

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

MEETS
ANSI B30.5
REQUIREMENTS

M-1200

BOOM NO. 75A

MAST NO. 75/49A

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,049,600 LB. AUXILIARY COUNTERWEIGHT

360 DEGREE RATING

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 LIFTCRANE SERVICE WITH 6 PART LINE IS 180,000 LBS. IN ALL CASES, UPPER BOOM POINT CAPACITIES CANNOT EXCEED THOSE LISTED FOR MAIN BOOM CAPACITY. UPPER BOOM POINT MINIMUM OPERATING RADII WILL BE RESTRICTED WITH BOOM AT MAXIMUM ANGLE.

WEIGHT OF ALL LOAD BLOCKS, HOOKS, SLINGS, HOIST LINES, ETC., BENEATH BOOM SHEAVES, IS CONSIDERED PART OF 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 ROLLER PATH LEVEL WITHIN A TOLERANCE OF 1-1/4" IN 60' AND PROPERLY SUPPORTED. REFER TO BOOM RIGGING NO. 173398 AND WIRE ROPE SPECIFICATION CHART NO. 7683-C. 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 IN WINDS UP TO 30 MPH PROVIDED CRANE OPERATOR JUDGMENT IS USED TO ALLOW FOR WIND EFFECT ON LIFTED LOAD AND OTHER CONSIDERATIONS NOTED ON 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 TO APPROXIMATELY 75 DEGREE BOOM ANGLE WHEN WIND EXCEEDS 30 MPH. LOWER BOOM TO GROUND WHEN WIND IS ABOVE 50 MPH.

OPERATING RADIUS IS HORIZONTAL DISTANCE FROM AXIS OF ROTATION TO CENTER OF VERTICAL HOIST LINE OR LOAD BLOCK. BOOM ANGLE IS 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 60' RINGER ATTACHMENT, 30'9" CRAWLERS, 48" TREADS, 28' RETRACTABLE GANTRY, 150' NO. 75/49A MAST, 20 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 52,000 LB. CRANE COUNTERWEIGHT AND 1,049,600 LB. AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH LIFTED UNASSISTED = 400'	DEDUCT 5,400 LBS. FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED
LOAD BLOCKS ON GROUND AT START.	

WARNING: CHECK AMOUNT OF AUXILIARY COUNTERWEIGHT ON MACHINE BEFORE USE OF THIS CHART.

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
150	55	80.7	159.0	1,800,000*
	60	78.7	158.0	1,772,300
	65	76.8	156.9	1,527,100
	70	74.8	155.5	1,339,400
	75	72.8	154.0	1,191,200
	80	70.8	152.2	1,071,000
	85	68.7	150.3	971,800
	90	66.6	148.1	888,300
	95	64.5	145.7	817,200
	100	62.4	143.1	755,900
	105	60.2	140.3	702,500
	110	57.9	137.1	655,600
	115	55.6	133.7	614,000
	120	53.2	130.0	576,800
	125	50.8	126.0	543,500
	130	48.2	121.5	513,400
	135	45.6	116.7	486,100
	140	42.8	111.4	461,300
	145	39.8	105.5	438,500
	150	36.7	98.9	417,600
	155	33.2	91.4	398,300
	160	29.5	82.9	380,500

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
175	55	82.0	184.4	1,587,800*
	60	80.4	183.5	1,587,800*
	65	78.7	182.5	1,523,000
	70	77.0	181.4	1,335,300
	75	75.3	180.1	1,187,000
	80	73.6	178.6	1,066,900
	85	71.9	177.0	967,600
	90	70.2	175.2	884,100
	95	68.4	173.2	813,000
	100	66.6	171.0	751,700
	105	64.8	168.7	698,300
	110	63.0	166.1	651,400
	115	61.1	163.4	609,800
	120	59.2	160.4	572,600
	125	57.2	157.2	539,300
	130	55.3	153.7	509,300
	135	53.2	150.0	482,000
	140	51.1	146.0	457,100
	145	49.0	141.7	434,400
	150	46.7	137.0	413,500
	155	44.4	132.0	394,200
	160	42.0	126.5	376,400
	165	39.4	120.5	359,900
	170	36.7	113.9	344,500
	175	33.8	106.6	330,100
	180	30.6	98.4	316,700
	185	27.2	89.0	304,200

