

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

BOOM NO. 44 WITH HEAVY LIFT TOP

167,000 LB. COUNTERWEIGHT

RATING OVER FRONT OF BLOCKED CRAWLERS

NO TRAVEL - LIMITED SWING

MEETS
ANSI B30.5
REQUIREMENTS

M-250

CAPACITIES FOR VARIOUS BOOM LENGTHS AND OPERATING RADII ARE FOR FREELY SUSPENDED LOADS AND DO NOT EXCEED 75% OF A STATIC TIPPING LOAD OVER FRONT OF MACHINE WITH CRAWLERS BLOCKED. CAPACITIES BASED ON STRUCTURAL COMPETENCE ARE DENOTED BY AN ASTERISK (*).

UPPER BOOM POINT CAPACITY FOR LIFTCRANE SERVICE WITH SINGLE PART WHIP LINE IS 30,000 LBS. OR 60,000 LBS. WITH TWO PART WHIP LINE. IN ALL CASES, UPPER BOOM POINT CAPACITIES CANNOT EXCEED THOSE LISTED FOR THE MAIN BOOM CAPACITY.

250' THRU 300' BOOM LENGTHS REQUIRE ONLY THE MIDDLE 3 SHEAVES TO BE USED ON THE LOWER BOOM POINT. ALL OTHER SHEAVES MUST BE REMOVED FROM THE LOWER BOOM POINT.

WEIGHT OF JIB, ALL LOAD BLOCKS, HOOKS, WEIGHT BALL, SLINGS, HOIST LINES, ETC., BENEATH BOOM AND JIB 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 IN A LEVEL POSITION ON A FIRM UNIFORMLY SUPPORTING SURFACE WITH GANTRY UP AND FRONT TUMBLER PROPERLY BLOCKED SO THAT THE CENTERLINE OF THE IDLER TUMBLER BECOMES THE TIPPING FULCRUM. DRIVE MOTORS MUST BE TO THE REAR OF THE MACHINE. SWING IS LIMITED TO THAT SECTOR SHOWN ON OPERATING RANGE DIAGRAM NO. 7582-A. REFER TO BOOM RIGGING NO. 172610 AND WIRE ROPE SPECIFICATION CHART NO. 7581-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.

MACHINE MAY BE OPERATED WITHIN WIND LIMITS SHOWN IN TABLE PROVIDED CRANE OPERATOR JUDGMENT IS USED TO ALLOW FOR WIND EFFECT ON THE LIFTED LOAD AND OTHER CONSIDERATIONS NOTED ON THE CAPACITY CHART ARE FOLLOWED. WIND WILL HAVE A CONSIDERABLE EFFECT ON A LOAD WITH A LARGE 'SAIL AREA' AND MUST BE COMPENSATED FOR ACCORDINGLY BY REDUCING LOAD RATINGS, REDUCING OPERATING SPEEDS OR BY A COMBINATION OF BOTH. RECOMMEND STOPPING OPERATION AND LOWERING BOOM AND JIB TO APPROXIMATELY 70 DEGREE BOOM ANGLE WHEN WIND EXCEEDS THOSE SHOWN IN TABLE TO PREVENT JIB BEING BLOWN OVER BACKWARDS. LOWER BOOM AND JIB TO GROUND WHEN WIND IS ABOVE 50 MPH.

OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF VERTICAL HOIST LINE OR LOAD BLOCK. 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 IS VERTICAL DISTANCE FROM GROUND LEVEL TO CENTERLINE OF BOOM POINT SHAFT.

MACHINE EQUIPPED WITH 30'9" CRAWLERS, 48" TREADS, 28' RETRACTABLE GANTRY, 12 PART BOOM HOIST REEVING, FOUR 1-1/2" BOOM PENDANTS, AND 167,000 LB. COUNTERWEIGHT.

