



# LOAD CHARTS

for Use With

## WRITTEN EXAMINATIONS



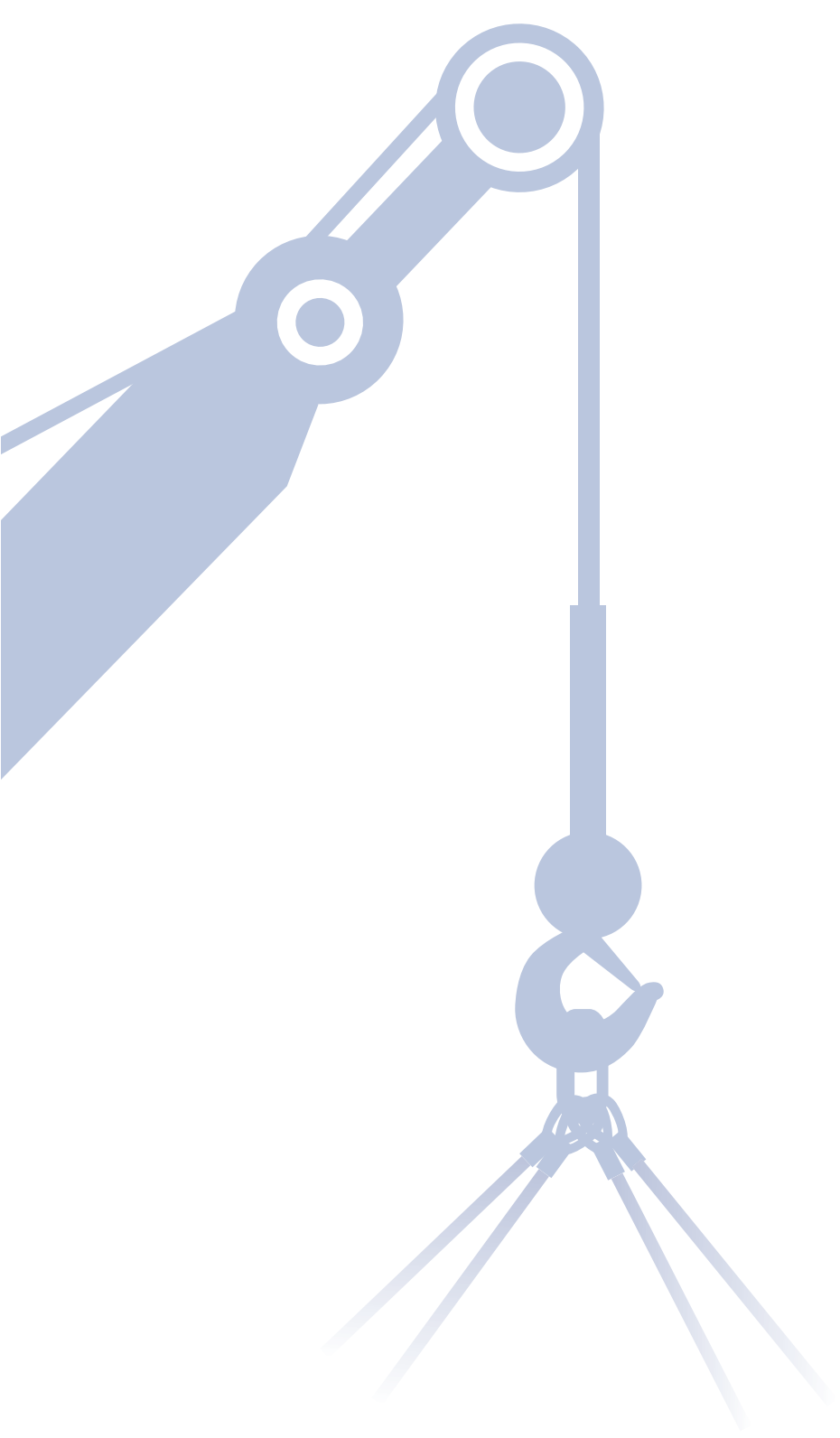
# Manitowoc 4100W

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**These pages are reproduced for illustration only and not as a substitute for reviewing the entire manual for a particular crane.**

**Make sure that you are fully trained on, and review the entire manual for, every crane you operate.**

*This load chart has been adapted from the original manufacturer's load chart for use in the NCCER Mobile Crane Certification Examination. It is not to be used for calculating loads, planning lifts, or for any other purpose.*



**WEIGHTS****4100W-S1 4100W-S2**

DESCRIPTION	APPROX. WEIGHT (IN LBS.)
<b>LIFT CRANE</b> - w/70' No. 22C boom, machine counterweight, universal gantry w/telescopic backhitch, 26'-6" crawlers w/48" treads, full width tandem drums, ind. swing, ind. boom hoist, Cummins NTA-855-C360 engine, 27-5/8" dia. lagging for rear drum, boom hoist rope, equalizer, telescopic air cushioned boom stop, 200 ton load block, 15 ton hook and weight ball, single sheave upper boom point, and upper wire rope guide.....	S1 363,795* S2 446,295*
<b>UPPERWORKS</b> - w/Cummins NTA-855-C360 engine, ind. boom hoist, ind. swing, and 27-5/8" dia. lagging for rear drum; <u>LESS</u> boom, gantry and backhitch, equalizer, load block, weight ball, counter weights, telescopic air cushioned boom stop, upper wire rope guide, and catwalk.....	80,500*
<b>UPPERWORKS</b> as above - w/gantry and backhitch, equalizer, boom hoist rope, and carbody; <u>LESS</u> crawlers.....	138,685*
<b>CARBODY</b> -w/roller path, ring gear, and king pin; <u>LESS</u> crawlers.....	49,700
<b>CRAWLERS</b> , 26'-6" w/48" treads.....	37,965 each
<b>COUNTERWEIGHT</b>	
Inner (Self-Removing).....	41,900
Middle (Self-Removing).....	41,500
Outer (Self-Removing).....	39,000
Side (2 Req'd).....	12,000 each
Carbody (2 Req'd).....	30,000 each
<b>BOOM</b> No. 22C	
Boom Butt - 30' .....	6,150
Boom Top - 40' (w/Lower boom point assembly).....	8,445
Upper Boom Point (Removable - single sheave).....	1,260
double sheave.....	1,505
Jib Adapter (Removable).....	545
Boom Insert - 10' (w/rope guide roller assembly).....	1,350
Boom Insert - 20' (w/rope guide roller assembly).....	2,435
Boom Insert - 40' (w/rope guide roller assembly).....	4,460
Boom Insert - 40' (w/jib backstay, and rope guide roller assembly).....	4,560
Basic Pendant - 40' 9-3/4" (4 Req'd).....	255 each
Pendant - 10' (4 per insert).....	115 each
Pendant - 20' (4 per insert).....	155 each
Pendant - 40' (4 per insert).....	215 each
Pendant Spreader Bar.....	320

\*Weights do not include hoist line, whip line, or fuel. For CAT. D-343TA add 1,170 lbs., for CAT. 3406 PCTA add 100 lbs. and for CM 12 V-71N engines add 600 lbs.

**WEIGHTS 4100W Cont'd**

DESCRIPTION	APPROX. WEIGHT (IN LBS.)
<b>JIB NO. 123</b>	
Jib Top - 15' (w/Jib point).....	695
Jib Butt - 15'.....	690
Jib Insert - 10'.....	340
Basic Pendant - 33' 3-3/4" (2 Req'd).....	115 each
Pendant - 10' (2 Per insert).....	65 each
Jib Backstay Pendant.....	155 each
Jib Stut - 12' - 6".....	365

**COMPONENTS**

Hook Rollers (6) - w/shafts.....	1,020
Light Plant - 6.5KW - w/mounting platform.....	1,390
Catwalk - left and right side w/rails.....	1,320
Lagging - 27-5/8" dia. plain.....	1,410
Boom Hoist Rope - 12 Part - 760' of 7/8" - 6 x 26.....	1,080
Wire Rope Guide Assembly - Lower.....	325
Wire Rope Guide Assembly - Upper.....	510
Rope Guide Roller Assembly.....	55 each
2-Part Gantry w/Telescopic Backhitch.....	7,805
Equalizer.....	2,000
Hoist Line - 1-1/8" - 6 x 31.....	2.34 lbs./ft.
Whip Line - 1-1/8" - 6 x 31.....	2.34 lbs./ft.
15 Ton Hook and Weight Ball.....	865
100 Ton Hook Block Assembly.....	2,065
200 Ton Hook Block Assembly.....	4,900
230 Ton Hook Block Assembly.....	5,375
Boom Stop - Telescopic Air Cushioned.....	675
Dragline Fairlead - Revolving.....	1,910
Dragline Fairlead - Hinged.....	9,330

**NOTE:** The above weights may fluctuate up or down 5% due to manufacturing tolerances.



**LIFT CRANE CAPACITIES****MEETS ANSI B30.5  
REQUIREMENTS**

BOOM NO. 22C WITH OPEN THROAT TOP  
146,400 LB. CRANE COUNTERWEIGHT  
60,000 LB. CARBODY COUNTERWEIGHT  
26'6" CRAWLERS EXTENDED

**WARNING:** This chart will apply only when  
two 12,000 lb. side ctwts. and two 30,000 lb.  
carbody ctwts. bear MEC registered Serial Numbers.

