MANITOWOC ENGINEERING CO.
(A division of The Manitowoc Company, Inc.) *Manitowoc, Wisconsin 54220*

LIFTCRANE CAPACITIES

MEETS ANSI B30.5 REQUIREMENTS

4100W SERIES 2 CRAWLER

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 per cent 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.

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions & 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 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 1⅜" 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.

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**	**14**				
Max. Load — Lbs.	430,000	460,000				

LOAD AND WHIP LINE SPECIFICATIONS
LOAD LINE: 1-1/8" — 6x31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 65 Ton. (Approx. Weight Per Ft. in Lbs. 2.34)
WHIP LINE: 1-1/8" — 6x31 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				(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
OVER FRONT OF BLOCKED CRAWLERS		OVER SIDE OF EXTENDED CRAWLERS			
Boom Lgth.	**Jib No. 123**	**Boom Lgth.**	**Jib No. 123**	**Jib Lgth.**	**Jib No. 123**
260'	— —	260'	— —	30'	3,000 Lb.
250'	— —	250'	— —	40'	3,600 Lb.
240'	40'	240'	40'	50'	4,200 Lb.
230'	60'	230'	60'	60'	4,900 Lb.
Load block, hook and weight ball on ground at start.					

For jib capacities, consult jib chart.

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
	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
	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
	75	27.4	43.9	62,500
	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
	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
	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
	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
	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

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

Capacities continued on reverse side.

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
	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
	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	98.5	73,600
	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
	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
120	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
	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
	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
	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
	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
130	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
	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
	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
	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	99.8	43,500
	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
	125	21.4	54.5	29,300
140	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
	36	76.8	143.3	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
	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
	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	25.8	68.0	27,000
	135	20.7	56.4	25,500
150	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
	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
	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
	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
	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
	135	29.2	80.1	25,000
	140	25.0	70.3	23,500
	145	19.9	58.2	22,200
160	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
	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
	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
	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
	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
	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
170	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
	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
	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
	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
	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
	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
	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
	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
190	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
	70	69.7	185.2	62,800
	75	68.1	183.2	57,000
	80	66.4	181.1	52,000
	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
	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
200	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
	100	61.3	182.5	36,800
	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

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity: Crawlers Extended
200	175	31.2	110.7	13,300
	180	28.4	102.0	12,400
	185	25.2	92.1	11,700
	190	21.6	80.5	10,900
	195	17.3	66.3	8,500
210	36	81.2	214.5	146,000
	38	80.7	214.2	143,300
	40	80.1	213.9	136,600
	45	78.7	213.0	115,500
	50	77.3	211.9	99,600
	55	75.9	210.7	87,100
	60	74.5	209.4	77,100
	65	73.1	207.9	68,800
	70	71.7	206.4	61,900
	75	70.2	204.6	56,100
	80	68.8	202.8	51,000
	85	67.3	200.7	46,700
	90	65.8	198.6	42,800
	95	64.3	196.3	39,400
	100	62.8	193.8	36,400
	105	61.3	191.1	33,700
	110	59.7	188.3	31,300
	115	58.1	185.3	29,100
	120	56.5	182.1	27,100
	125	54.8	178.6	25,200
	130	53.1	175.0	23,500
	135	51.4	171.1	22,000
	140	49.6	167.0	20,600
	145	47.8	162.6	19,200
	150	46.0	157.9	18,000
	155	44.0	152.9	16,800
	160	42.0	147.6	15,800
	165	39.9	141.8	14,800
	170	37.8	135.6	13,800
	175	35.5	128.9	12,900
	180	33.1	121.6	12,100
	185	30.5	113.5	11,300
	190	27.7	104.5	10,600
	195	24.6	94.3	9,900
	200	21.0	82.4	8,800
	205	16.8	67.8	6,500
220	38	81.1	224.4	135,900
	40	80.6	224.0	133,400
	45	79.3	223.1	115,000
	50	77.9	222.1	99,100
	55	76.6	221.0	86,600
	60	75.3	219.8	76,600
	65	73.9	218.4	68,300
	70	72.5	216.9	61,400
	75	71.2	215.2	55,500
	80	69.8	213.5	50,500
	85	68.4	211.5	46,100
	90	67.0	209.5	42,300
	95	65.6	207.3	38,900
	100	64.1	204.9	35,800
	105	62.7	202.4	33,100
	110	61.2	199.8	30,700
	115	59.7	196.9	28,500
	120	58.2	193.9	26,500
	125	56.6	190.7	24,600
	130	55.1	187.3	23,000
	135	53.5	183.7	21,400
	140	51.8	179.9	20,000
	145	50.1	175.9	18,600
	150	48.4	171.6	17,400
	155	46.7	167.0	16,300
	160	44.8	162.1	15,200
	165	43.0	156.9	14,200
	170	41.0	151.4	13,200
	175	39.0	145.4	12,300
	180	36.9	139.0	11,500
	185	34.6	132.1	10,700
	190	32.3	124.5	10,000
	195	29.8	116.2	9,300
	200	27.0	106.9	8,600
	205	24.0	96.4	8,000
	210	20.6	84.2	6,500

Capacities continued on next page.

SEE CONDITIONS ON REVERSE SIDE