

MANITOWOC 4600 SERIES 3
LIFT CRANE CAPACITIES - 113,500# CWT.
BOOM #27 WITH OPEN THROAT TOP
CRAWLER MACHINE ON A BARGE - 1 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS. BOOM LENGTH - FT.										RAD. IN FT.
	80	90	100	110	120	130	140	150	160	170	
20	368.8										20
21	341.7	336.5									21
22	318.3	313.6									22
23	297.8	293.6	289.8								23
24	279.7	275.8	272.4								24
25	263.6	260.1	256.9	253.5							25
26	249.2	245.9	243.0	239.9	237.4						26
27	236.3	233.2	230.5	227.6	225.3						27
28	224.5	221.7	219.2	216.4	214.3	211.7					28
29	213.9	211.2	208.8	206.2	204.3	201.8					29
30	204.1	201.6	199.4	196.9	195.1	192.8	190.7				30
32	187.0	184.7	182.7	180.5	178.9	176.8	174.9	172.8			32
34	172.4	170.2	168.5	166.4	165.1	163.1	161.4	159.5	158.1		34
36	159.8	157.8	156.2	154.3	153.1	151.2	149.7	147.9	146.6	144.9	36
38	148.8	147.0	145.5	143.7	142.6	140.9	139.4	137.7	136.6	135.0	38
40	139.2	137.4	136.0	134.3	133.3	131.7	130.3	128.7	127.7	126.2	40
45	119.5	117.9	116.7	115.2	114.4	112.9	111.7	110.3	109.5	108.1	45
50	104.4	103.0	101.9	100.5	99.8	98.5	97.4	96.1	95.3	94.1	50
55	92.5	91.1	90.1	88.8	88.2	86.9	85.9	84.7	84.1	82.9	55
60	82.8	81.5	80.5	79.3	78.7	77.5	76.6	75.4	74.8	73.7	60
65	74.8	73.5	72.6	71.4	70.9	69.8	68.9	67.7	67.2	66.1	65
70	68.1	66.8	66.0	64.8	64.3	63.2	62.3	61.2	60.7	59.7	70
75	62.3	61.1	60.3	59.1	58.7	57.6	56.7	55.7	55.2	54.2	75
80	57.4	56.2	55.3	54.2	53.8	52.7	51.9	50.9	50.4	49.4	80
85		51.9	51.1	49.9	49.5	48.5	47.7	46.7	46.2	45.2	85
90		48.1	47.3	46.2	45.8	44.7	44.0	42.9	42.5	41.6	90
95			44.0	42.9	42.5	41.4	40.7	39.7	39.2	38.3	95
100			41.0	39.9	39.5	38.5	37.7	36.7	36.3	35.4	100
105				37.2	36.8	35.8	35.1	34.1	33.7	32.7	105
110				34.9	34.4	33.4	32.7	31.7	31.3	30.4	110
115					32.3	31.3	30.5	29.5	29.1	28.2	115
120					30.3	29.3	28.5	27.5	27.2	26.2	120
125						27.5	26.7	25.7	25.4	24.4	125
130						25.8	25.1	24.1	23.7	22.8	130
135							23.5	22.5	22.2	21.3	135
140							22.1	21.1	20.8	19.8	140
145								19.8	19.4	18.5	145
150								18.6	18.2	17.3	150
155									17.1	16.2	155
160									16.1	15.1	160
165										14.1	165
170										13.2	170

