



3-21-66
3-27-67
7-1-64
Drwg. Date 11-29-63

MANITOWOC 400QW - 24' CRAWLERS EXTENDED

LIFT CRANE CAPACITIES - 104,400# CWT.

BOOM #17 WITH OPEN THROAT TOP

CRAWLER MACHINE ON BARGE - 6 DEGREE MACHINE LIST

RAD. IN. FT.	CAPACITIES IN THOUSANDS OF LBS.																RAD. IN. FT.
	BOOM LENGTH - FT.																
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200		
17																16	
18																17	
19																18	
20																19	
22																21	
24																23	
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168																167	
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172																171	
174																173	
176																175	
178																177	
180																179	

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 (*).

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

REFER TO RIGGING #48227, LOAD LINE SPECIFICATION CHART #5308 AND RANGE CHART #4796. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, 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 24' EXTENSIBLE CRAWLERS, 4 1/2 IN. TREADS, 15' RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, TWO 2 IN. BOOM PERCENTS, 1ST CWT. = 40,100#, 2ND CWT. = 35,500#, 3RD CWT. = 28,500#.

MANITOWOC 400W - 24° CRAWLERS EXTENDED

LIFTCRANE CAPACITIES - 104,400# C&I.

BGCM #17 WITH OPEN THROAT TOP

CRAWLER MACHINE ON BARGE - 2 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.															RAD. IN FT.
	BOOM LENGTH - FT.															
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
16	230.6*	206.3*														16
17	227.5*	203.6*														17
18	224.6*	201.0*	182.0*													18
19	216.7*	198.5*	179.9*													19
20	209.0	196.1*	177.3*	161.4*												20
22	176.1	171.4	167.2*	157.3*	143.7*											22
24	155.3	151.5	148.1	144.8*	140.8*	129.8*										24
26	138.8	135.6	132.7	130.0	127.2*	124.6*	117.4*	108.5*								26
28	125.4	122.6	120.2	117.8	115.2*	112.6*	110.9*	106.7*	98.6*							28
30	114.2	111.7	109.6	107.4	105.4	103.5	101.6	99.6	97.0*	89.5*						30
32	104.8	102.6	100.7	99.0	97.0	95.0	93.0	91.8	90.1	87.9*						32
34	96.8	94.8	93.0	91.5	89.7	88.2	86.6	85.0	83.5	82.0	80.6*					34
36	89.9	88.0	86.6	85.0	83.4	82.0	80.6	79.1	77.7	76.3	74.9	75.9*				36
38	83.8	82.2	80.7	79.2	77.8	76.5	75.2	73.8	72.5	71.2	70.0	68.8	66.3*			38
40	78.5	76.8	75.4	74.0	72.8	71.7	70.5	69.2	68.0	66.8	65.6	64.4	63.1*	57.7*		40
45	67.7	66.0	64.6	63.2	62.0	61.7	60.7	59.6	58.6	57.4	56.3	55.2	54.1	53.0	50.1*	45
50	59.5	57.9	56.6	55.2	54.0	53.1	52.0	51.0	50.0	48.9	47.8	46.8	45.7	44.6	43.5	40
55	52.6	51.3	50.0	48.6	47.4	46.6	45.6	44.6	43.6	42.5	41.5	40.5	39.4	38.4	37.3	45
60	47.4	46.0	44.8	43.4	42.2	41.4	40.4	39.4	38.4	37.3	36.3	35.3	34.2	33.2	32.1	45
65		44.4	43.2	41.8	40.6	39.8	38.8	37.8	36.8	35.8	34.8	33.8	32.7	31.7	30.6	55
70		41.6	40.4	39.0	37.8	37.0	36.0	35.0	34.0	33.0	32.0	31.0	30.0	28.9	27.8	60
75		38.8	37.6	36.2	35.0	34.2	33.2	32.2	31.2	30.2	29.2	28.2	27.1	26.1	25.0	65
80			34.4	33.2	32.0	31.2	30.2	29.2	28.2	27.2	26.2	25.2	24.1	23.1	22.0	70
85			31.4	30.2	29.0	28.2	27.2	26.2	25.2	24.2	23.2	22.2	21.1	20.1	19.0	75
90				28.6	27.4	26.6	25.6	24.6	23.6	22.6	21.6	20.6	19.5	18.5	17.4	80
95				26.8	25.6	24.8	23.8	22.8	21.8	20.8	19.8	18.8	17.7	16.7	15.6	85
100				26.0	24.8	24.0	23.0	22.0	21.0	20.0	19.0	18.0	16.9	15.9	14.8	90
105					22.0	21.0	20.0	19.0	18.0	17.0	16.0	15.0	13.9	12.9	11.8	95
110						21.8	20.8	19.8	18.8	17.8	16.8	15.8	14.7	13.7	12.6	100
115						19.8	18.8	17.8	16.8	15.8	14.8	13.8	12.7	11.7	10.6	105
120							18.8	17.8	16.8	15.8	14.8	13.8	12.7	11.7	10.6	110
125							16.8	15.8	14.8	13.8	12.8	11.8	10.7	9.6	8.5	115
130								14.8	13.8	12.8	11.8	10.8	9.7	8.6	7.5	120
135									13.8	12.8	11.8	10.8	9.7	8.6	7.5	125
140										13.8	12.8	11.8	10.7	9.6	8.5	130
145											12.8	11.8	10.7	9.6	8.5	135
150												12.8	11.7	10.6	9.5	140
155													11.7	10.6	9.5	145
160														11.7	10.6	150
165															10.6	155
170																160
175																170
																175

