

**MANITOWOC ENGINEERING CO.**

A Division of The Manitowoc Company, Inc. Manitowoc, Wisconsin 54220

**LIFTCRANE CAPACITIES**MEETS
ANSI B30.5
REQUIREMENTS**3900
CRAWLER****BOOM NO. 8 WITH OPEN THROAT TOP
74,000 LB. COUNTERWEIGHT**

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii 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.

Upper boom point capacity (whip line) for single part line is 22,500 lbs. (20,000 lbs. when rear auxiliary drum is used). In all cases, upper boom point capacities cannot exceed those listed for the main boom capacity.

Capacities are shown in pounds. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is to be 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. See boom raising capability chart.

OPERATING CONDITIONS: Machine to operate in a level position on a firm surface with gantry in working position and be rigged in accordance with and under conditions referred to in rigging drawing No. 48029 or No. 48237 and load line specification chart No. 4899.

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

OPERATING RADIUS: Operating radius 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 11" 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 20'4" crawlers, 38" or 48" treads, 15' retractable gantry, 10 or 12 part boom hoist reeving, two 1-1/2" boom pendants, 1st cwt. = 32,000 lbs., 2nd cwt. = 26,500 lbs., 3rd cwt. = 15,500 lbs.

HOIST REEVEING FOR MAIN LOAD BLOCK					
No. Parts of Line	1	2	3	4	5
Maximum Load - Lbs.	22,500	45,000	67,500	90,000	112,500
No. Parts of Line	6	7	8	9	
Maximum Load - Lbs.	135,000	157,500	180,000	200,000	

LOAD AND WHIP LINE SPECIFICATIONS	
LOAD LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. (Approx. Weight Per Ft. in Lbs. 1.85)	
WHIP LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load — 22,500 lbs. per Line. (Approx. Weight Per Ft. in Lbs. 1.85)	

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED					
OVER FRONT OF BLOCKED CRAWLERS			OVER SIDE OF CRAWLERS		
Bo. Lgth.	Jib No. 123	Jib No. 124	Bo. Lgth.	Jib No. 123	Jib No. 124
210'	---	---	190'	---	---
200'	---	---	180'	---	30'
190'	30'	60'	170'	---	60'
180'	50'	60'	160'	60'	60'
170'	60'	60'			

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

(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED		
Jib Lgth.	Jib No. 123	Jib No. 124
30'	2,500 lb.	1,800 lb.
40'	3,100 lb.	2,050 lb.
50'	3,700 lb.	2,300 lb.
60'	4,400 lb.	2,500 lb.

For jib capacities, consult jib chart.