WIND LIMITS DURING OPERATION		
MAXIMUM WIND VELOCITY	BOOM LENGTH	JIB LENGTH
MPH	FEET	FEET
30	70 - 200	---
25	210 - 240	---
20	250 - 300	---
25	130 - 210	40 - 80
20	220 - 250	40 - 80
15	260	40 - 60
25	130 - 200	100 - 120
20	210 - 230	100 - 120
20	240	100

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED OVER FRONT OF BLOCKED CRAWLERS		DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
BOOM LGTH.	JIB NO. 132	JIB LGTH.	JIB NO. 132
300'	---	40'	6,400 LBS.
290'	---	60'	8,200 LBS.
280'	---	80'	10,300 LBS.
270'	---	100'	12,800 LBS.
260'	60'	120'	15,300 LBS.
250'	80'		
240'	100'		
230'	120'		
LOAD BLOCK, HOOK AND WEIGHT BALL ON GROUND AT START. UPPER BOOM POINT CANNOT BE USED ON 300' BOOM.			

CONSULT JIB CHART FOR JIB CAPACITIES. UPPER BOOM POINT CANNOT BE USED WHEN JIB IS ATTACHED.

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
70	18	82.9	77.1	551,200*
	19	82.1	76.9	547,900*
	20	81.3	76.8	545,600*
	21	80.4	76.5	527,000*
	22	79.6	76.3	504,500*
	23	78.8	76.1	483,800*
	24	77.9	75.8	464,700*
	25	77.1	75.6	447,000*
	26	76.2	75.3	430,500*
	27	75.4	75.0	415,200*
	28	74.5	74.7	400,900*
	29	73.7	74.4	387,600*
	30	72.8	74.0	375,000*
	32	71.0	73.3	352,200*
	34	69.3	72.4	331,800*
	36	67.5	71.6	302,800
	38	65.7	70.6	276,700
	40	63.8	69.5	254,500
	42	61.9	68.4	235,500

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
70	44	60.0	67.2	219,000
	46	58.1	65.9	204,500
	48	56.1	64.5	191,800
	50	54.0	62.9	180,400
	55	48.6	58.6	156,800
	60	42.6	53.2	138,200
80	65	35.8	46.6	123,300
	70	27.4	37.6	110,200*
	20	82.4	86.9	526,400*
	21	81.7	86.7	523,600*
	22	80.9	86.5	503,500*
	23	80.2	86.3	482,900*
	24	79.5	86.1	463,800*
	25	78.7	85.9	446,100*
	26	78.0	85.6	429,700*
	27	77.3	85.4	414,400*
80	28	76.5	85.1	400,100*
	29	75.8	84.8	386,700*

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
80	30	75.0	84.5	374,200*
	32	73.5	83.9	351,300*
	34	72.0	83.2	331,000*
	36	70.5	82.4	302,700
	38	68.9	81.6	276,600
	40	67.3	80.7	254,400
	42	65.8	79.8	235,300
	44	64.2	78.7	218,800
	46	62.5	77.6	204,300
	48	60.9	76.5	191,500
	50	59.2	75.2	180,100
	55	54.8	71.7	156,500
	60	50.2	67.6	137,900
	65	45.1	62.7	123,000
80	70	39.6	56.8	110,700
	75	33.3	49.4	100,400
	80	25.4	39.7	91,600