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
200	60	81.6	208.9	1,444,700*
	65	80.1	208.0	1,435,100*
	70	78.7	207.0	1,330,600
	75	77.2	205.9	1,182,300
	80	75.7	204.6	1,062,200
	85	74.2	203.2	962,900
	90	72.7	201.6	879,400
	95	71.2	199.9	808,300
	100	69.7	198.1	747,000
	105	68.1	196.1	693,600
	110	66.6	193.9	646,600
	115	65.0	191.6	605,000
	120	63.4	189.1	567,900
	125	61.8	186.4	534,600
	130	60.1	183.6	504,500
	135	58.4	180.5	477,200
	140	56.7	177.2	452,400
	145	55.0	173.7	429,600
	150	53.2	170.0	408,700
	155	51.4	166.0	389,500
	160	49.5	161.8	371,700
	165	47.6	157.3	355,200
	170	45.6	152.4	339,800
	175	43.5	147.2	325,500
	180	41.3	141.6	312,100
	185	39.1	135.5	299,500
	190	36.7	128.9	287,800
	195	34.2	121.7	276,700
	200	31.5	113.7	266,200
	205	28.6	104.8	256,400

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BOOM NO. 75A

MAST NO. 75/49A

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,049,600 LB. AUXILIARY COUNTERWEIGHT

360 DEGREE RATING

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
225	65	81.2	233.4	1,278,000*
	70	79.9	232.5	1,263,900*
	75	78.6	231.5	1,178,400
	80	77.3	230.4	1,058,300
	85	76.0	229.2	959,000
	90	74.7	227.8	875,500
	95	73.4	226.3	804,400
	100	72.0	224.7	743,100
	105	70.7	222.9	689,700
	110	69.3	221.0	642,700
	115	68.0	219.0	601,100
	120	66.6	216.8	564,000
	125	65.2	214.5	530,700
	130	63.7	212.1	500,600
	135	62.3	209.4	473,300
	140	60.8	206.7	448,500
	145	59.4	203.7	425,700
	150	57.9	200.6	404,800
	155	56.3	197.3	385,600
	160	54.8	193.7	367,800
250	165	53.2	190.0	351,300
	170	51.6	186.1	335,900
	175	49.9	181.9	321,600
	180	48.2	177.4	308,200
	185	46.5	172.7	295,700
	190	44.7	167.7	283,900
	195	42.8	162.3	272,800
	200	40.9	156.6	262,400
	205	38.8	150.5	252,600
	210	36.7	143.9	243,200
	215	34.5	136.7	234,400
	220	32.1	128.9	226,100
	225	29.6	120.3	218,100
300	70	81.0	257.9	1,132,100*
	75	79.8	257.0	1,120,600*
	80	78.6	256.0	1,053,500
	85	77.4	254.9	954,200
	90	76.3	253.7	870,700
	95	75.1	252.3	799,600
	100	73.9	250.9	738,300
	105	72.7	249.3	684,800
	110	71.5	247.7	637,900
	115	70.3	245.9	596,300
	120	69.0	244.0	559,100
	125	67.8	241.9	525,800
	130	66.6	239.8	495,800
	135	65.3	237.5	468,500
	140	64.0	235.0	443,600
	145	62.7	232.4	420,900
	150	61.4	229.7	400,000
	155	60.1	226.9	380,700
	160	58.8	223.8	362,900
	165	57.4	220.6	346,400
350	170	56.0	217.3	331,000
	175	54.6	213.7	316,700
	180	53.2	210.0	303,300
	185	51.7	206.1	290,800
	190	50.2	201.9	279,000
	195	48.7	197.6	268,000
	200	47.2	193.0	257,600
	205	45.6	188.1	247,700
	210	43.9	183.0	238,400
	215	42.2	177.5	229,600
	220	40.5	171.7	221,300
	225	38.6	165.5	213,300
	230	36.7	158.9	205,800
	235	34.8	151.8	198,600
	240	32.7	144.1	191,800
	245	30.4	135.8	185,200
	250	28.0	126.6	179,000