CAPACITIES ARE FOR A CRANER 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 (*).

HEIGHT OF ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES BENEATH BOOM 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.

REFER TO RIGGING #48227, LOAD LINE SPECIFICATION CHART #5308 AND RANGE CHART #4796. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, 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 24° EXTENSIBLE CRAWLERS, 48 IN. TREADS, 15° RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, TWO 2 IN. BOOM PENDANTS, 1ST CWT. = 40,100#, 2ND CWT. = 35,800#, 3RD CWT. = 28,500#.

DJK
04/28/77, Rev. 8/1/78
DRWG: #6908-B



MANITOWOC ENGINEERING CO.
MANITOWOC, WISCONSIN

MANITOWOC 460GH - 24' CRAWLERS EXTENDED

LIFTCRANE CAPACITIES - 104,400# CWT.

BOOM #17 WITH OPEN THROAT TOP

CRAWLER MACHINE ON BARGE - 3 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.															RAD. IN FT.	
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200		
14	201.0*	178.4*															16
15	196.5*	174.4*															17
16	183.7	172.4*	158.6*														18
17	161.0	158.6*	150.3*														19
18	143.2	152.4*	134.1*														20
19	128.6	144.4*	121.1*														21
20	117.7	137.0*	110.0*														22
21	107.1	130.0*	101.0*														23
22	99.8	123.0*	93.0*	137.0*													24
23	91.7	116.0*	86.0*	130.0*	117.7												25
24	84.4	109.0*	79.0*	121.0*	111.7	106.5*											26
25	77.0	102.0*	72.0*	112.0*	107.7	101.5*	95.5*										27
26	70.0	95.0*	66.0*	103.0*	102.7	96.5*	90.5*	80.4									28
27	63.0	88.0*	59.0*	94.0*	97.7	91.5*	85.5*	76.4	75.0*								29
28	56.0	81.0*	52.0*	85.0*	92.7	86.5*	80.5*	71.4	70.0*	75.0*							30
29		74.0*	45.0*	76.0*	87.7	81.5*	75.5*	62.4	61.0*	66.0*							31
30		67.0*	38.0*	67.0*	82.7	76.5*	70.5*	55.4	54.0*	59.0*							32
31		60.0*	31.0*	60.0*	77.7	71.5*	65.5*	48.4	47.0*	52.0*							33
32		53.0*	24.0*	53.0*	72.7	66.5*	60.5*	41.4	40.0*	45.0*							34
33		46.0*	17.0*	46.0*	67.7	61.5*	55.5*	34.4	33.0*	38.0*							35
34		39.0*	10.0*	39.0*	62.7	56.5*	50.5*	27.4	26.0*	31.0*							36
35		32.0*	3.0*	32.0*	57.7	51.5*	45.5*	20.4	19.0*	24.0*							37
36		25.0*		25.0*	52.7	46.5*	40.5*	13.4	12.0*	17.0*							38
37		18.0*		18.0*	47.7	41.5*	35.5*	6.4	5.0*	10.0*							39
38		11.0*		11.0*	42.7	36.5*	30.5*			5.0*							40
39		4.0*		4.0*	37.7	31.5*	25.5*										41
40					32.7	26.5*	20.5*										42
41					27.7	21.5*	15.5*										43
42					22.7	16.5*	10.5*										44
43					17.7	11.5*	5.5*										45
44					12.7	6.5*											46
45					7.7	1.5*											47
46					2.7												48
47																	49
48																	50

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 (*).