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
60	15	79.1	65.6	200,000	70	40	58.7	66.5	51,100	90	18	80.8	95.5	162,600	100	19	81.2	105.5	148,400
	16	78.1	65.4	200,000		45	53.8	63.1	43,800		19	80.2	95.3	148,500		20	80.6	105.3	136,500
	17	77.1	65.1	180,200		50	48.5	59.1	38,100		20	79.5	95.2	136,600		22	79.4	105.0	117,500
	18	76.1	64.9	163,400		55	42.8	54.2	33,700		22	78.2	94.8	117,600		24	78.2	104.6	103,000
	19	75.2	64.7	149,400		60	36.4	48.2	30,000		24	76.9	94.3	103,100		26	77.1	104.1	91,500
	20	74.2	64.4	137,500		65	28.7	40.3	27,100		26	75.6	93.8	91,700		28	75.9	103.6	82,300
	22	72.2	63.8	118,600	70	18.5	28.9	24,500	28		74.3	93.3	82,400	30		74.7	103.1	74,600	
	24	70.1	63.1	104,100	16	81.1	85.7	200,000	30		73.0	92.7	74,700	32		73.5	102.5	68,200	
	26	68.1	62.3	92,700	17	80.4	85.5	179,700	32		71.6	92.1	68,300	34		72.3	101.9	62,700	
	28	66.0	61.5	83,400	18	79.6	85.4	162,900	34		70.3	91.4	62,800	36		71.1	101.3	58,000	
70	30	63.9	60.5	75,800	80	19	78.9	85.2	148,800	100	36	68.9	90.6	58,100	110	38	69.9	100.6	53,900
	32	61.8	59.5	69,400		20	78.2	85.0	137,000		38	67.5	89.8	54,000		40	68.7	99.8	50,200
	34	59.6	58.4	63,900		22	76.7	84.5	118,000		40	66.2	89.0	50,400		45	65.6	97.7	42,900
	36	57.3	57.2	59,200		24	75.2	84.0	103,500		45	62.6	86.6	43,000		50	62.4	95.3	37,200
	38	55.0	55.8	55,100		26	73.8	83.5	92,000		50	59.0	83.8	37,400		55	59.1	92.5	32,800
	40	52.7	54.4	51,500		28	72.3	82.9	82,800		55	55.2	80.6	32,900		60	55.7	89.3	29,100
	45	46.4	50.1	44,200		30	70.8	82.2	75,100		60	51.2	76.8	29,300		65	52.1	85.6	26,100
	50	39.4	44.7	38,500		32	69.2	81.5	68,700		65	47.0	72.5	26,300		70	48.4	81.5	23,600
	55	31.1	37.6	34,100		34	67.7	80.7	63,200		70	42.5	67.4	23,800		75	44.5	76.7	21,500
	60	20.0	27.2	30,500		36	66.1	79.8	58,500		75	37.5	61.5	21,600		80	40.2	71.2	19,600
80	15	80.6	75.7	200,000	90	38	64.6	78.9	54,400	110	80	31.9	54.3	19,800	120	85	35.5	64.8	18,000
	16	79.8	75.6	200,000		40	63.0	77.9	50,800		85	25.3	45.1	18,200		90	30.3	57.0	16,600
	17	79.0	75.4	179,900		45	58.9	75.1	43,500		90	16.3	31.9	16,700		95	24.0	47.3	15,300
	18	78.1	75.2	163,100		50	54.6	71.8	37,800							100	15.5	33.3	14,200
	19	77.3	74.9	149,100		55	50.0	68.0	33,300										
	20	76.5	74.7	137,200		60	45.2	63.4	29,700										
	22	74.8	74.2	118,200		65	39.9	58.0	26,700										
	24	73.1	73.6	103,700		70	33.9	51.3	24,200										
	26	71.4	73.0	92,300		75	26.9	42.8	22,100										
	28	69.6	72.3	83,000		80	17.3	30.5	20,200										
90	30	67.9	71.5	75,400	100	45	58.9	75.1	43,500	110	30	67.9	71.5	75,400	120	32	66.1	70.6	69,000
	32	66.1	70.6	69,000		50	54.6	71.8	37,800							34	64.3	69.7	63,500
	34	64.3	69.7	63,500		55	50.0	68.0	33,300							36	62.5	68.7	58,800
	36	62.5	68.7	58,800		60	45.2	63.4	29,700							38	60.6	67.6	54,700
	38	60.6	67.6	54,700		65	39.9	58.0	26,700										
						70	33.9	51.3	24,200										

Capacities continued on reverse side.