**LIFTING CAPACITIES:** Capacities for various boom lengths  
and operating radii may be based on percent of tipping,  
strength of structural components, operating speeds and other  
factors.

Capacities are for freely suspended loads and do not exceed  
75% of a static tipping load. Capacities based on structural  
competence are shown by shaded areas.

Capacities are shown in pounds. Deduct 1200 pounds from  
capacities listed when single sheave upper boom point is  
attached and 1500 pounds when two sheave upper boom point  
is attached. To comply with B30.5 requirements, upper  
boom point cannot be used on the 260 ft. boom. Weight of jib,  
(see chart A), all load blocks, hooks, weight ball, slings, hoist  
lines beneath boom and jib point sheaves, etc., 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.

**OPERATING CONDITIONS:** Machine to operate in a level  
position on a firm surface with crawlers fully extended and  
gantry in working position and be rigged in accordance with  
and under conditions referred to in rigging drawing No. 190693  
and load line specification chart No. 6592-A.

**HOIST REEVING FOR MAIN LOAD BLOCK**

No. Parts Of Line	1	2	3	4	5	6
Max Load - Lbs.	32,500	65,000	97,500	130,000	162,500	195,000
No. Parts Of Line	7	8	9	10	11	12
Max. Load - Lbs.	227,500	260,000	292,500	325,000	357,500	400,000
No. Parts Of Line	13					
Max. Load - Lbs.	430,000					

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
70	16.5	79.7	75.9	460,000
	17	79.3	75.8	400,000
	18	78.5	75.6	380,100
	19	77.6	75.4	363,000
	20	76.8	75.1	347,300
	22	75.1	74.6	319,600
	24	73.4	74.1	293,400
	26	71.7	73.5	266,100
	28	69.9	72.8	237,500
	30	68.2	72.0	214,300
70	32	66.4	71.2	195,100
	34	64.6	70.2	178,900
	36	62.8	69.3	165,200
	38	60.9	68.2	153,300
	40	59.1	67.0	143,000
	45	54.1	63.7	122,100
	50	48.9	59.8	106,300
	55	43.2	54.9	93,900
	60	36.9	49.0	84,000
	65	29.4	41.3	75,800
	70	19.5	30.3	63,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
80	17	80.6	85.9	392,800
	18	79.9	85.8	378,900
	19	79.2	85.6	361,800
	20	78.5	85.4	346,100
	22	77.0	84.9	318,400
	24	75.5	84.5	292,500
	26	74.0	83.9	265,600
	28	72.5	83.3	237,000
	30	71.0	82.7	213,800
	32	69.5	81.9	194,600
80	34	68.0	81.2	178,500
	36	66.4	80.3	164,700
	38	64.8	79.4	152,800
	40	63.3	78.4	142,400
	45	59.2	75.7	121,500
	50	54.9	72.5	105,700
	55	50.4	68.6	93,300
	60	45.6	64.1	83,400
	65	40.3	58.8	75,200
	70	34.4	52.2	68,300
80	75	27.4	43.9	52,500
	80	18.2	32.0	53,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
90	18	81.1	95.9	355,400
	19	80.4	95.7	346,900
	20	79.8	95.6	336,900
	22	78.5	95.2	317,400
	24	77.2	94.7	291,700
	26	75.9	94.3	264,800
	28	74.5	93.7	236,600
	30	73.2	93.2	213,400
	32	71.9	92.5	194,200
	34	70.5	91.9	178,000
90	36	69.2	91.1	164,200
	38	67.8	90.3	152,300
	40	66.4	89.5	142,000
	45	62.9	87.1	121,100
	50	59.3	84.4	105,200
	55	55.5	81.2	92,800
	60	51.5	77.5	82,900
	65	47.3	73.2	74,700
	70	42.8	68.2	67,800
	75	37.9	62.3	62,000
90	80	32.4	55.2	57,000
	85	25.8	46.2	52,600
	90	17.1	33.5	45,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
100	19	81.4	105.9	332,900
	20	80.8	105.7	327,100
	22	79.6	105.4	316,200
	24	78.5	105.0	290,800
	26	77.3	104.5	263,900
	28	76.1	104.1	236,200
	30	74.9	103.6	212,900
	32	73.7	103.0	193,700
	34	72.5	102.4	177,500
	36	71.3	101.7	163,700
100	38	70.1	101.0	151,800
	40	68.9	100.3	141,400
	45	65.8	98.2	120,500
	50	62.6	95.8	104,700
	55	59.3	93.0	92,300
	60	55.9	89.8	82,300
	65	52.4	86.2	74,100
	70	48.7	82.1	67,200
	75	44.8	77.4	61,400
	80	40.5	72.0	56,400
100	85	35.9	65.6	52,000
	90	30.7	58.0	48,200
	95	24.5	48.5	44,900
	100	16.3	35.0	39,300

Crane operator judgement must be used to allow for dynamic  
load effects of swinging, hoisting or lowering, travel, as well  
as adverse operating conditions & physical machine  
depreciation.

**OPERATOR RADIUS:** Operating is the horizontal distance  
from the axis of rotation to the center of vertical hoist line or  
load block with the load freely suspended. Add 14" to boom  
point radius for radius of sheave when using single part hoist  
line.

Boom angle is the 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, in feet,  
is the vertical distance from ground level to centerline of boom  
point shaft.

**MACHINE EQUIPMENT:** Machine equipped with 26'6"  
extendible crawlers, 48" treads, 17' retractable gantry, 12 part  
boom hoist reeving, four 1 3/8" boom pendants, 1st ctwt.  
41,900 lbs., 2nd ctwt. 41,500 lbs., 3rd ctwt. 39,000 lbs., two  
12,000 lbs. side ctwt's. and two 30,000 lbs. carbody ctwt's.

**LOAD AND WHIP LINE SPECIFICATIONS**

<b>LOAD LINE:</b> 1-1/8" - 6 x 31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 65 Ton. (Approx. Weight Per Ft. in Lbs. 2.34)
<b>WHIP LINE:</b> 1-1/8" - Warrington-Seale, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 56.5 Ton. Maximum Load - 28,300 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 2.34)

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED				DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVERFRONT OF BLOCKED CRAWLERS		OVERSIDE OF EXTENDED CRAWLERS			
BOOM LENGTH	JIB NO. 123	BOOM LENGTH	JIB NO. 123	JIB LENGTH	JIB NO. 123
260'	--	260'	--	30'	3,000 lbs.
250'	--	250'	--	40'	3,600 lbs.
240'	40'	240'	40'	50'	4,200 lbs.
230'	60'	230'	60'	60'	4,900 lbs.

Load Block, hook and weight ball on ground at start.

FOR JIB CAPACITIES, CONSULT JIB CHART.

**CAUTION! CHECK AMOUNT OF COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.**

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machine specific. Not responsible for typographical errors.