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

REFER TO RIGGING #48227, LOAD LINE SPECIFICATION CHART #5308 AND RANGE CHART #4796. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, 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 24' EXTENDIBLE CRAWLERS, 48 IN. TREADS, 15' RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, TWO 2 IN. BOOM PENDANTS, 1ST CWT. = 40,100#, 2ND CWT. = 35,800#, 3RD CWT. = 25,500#.

MANITOWOC 4000W - 24° CRAWLERS EXTENDED

LIFT CRANE CAPACITIES - 104,400# CWT.

BOOK #22 WITH OPEN THROAT TOP

CRAWLER MACHINE ON BARGE - 0 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.														RAD. IN FT.	
	70	80	90	100	110	120	130	140	150	160	170	180	190	200		
17	300.0*	294.0*	267.1*													17
18	285.0*	281.6*	262.0*													18
19	267.3*	266.5*	256.0*													19
20	249.9*	249.1*	249.3*	243.0*												20
22	212.5*	212.2*	211.3*	211.9*												22
24	183.3	183.0	182.6	182.7	186.8*											24
26	160.9	160.5	160.2	159.7	158.9	181.5*										26
28	143.2	142.8	142.4	141.9	141.5	158.8*										28
30	128.8	128.4	128.0	127.6	127.2	141.1	181.4									30
32	116.9	116.5	116.1	115.7	115.3	126.6	158.8*	157.0*								32
34	104.9	104.5	104.1	103.7	103.3	114.6	141.1	140.1	139.7							34
36	98.4	98.0	97.6	97.2	96.8	104.1	126.6	126.0	125.6	113.9						36
38	91.0	90.6	90.2	89.8	89.4	96.0	104.1	104.0	103.6	103.0	112.5					38
40	84.6	84.2	83.8	83.4	83.0	88.6	95.5	95.0	94.6	94.2	102.4	112.0				40
42	78.7	78.3	77.9	77.5	77.1	82.1	88.6	88.1	87.7	87.3	94.9	102.4	112.0			42
44	71.7	71.3	70.9	70.5	70.1	75.7	82.1	81.6	81.2	80.8	87.0	94.9	102.4	112.0		44
46	64.6	64.2	63.8	63.4	63.0	69.1	75.7	75.2	74.8	74.4	80.5	87.0	94.9	102.4		46
48	57.5	57.1	56.7	56.3	55.9	62.1	69.1	68.6	68.2	67.8	73.9	80.5	87.0	94.9		48
50	50.4	50.0	49.6	49.2	48.8	55.1	62.1	61.6	61.2	60.8	66.9	73.9	80.5	87.0		50
52	43.3	42.9	42.5	42.1	41.7	48.1	55.1	54.6	54.2	53.8	59.9	66.9	73.9	80.5		52
54	36.2	35.8	35.4	35.0	34.6	41.1	48.1	47.6	47.2	46.8	52.9	59.9	66.9	73.9		54
56	29.1	28.7	28.3	27.9	27.5	34.1	41.1	40.6	40.2	39.8	45.9	52.9	59.9	66.9		56
58	22.0	21.6	21.2	20.8	20.4	27.1	34.1	33.6	33.2	32.8	38.9	45.9	52.9	59.9		58
60	14.9	14.5	14.1	13.7	13.3	20.1	27.1	26.6	26.2	25.8	31.9	38.9	45.9	52.9		60
62	8.8	8.4	8.0	7.6	7.2	13.1	20.1	19.6	19.2	18.8	24.9	31.9	38.9	45.9		62
64	2.7	2.3	1.9	1.5	1.1	6.1	13.1	12.6	12.2	11.8	17.9	24.9	31.9	38.9		64
66							6.1	5.6	5.2	4.8	10.9	17.9	24.9	31.9		66
68								4.6	4.2	3.8	8.9	15.9	22.9	29.9		68
70									3.2	2.8	6.9	13.9	20.9	27.9		70
72										1.8	5.9	11.9	17.9	24.9		72
74											4.9	10.9	16.9	23.9		74
76												8.9	14.9	21.9		76
78													12.9	19.9		78
80														17.9		80
82															13.9	105
84															11.9	110
86															9.9	115
88															7.9	120
90															5.9	125
92															3.9	130
94															1.9	135
96																145
98																150
100																155
102																160
104																165

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 (*).