**SEE CONDITIONS ON REVERSE SIDE**

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
22	80.4	115.1	117,200		28	80.6	154.7	80,800		32	80.9	184.4	65,700		36	81.1	214.1	54,600	
24	79.3	114.8	102,700		30	79.9	154.3	73,100		34	80.3	184.1	60,200		38	80.6	213.8	50,400	
26	78.3	114.4	91,200		32	79.1	153.9	66,600		36	79.6	183.7	55,500		40	80.0	213.5	46,800	
28	77.2	113.9	82,000		34	78.3	153.5	61,100		38	79.0	183.3	51,300		45	78.6	212.5	39,400	
30	76.1	113.4	74,300		36	77.5	153.1	56,400		40	78.3	182.9	47,700		50	77.2	211.5	33,700	
32	75.1	112.9	67,900		38	76.8	152.7	52,300		45	76.7	181.8	40,300		55	75.8	210.3	29,200	
34	74.0	112.4	62,400		40	76.0	152.2	48,600		50	74.1	180.6	34,600		60	74.4	208.9	25,500	
36	72.9	111.8	57,700		45	74.0	150.8	41,300		55	73.4	179.2	30,100		65	73.0	207.5	22,500	
38	71.8	111.1	53,500		50	72.0	149.3	35,600		60	71.7	177.6	26,500		70	71.6	205.9	19,900	
40	70.7	110.5	49,900		55	70.0	147.6	31,100		65	70.1	175.9	23,500		75	70.1	204.2	17,800	
45	67.9	108.6	42,600		60	67.9	145.7	27,500		70	68.4	174.0	20,900		80	68.7	202.3	15,900	
50	65.1	106.4	36,900		65	65.8	143.5	24,400		75	66.6	171.9	18,800		85	67.2	200.2	14,300	
55	62.2	103.9	32,400		70	63.7	141.2	21,900		80	65.9	169.6	16,900		90	65.7	198.1	12,800	
60	59.2	101.1	28,800		75	61.6	138.6	19,800		85	63.1	167.2	15,300		95	64.2	195.7	11,600	
65	56.1	97.9	25,800		80	59.4	135.8	17,900		90	61.3	164.6	13,800		100	62.7	193.2	10,400	
70	52.9	94.4	23,300		85	57.1	132.7	16,300		95	59.5	161.7	12,600		105	61.1	190.6	9,400	
75	49.5	90.4	21,100		90	54.8	129.3	14,800		100	57.6	158.7	11,400		110	59.6	187.7	8,500	
80	46.0	85.8	19,300		95	52.5	125.6	13,600		105	55.7	155.4	10,400		115	58.0	184.7	7,700	
85	42.3	80.7	17,600		100	50.0	121.6	12,400		110	53.8	151.9	9,500		120	56.3	181.5	6,900	
90	38.3	74.8	16,200		105	47.5	117.2	11,400		115	51.8	148.1	8,700		125	54.7	178.0	6,200	
95	33.8	67.9	15,000		110	44.8	112.4	10,500		120	49.7	144.0	7,900		130	53.0	174.4	5,600	
100	28.8	59.7	13,800		115	42.1	107.1	9,700		125	47.6	139.6	7,200		135	51.3	170.5	5,000	
105	22.8	49.4	12,800		120	39.1	101.3	8,900		130	45.4	134.8	6,600		140	49.5	166.3	4,400	
22	81.2	125.2	112,500		125	36.0	94.8	8,200		135	43.1	129.7	6,000		145	47.7	161.9	3,900	
24	80.2	124.9	102,400		130	32.6	87.5	7,600		140	40.7	124.1	5,400		150	45.8	157.2	3,500	
26	79.3	124.6	90,900		135	28.9	79.0	7,000		145	38.2	118.1	4,900		155	43.9	152.2	3,000	
28	78.3	124.2	81,600		140	24.6	69.1	6,500		150	35.6	111.4	4,500						
30	77.3	123.7	73,900		145	19.5	56.8	6,000		155	32.8	104.1	4,000						
32	76.3	123.3	67,500		30	80.5	164.5	72,800		160	29.7	95.8	3,600						
34	75.3	122.7	62,000		32	79.8	164.1	66,400		165	26.3	86.4	3,200						
36	74.3	122.2	57,300		34	79.1	163.7	60,900		34	80.8	194.2	60,000						
38	73.4	121.6	53,200		36	78.3	163.3	56,200		36	80.2	193.9	55,200						
40	72.4	121.0	49,500		38	77.6	162.9	52,000		38	79.6	193.5	51,100						
45	69.8	119.3	42,200		40	76.9	162.5	48,400		40	79.0	193.1	47,500						
50	67.3	117.3	36,500		45	75.0	161.2	41,000		45	77.4	192.1	40,100						