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
275	70	81.8	283.3	1,016,400*
	75	80.7	282.4	1,007,300*
	80	79.7	281.5	997,900*
	85	78.6	280.5	950,500
	90	77.5	279.4	867,100
	95	76.5	278.2	795,900
	100	75.4	276.9	734,600
	105	74.3	275.5	681,200
	110	73.2	274.0	634,200
	115	72.1	272.4	592,600
	120	71.0	270.7	555,500
	125	69.9	268.8	522,200
	130	68.8	266.9	492,100
	135	67.7	264.8	464,800
	140	66.5	262.7	439,900
	145	65.4	260.4	417,200
	150	64.2	258.0	396,300
	155	63.1	255.4	377,000
	160	61.9	252.8	359,200
	165	60.7	250.0	342,700
300	170	59.5	247.0	327,400
	175	58.3	243.9	313,000
	180	57.0	240.7	299,700
	185	55.8	237.3	287,100
	190	54.5	233.7	275,400
	195	53.2	230.0	264,300
	200	51.9	226.1	253,900
	205	50.5	222.0	244,100
	210	49.1	217.7	234,800
	215	47.7	213.2	225,900
	220	46.3	208.4	217,600
	225	44.8	203.4	209,700
	230	43.3	198.2	202,100
	235	41.8	192.6	195,000
	240	40.1	186.7	188,100
	245	38.5	180.5	181,600
	250	36.8	173.9	175,400
	255	35.0	166.8	169,400
	260	33.1	159.2	163,700
	265	31.1	151.1	158,200
350	270	29.0	142.2	153,000
	75	81.5	307.8	899,400*
	80	80.5	306.9	890,800*
	85	79.6	306.0	873,600*
	90	78.6	305.0	856,400*
	95	77.6	303.9	791,000
	100	76.6	302.7	729,700
	105	75.7	301.4	676,200
	110	74.7	300.1	629,200
	115	73.7	298.6	587,600
	120	72.7	297.0	550,500
	125	71.7	295.4	517,200
	130	70.6	293.6	487,100
	135	69.6	291.8	459,800
	140	68.6	289.8	435,000
	145	67.6	287.7	412,200
	150	66.5	285.6	391,300
	155	65.5	283.3	372,100
	160	64.4	280.9	354,200
	165	63.4	278.4	337,700
	170	62.3	275.8	322,400
400	175	61.2	273.0	308,100
	180	60.1	270.2	294,700
	185	59.0	267.2	282,100
	190	57.8	264.0	270,400
	195	56.7	260.7	259,300
	200	55.5	257.3	248,900
	205	54.4	253.7	239,100
	210	53.2	250.0	229,800
	215	52.0	246.1	221,000

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
300	220	50.7	242.0	212,600
	225	49.5	237.8	204,700
	230	48.2	233.3	197,200
	235	46.9	228.7	190,000
	240	45.6	223.8	183,100
	245	44.2	218.7	176,600
	250	42.8	213.3	170,400
	255	41.4	207.7	164,400
	260	39.9	201.8	158,700
	265	38.3	195.5	153,300
	270	36.8	188.9	148,000
	275	35.1	181.9	143,000
	280	33.4	174.4	138,200
	285	31.6	166.4	133,500
	290	29.7	157.8	129,000
	295	27.7	148.4	124,700
325	80	81.3	332.3	784,500*
	85	80.4	331.4	770,300*
	90	79.5	330.5	755,900*
	95	78.6	329.5	741,300*
	100	77.7	328.4	725,700
	105	76.8	327.2	672,300
	110	75.9	326.0	625,300
	115	75.0	324.6	583,700
	120	74.0	323.2	546,600
	125	73.1	321.7	513,200
	130	72.2	320.1	483,100
	135	71.3	318.4	455,900
	140	70.3	316.6	431,000
	145	69.4	314.7	408,200
	150	68.4	312.7	387,300
	155	67.5	310.7	368,100
	160	66.5	308.5	350,300
	165	65.6	306.2	333,800
	170	64.6	303.8	318,400
	175	63.6	301.4	304,100
350	180	62.6	298.8	290,700
	185	61.6	296.1	278,200
	190	60.6	293.3	266,400
	195	59.6	290.3	255,000
	200	58.5	287.3	244,900
	205	57.5	284.1	235,100
	210	56.4	280.8	225,800
	215	55.4	277.3	217,000
	220	54.3	273.7	208,600
	225	53.2	270.0	200,700
	230	52.1	266.1	193,200
	235	50.9	262.1	186,000
	240	49.8	257.9	179,200
	245	48.6	253.5	172,700
	250	47.4	248.9	166,400
	255	46.2	244.1	160,500
	260	44.9	239.1	154,800
	265	43.7	233.9	149,300
	270	42.4	228.5	144,100
	275	41.0	222.8	139,000
400	280	39.7	216.8	134,200
	285	38.2	210.5	129,600
	290	36.8	203.9	125,100
	295	35.3	196.9	120,800
	300	33.7	189.5	116,700
	305	32.0	181.6	112,700
	310	30.3	173.2	108,800
	315	28.5	164.1	105,100