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M-250

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS	BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS	BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
90	21	82.6	96.9	498,600*	110	60	62.4	104.2	137,100	140	27	82.8	146.5	341,800*
	22	81.9	96.7	495,600*		65	59.4	101.2	122,100		28	82.4	146.4	340,000*
	23	81.3	96.5	482,200*		70	56.3	97.9	109,800		29	81.9	146.2	338,200*
	24	80.6	96.3	463,200*		75	53.0	94.1	99,500		30	81.5	146.0	336,400*
	25	80.0	96.1	445,500*		80	49.6	89.9	90,700		32	80.7	145.7	333,100*
	26	79.3	95.9	429,100*		85	46.0	85.1	83,200		34	79.9	145.3	326,800*
	27	78.7	95.7	413,800*		90	42.2	79.7	76,600		36	79.0	144.9	301,800
	28	78.0	95.4	399,500*		95	38.0	73.4	70,900		38	78.2	144.4	275,500
	29	77.4	95.2	386,200*		100	33.3	66.0	65,800		40	77.4	144.0	253,200
	30	76.7	94.9	373,600*		105	28.0	57.1	61,200		42	76.5	143.5	234,000
	32	75.4	94.4	350,800*	120	24	83.0	126.8	363,700*		44	75.7	142.9	217,400
	34	74.1	93.7	330,500*		25	82.5	126.6	361,400*		46	74.8	142.3	202,800
	36	72.7	93.1	302,700*		26	82.0	126.4	359,200*		48	74.0	141.7	189,900
	38	71.4	92.4	276,600		27	81.6	126.3	357,000*		50	73.1	141.1	178,400
	40	70.0	91.6	254,400		28	81.1	126.1	354,900*		55	70.9	139.4	154,600
	42	68.6	90.8	235,300		29	80.6	125.9	352,900*		60	68.7	137.4	136,000
	44	67.2	89.9	218,700		30	80.1	125.7	350,900*		65	66.5	135.2	121,000
	46	65.8	88.9	204,200		32	79.1	125.3	347,200*		70	64.2	132.8	108,600
	48	64.4	87.9	191,400		34	78.1	124.8	328,100*		75	61.9	130.1	98,300
	50	63.0	86.8	180,000		36	77.2	124.4	302,100		80	59.5	127.2	89,500
100	55	59.3	83.9	156,400	130	38	76.2	123.8	275,800		85	57.1	124.0	81,900
	60	55.4	80.4	137,800		40	75.2	123.3	253,500		90	54.6	120.4	75,400
	65	51.3	76.5	122,900		42	74.2	122.7	234,400		95	52.0	116.5	69,600
	70	47.0	71.8	110,600		44	73.2	122.0	217,800		100	49.3	112.2	64,500
	75	42.3	66.5	100,300		46	72.2	121.4	203,200		105	46.5	107.5	60,000
	80	37.1	60.0	91,500		48	71.2	120.6	190,400		110	43.5	102.3	55,900
	85	31.2	52.1	84,000		50	70.1	119.9	178,900		115	40.4	96.5	52,200
	22	82.8	106.8	479,300*		55	67.6	117.8	155,200		120	37.0	90.0	48,900
	23	82.2	106.7	476,300*		60	64.9	115.5	136,600		125	33.4	82.6	45,900
	24	81.6	106.5	462,200*		65	62.2	112.8	121,600		130	29.3	74.0	43,100
	25	81.0	106.3	444,500*	140	70	59.5	109.9	109,200		28	82.9	156.5	302,400*
	26	80.4	106.1	428,100*		75	56.6	106.6	98,900		29	82.5	156.3	300,500*
	27	79.8	105.9	412,800*		80	53.6	102.9	90,100		30	82.1	156.2	298,600*
	28	79.3	105.7	398,600*		85	50.6	98.8	82,600		32	81.3	155.8	295,000*
	29	78.7	105.5	385,200*		90	47.3	94.2	76,000		34	80.6	155.5	291,500*
	30	78.1	105.2	372,700*		95	43.9	89.1	70,300		36	79.8	155.1	288,300*
	32	76.9	104.7	349,900*		100	40.2	83.3	65,200		38	79.0	154.7	275,200
	34	75.7	104.2	329,600*		105	36.2	76.6	60,700		40	78.2	154.2	252,800
	36	74.5	103.6	302,500		110	31.8	68.8	56,600		42	77.4	153.8	233,600
	38	73.3	103.0	276,300		115	26.7	59.3	52,900		44	76.6	153.3	217,000
110	40	72.1	102.3	254,100	150	26	82.7	136.6	350,700*		46	75.8	152.7	202,400
	42	70.9	101.5	235,000		27	82.2	136.4	348,700*		48	75.1	152.2	189,500
	44	69.7	100.8	218,400		28	81.8	136.2	346,700*		50	74.3	151.6	178,000
	46	68.4	99.9	203,900		29	81.3	136.1	344,800*		55	72.3	150.0	154,200
	48	67.2	99.0	191,100		30	80.9	135.9	343,000*		60	70.2	148.2	135,500
	50	65.9	98.1	179,700		32	80.0	135.5	339,500*		65	68.2	146.2	120,500
	55	62.7	95.5	156,000		34	79.1	135.1	327,800*		70	66.1	143.9	108,100
	60	59.3	92.5	137,400		36	78.2	134.6	302,100		75	63.9	141.5	97,800
	65	55.9	89.2	122,400		38	77.3	134.2	275,800		80	61.8	138.8	89,000
	70	52.3	85.3	110,100		40	76.4	133.6	253,500		85	59.6	135.9	81,400
120	75	48.5	80.9	99,800	160	42	75.4	133.1	234,400		90	57.3	132.6	74,900
	80	44.4	75.9	91,000		44	74.5	132.5	217,800		95	55.0	129.1	69,100
	85	40.0	70.0	83,500		46	73.6	131.9	203,200		100	52.6	125.3	64,000
	90	35.1	63.1	77,000		48	72.7	131.2	190,400		105	50.1	121.2	59,500
	95	29.5	54.7	71,200		50	71.7	130.5	178,900		110	47.5	116.6	55,400
	23	82.9	116.8	374,400*		55	69.4	128.7	155,100		115	44.8	111.6	51,700
	24	82.4	116.6	371,800*		60	67.0	126.5	136,500		120	42.0	106.1	48,400
	25	81.8	116.5	369,400*		65	64.5	124.1	121,500		125	38.9	100.0	45,400
	26	81.3	116.3	367,000*		70	62.1	121.5	109,200		130	35.7	93.2	42,600
	27	80.8	116.1	364,700*		75	59.5	118.5	98,800		135	32.2	85.4	40,100
130	28	80.3	115.9	362,500*		80	56.9	115.3	90,100		140	28.3	76.5	37,700
	29	79.7	115.7	360,300*	170	85	54.2	111.7	82,500					
	30	79.2	115.5	358,200*		90	51.3	107.7	76,000					
	32	78.1	115.0	349,300*		95	48.4	103.3	70,200					
	34	77.0	114.6	329,000*		100	45.3	98.4	65,100					
	36	76.0	114.0	302,400		105	42.0	92.9	60,600					
	38	74.9	113.4	276,100		110	38.5	86.7	56,500					
	40	73.8	112.8	253,900		115	34.7	79.7	52,900					
	42	72.7	112.2	234,800		120	30.5	71.5	49,500					
	44	71.6	111.5	218,200		125	25.6	61.5	46,500					
	46	70.5	110.7	203,600										
	48	69.4	109.9	190,800										
	50	68.2	109.1	179,400										
	55	65.4	106.8	155,700										

