

MANITOWOC 4600 SERIES 3
 LIFT CRANE CAPACITIES - 113,500# CWT.
 BOOM #27 WITH OPEN THROAT TOP
 CRAWLER MACHINE ON A BARGE - 3 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	
23	233.4*										23
24	225.1*										24
25	217.4*	206.4*									25
26	210.2	199.7*									26
27	200.7	193.5*	184.7*								27
28	192.0	186.6	179.2*								28
29	184.0	178.9	174.0*	166.1*							29
30	176.6	171.8	167.6	161.5*	156.2*						30
32	163.3	159.1	155.3	151.4	147.3*	142.4*					32
34	151.9	148.0	144.6	141.0	138.2	134.3*	130.7*				34
36	141.8	138.3	135.2	131.9	129.4	126.3	123.5	120.0*			36
38	133.0	129.7	126.9	123.8	121.5	118.7	116.1	113.4	111.3*		38
40	125.1	122.0	119.5	116.6	114.5	111.9	109.5	107.0	105.0	102.6	40
45	108.8	106.1	104.0	101.5	99.8	97.5	95.5	93.3	91.7	89.6	45
50	96.0	93.7	91.8	89.6	88.1	86.1	84.4	82.4	81.0	79.2	50
55	85.7	83.6	81.9	79.9	78.7	76.8	75.3	73.5	72.3	70.6	55
60	77.3	75.3	73.8	71.9	70.8	69.1	67.7	66.1	65.0	63.4	60
65	70.3	68.4	67.0	65.2	64.3	62.7	61.3	59.8	58.8	57.4	65
70	64.4	62.6	61.2	59.5	58.6	57.1	55.9	54.4	53.6	52.2	70
75	59.4	57.5	56.2	54.6	53.8	52.3	51.2	49.8	49.0	47.6	75
80	55.1	53.2	51.9	50.4	49.6	48.2	47.0	45.7	44.9	43.7	80
85		49.4	48.1	46.6	45.9	44.5	43.4	42.1	41.4	40.2	85
90		46.2	44.8	43.3	42.6	41.2	40.2	38.9	38.3	37.1	90
95			41.9	40.4	39.7	38.3	37.3	36.1	35.4	34.3	95
100			39.3	37.8	37.0	35.7	34.7	33.5	32.9	31.8	100
105				35.4	34.7	33.4	32.4	31.2	30.6	29.5	105
110				33.4	32.6	31.3	30.3	29.1	28.5	27.4	110
115					30.7	29.4	28.4	27.2	26.6	25.5	115
120					29.0	27.6	26.6	25.5	24.9	23.8	120
125						26.0	25.0	23.9	23.3	22.2	125
130						24.6	23.6	22.4	21.8	20.8	130
135							22.2	21.0	20.5	19.4	135
140							21.0	19.8	19.2	18.2	140
145								18.7	18.1	17.0	145
150								17.6	17.0	15.9	150
155									16.0	14.9	155
160									15.1	14.0	160
165										13.1	165
170										12.4	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	
45	87.7	85.7							45
50	77.5	75.7	74.4	72.5*	70.5*				50
55	69.1	67.5	66.3	64.7	63.1*				55
60	62.1	60.5	59.5	58.0	56.7	61.0*	59.5*		60
65	56.1	54.7	53.7	52.3	51.1	49.4*	48.0*	51.4*	65
70	51.0	49.6	48.7	47.4	46.2	44.9	43.7*	41.6*	70
75	46.5	45.2	44.4	43.1	42.0	40.8	39.9	38.1*	75
80	42.6	41.3	40.6	39.3	38.3	37.1	36.3	34.9*	80
85	39.1	37.9	37.2	36.0	35.0	33.8	33.1	31.9	85
90	36.1	34.9	34.2	33.0	32.1	30.9	30.2	29.1	90
95	33.3	32.1	31.5	30.4	29.4	28.3	27.6	26.5	95
100	30.8	29.7	29.0	28.0	27.0	25.9	25.3	24.2	100
105	28.6	27.5	26.8	25.8	24.9	23.8	23.1	22.1	105
110	26.5	25.4	24.8	23.8	22.9	21.8	21.2	20.2	110
115	24.7	23.6	23.0	21.9	21.1	20.0	19.4	18.4	115
120	22.9	21.9	21.3	20.3	19.4	18.4	17.8	16.8	120
125	21.4	20.3	19.7	18.7	17.9	16.9	16.3	15.3	125
130	19.9	18.9	18.3	17.3	16.5	15.5	14.9	13.9	130
135	18.6	17.5	17.0	16.0	15.2	14.2	13.6	12.6	135
140	17.3	16.3	15.7	14.8	13.9	13.0	12.4	11.4	140
145	16.2	15.1	14.6	13.6	12.8	11.8	11.3	10.3	145
150	15.1	14.1	13.5	12.5	11.7	10.8	10.2	9.3	150
155	14.1	13.0	12.5	11.5	10.7	9.8	9.2	8.3	155
160	13.1	12.1	11.6	10.6	9.8	8.9	8.3	7.4	160
165	12.3	11.2	10.7	9.7	8.9	8.0	7.4	6.4*	165
170	11.4	10.4	9.9	8.9	8.1	7.2	6.6	5.5*	170
175	10.7	9.6	9.1	8.1	7.3	6.4	5.8	4.7*	175
180	10.0	8.9	8.4	7.4	6.6	5.7	5.1		180
185		8.2	7.7	6.7	5.9	5.0	4.4		185
190			7.0	6.1	5.3	4.3			190
195			6.4	5.5	4.6				195
200				4.9	4.1				200
205				4.3					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 (*).

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.	

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.

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

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.