	36	80.8	204.4	105,700	122,200
	38	80.2	204.1	97,800	112,900
	40	79.6	203.7	91,000	104,800
	45	78.2	202.8	77,000	88,400
	50	76.7	201.6	66,400	76,100
	55	75.2	200.4	58,000	66,400
	60	73.7	199.0	51,100	58,600
	65	72.2	197.5	45,500	52,200
	70	70.7	195.8	40,800	46,800
	75	69.2	194.0	36,800	42,300
	80	67.7	192.0	33,300	38,300
	85	66.1	189.9	30,300	34,900
	90	64.5	187.6	27,600	32,000
	95	62.9	185.1	25,300	29,300
	100	61.3	182.5	23,200	27,000
	105	59.7	179.6	21,300	24,900
	110	58.0	176.6	19,600	23,000
	115	56.3	173.4	18,100	21,300
	120	54.5	169.9	16,700	19,700
	125	52.8	166.3	15,400	18,300
	130	50.9	162.3	14,200	17,000
	135	49.1	158.1	13,100	15,800
	140	47.2	153.6	12,100	14,700
	145	45.2	148.8	11,200	13,600
	150	43.1	143.7	10,300	12,700
	155	41.0	138.2	9,400	11,800
	160	38.7	132.2	8,600	10,900
	165	36.4	125.7	7,900	10,100
	170	33.9	118.6	7,100	9,300
	175	31.2	110.7	6,500	8,600
	180	28.4	102.0	5,800	7,900
	185	25.2	92.1	5,300	7,200
	190	21.6	80.5	4,700	6,600
	195	17.3	66.3	4,200	6,000
210	36	81.2	214.6	105,200	121,800
	38	80.7	214.2	97,400	112,500
	40	80.1	213.9	90,500	104,300
	45	78.7	213.0	76,600	88,000
	50	77.3	211.9	65,900	75,600
	55	75.9	210.7	57,500	65,900
	60	74.5	209.4	50,700	58,100
	65	73.1	208.0	45,100	51,700
	70	71.7	206.4	40,300	46,400
	75	70.2	204.6	36,300	41,800
	80	68.8	202.8	32,900	37,900
	85	67.3	200.8	29,800	34,500
	90	65.8	198.6	27,200	31,500
	95	64.3	196.3	24,800	28,900
	100	62.8	193.8	22,700	26,500
	105	61.3	191.1	20,900	24,400
	110	59.7	188.3	19,200	22,500
	115	58.1	185.3	17,600	20,800
	120	56.5	182.1	16,200	19,300
	125	54.8	178.6	14,900	17,800
	130	53.1	175.0	13,800	16,500
	135	51.4	171.1	12,700	15,300
	140	49.6	167.0	11,700	14,200
	145	47.8	162.6	10,700	13,200
	150	46.0	157.9	9,900	12,200
	155	44.0	152.9	9,100	11,300
	160	42.0	147.6	8,300	10,500
	165	39.9	141.8	7,500	9,700
	170	37.8	135.6	6,800	9,000
	175	35.5	128.9	6,100	8,200
	180	33.1	121.6	5,500	7,500
	185	30.5	113.5	4,900	6,900
	190	27.7	104.5	4,400	6,300
	195	24.6	94.3	—	5,700
	200	21.0	82.4	—	5,100