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BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
160	29	83.0	166.4	292,100*
	30	82.6	166.3	290,300*
	32	81.9	166.0	287,100*
	34	81.1	165.7	284,000*
	36	80.4	165.3	281,100*
	38	79.7	164.9	274,800
	40	79.0	164.5	252,400
	42	78.2	164.0	233,200
	44	77.5	163.6	216,500
	46	76.8	163.1	201,900
	48	76.0	162.6	189,000
	50	75.3	162.0	177,500
	55	73.4	160.5	153,700
	60	71.5	158.8	135,000
	65	69.6	157.0	119,900
	70	67.7	154.9	107,500
	75	65.7	152.6	97,200
	80	63.7	150.2	88,400
	85	61.7	147.5	80,800
	90	59.6	144.5	74,200
170	95	57.5	141.3	68,500
	100	55.3	137.9	63,400
	105	53.1	134.1	58,800
	110	50.7	130.1	54,700
	115	48.4	125.6	51,100
	120	45.9	120.8	47,700
	125	43.3	115.6	44,700
	130	40.5	109.8	41,900
	135	37.6	103.4	39,400
	140	34.5	96.2	37,100
	145	31.1	88.2	34,900
	150	27.3	78.8	32,900
	30	83.0	176.4	284,100*
	32	82.4	176.1	281,100*
	34	81.7	175.8	278,300*
	36	81.0	175.5	275,600*
	38	80.3	175.1	273,100*
	40	79.6	174.7	252,300
	42	78.9	174.3	233,100
	44	78.2	173.8	216,400
	46	77.5	173.4	201,800
	48	76.9	172.9	188,900