55	64.7	115.1	32,000		50	73.2	159.8	35,300		50	75.9	190.9	34,400						
60	62.0	112.6	28,400		55	71.3	158.2	30,900		55	74.3	189.6	29,900						
65	59.2	109.8	25,400		60	69.4	156.4	27,200		60	72.7	188.1	26,200						
70	56.4	106.6	22,900		65	67.4	154.4	24,200		65	71.2	186.5	23,200						
75	53.5	103.1	20,700		70	65.5	152.2	21,700		70	69.6	184.7	20,700						
80	50.5	99.2	18,900		75	63.5	149.9	19,500		75	67.9	182.7	18,500						
85	47.3	94.8	17,200		80	61.5	147.3	17,600		80	66.3	180.6	16,600						
90	44.0	90.0	15,800		85	59.4	144.4	16,000		85	64.6	178.3	15,000						
95	40.4	84.4	14,500		90	57.3	141.3	14,600		90	63.0	175.9	13,600						
100	36.6	78.2	13,400		95	55.2	138.0	13,300		95	61.3	173.2	12,300						
105	32.4	70.9	12,400		100	53.0	134.4	12,200		100	59.5	170.4	11,200						
110	27.6	62.2	11,500		105	50.7	130.4	11,200		105	57.8	167.4	10,200						
115	21.9	51.3	10,700		110	48.3	126.2	10,300		110	56.0	164.1	9,200						
24	81.0	135.0	102,200		115	45.9	121.5	9,400		115	54.1	160.6	8,400						
26	80.1	134.7	90,700		120	43.3	116.5	8,700		120	52.2	156.8	7,600						
28	79.2	134.4	81,400		125	40.7	110.9	8,000		125	50.3	152.8	6,900						
30	78.3	134.0	73,700		130	37.8	104.8	7,300		130	48.3	148.5	6,300						
32	77.4	133.5	67,300		135	34.8	98.0	6,700		135	46.3	143.9	5,700						
34	76.5	133.1	61,800		140	31.5	90.3	6,200		140	44.1	139.0	5,200						
36	75.5	132.6	57,100		145	27.9	81.6	5,700		145	41.9	133.6	4,700						
38	74.7	132.0	53,000		150	23.8	71.3	5,200		150	39.6	127.8	4,200						
40	73.8	131.5	49,300		155	18.9	58.5	4,800		155	37.2	121.5	3,800						
45	71.4	129.9	42,000		30	81.1	174.6	67,500		160	34.6	114.6	3,400						
50	69.1	128.1	36,300		32	80.4	174.3	66,100		165	31.9	106.9	3,000						
55	66.7	126.1	31,800		34	79.7	173.9	60,600		36	80.7	204.0	54,900						
60	64.3	123.8	28,200		36	79.0	173.5	55,800		38	80.1	203.7	50,800						
65	61.8	121.3	25,200		38	78.3	173.1	51,700		40	79.5	203.3	47,100						
70	59.3	118.4	22,700		40	77.6	172.7	48,100		45	78.1	202.3	39,700						
75	56.7	115.3	20,500		45	75.9	171.5	40,700		50	76.6	201.2	34,000						
80	54.0	111.9	18,600		50	74.2	170.2	35,000		55	75.1	199.9	29,500						
85	51.2	108.0	17,000		55	72.4	168.7	30,500		60	73.6	198.5	25,900						
90	48.4	103.8	15,600		60	70.6	167.0	26,900		65	72.1	197.0	22,900						
95	45.3	99.1	14,300		65	68.8	165.2	23,900		70	70.6	195.3	20,300						
100	42.2	93.9	13,200		70	67.0	163.2	21,300		75	69.1	193.5	18,200						
105	38.8	88.0	12,200		75	65.2	160.9	19,200		80	67.6	191.5	16,300						
110	35.1	81.4	11,300		80	63.3	158.5	17,300		85	66.0	189.4	14,700						
115	31.0	73.7	10,400		85	61.4	155.9	15,700		90	64.4	187.0	13,200						
120	26.5	64.6	9,700		90	59.5	153.1	14,200		95	62.8	184.6	12,000						
125	21.0	53.2	9,000		95	57.5	150.0	13,000		100	61.2	181.9	10,800						
26	80.8	144.9	90,400		100	55.5	146.7	11,800		105	59.5	179.1	9,800						
28	80.0	144.5	81,100		105	53.4	143.1	10,800		110	57.9	176.0	8,900						
30	79.1	144.1	73,400		110</														