## SEE CONDITIONS ON REVERSE SIDE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
110	22	80.6	115.5	291,600
	24	79.5	115.2	282,900
	26	78.5	114.8	263,200
	28	77.4	114.3	235,800
	30	76.3	113.9	212,500
100	32	75.3	113.4	193,300
	34	74.2	112.8	177,100
	36	73.1	112.2	163,300
	38	72.0	111.6	151,400
	40	70.9	110.9	141,000
90	45	68.1	109.1	120,100
	50	65.3	106.9	104,200
	55	62.4	104.5	91,800
	60	59.4	101.7	81,800
	65	56.3	98.58	73,600
80	70	53.1	95.0	66,800
	75	49.8	91.0	60,900
	80	46.3	86.5	55,900
	85	42.6	81.4	51,600
	90	38.6	75.6	47,800
70	95	34.2	68.8	44,400
	100	29.2	60.7	41,400
	105	23.3	50.6	38,700
	110	15.5	36.4	33,900
60	22	81.4	125.6	285,000
	24	80.4	125.3	271,700
	26	79.4	125.0	259,800
	28	78.5	124.6	235,300
	30	77.5	124.1	212,100
50	32	76.5	123.7	192,800
	34	75.5	123.2	176,600
	36	74.5	122.7	162,800
	38	73.5	122.1	150,900
	40	72.5	121.5	140,500
40	45	70.0	119.8	119,500
	50	67.5	117.8	103,700
	55	64.8	115.6	91,300
	60	62.2	113.1	81,300
	65	59.4	110.3	73,100
30	70	56.6	107.2	66,200
	75	53.7	103.7	60,400
	80	50.7	99.9	55,300
	85	47.5	95.5	51,000
	90	44.2	90.7	47,200
20	95	40.7	85.2	43,800
	100	36.9	79.0	40,800
	105	32.7	71.8	38,100
	110	28.0	63.2	35,700
	115	22.3	52.6	33,500
10	24	81.2	135.5	260,000
	26	80.3	135.1	248,600
	28	79.4	134.8	234,700
	30	78.5	134.4	211,800
	32	77.6	133.9	192,500
0	34	76.7	133.5	176,300
	36	75.7	133.0	162,500
	38	74.8	132.5	150,600
	40	73.9	131.9	140,200
	45	71.6	130.4	119,300
0	50	69.3	128.6	103,400
	55	66.9	126.6	91,000
	60	64.5	124.3	81,000
	65	62.0	121.8	72,800
	70	59.5	119.0	65,900
0	75	56.9	115.9	60,000
	80	54.2	112.5	55,000
	85	51.5	108.7	50,700
	90	48.6	104.5	46,800
	95	45.6	9.8	43,500
0	100	42.4	94.7	40,500
	105	39.0	88.8	37,800
	110	35.4	82.3	35,300
	115	31.4	74.7	33,100
	120	26.8	65.7	31,100
0	125	21.4	54.5	29,300
0	26	81.0	145.3	239,700
	28	80.1	144.9	230,800
	30	79.3	144.6	211,300
	32	78.5	144.2	192,100
	34	77.6	143.7	175,800
0	36	76.8	143.5	162,000
	38	75.9	142.8	150,100
	40	75.1	142.3	139,700
	45	73.0	140.9	118,700
	50	70.8	139.2	102,800
0	55	68.6	137.4	90,400
	60	66.4	135.3	80,400
	65	64.2	133.0	72,200
	70	61.9	130.5	65,300
	75	59.5	127.7	59,500
0	80	57.1	124.6	54,400
	85	54.6	121.2	50,100
	90	52.1	117.5	46,200
	95	49.5	113.4	42,900
	100	46.7	108.9	39,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
140	105	43.8	103.9	37,200
	110	40.8	98.5	34,700
	115	37.5	92.3	32,500
	120	34.0	85.4	30,500
	125	30.2	77.4	28,700
130	130	25.8	68.0	27,000
	135	20.7	56.4	25,500
120	28	80.8	155.1	218,600
	30	80.0	154.7	210,300
	32	79.2	154.4	191,600
	34	78.5	154.0	175,400
	36	77.7	153.5	161,600
110	38	76.9	153.1	149,600
	40	76.1	152.6	139,200
	45	74.1	151.3	118,200
	50	72.1	149.8	102,400
	55	70.1	148.1	89,900
100	60	68.1	146.2	79,900
	65	66.0	144.0	71,700
	70	63.9	141.7	64,800
	75	61.7	139.1	59,000
	80	59.6	136.3	53,900
90	85	57.3	133.2	49,600
	90	55.0	129.9	45,700
	95	52.7	126.2	42,400
	100	50.2	122.3	39,400
	105	47.7	117.9	36,700
80	110	45.0	113.1	34,200
	115	42.3	107.9	32,000
	120	39.3	102.1	30,000
	125	36.2	95.7	28,200
	130	32.9	88.4	26,500
70	135	29.2	80.1	25,000
	140	25.0	70.3	23,500
	145	19.9	58.2	22,200
60	28	81.4	165.2	208,500
	30	80.6	164.9	203,500
	32	79.9	164.5	191,100
	34	79.2	164.2	174,900
	36	78.5	163.8	161,000
50	38	77.7	163.3	149,100
	40	77.0	162.9	138,700
	45	75.2	161.7	117,700
	50	73.3	160.2	101,800
	55	71.4	158.7	89,300
40	60	69.5	156.9	79,300
	65	67.6	154.9	71,100
	70	65.6	152.8	64,200
	75	63.7	150.4	58,400
	80	61.6	147.8	53,300
30	85	59.6	145.0	49,000
	90	57.5	141.9	45,100
	95	55.3	138.6	41,800
	100	53.1	135.0	38,700
	105	50.9	131.1	36,000
20	110	48.5	126.8	33,600
	115	46.1	122.2	31,400
	120	43.5	117.2	29,400
	125	40.9	111.7	27,600
	130	38.0	105.6	25,900
10	135	35.0	98.9	24,300
	140	31.8	91.3	22,900
	145	28.2	82.6	21,600
	150	24.1	72.5	20,400
	155	19.3	59.9	19,200
0	30	81.2	175.0	192,600
	32	80.5	174.7	188,400
	34	79.8	174.3	174,600
	36	79.2	174.0	160,800
	38	78.5	173.6	148,800
0	40	77.8	173.1	138,400
	45	76.0	172.0	117,400
	50	74.3	170.7	101,500
	55	72.5	169.2	89,100
	60	70.8	167.5	79,000
0	65	69.0	165.7	70,800
	70	67.2	163.7	63,900
	75	65.3	161.5	58,100
	80	63.4	159.1	53,000
	85	61.5	156.5	48,700
0	90	59.6	153.6	44,900
	95	57.6	150.6	41,500
	100	55.6	147.3	38,500
	105	53.6	143.7	35,800
	110	51.4	139.9	33,300
0	115	49.2	135.8	31,100
	120	47.0	131.3	29,100
	125	44.6	126.4	27,300
	130	42.2	121.1	25,600
	135	39.6	115.3	24,100
0	140	36.9	109.0	22,600
	145	34.0	102.0	21,300
	150	30.8	94.1	20,100
	155	27.3	85.1	18,900
	160	23.4	74.6	17,800
0	165	18.7	61.6	16,400