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
180	32	82.8	186.2	274,600*
	34	82.1	185.9	272,100*
	36	81.5	185.6	269,700*
	38	80.9	185.3	267,400*
	40	80.2	184.9	251,900
	42	79.6	184.5	232,700
	44	78.9	184.1	216,000
	46	78.3	183.6	201,400
	48	77.6	183.2	188,400
	50	76.9	182.7	176,900
	55	75.3	181.4	153,000
	60	73.6	179.9	134,300
	65	72.0	178.3	119,200
	70	70.3	176.5	106,800
	75	68.6	174.5	96,500
	80	66.8	172.3	87,600
	85	65.1	170.0	80,100
	90	63.3	167.5	73,500
	95	61.5	164.8	67,700
	100	59.6	161.8	62,600
190	105	57.8	158.7	58,100
	110	55.8	155.3	54,000
	115	53.9	151.7	50,300
	120	51.8	147.7	47,000
	125	49.8	143.5	43,900
	130	47.6	139.0	41,200
	135	45.4	134.1	38,600
	140	43.1	128.8	36,300
	145	40.6	123.0	34,100
	150	38.1	116.7	32,100
	155	35.4	109.8	30,200
	160	32.4	102.1	28,500
	165	29.2	93.4	26,900
	170	25.7	83.3	25,300
	34	82.6	196.0	241,300*
	36	81.9	195.7	238,800*
	38	81.3	195.4	236,500*
	40	80.7	195.1	234,200*
	42	80.1	194.7	232,000*
	44	79.5	194.3	215,600
	46	78.9	193.9	200,900
	48	78.3	193.4	188,000
	50	77.6	193.0	176,500
	55	76.1	191.7	152,600

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
200	34	82.9	206.1	233,400*
	36	82.4	205.8	231,200*
	38	81.8	205.5	229,100*
	40	81.2	205.2	227,100*
	42	80.6	204.8	225,200*
	44	80.0	204.5	215,100
	46	79.4	204.1	200,500
	48	78.9	203.7	187,500
	50	78.3	203.2	176,000
	55	76.8	202.1	152,000
	60	75.3	200.7	133,300
	65	73.8	199.3	118,200
	70	72.3	197.7	105,700
	75	70.8	195.9	95,300
	80	69.3	194.0	86,500
	85	67.7	192.0	78,900
	90	66.2	189.8	72,300
	95	64.6	187.4	66,500
	100	63.0	184.8	61,400
	105	61.3	182.1	56,800
210	110	59.7	179.2	52,800
	115	58.0	176.0	49,100
	120	56.3	172.7	45,700
	125	54.5	169.1	42,700
	130	52.7	165.3	39,900
	135	50.9	161.3	37,400
	140	49.0	157.0	35,000
	145	47.0	152.3	32,900
	150	45.0	147.3	30,800
	155	42.9	142.0	29,000
	160	40.7	136.2	27,200
	165	38.4	130.0	25,600
	170	36.0	123.2	24,100
	175	33.4	115.8	22,600
	180	30.7	107.5	21,300
	185	27.7	98.3	20,000
	36	82.7	215.9	225,300*
	38	82.2	215.6	223,500*
	40	81.6	215.3	221,700*
	42	81.1	215.0	219,300*
	44	80.5	214.6	214,300*
	46	80.0	214.3	200,200
	48	79.4	213.9	187,300
	50	78.8	213.5	175,700
	55	77.4	212.3	151,800
	60	76.0	211.1	133,000

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

BOOM NO. 44 WITH HEAVY LIFT TOP
167,000 LB. COUNTERWEIGHT
RATING OVER FRONT OF BLOCKED CRAWLERS
NO TRAVEL - LIMITED SWING