WEIGHT OF ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES BENEATH BOOM POINT SHEAVES, ETC. IS CONSIDERED PART OF THE MAIN BOOM LOAD. DEDUCT 1,200# FROM ABOVE CAPACITIES WHEN SINGLE SHEAVE UPPER BOOM POINT IS ATTACHED AND 1,500# WHEN TWO SHEAVE UPPER BOOM POINT IS ATTACHED. 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.

REFER TO RIGGING #48168, LOAD LINE SPECIFICATION CHART #5320 AND RANGE CHART #5359. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING 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 24° EXTENDIBLE CRAWLERS, 48 IN. TREADS, 15' RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, FOUR 1-3/8 IN. BOOM PENDANTS, 1ST CWT. = 40,100#, 2ND CWT. = 35,800#, 3RD CWT. = 28,500#.

DJK
04/27/77, Rev. 8/1/78
DRWG. #6909-A

MANITOWOC ENGINEERING CO.
MANITOWOC, WISCONSIN

MANITOWOC 4000W - 24' CRAWLERS EXTENDED
 LIFTCRANE CAPACITIES - 104,600# CHT.
 BOOM #22 WITH OPEN THROAT TOP

CRAWLER MACHINE ON BARGE - 2 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.														RAD. IN FT.	
	70	80	90	100	110	120	130	140	150	160	170	180	190	200		
17	230.8*															
18	218.0*															
19	206.3*															
20	196.0															
22	170.0															
24	150.0															
26	134.0															
28	118.0															
30	110.0															
32	101.0	108.0														
34	93.0	99.0	105.0													
36	86.0	91.0	97.0	103.0												
38	80.0	84.0	89.0	95.0	101.0											
40	75.0	79.0	83.0	88.0	94.0	100.0										
45	66.0	70.0	74.0	79.0	85.0	91.0	97.0	103.0	107.0							
50	56.0	60.0	64.0	69.0	75.0	81.0	87.0	93.0	99.0	105.0						
60	42.0	46.0	50.0	55.0	61.0	67.0	73.0	79.0	85.0	91.0	97.0	103.0				
65	36.0	40.0	44.0	49.0	55.0	61.0	67.0	73.0	79.0	85.0	91.0	97.0	103.0			
70	30.0	34.0	38.0	43.0	49.0	55.0	61.0	67.0	73.0	79.0	85.0	91.0	97.0	103.0		
75	24.0	28.0	32.0	37.0	43.0	49.0	55.0	61.0	67.0	73.0	79.0	85.0	91.0	97.0	103.0	
80	18.0	22.0	26.0	31.0	37.0	43.0	49.0	55.0	61.0	67.0	73.0	79.0	85.0	91.0	97.0	103.0
85	14.0	18.0	22.0	27.0	33.0	39.0	45.0	51.0	57.0	63.0	69.0	75.0	81.0	87.0	93.0	99.0
90	11.0	15.0	19.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0
100	7.0	11.0	15.0	20.0	26.0	32.0	38.0	44.0	50.0	56.0	62.0	68.0	74.0	80.0	86.0	92.0
105		9.0	13.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0
110		7.0	11.0	16.0	22.0	28.0	34.0	40.0	46.0	52.0	58.0	64.0	70.0	76.0	82.0	88.0
115		5.0	9.0	13.0	19.0	25.0	31.0	37.0	43.0	49.0	55.0	61.0	67.0	73.0	79.0	85.0
120		4.0	8.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0
125		3.0	7.0	11.0	17.0	23.0	29.0	35.0	41.0	47.0	53.0	59.0	65.0	71.0	77.0	83.0
130		2.0	6.0	10.0	16.0	22.0	28.0	34.0	40.0	46.0	52.0	58.0	64.0	70.0	76.0	82.0
135		1.0	5.0	9.0	15.0	21.0	27.0	33.0	39.0	45.0	51.0	57.0	63.0	69.0	75.0	81.0
140			4.0	8.0	14.0	20.0	26.0	32.0	38.0	44.0	50.0	56.0	62.0	68.0	74.0	80.0
145			3.0	7.0	13.0	19.0	25.0	31.0	37.0	43.0	49.0	55.0	61.0	67.0	73.0	79.0
150			2.0	6.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0
155			1.0	5.0	11.0	17.0	23.0	29.0	35.0	41.0	47.0	53.0	59.0	65.0	71.0	77.0
160			0.0	4.0	10.0	16.0	22.0	28.0	34.0	40.0	46.0	52.0	58.0	64.0	70.0	76.0

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 (*).
 WEIGHT OF ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES BENEATH BOOM POINT SHEAVES, ETC. IS CONSIDERED PART OF THE MAIN
 BOOM LOAD. DEDUCT 1,200# FROM ABOVE CAPACITIES WHEN SINGLE SHEAVE UPPER BOOM POINT IS ATTACHED AND 1,500# WHEN TWO SHEAVE UPPER
 BOOM POINT IS ATTACHED. 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.