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
180	32	81.1	184.8	180,000
	34	80.4	184.5	174,100
	36	79.8	184.1	160,300
	38	79.1	183.8	148,300
	40	78.5	183.4	137,900
	45	76.8	182.3	116,900
	50	75.2	181.0	101,000
	55	73.5	179.6	88,500
	60	71.9	178.1	78,500
	65	70.2	176.3	70,300
	70	68.5	174.5	63,400
	75	66.8	172.4	57,500
	80	65.0	170.2	52,500
	85	63.3	167.7	48,100
	90	61.5	165.1	44,300
	95	59.6	162.3	40,900
	100	57.8	159.3	37,900
	105	55.9	156.0	35,200
	110	53.9	152.5	32,700
	115	51.9	148.7	30,500
190	120	49.9	144.6	28,500
	125	47.8	140.3	26,700
	130	45.6	135.5	25,000
	135	43.3	130.4	23,500
	140	40.9	124.9	22,000
	145	38.4	118.9	20,700
	150	35.8	112.3	19,500
	155	33.0	105.0	18,300
	160	29.9	96.8	17,200
	165	26.6	87.5	16,200
	170	22.7	76.6	15,300
	175	18.2	63.2	13,500
	32	81.5	194.9	171,000
	34	80.9	194.6	166,100
	36	80.3	194.3	159,800
	38	79.7	193.9	147,900
	40	79.1	193.6	137,400
	45	77.5	192.5	116,400
	50	76.0	191.3	100,500
	55	74.4	190.0	88,000
60	72.9	188.6	78,000	
65	71.3	186.9	69,700	
200	70	69.7	185.2	62,800
	75	68.1	183.1	57,000
	80	66.4	181.0	52,100
	85	64.8	178.9	47,600
	90	63.1	176.4	43,800
	95	61.4	173.8	40,400
	100	59.7	171.0	37,400
	105	57.9	167.9	34,700
	110	56.1	164.7	32,200
	115	54.3	161.2	30,000
	120	52.4	157.5	28,000
	125	50.4	153.5	26,200
	130	48.5	149.2	24,500
	135	46.4	144.6	22,900
	140	44.3	139.7	21,500
	145	42.1	134.4	20,200
	150	39.8	128.6	18,900
	155	37.4	122.3	17,800
	160	34.8	115.5	16,700
	165	32.1	107.9	15,700
210	170	29.1	99.4	14,800
	175	25.8	89.8	13,900
	180	22.1	78.6	13,100
	185	17.7	64.8	11,000
	34	81.4	204.7	157,200
	36	80.8	204.4	153,500
	38	80.2	204.1	147,400
	40	79.6	203.7	136,900
	45	78.2	202.8	115,900
	50	76.7	201.6	100,000
	55	75.2	200.4	87,500
	60	73.7	199.0	77,400
	65	72.2	197.5	69,200
	70	70.7	195.8	62,300
	75	69.2	194.0	56,400
	80	67.7	192.0	51,400
	85	66.1	189.9	47,000
	90	64.5	187.6	43,200
	95	62.9	185.1	39,800
	220	100	61.3	182.5
105		59.7	179.6	34,100
110		58.0	176.6	31,600
115		56.3	173.4	29,400
120		54.5	169.9	27,400
125		52.8	166.2	25,600
130		50.9	162.3	23,900
135		49.1	158.1	22,300
140		47.2	153.6	20,900
145		45.2	148.8	19,600
150		43.1	143.7	18,300
155		41.0	138.1	17,200
160		38.7	132.2	16,100
165		36.4	125.7	15,100
170		33.9	118.6	14,200



**LIFTCRANE CAPACITIES - 4100W SERIES 2**  
**BOOM NO. 22C WITH OPEN THROAT TOP, CONTINUED.**

**SEE CONDITIONS ON FRONT PAGE**

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>2 3 0</b>	38	81.5	234.5	132,900
	40	81.0	234.2	125,200
	45	79.7	233.3	114,500
	50	78.5	232.4	98,600
	55	77.2	231.3	86,100
	60	75.9	230.1	76,100
	65	74.6	228.8	67,800
	70	73.3	227.3	60,900
	75	72.0	225.8	55,000
	80	70.7	224.1	50,000
	85	69.4	222.3	45,600
	90	68.0	220.3	41,700
	95	66.7	218.2	38,400
	100	65.3	216.0	35,300
	105	64.0	213.6	32,600
<b>2 4 0</b>	110	62.6	211.1	30,200
	115	61.1	208.4	28,000
	120	59.7	205.6	26,000
	125	58.3	202.6	24,100
	130	56.8	199.4	22,400
	135	55.3	196.0	20,900
	140	53.8	192.5	19,400
	145	52.2	188.7	18,100
	150	50.6	184.7	16,900
	155	49.0	180.5	15,700
	160	47.3	176.0	14,700
	165	45.6	171.3	13,600
	170	43.8	166.2	12,700
	175	42.0	160.8	11,800
	180	40.1	155.1	11,000
<b>2 4 0</b>	185	38.1	148.9	10,200
	190	36.0	142.3	9,400
	195	33.9	135.1	8,700
	200	31.6	127.3	8,100
	205	29.1	118.8	7,400
	210	26.4	109.3	6,800
<b>2 4 0</b>	40	81.4	244.3	123,400
	45	80.2	243.5	112,600
	50	78.9	242.6	98,100
	55	77.7	241.5	85,600
	60	76.5	240.4	75,600
	65	75.3	239.1	67,300
	70	74.0	237.7	60,400
	75	72.8	236.3	54,500
	80	71.5	234.6	49,500
	85	70.3	232.9	45,100
	90	69.0	231.1	41,200
	95	67.7	229.1	37,800
	100	66.4	227.0	34,800
	105	65.1	224.7	32,100
	110	63.8	222.3	29,700
<b>2 4 0</b>	115	62.5	219.8	27,400
	120	61.1	217.1	25,400
	125	59.7	214.3	23,600
	130	58.3	211.3	21,900
	135	56.9	208.1	20,300
	140	55.5	204.7	18,900
	145	54.0	201.2	17,600
	150	52.5	197.5	16,300
	155	51.0	193.5	15,200
	160	49.5	189.4	14,100
	165	47.9	185.0	13,100
	170	46.2	180.3	12,200
	175	44.6	175.4	11,300
	180	42.8	170.2	10,400
	185	41.0	164.6	9,600
<b>2 4 0</b>	190	39.2	158.7	8,900
	195	37.3	152.3	8,200
	200	35.2	145.5	7,500
	205	33.1	138.1	6,700
	210	30.9	130.1	6,000

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>2 5 0</b>	45	80.6	253.6	106,600
	50	79.4	252.7	97,800
	55	78.2	251.7	85,200
	60	77.1	250.6	75,200
	65	75.9	249.4	66,900
	70	74.7	248.1	60,000
	75	73.5	246.7	54,100
	80	72.3	245.2	49,100
	85	71.1	243.5	44,700
	90	69.9	241.7	40,800
	95	68.7	239.8	37,400
	100	67.4	237.8	34,400
	105	66.2	235.7	31,700
	110	64.9	233.4	29,300
	115	63.6	231.0	27,100
<b>2 5 0</b>	120	62.4	228.5	25,000
	125	61.1	225.8	23,200
	130	59.7	222.9	21,500
	135	58.4	219.9	20,000
	140	57.0	216.8	18,500
	145	55.7	213.4	17,200
	150	54.3	209.9	16,000
	155	52.8	206.2	14,800
	160	51.4	202.4	13,700
	165	49.9	198.3	12,700
	170	48.4	193.9	11,800
	175	46.8	189.4	10,900
	180	45.3	184.5	10,100
	185	43.6	179.4	9,300
	190	41.9	174.0	8,500
<b>2 6 0</b>	195	40.2	168.3	7,800
	200	38.4	162.2	7,000
	205	36.5	155.7	6,200
	210	34.5	148.6	5,500
	45	80.9	263.7	104,800
	50	79.8	262.9	95,700
	55	78.7	261.9	84,700
	60	77.6	260.9	74,700
	65	76.4	259.7	66,400
	70	75.3	258.5	59,500
	75	74.2	257.1	53,600
	80	73.0	255.6	48,500
	85	71.8	254.1	44,100
	90	70.7	252.4	40,300
	95	69.5	250.6	36,900
<b>2 6 0</b>	100	68.3	248.6	33,900
	105	67.1	246.6	31,100
	110	65.9	244.4	28,700
	115	64.7	242.1	26,500
	120	63.5	239.7	24,500
	125	62.3	237.1	22,600
	130	61.0	234.4	20,900
	135	59.7	231.6	19,400
	140	58.5	228.6	17,900
	145	57.2	225.4	16,600
	150	55.8	222.1	15,400
	155	54.5	218.7	14,200
	160	53.1	215.0	13,100
	165	51.7	211.2	12,100
<b>2 6 0</b>	170	50.3	207.1	11,200
	175	48.9	202.9	10,300
	180	47.4	198.4	9,500
	185	45.9	193.7	8,700
	190	44.3	188.7	7,900
	195	42.7	183.4	7,000
<b>2 6 0</b>	200	41.1	177.8	6,200
	205	39.4	171.9	5,400
	210	37.6	165.6	4,700



**LIFT CRANE CAPACITIES****MEETS ANSI B30.5  
REQUIREMENTS**

BOOM NO. 22C WITH OPEN THROAT TOP OFFSET 4 1/2 DEGREES

146,400 LB. CRANE COUNTERWEIGHT

60,000 LB. CARBODY COUNTERWEIGHT

26'6" CRAWLERS EXTENDED

**WARNING:** This chart will apply only when two 12,000 lb. side ctwts. and two 30,000 lb. carbody ctwts. bear MEC registered Serial Numbers.

**LIFTING CAPACITIES:** Capacities for various boom lengths and operating radii may be based on percent of tipping, strength of structural components, operating speeds and other factors.

Capacities are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are shown by shaded areas.

Capacities are shown in pounds. Deduct 1200 pounds from capacities listed when single sheave upper boom point is attached and 1500 pounds when two sheave upper boom point is attached. To comply with B30.5 requirements, upper boom point cannot be used on the 260 ft. boom. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., 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.