MEETS
ANSI B30.5
REQUIREMENTS

M-250

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
220	38	82.5	225.8	217,300*
	40	82.0	225.5	214,800*
	42	81.5	225.1	209,800*
	44	80.9	224.8	205,000*
	46	80.4	224.4	199,800*
	48	79.9	224.1	186,800*
	50	79.4	223.7	175,300*
	55	78.0	222.6	151,300*
	60	76.7	221.4	132,500*
	65	75.3	220.1	117,400*
	70	74.0	218.7	104,900*
	75	72.6	217.1	94,500*
	80	71.2	215.4	85,700*
	85	69.9	213.5	78,100*
	90	68.5	211.6	71,400*
	95	67.0	209.4	65,600*
	100	65.6	207.2	60,500*
	105	64.2	204.7	56,000*
	110	62.7	202.2	51,900*
	115	61.2	199.4	48,200*
230	120	59.7	196.5	44,800*
	125	58.2	193.4	41,800*
	130	56.6	190.1	39,000*
	135	55.0	186.6	36,500*
	140	53.4	182.9	34,100*
	145	51.7	179.0	31,900*
	150	50.1	174.8	29,900*
	155	48.3	170.4	28,100*
	160	46.5	165.6	26,300*
	165	44.7	160.6	24,700*
	170	42.8	155.2	23,200*
	175	40.8	149.5	21,700*
	180	38.7	143.3	20,400*
	185	36.5	136.6	19,100*
	190	34.2	129.4	17,900*
	195	31.8	121.5	16,800*
	200	29.2	112.7	15,700*
	205	26.3	102.9	14,700*
240	38	82.9	235.9	193,200*
	40	82.4	235.6	191,600*
	42	81.8	235.3	190,000*
	44	81.3	234.9	188,500*
	46	80.8	234.6	187,100*
	48	80.3	234.2	183,900*
	50	79.8	233.9	174,800*
	55	78.6	232.9	150,800*
	60	77.3	231.7	132,000*
	65	76.0	230.5	116,800*
	70	74.7	229.1	104,400*
	75	73.4	227.6	94,000*
	80	72.1	226.0	85,100*
	85	70.8	224.2	77,500*
	90	69.4	222.3	70,900*
	95	68.1	220.3	65,100*
	100	66.7	218.2	60,000*
	105	65.4	215.9	55,400*
	110	64.0	213.4	51,300*
	115	62.6	210.8	47,600*
250	120	61.2	208.1	44,300*
	125	59.7	205.1	41,200*
	130	58.3	202.1	38,400*
	135	56.8	198.8	35,900*
	140	55.2	195.3	33,500*
	145	53.7	191.7	31,400*
	150	52.1	187.8	29,300*
	155	50.5	183.7	27,500*
	160	48.9	179.3	25,700*
	165	47.2	174.7	24,100*
	170	45.4	169.8	22,600*
	175	43.6	164.6	21,100*
260	38	82.5	255.8	179,100*
	40	82.0	255.5	177,900*
	42	81.5	255.2	174,900*
	44	81.0	254.9	171,600*
	46	80.5	254.6	168,200*
	48	80.0	254.2	164,900*
	50	79.5	253.7	151,100*
	55	78.3	252.2	132,200*
	60	77.1	251.1	117,100*
	65	76.0	249.8	104,600*
	70	74.8	248.5	94,200*
	75	73.6	247.0	85,300*
	80	72.4	245.4	77,700*
	85	71.2	243.7	71,100*
	90	69.9	241.8	65,300*
	95	68.7	239.9	60,100*
	100	67.5	237.8	55,600*
	105	66.2	235.6	51,500*
	110	64.9	233.3	47,800*
	115	63.7	230.8	44,400*
250	120	62.4	228.2	41,400*
	130	61.1	225.4	38,600*
	135	59.7	222.5	36,000*
	140	58.4	219.4	33,700*
	145	57.0	216.2	31,500*
250	150	55.6	212.7	29,500*
	155	54.2	209.1	27,600*
	160	52.8	205.4	25,900*
	165	51.3	201.4	24,300*
	170	49.8	197.2	22,700*
	175	48.3	192.7	21,300*
	180	46.7	188.0	20,000*
	185	45.1	183.1	18,700*
	190	43.4	177.8	17,500*
	195	41.7	172.2	16,400*
	200	40.0	166.3	15,300*
	205	38.1	160.0	14,300*
	210	36.2	153.2	13,300*
	215	34.2	146.0	12,400*
	220	32.0	138.1	11,500*
	225	29.7	129.5	10,700*
	230	27.3	120.1	9,900*
	42	82.8	265.6	169,400*
	44	82.4	265.3	166,100*
	46	81.9	265.0	162,800*
	48	81.5	264.7	159,700*
	50	81.0	264.4	156,500*
	55	79.9	263.5	148,500*
	60	78.8	262.5	131,700*
	65	77.6	261.4	116,500*
	70	76.5	260.1	104,100*
	75	75.4	258.8	93,600*
	80	74.2	257.4	84,700*
	85	73.1	255.9	77,100*
	90	71.9	254.2	70,500*
	95	70.7	252.5	64,700*
	100	69.6	250.6	59,500*
	105	68.4	248.6	54,900*
	110	67.2	246.5	50,800*
	115	66.0	244.3	47,100*
	120	64.8	241.9	43,800*
	125	63.5	239.4	40,700*
	130	62.3	236.8	38,000*
	135	61.0	234.0	35,400*
	140	59.8	231.1	33,000*
	145	58.5	228.1	30,900*
	150	57.1	224.8	28,800*
	155	55.8	221.4	27,000*
	160	54.5	217.9	25,200*
	165	53.1	214.1	23,600*
	170	51.7	210.2	22,100*
	175	50.2	206.0	20,600*
	180	48.8	201.7	19,300*
	185	47.3	197.1	18,000*
	190	45.8	192.2	16,800*
	195	44.2	187.1	15,700*
	200	42.6	181.7	14,600*
	205	40.9	176.0	13,600*
	210	39.1	169.9	12,600*
	215	37.3	163.4	11,700*
	220	35.4	156.4	10,800*
	225	33.5	149.0	10,000*
	230	31.4	140.9	9,200*
	235	29.1	132.1	8,400*
	240	26.7	122.4	7,700*