REFER TO RIGGING #48168, LOAD LINE SPECIFICATION CHART #5320 AND RANGE CHART #5359. CRANE OPERATOR JUDGMENT MUST BE USED TO ALLOW
 FOR DYNAMIC LOAD EFFECTS OF SWINGING, HOISTING OR LOWERING, 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 24' EXTENDIBLE CRAWLERS, 48 IN. TREADS, 15' RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, FOUR 1-3/8 IN.
 BOOM PENDANTS, 1ST CHT. = 40,100#, 2ND CHT. = 35,800#, 3RD CHT. = 28,500#.

DJK
 04/27/77 Rev. 8/1/78
 DRWG. #6909-B

MANITOWOC ENGINEERING CO.
 MANITOWOC, WISCONSIN

MANITOWOC 4000W - 24° CRAWLERS EXTENDED
 LIFT CRANE CAPACITIES - 104,400# CWT.
 BOOM #22 WITH OPEN THROAT TOP
 CRAWLER MACHINE ON BARGE - 3 DEGREE MACHINE LIST

RAD. IN FT.	CAPACITIES IN THOUSANDS OF LBS.														RAD. IN FT.
	BOOM LENGTH - FT.														
	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
18	197.9														197.9
19	184.6*														184.6*
20	175.2														175.2
22	153.9	168.0*													153.9
24	137.1	148.5													137.1
26	123.4	132.6	143.5												123.4
28	112.1	119.8	116.0	124.3											112.1
30	102.6	108.8	105.7	102.6	109.2	96.9									102.6
32	94.7	99.7	97.0	94.2	91.7	89.1	87.1								94.7
34	88.1	91.5	89.4	86.9	84.7	82.4	80.6	78.4							88.1
36	82.7	85.1	82.9	80.6	78.2	76.5	74.9	72.9							82.7
38	78.4	80.0	77.2	75.1	73.2	71.3	69.9	68.0	71.1						78.4
40	74.4	76.0	72.2	70.2	68.5	66.7	65.4	63.7	66.9	64.4					74.4
45	61.5	63.5	60.7	58.5	56.2	54.6	52.9	51.6	50.0	48.6	55.2				61.5
50	47.4	49.5	46.7	44.5	42.2	40.9	39.9	38.7	37.3	36.0	42.2	44.7			47.4
55	33.4	35.5	32.7	30.5	28.2	27.1	26.2	25.0	23.6	22.3	28.2	30.5	34.4		33.4
60	22.1	24.2	21.4	19.2	17.0	16.0	15.1	14.0	12.7	11.4	17.0	19.2	22.1	26.0	22.1
65	15.5	17.6	14.8	12.6	10.4	9.4	8.5	7.4	6.3	5.2	10.4	12.6	15.5	18.4	15.5
70	11.3	13.4	10.6	8.4	6.2	5.2	4.3	3.2	2.1	1.0	6.2	8.4	11.3	14.2	11.3
75		10.1	7.3	5.1	2.9	1.9	1.0	0.9	0.8	0.7	2.9	5.1	7.3	10.2	7.3
80		7.8	5.0	2.8	0.6	0.6	0.5	0.4	0.3	0.2	1.9	4.0	6.2	9.1	5.0
85		5.5	2.7	0.5	0.5	0.4	0.3	0.2	0.1	0.1	1.4	2.7	4.9	7.8	2.7
90		3.8	2.0	0.4	0.4	0.3	0.2	0.1	0.1	0.1	1.0	2.0	3.8	6.7	2.0
95		2.7	1.5	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.7	1.5	2.7	5.5	1.5
100		1.9	1.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.0	1.9	4.4	1.0
105		1.4	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.7	1.4	3.3	0.7
110		1.0	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	1.0	2.5	0.5
115		0.7	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.7	1.9	0.3
120		0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	1.4	0.2
125		0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.1	0.1
130		0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.9	0.1
135		0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.7	0.1
140		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1
145		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1
150		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1
155		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1

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