**OPERATING CONDITIONS:** Machine to operate in a level position on a firm surface with crawlers fully extended and gantry in working position and be rigged in accordance with and under conditions referred to in rigging drawing No. 190693 and load line specification chard No. 6592-A.

**HOIST REEVING FOR MAIN LOAD BLOCK**

No. Parts Of Line	1	2	3	4	5	6
Max. Load - Lbs.	32,500	65,000	97,500	130,000	162,500	195,000
No. Parts Of Line	7	8	9	10	11	12
Max. Load - Lbs.	227,500	260,000	292,500	325,000	357,500	400,000
No. Parts Of Line	13					
Max. Load - Lbs.	430,000					

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
70	16.5	82.4	76.1	420,000
	17	82.0	76.0	398,900
	18	81.2	75.8	380,100
	19	80.3	75.6	363,000
	20	79.5	75.4	347,300
	22	77.8	74.9	319,600
	24	76.1	74.3	293,400
	26	74.4	73.7	266,100
	28	72.7	73.0	237,500
	30	71.0	72.3	214,300
	32	69.2	71.4	195,100
	34	67.4	70.5	178,900
	36	65.6	69.5	165,200
	38	63.7	68.5	153,300
	40	61.8	67.3	143,000
	45	57.0	64.0	122,100
	50	51.8	60.1	106,300
	55	46.1	55.3	93,900
	60	39.8	49.4	84,000
	65	32.4	41.8	75,800
	70	22.7	31.0	63,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
80	17	83.0	86.2	315,400
	18	82.3	86.0	309,400
	19	81.6	85.8	303,600
	20	80.8	85.6	298,200
	22	79.4	85.2	286,000
	24	77.9	84.7	278,700
	26	76.4	84.2	265,600
	28	74.9	83.6	237,000
	30	73.4	82.9	213,800
	32	71.9	82.2	194,600
	34	70.4	81.4	178,500
	36	68.8	80.6	164,700
	38	67.3	79.7	152,800
	40	65.7	78.7	142,400
	45	61.6	76.0	121,500
	50	57.4	72.7	105,700
	55	52.9	68.9	93,300
	60	48.1	64.5	83,400
	65	42.9	59.1	75,200
	70	37.0	52.6	68,300
	75	30.1	44.4	62,500
	80	21.0	32.7	53,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
90	19	82.5	96.0	276,700
	20	81.9	95.8	271,500
	22	80.6	95.4	261,300
	24	79.3	95.0	252,900
	26	78.0	94.5	244,800
	28	76.7	94.0	236,600
	30	75.3	93.4	213,400
	32	74.0	92.8	194,200
	34	72.7	92.1	178,000
	36	71.3	91.4	164,200
	38	69.9	90.6	152,300
	40	68.6	89.7	142,000
	45	65.1	87.4	121,100
	50	61.4	84.6	105,200
	55	57.7	81.4	92,800
	60	53.7	77.7	82,900
	65	49.5	73.5	74,700
	70	45.1	68.5	67,800
	75	40.2	62.7	62,000
	80	34.7	55.6	57,000
	85	28.2	46.7	52,600
	90	19.7	34.3	49,900

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
100	20	82.7	105.9	258,300
	22	81.5	105.6	248,700
	24	80.4	105.2	240,100
	26	79.2	104.8	232,100
	28	78.0	104.3	224,800
	30	76.8	103.8	212,900
	32	75.7	103.2	193,700
	34	74.5	102.6	177,500
	36	73.3	102.0	163,700
	38	72.0	101.3	151,800
	40	70.8	100.5	141,400
	45	67.7	98.5	120,500
	50	64.6	96.0	104,700
	55	61.3	93.3	92,300
	60	57.9	90.1	82,300
	65	54.4	86.5	74,100
	70	50.7	82.4	67,200
	75	46.8	77.7	61,400
	80	42.6	72.3	56,400
	85	38.0	66.0	52,000
	90	32.8	58.5	48,200
	95	26.6	49.0	44,900
	100	18.6	35.8	39,300

Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions & physical machine depreciation.

**OPERATOR RADIUS:** Operating is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 14" to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the 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, in feet, is the vertical distance from ground level to centerline of boom point shaft.

**MACHINE EQUIPMENT:** Machine equipped with 26'6" extendible crawlers, 48" treads, 17' retractable gantry, 12 part boom hoist reeving, four 1 3/8" boom pendants, 1st cwt. 41,900 lbs., 2nd cwt. 41,500 lbs., 3rd cwt. 39,000 lbs., two 12,000 lbs. side cwt's. and two 30,000 lbs. carbody cwt's.

**LOAD AND WHIP LINE SPECIFICATIONS**

<b>LOAD LINE:</b> 1-1/8" - 6 x 31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 65 Ton. (Approx. Weight Per Ft. in Lbs. 2.34)
<b>WHIP LINE:</b> 1-1/8" - Warrington-Seale, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 56.5 Ton. Maximum Load - 28,300 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 2.34)

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED				DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVERFRONT OF BLOCKED CRAWLERS		OVERSIDE OF EXTENDED CRAWLERS		JIB LENGTH	JIB NO. 123
BOOM LENGTH	JIB NO. 123	BOOM LENGTH	JIB NO. 123	JIB LENGTH	JIB NO. 123
260'	--	260'	--	30'	3,000 lbs.
250'	--	250'	--	40'	3,600 lbs.
240'	40'	240'	40'	50'	4,200 lbs.
230'	60'	230'	60'	60'	4,900 lbs.

Load Block, hook and weight ball on ground at start.

FOR JIB CAPACITIES, CONSULT JIB CHART.

**CAUTION! CHECK AMOUNT OF COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.**

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## SEE CONDITIONS ON REVERSE SIDE

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>110</b>	22	82.3	115.7	240,500
	24	81.3	115.4	232,100
	26	80.2	115.0	224,400
	28	79.1	114.6	217,300
	30	78.1	114.1	210,700
	32	77.0	113.6	193,300
	34	75.9	113.1	177,100
	36	74.8	112.5	163,300
	38	73.7	111.8	151,400
	40	72.6	111.2	141,000
<b>110</b>	45	69.9	109.3	120,100
	50	67.0	107.2	104,200
	55	64.1	104.7	91,800
	60	61.2	101.9	81,800
	65	58.1	98.8	73,600
	70	54.9	95.3	66,800
	75	51.6	91.3	60,900
	80	48.1	86.8	55,900
	85	44.4	81.7	51,600
	90	40.4	75.9	47,800
<b>110</b>	95	36.1	69.2	44,400
	100	31.1	61.1	41,400
	105	25.3	51.1	38,700
	110	17.6	37.2	33,900
<b>120</b>	22	83.0	125.9	228,700
	24	82.0	125.5	220,500
	26	81.0	125.2	213,000
	28	80.0	124.8	206,100
	30	79.1	124.4	199,700
	32	78.1	123.9	192,800
	34	77.1	123.4	186,600
	36	76.1	122.9	180,800
	38	75.1	122.3	175,500
	40	74.1	121.7	170,500
<b>120</b>	45	71.6	120.0	159,500
	50	69.1	118.1	143,700
	55	66.5	115.9	131,300
	60	63.8	113.4	121,300
	65	61.1	110.6	113,100
	70	58.3	107.5	106,200
	75	55.4	104.0	100,400
	80	52.4	100.1	95,300
	85	49.2	95.8	90,800
	90	45.9	91.0	86,700
<b>120</b>	95	42.4	85.5	83,800
	100	38.6	79.4	80,800
	105	34.4	72.2	77,800
	110	29.7	63.7	74,700
	115	24.1	53.2	71,500
<b>130</b>	24	82.6	135.7	212,700
	26	81.7	135.3	205,300
	28	80.8	135.0	198,600
	30	79.9	134.6	192,300
	32	79.0	134.2	186,500
	34	78.1	133.7	181,300
	36	77.2	133.2	176,500
	38	76.3	132.7	172,100
	40	75.4	132.1	168,100
	45	73.1	130.6	159,300
<b>130</b>	50	70.8	128.8	153,400
	55	68.4	126.8	147,000
	60	66.0	124.6	141,000
	65	63.5	122.0	135,400
	70	61.0	119.2	130,200
	75	58.4	116.1	125,400
	80	55.7	112.7	121,000
	85	53.0	108.9	117,000
	90	50.1	104.8	113,400
	95	47.1	100.1	110,100
<b>130</b>	100	43.9	95.0	107,000
	105	40.6	89.2	104,000
	110	36.9	82.6	101,000
	115	33.0	75.1	98,000
	120	28.5	66.1	95,000
	125	23.1	55.1	92,000
<b>140</b>	26	82.3	145.5	198,400
	28	81.5	145.1	191,800
	30	80.7	144.8	185,600
	32	79.8	144.4	179,900
	34	79.0	144.0	174,700
	36	78.1	143.5	169,000
	38	77.3	143.0	163,800
	40	76.5	142.5	159,100
	45	74.3	141.1	154,700
	50	72.2	139.4	150,800
<b>140</b>	55	70.0	137.6	147,400
	60	67.8	135.5	144,400
	65	65.6	133.2	141,800
	70	63.3	130.7	139,500
	75	60.9	127.9	137,500
	80	58.5	124.8	135,800
	85	56.1	121.4	134,400
	90	53.5	117.7	133,200
	95	50.9	113.7	132,100
	100	48.1	109.2	131,100