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

BOOM NO. 44 WITH HEAVY LIFT TOP

167,000 LB. COUNTERWEIGHT

RATING OVER FRONT OF BLOCKED CRAWLERS

NO TRAVEL - LIMITED SWING

MEETS
ANSI B30.5
REQUIREMENTS

M-250

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
270	44	82.6	275.4	153,900*
	46	82.2	275.1	151,800*
	48	81.8	274.8	148,900*
	50	81.3	274.5	146,100*
	55	80.3	273.6	139,000*
	60	79.2	272.7	131,200
	65	78.1	271.6	116,000
	70	77.0	270.4	103,500
	75	75.9	269.2	93,100
	80	74.8	267.8	84,200
	85	73.7	266.4	76,500
	90	72.6	264.8	69,900
	95	71.5	263.1	64,100
	100	70.4	261.3	58,900
	105	69.2	259.4	54,400
	110	68.1	257.4	50,300
	115	66.9	255.3	46,600
	120	65.8	253.0	43,200
	125	64.6	250.6	40,100
	130	63.4	248.1	37,400
	135	62.2	245.5	34,800
	140	61.0	242.7	32,400
	145	59.8	239.8	30,300
	150	58.5	236.7	28,200
	155	57.3	233.5	26,400
	160	56.0	230.1	24,600
	165	54.7	226.6	23,000
	170	53.4	222.9	21,500
	175	52.0	219.0	20,000
	180	50.6	214.9	18,700
	185	49.2	210.6	17,400
	190	47.8	206.1	16,200
	195	46.3	201.3	15,100
	200	44.8	196.3	14,000
	205	43.3	191.1	13,000
	210	41.7	185.5	12,000
	215	40.1	179.6	11,100
	220	38.4	173.3	10,200
	225	36.6	166.6	9,400
	230	34.8	159.5	8,600
	235	32.8	151.9	7,800
	240	30.8	143.6	7,100
	245	28.6	134.6	6,400
	250	26.2	124.7	5,700

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
280	44	82.9	285.5	142,700*
	46	82.5	285.2	142,000*
	48	82.1	284.9	141,300*
	50	81.7	284.6	138,600*
	55	80.6	283.8	130,900*
	60	79.6	282.9	129,100*
	65	78.5	281.8	116,000
	70	77.5	280.7	103,500
	75	76.4	279.5	93,000
	80	75.4	278.2	84,100
	85	74.3	276.8	76,400
	90	73.2	275.3	69,800
	95	72.2	273.7	64,000
	100	71.1	271.9	58,800
	105	70.0	270.1	54,200
	110	68.9	268.2	50,100
	115	67.8	266.1	46,400
	120	66.7	264.0	43,000
	125	65.6	261.7	40,000
	130	64.4	259.3	37,200
	135	63.3	256.8	34,600
	140	62.1	254.1	32,300
	145	61.0	251.4	30,100
	150	59.8	248.5	28,100
	155	58.6	245.4	26,200
	160	57.4	242.2	24,400
	165	56.1	238.8	22,800
	170	54.9	235.3	21,300
	175	53.6	231.6	19,800
	180	52.3	227.8	18,500
	185	51.0	223.7	17,200
	190	49.7	219.5	16,000
	195	48.3	215.1	14,900
	200	46.9	210.4	13,800
	205	45.5	205.5	12,800
	210	44.0	200.3	11,800
	215	42.5	194.9	10,900
	220	40.9	189.2	10,000
	225	39.3	183.1	9,200
	230	37.6	176.7	8,400
	235	35.9	169.9	7,600
	240	34.1	162.6	6,900
	245	32.2	154.7	6,200
	250	30.2	146.3	5,500
	255	28.0	137.1	4,700*