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RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.								RAD IN FT.
	BOOM LENGTH - FT.								
	180	190	200	210	220	230	240	250	
36	143.4								36
38	133.5	131.9							38
40	124.8	123.3	122.2						40
45	106.9	105.6	104.6	103.3	102.2	100.9			45
50	93.0	91.8	90.9	89.7	88.7	87.5	86.6	85.4	50
55	81.9	80.7	80.0	78.9	77.9	76.7	76.0	74.9	55
60	72.8	71.7	71.0	69.9	69.0	67.9	67.2	66.2	60
65	65.2	64.2	63.5	62.5	61.6	60.6	59.9	58.9	65
70	58.8	57.8	57.2	56.2	55.3	54.3	53.7	52.7	70
75	53.3	52.3	51.8	50.8	50.0	49.0	48.4	47.4	75
80	48.6	47.6	47.1	46.1	45.3	44.3	43.8	42.8	80
85	44.4	43.5	42.9	42.0	41.2	40.3	39.7	38.8	85
90	40.8	39.8	39.3	38.4	37.6	36.7	36.1	35.2	90
95	37.5	36.6	36.1	35.2	34.4	33.5	32.9	32.1	95
100	34.6	33.7	33.2	32.3	31.5	30.6	30.1	29.2	100
105	32.0	31.1	30.6	29.7	28.9	28.0	27.5	26.6	105
110	29.6	28.7	28.2	27.3	26.6	25.7	25.2	24.3	110
115	27.5	26.6	26.1	25.2	24.5	23.6	23.1	22.2	115
120	25.5	24.6	24.1	23.3	22.5	21.6	21.1	20.3	120
125	23.7	22.8	22.4	21.5	20.7	19.9	19.4	18.5	125
130	22.1	21.1	20.7	19.8	19.1	18.2	17.7	16.9	130
135	20.5	19.6	19.2	18.3	17.6	16.7	16.2	15.4	135
140	19.1	18.2	17.8	16.9	16.2	15.3	14.8	14.0	140
145	17.8	16.9	16.5	15.6	14.9	14.0	13.5	12.7	145
150	16.6	15.7	15.3	14.4	13.7	12.8	12.3	11.5	150
155	15.5	14.6	14.1	13.3	12.5	11.7	11.2	10.4	155
160	14.4	13.5	13.1	12.2	11.5	10.6	10.2	9.3	160
165	13.4	12.5	12.1	11.2	10.5	9.6	9.2	8.3	165
170	12.5	11.6	11.1	10.3	9.6	8.7	8.2	7.4	170
175	11.6	10.7	10.3	9.4	8.7	7.8	7.4	6.5	175
180	10.8	9.9	9.4	8.6	7.9	7.0	6.5	5.7	180
185		9.1	8.7	7.8	7.1	6.2	5.8	4.9	185
190			7.9	7.1	6.4	5.5	5.0	4.2	190
195			7.2	6.4	5.7	4.8	4.3		195
200				5.7	5.0	4.1			200
205				5.1	4.4				205

CAPACITIES ARE FOR A CRAWLER MACHINE WHEN OPERATING ON A BARGE. MACHINE SHALL BE POSITIVELY SECURED TO PREVENT SHIFTING. 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 DENOTED BY AN ASTERISK (*).

UPPER BOOM POINT CAPACITY FOR LIFT CRANE SERVICE WITH SINGLE PART WHIP LINE OR COMBINATION OF TWO SINGLE PART LINES IS 40,000#. IN ALL CASES, UPPER BOOM POINT CAPACITIES CANNOT EXCEED THOSE LISTED FOR THE MAIN BOOM CAPACITY.

WEIGHT OF UPPER BOOM POINT, ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES, ETC., BENEATH BOOM 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.

MACHINE TO OPERATE WITH MACHINE LIST NOT TO EXCEED DEGREES NOTED ABOVE. REFER TO RIGGING #50973, LOAD LINE SPECIFICATION CHART #6444-A, RANGE CHART #6721-A AND POWER PLANT AND COUNTERWEIGHT ARRANGEMENT CHART #6655-A. CRANE OPERATOR JUDGMENT 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.

OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION AT BARGE DECK TO THE CENTER OF VERTICAL HOIST LINE OR LOAD BLOCK.

MACHINE EQUIPPED WITH 26'-1 CRAWLERS, 60 IN. TREADS, 30' HEAVY DUTY MAST, VICON INDEPENDENT BOOM HOIST WITH 16 PART REEVING, 12 PART MAST HOIST REEVING, FOUR 1-3/8 IN. BOOM PENDANTS AND 113,500# COUNTERWEIGHT.

MAXIMUM BOOM LENGTH LIFTED UNASSISTED	
OVER FRONT OF BLOCKED CRAWLERS IS 250'	OVER SIDE OF CRAWLERS IS 220'
LOAD BLOCK, HOOK AND WEIGHT BALL ON BARGE AT START. JIB IS NOT TO BE USED ON CRAWLER MACHINE WHILE OPERATING ON A BARGE.	

DEDUCT FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED	
ONE SHEAVE POINT	1,200#
TWO SHEAVE POINT	1,500#
INTEGRAL POINT	1,600#