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>140</b>	105	45.3	104.2	37,200
	110	42.2	98.8	34,700
	115	39.0	92.7	32,500
	120	35.5	85.7	30,500
	125	31.7	77.8	28,700
	130	27.4	68.5	27,000
	135	22.2	57.0	25,500
	28	82.1	155.3	185,600
	30	81.3	154.9	179,600
	32	80.5	154.6	174,000
<b>140</b>	34	79.7	154.2	168,800
	36	79.0	153.8	161,600
	38	78.2	153.3	149,600
	40	77.4	152.8	139,200
	45	75.4	151.5	118,200
	50	73.4	150.0	102,400
	55	71.4	148.3	89,900
	60	69.4	146.4	79,900
	65	67.3	144.3	71,700
	70	65.2	141.9	64,800
<b>140</b>	75	63.0	139.4	59,000
	80	60.9	136.6	53,900
	85	58.6	133.5	49,600
	90	56.3	130.1	45,700
	95	54.0	126.5	42,400
	100	51.5	122.5	39,400
	105	49.0	118.2	36,700
	110	46.4	113.4	34,200
	115	43.6	108.2	32,000
	120	40.7	102.4	30,000
<b>140</b>	125	37.6	96.0	28,200
	130	34.2	88.8	26,500
	135	30.5	80.5	25,000
	140	26.4	70.8	23,500
	145	21.4	58.8	22,200
	28	82.6	165.4	179,800
	30	81.8	165.1	173,900
	32	81.1	164.7	168,400
	34	80.4	164.4	163,400
	36	79.7	164.0	158,600
<b>140</b>	38	78.9	163.6	149,100
	40	78.2	163.1	138,700
	45	76.3	161.9	117,700
	50	74.5	160.5	101,800
	55	72.6	158.9	89,300
	60	70.7	157.1	79,300
	65	68.8	155.1	71,100
	70	66.8	153.0	64,200
	75	64.9	150.6	58,400
	80	62.9	148.0	53,300
<b>140</b>	85	60.8	145.2	49,000
	90	58.7	142.2	45,100
	95	56.6	138.8	41,800
	100	54.4	135.2	38,700
	105	52.1	131.4	36,000
	110	49.7	127.1	33,600
	115	47.3	122.5	31,400
	120	44.8	117.5	29,400
	125	42.1	112.0	27,600
	130	39.3	105.9	25,900
<b>140</b>	135	36.3	99.2	24,300
	140	33.1	91.7	22,900
	145	29.5	83.0	21,600
	150	25.5	72.9	20,400
	155	20.7	60.5	19,200
	30	82.3	175.2	169,000
	32	81.6	174.9	163,600
	34	81.0	174.5	158,700
	36	80.3	174.2	154,000
	38	79.6	173.8	148,800
<b>140</b>	40	78.9	173.3	138,400
	45	77.2	172.2	117,400
	50	75.4	170.9	101,500
	55	73.7	169.4	89,100
	60	71.9	167.7	79,000
	65	70.1	165.9	70,800
	70	68.3	163.9	63,900
	75	66.4	161.7	58,100
	80	64.6	159.3	53,000
	85	62.7	156.7	48,700
<b>140</b>	90	60.8	153.9	44,900
	95	58.8	150.8	41,500
	100	56.8	147.5	38,500
	105	54.7	144.0	35,800
	110	52.6	140.2	33,300
	115	50.4	136.0	31,100
	120	48.1	131.5	29,100
	125	45.8	126.7	27,300
	130	43.3	121.4	25,600
	135	40.8	115.7	24,100
<b>140</b>	140	38.1	109.3	22,600
	145	35.2	102.3	21,300
	150	32.0	94.5	20,100
	155	28.6	85.5	18,900
	160	24.7	75.1	17,800
	165	20.0	62.2	16,400

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>140</b>	32	82.1	185.0	158,700
	34	81.5	184.7	154,000
	36	80.8	184.3	149,500
	38	80.2	184.0	145,200
	40	79.5	183.6	137,900
	45	77.9	182.5	116,900
	50	76.3	181.2	101,000
	55	74.6	179.8	88,500
	60	72.9	178.3	78,500
	65	71.3	176.6	70,300
<b>140</b>	70	69.6	174.7	63,400
	75	67.8	172.6	57,500
	80	66.1	170.4	52,500
	85	64.3	168.0	48,100
	90	62.5	165.4	44,300
	95	60.7	162.5	40,900
	100	58.9	159.5	37,900
	105	57.0	156.2	35,200
	110	55.0	152.7	32,700
	115	53.0	149.0	30,500
<b>140</b>	120	51.0	144.9	28,500
	125	48.9	140.5	26,700
	130	46.7	135.8	25,000
	135	44.4	130.7	23,500
	140	42.0	125.2	22,000
	145	39.6	119.2	20,700
	150	36.9	112.6	19,500
	155	34.1	105.3	18,300
	160	31.1	97.2	17,200
	165	27.7	87.9	16,200
<b>140</b>	170	23.9	77.1	15,300
	175	19.4	63.8	13,500
	32	82.5	195.1	153,100
	34	81.9	194.8	148,800





## LIFT CRANE CAPACITIES - 4100W SERIES 2

BOOM NO. 22C WITH OPEN THROAT TOP OFFSET 4 1/2 DEGREES, CONTINUED

**SEE CONDITIONS ON FRONT PAGE**

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>230</b>	38	82.3	234.7	119,600
	40	81.8	234.4	117,100
	45	80.6	233.5	111,200
	50	79.3	232.5	98,600
	55	78.0	231.5	86,100
	60	76.7	230.3	76,100
	65	75.4	229.0	67,800
	70	74.2	227.5	60,900
	75	72.9	226.0	55,000
	80	71.5	224.3	50,000
	85	70.2	222.5	45,600
	90	68.9	220.5	41,700
	95	67.5	218.4	38,400
	100	66.2	216.2	35,300
	105	64.8	213.8	32,600
	110	63.4	211.3	30,200
	115	62.0	208.7	28,000
	120	60.6	205.8	26,000
	125	59.1	202.8	24,100
	130	57.6	199.6	22,400
<b>240</b>	135	56.1	196.3	20,900
	140	54.6	192.7	19,400
	145	53.0	189.0	18,100
	150	51.5	185.0	16,900
	155	49.8	180.7	15,700
	160	48.2	176.3	14,700
	165	46.4	171.5	13,600
	170	44.7	166.5	12,700
	175	42.8	161.1	11,800
	180	40.9	155.4	11,000
	185	39.0	149.2	10,200
	190	36.9	142.6	9,400
	195	34.7	135.5	8,700
	200	32.4	127.7	8,100
	205	30.0	119.2	7,400
	210	27.3	109.7	6,800
	40	82.2	244.5	111,700
	45	81.0	243.7	106,300
	50	79.7	242.7	98,100
	55	78.5	241.7	85,600
	60	77.3	240.6	75,600
<b>260</b>	65	76.1	239.3	67,300
	70	74.8	237.9	60,400
	75	73.6	236.5	54,500
	80	72.3	234.8	49,500
	85	71.1	233.1	45,100
	90	69.8	231.3	41,200
	95	68.5	229.3	37,800
	100	67.2	227.2	34,800
	105	65.9	224.9	32,100
	110	64.6	222.5	29,700
	115	63.3	220.0	27,400
	120	61.9	217.3	25,400
	125	60.5	214.5	23,600
	130	59.1	211.5	21,900
	135	57.7	208.3	20,300
	140	56.3	205.0	18,900
	145	54.8	201.4	17,600
	150	53.3	197.7	16,300
	155	51.8	193.8	15,200
	160	50.3	189.6	14,100
<b>280</b>	165	48.7	185.2	13,100
	170	47.1	180.6	12,200
	175	45.4	175.7	11,300
	180	43.7	170.4	10,400
	185	41.9	164.9	9,600
	190	40.0	159.0	8,900
	195	38.1	152.6	8,200
	200	36.1	145.8	7,500
	205	34.0	138.5	6,700
	210	31.7	130.5	6,000