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
290	46	82.7	295.3	132,000*
	48	82.3	295.0	131,400*
	50	81.9	294.7	130,800*
	55	80.9	293.9	129,600*
	60	79.9	293.0	127,400*
	65	78.9	292.1	115,600
	70	77.9	291.0	103,100
	75	76.9	289.8	92,600
	80	75.9	288.6	83,700
	85	74.9	287.2	76,000
	90	73.8	285.7	69,400
	95	72.8	284.2	63,600
	100	71.8	282.5	58,400
	105	70.7	280.8	53,800
	110	69.7	278.9	49,700
	115	68.6	277.0	46,000
	120	67.5	274.9	42,600
	125	66.5	272.7	39,600
	130	65.4	270.4	36,800
	135	64.3	268.0	34,200
	140	63.2	265.5	31,900
	145	62.0	262.8	29,700
	150	60.9	260.0	27,600
	155	59.8	257.1	25,800
	160	58.6	254.1	24,000
	165	57.4	250.9	22,400
	170	56.3	247.5	20,900
	175	55.1	244.0	19,400
	180	53.8	240.4	18,100
	185	52.6	236.6	16,800

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
290	190	51.3	232.6	15,600
	195	50.0	228.4	14,500
	200	48.7	224.0	13,400
	205	47.4	219.4	12,400
	210	46.0	214.6	11,400
	215	44.6	209.6	10,500
	220	43.2	204.3	9,600
	225	41.7	198.7	8,800
	230	40.2	192.8	8,000
	235	38.6	186.6	7,200
	240	37.0	180.0	6,500
	245	35.3	173.0	5,800
	250	33.5	165.5	5,100
	255	31.6	157.5	4,500
	46	83.0	305.4	123,300*
	48	82.6	305.1	122,900*
	50	82.2	304.8	122,600*
	55	81.3	304.1	120,400*
	60	80.3	303.2	116,000*
	65	79.3	302.3	111,900*
	70	78.3	301.2	102,500
	75	77.4	300.1	92,000
	80	76.4	298.9	83,100
	85	75.4	297.6	75,400
	90	74.4	296.2	68,800
	95	73.4	294.7	62,900
	100	72.4	293.1	57,800
	105	71.4	291.4	53,200
	110	70.4	289.6	49,000
	115	69.4	287.7	45,300
	120	68.3	285.7	42,000
	125	67.3	283.6	38,900
	130	66.2	281.4	36,100
	135	65.2	279.1	33,500
	140	64.1	276.7	31,200
	145	63.1	274.1	29,000
	150	62.0	271.5	27,000
	155	60.9	268.7	25,100
	160	59.8	265.8	23,300
	165	58.7	262.7	21,700
	170	57.5	259.6	20,200
	175	56.4	256.2	18,700
	180	55.2	252.8	17,400
	185	54.0	249.1	16,100
	190	52.8	245.4	14,900
	195	51.6	241.4	13,800
	200	50.4	237.3	12,700
	205	49.1	233.0	11,700
	210	47.8	228.4	10,700
	215	46.5	223.7	9,800
	220	45.2	218.8	8,900
	225	43.8	213.6	8,100
	230	42.4	208.1	7,300
	235	40.9	202.4	6,500
	240	39.5	196.4	5,800
	245	37.9	190.0	5,000*
	250	36.3	183.3	4,200*