BOOM LGTH FEET	OPER. RAD. FEET	BOOM ANG DEG.	BOOM POINT ELEV.	CAPACITY: CRAWLERS EXTENDED
<b>250</b>	45	81.3	253.8	101,500
	50	80.2	252.9	96,900
	55	79.0	251.9	85,200
	60	77.8	250.8	75,200
	65	76.6	249.6	66,900
	70	75.5	248.3	60,000
	75	74.3	246.9	54,100
	80	73.1	245.4	49,100
	85	71.9	243.7	44,700
	90	70.6	241.9	40,800
	95	69.4	240.1	37,400
	100	68.2	238.0	34,400
	105	66.9	235.9	31,700
	110	65.7	233.6	29,300
	115	64.4	231.2	27,100
	120	63.1	228.7	25,000
	125	61.8	226.0	23,200
	130	60.5	223.1	21,500
	135	59.2	220.2	20,000
	140	57.8	217.0	18,500
<b>260</b>	145	56.4	213.7	17,200
	150	55.1	210.2	16,000
	155	53.6	206.5	14,800
	160	52.2	202.6	13,700
	165	50.7	198.5	12,700
	170	49.2	194.2	11,800
	175	47.6	189.6	10,900
	180	46.0	184.8	10,100
	185	44.4	179.7	9,300
	190	42.7	174.3	8,500
	195	41.0	168.6	7,800
	200	39.2	162.5	7,000
	205	37.3	156.0	6,200
	210	35.3	149.0	5,500
	45	81.7	263.9	96,500
	50	80.5	263.1	92,300
	55	79.4	262.1	84,700
	60	78.3	261.1	74,700
	65	77.2	259.9	66,400
	70	76.0	258.7	59,500
	75	74.9	257.3	53,600
	80	73.7	255.8	48,500
	85	72.6	254.3	44,100
	90	71.4	252.6	40,300
<b>280</b>	95	70.3	250.8	36,900
	100	69.1	248.8	33,900
	105	67.9	246.8	31,100
	110	66.7	244.6	28,700
	115	65.5	242.3	26,500
	120	64.2	239.9	24,500
	125	63.0	237.3	22,600
	130	61.8	234.6	20,900
	135	60.5	231.8	19,400
	140	59.2	228.8	17,900
	145	57.9	225.7	16,600
	150	56.6	222.4	15,400
	155	55.2	218.9	14,200
	160	53.9	215.2	13,100
	165	52.5	211.4	12,100
	170	51.1	207.4	11,200
	175	49.6	203.1	10,300
	180	48.2	198.6	9,500
	185	46.6	193.9	8,700
	190	45.1	188.9	7,900
	195	43.5	183.7	7,000
	200	41.8	178.1	6,200
	205	40.1	172.2	5,400
	210	38.4	165.9	4,700



## Manitowoc 4100W

## JIB LIFTING CAPACITIES

4100W

Meets ANSI B30.5 Requirements SERIES 2

## JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

## 0 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6924-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1<sup>1/2</sup> inch - 6 x 31 IPS, IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOM LENGTH - FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39500	39100	38600	38000	37500	95
	100	40000	40000	40000	39800	39200	38600	38200	37600	37100	36500	36100	35500	35000	34400	100
	105	38700	38100	37700	37000	36500	35800	35500	34900	34300	33700	33300	32800	32200	31700	105
	110	36300	35600	35200	34600	34000	33400	33000	32400	31900	31300	30900	30300	29800	29200	110
	115	34100	33400	33000	32400	31800	31200	30800	30200	29600	29000	28600	28100	27500	27000	115
	120	32100	31400	31000	30300	29800	29100	28800	28200	27600	27000	26600	26000	25500	25000	120
	130		27900	27400	26800	26200	25600	25200	24600	24100	23500	23100	22500	21900	21400	130
	140			24400	23800	23200	22600	22200	21600	21000	20400	20000	19400	18900	18400	140
	150				21200	20600	20000	19600	19000	18500	17800	17400	16900	16300	15800	150
	160					18400	17800	17400	16800	16200	15600	15200	14600	14100	13500	160
	170							15400	14800	14200	13600	13200	12600	12100	11500	170
40 FOOT JIB	180								13100	12500	11900	11500	10900	10300	9800	180
	190									11000	10300	9900	9300	8800	8200	190
	200										8900	8600	8000	7400	6600	200
	210											7300	6600	5800	5100	210
	105+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	105+
	110	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	29600	110
	115	30000	30000	30000	30000	30000	30000	30000	30000	30000	29400	29000	28400	27900	27300	115
	120	29600	30000	30000	30000	30000	29500	29100	28500	28000	27400	27000	26400	25800	25300	120
	125	28400	29900	29500	28800	28300	27600	27300	26700	26100	25500	25100	24500	24000	23400	125
	130	27300	28200	27800	27100	26600	25900	25600	25000	24400	23800	23400	22800	22300	21700	130
	140		25200	24800	24100	23600	22900	22500	21900	21400	20800	20400	19800	19200	18700	140
	150			22200	21500	21000	20300	20000	19300	18800	18200	17800	17200	16600	16100	150
50 FOOT JIB	160				19300	18700	18100	17700	17100	16500	15900	15500	14900	14400	13800	160
	170					16100	15700	15100	14600	13900	13500	12900	12400	11800	11300	170
	180						14000	13400	12800	12200	11800	11200	10600	10100	9500	180
	190							11800	11300	10600	10200	9600	9100	8500	8000	190
	200								9900	9300	8900	8300	7700	7000	6400	200
	210									8000	7600	7000	6200	5400	4800	210
	135+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	135+
	140	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	140
	145		20000	20000	20000	20000	20000	20000	20000	20000	19600	19200	18600	18100	17600	145
	150		20000	20000	20000	20000	20000	20000	20000	19600	19000	18400	17800	17200	16600	150
	155			20000	20000	20000	19400	19000	18400	17800	17200	16800	16200	15700	15100	155
	160			20000	19500	19000	18300	17900	17300	16800	16100	15700	15100	14600	14000	160
	170				17600	17000	16400	16000	15300	14800	14200	13800	13200	12600	12000	170
	180					14600	14200	13600	13000	12400	12000	11400	10900	10300	9700	180
60 FOOT JIB	190							12700	12100	11500	10900	10500	9900	9300	8700	190
	200								10700	10100	9500	9100	8500	7900	7300	200
	210									8900	8200	7800	7200	6500	5900	210
	220										7100	6700	5900	5100	4300	220
	150+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	150+
	155		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	155
	160		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	160
	170			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	170
	180				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	180
	190					10000	10000	10000	10000	10000	10000	10000	10000	10000	9400	190
	200						10000	10000	10000	10000	10000	10000	10000	9400	8800	200
	210							9600	9000	8400	8000	7400	6800	6200	5600	210
60 FOOT JIB	220									7900	7300	6800	6100	5300	4500	220
	230										6200	5600	4800	4000	3200	230

These load charts are intended for instructional purposes only. They were derived from manufacturer sales information which may not be complete or machine specific. Not responsible for typographical errors.





## Manitowoc 4100W

## JIB LIFTING CAPACITIES

4100W

JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

Meets ANSI B30.5 Requirements SERIES 2

## 10 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6934-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1 1/8 inch - 6 x 31 IPS, IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOMLENGTH- FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39900	39500	38900	38400	37900	95
	100	38600	40000	40000	40000	39800	39200	38900	38300	37800	37200	36900	36300	35800	35400	100
	105	37200	38500	38100	37500	37000	36400	36100	35500	35000	34500	34100	33600	33100	32600	105
	110	36900	36000	35600	35000	34500	33900	33600	33000	32500	32000	31600	31000	30500	30000	110
	115		33800	33400	32800	32300	31700	31300	30800	30200	29700	29300	28800	28300	27700	115
	120		31700	31300	30700	30200	29600	29300	28700	28200	27600	27200	26700	26200	25700	120
	125			29400	28800	28300	27700	27400	26800	26300	25700	25300	24800	24300	23800	125
	130				27100	26600	26000	25600	25100	24600	24000	23600	23100	22500	22000	130
	140					23500	22900	22600	22000	21500	20900	20500	20000	19500	18900	140
	150						20300	19900	19400	18800	18300	17900	17300	16800	16300	150
	160								17100	16500	16000	15600	15000	14500	14000	160
40 FOOT JIB	170									14500	13900	13600	13000	12500	11900	170
	180										12200	11800	11200	10700	10200	180
	190												9600	9100	8600	190
	200													7700	7000	200
	100+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	100+
	105	29100	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	27700	105
	110	28000	29300	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	110
	115	27100	28300	29500	30000	30000	30000	30000	30000	30000	30000	29900	29300	28900	28300	115
	120	26200	27400	28600	29700	30000	30000	29800	29200	28700	28100	27800	27200	26700	26200	120
	125		26600	27700	28800	28800	28200	27900	27300	26800	26200	25900	25300	24800	24300	125
	130		25900	26900	27600	27100	26500	26100	25600	25100	24500	24100	23600	23100	22600	130
	140				24500	24000	23400	23000	22500	22000	21400	21000	20500	20000	19400	140
50 FOOT JIB	150					21300	20700	20400	19800	19300	18700	18300	17800	17300	16800	150
	160						18400	18100	17500	17000	16400	16000	15500	15000	14400	160
	170								15500	15000	14400	14000	13400	12900	12400	170
	180									13200	12600	12200	11600	11100	10600	180
	190												10600	9500	9000	190
	200													8600	7600	200
	130+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		130+
	135	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		135
	140		20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		140
	145		20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	19400	18900		145
	150				20000	20000	20000	20000	20000	19700	19100	18700	18200	17600		150
	155				20000	20000	19900	19500	19000	18500	17900	17500	17000	16400		155
	160					19400	18800	18400	17900	17300	16800	16400	15800	15300		160
	165						17700	17400	16800	16300	15700	15300	14800	14300		165
60 FOOT JIB	170						16700	16400	15800	15300	14700	14300	13800	13300		170
	180								14000	13500	12900	12500	12000	11500		180
	190									11900	11300	10900	10400	9800		190
	200										9900	9500	8900	8400		200
	140+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		140+
	145		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		145
	150		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		150
60 FOOT JIB	155			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		155
	160				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		160
	170					10000	10000	10000	10000	10000	10000	10000	10000	10000		170
	180						10000	10000	10000	10000	10000	10000	10000	10000		180
	190							10000	10000	10000	10000	10000	10000	10000		190
	200									10000	10000	9700	9200	8700		200
	210										8800	8400	7900	7300		210





## Manitowoc 4100W

## JIB LIFTING CAPACITIES

4100W

JIB NO. 123 WITH 12' 6" STRUT ON BOOM NO. 22C WITH OPEN THROAT TOP 26' 6" CRAWLERS EXTENDED

Meets ANSI B30.5 Requirements SERIES 2

20 DEGREE JIB OFFSET ANGLE

Chart supplement boom capacity chart No. 6924-A. Capacities are for freely suspended loads based on tipping, strength of structural components or other factors. Crane operator judgement must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions and physical machine depreciation.

Capacities do not exceed 75% of a static tipping load with machine on firm level surface. Capacities based on structural competence are denoted

by shaded areas. Operating radius is the horizontal distance from axis of rotation to the center of vertical hoist line or load block. Weight of all load blocks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., including those on the main boom is considered part of the jib load. Boom and jib load are not to be lowered beyond radii where combined weights are greater than rated capacity. Maximum capacity on 1<sup>1/2</sup> inch - 6 x 31 IPS, IWRC is 28,300 lbs./line.

	JIB POINT RADIUS FEET	CAPACITIES IN POUNDS BOOM LENGTH- FEET														JIB POINT RADIUS FEET
		110	120	130	140	150	160	170	180	190	200	210	220	230	240	
30 FOOT JIB	90+	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	90+
	95	40000	40000	40000	40000	40000	40000	40000	40000	40000	39500	39100	38600	38000	37500	95
	100	40000	40000	40000	39800	39200	38600	38200	37600	37100	36500	36100	35500	35000	34400	100
	105	38700	38100	37700	37000	36500	35800	35500	34900	34300	33700	33300	32800	32200	31700	105
	110	36300	35600	35200	34600	34000	33400	33000	32400	31900	31300	30900	30300	29800	29200	110
	115	34100	33400	33000	32400	31800	31200	30800	30200	29600	29000	28600	28100	27500	27000	115
	120	32100	31400	31000	30300	29800	29100	28800	28200	27600	27000	26600	26000	25500	25000	120
	130		27900	27400	26800	26200	25600	25200	24600	24100	23500	23100	22500	21900	21400	130
	140			24400	23800	23200	22600	22200	21600	21000	20400	20000	19400	18900	18400	140
	150				21200	20600	20000	19600	19000	18500	17800	17400	16900	16300	15800	150
	160					18400	17800	17400	16800	16200	15600	15200	14600	14100	13500	160
	170						15400	14800	14200	13600	13000	12600	12000	11500	11000	170
	180								13100	12500	11900	11500	10900	10300	9800	180
	190									11000	10300	9900	9300	8800	8200	190
	200										8900	8600	8000	7400	6600	200
	210											7300	6600	5800	5100	210
40 FOOT JIB		CAPACITIES IN POUNDS BOOM LENGTH- FEET														JIB POINT RADIUS FEET
	105+	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	105+
	110	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	29600	110
	115	30000	30000	30000	30000	30000	30000	30000	30000	30000	29400	29000	28400	27900	27300	115
	120	29600	30000	30000	30000	30000	29500	29100	28500	28000	27400	27000	26400	25800	25300	120
	125	28400	29900	29500	28800	28300	27600	27300	26700	26100	25500	25100	24500	24000	23400	125
	130	27300	28200	27800	27100	26600	25900	25600	25000	24400	23800	23400	22800	22300	21700	130
	140		25200	24800	24100	23600	22900	22500	21900	21400	20800	20400	19800	19200	18700	140
	150			22200	21500	21000	20300	20000	19300	18800	18200	17800	17200	16600	16100	150
	160				19300	18700	18100	17700	17100	16500	15900	15500	14900	14400	13800	160
	170						16100	15700	15100	14600	13900	13500	12900	12400	11800	170
	180							14000	13400	12800	12200	11800	11200	10600	10100	180
	190								11800	11300	10600	10200	9600	9100	8500	190
	200									9900	9300	8900	8300	7700	7000	200
	210										8000	7600	7000	6200	5400	210
50 FOOT JIB		CAPACITIES IN POUNDS BOOM LENGTH- FEET														JIB POINT RADIUS FEET
	135+	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		135+
	140	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000		140
	145		20000	20000	20000	20000	20000	20000	20000	20000	19600	19200	18600	18100		145
	150		20000	20000	20000	20000	20000	20000	20000	19600	19000	18400	17800	17200	16600	150
	155			20000	20000	20000	19400	19000	18400	17800	17200	16800	16200	15700		155
	160			20000	19500	19000	18300	17900	17300	16800	16100	15700	15100	14600		160
	170				17600	17000	16400	16000	15300	14800	14200	13800	13200	12600		170
	180						14600	14200	13600	13000	12400	12000	11400	10900		180
	190							12700	12100	11500	10900	10500	9900	9300		190
	200								10700	10100	9500	9100	8500	7900		200
	210									8900	8200	7800	7200	6500		210
	220										7100	6700	5900	5100		220
60 FOOT JIB		CAPACITIES IN POUNDS BOOM LENGTH- FEET														JIB POINT RADIUS FEET
	150+	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		150+
	155		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		155
	160		10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		160
	170			10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		170
	180				10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		180
	190					10000	10000	10000	10000	10000	10000	10000	10000	9400		190
	200						10000	10000	10000	10000	9600	9200	8600	8000		200
	210							10000	10000	9600	9000	8400	8000	7400	6700	210
	220									7900	7300	6800	6100	5300		220
	230										6200	5600	4800	4000		230

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