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BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
350	80	81.9	357.6	695,500*
	85	81.1	356.8	683,400*
	90	80.2	355.9	671,000*
	95	79.4	355.0	658,400*
	100	78.6	354.0	645,600*
	105	77.7	352.9	632,700*
	110	76.9	351.7	619,700*
	115	76.1	350.5	578,700
	120	75.2	349.2	541,500
	125	74.4	347.8	508,200
	130	73.5	346.3	478,100
	135	72.6	344.7	450,800
	140	71.8	343.1	426,000
	145	70.9	341.4	403,200
	150	70.0	339.5	382,300
	155	69.2	337.6	363,000
	160	68.3	335.7	345,200
	165	67.4	333.6	328,700
	170	66.5	331.4	313,400
	175	65.6	329.1	299,000
	180	64.7	326.8	285,700
	185	63.8	324.3	273,100
	190	62.9	321.8	261,400
	195	62.0	319.1	250,300
	200	61.0	316.3	239,900
	205	60.1	313.5	230,000
	210	59.1	310.5	220,700
	215	58.2	307.4	211,900
	220	57.2	304.2	203,600
	225	56.2	300.8	195,700
	230	55.2	297.3	188,100
	235	54.2	293.7	181,000
	240	53.2	290.0	174,100
	245	52.1	286.1	167,600
	250	51.1	282.1	161,400
	255	50.0	277.9	155,400
	260	48.9	273.6	149,700
	265	47.8	269.1	144,300
	270	46.7	264.4	139,000
	275	45.6	259.5	134,000
	280	44.4	254.4	129,200
	285	43.2	249.1	124,500
	290	42.0	243.6	120,100
	295	40.7	237.9	115,800
	300	39.5	231.8	111,600
	305	38.1	225.5	107,600
	310	36.8	218.9	103,800
	315	35.4	211.9	100,100

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
375	85	81.7	382.1	603,600*
	90	80.9	381.3	593,100*
	95	80.1	380.4	582,300*
	100	79.3	379.5	571,300*
	105	78.6	378.5	560,000*
	110	77.8	377.4	548,100*
	115	77.0	376.3	535,700*
	120	76.2	375.0	523,000*
	125	75.4	373.7	504,100
	130	74.6	372.4	474,000
	135	73.8	370.9	446,700
	140	73.0	369.4	421,800
	145	72.2	367.8	399,100
	150	71.4	366.1	378,200
	155	70.6	364.3	358,900
	160	69.8	362.5	341,100
	165	69.0	360.6	324,600
	170	68.2	358.6	309,200
	175	67.3	356.5	294,900
	180	66.5	354.3	281,500
	185	65.7	352.1	269,000
	190	64.8	349.7	257,200
	195	64.0	347.3	246,100
	200	63.1	344.7	235,700
	205	62.3	342.1	225,900
	210	61.4	339.4	216,600
	215	60.5	336.6	207,800
	220	59.6	333.6	199,400
	225	58.7	330.6	191,500
	230	57.8	327.5	184,000
	235	56.9	324.2	176,800
	240	56.0	320.8	170,000
	245	55.1	317.4	163,400
	250	54.1	313.8	157,200
	255	53.2	310.0	151,300
	260	52.2	306.1	145,600
	265	51.2	302.1	140,100
	270	50.2	298.0	134,900
	275	49.2	293.7	129,800
	280	48.2	289.2	125,000
	285	47.2	284.6	120,400
	290	46.1	279.8	115,900
	295	45.0	274.9	111,600
	300	43.9	269.7	107,500
	305	42.8	264.3	103,500

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
400	90	81.5	406.6	516,200*
	95	80.8	405.8	512,000*
	100	80.0	404.9	501,800*
	105	79.3	404.0	490,800*
	110	78.6	403.0	479,300*
	115	77.8	401.9	467,400*
	120	77.1	400.8	455,500*
	125	76.4	399.5	443,700*
	130	75.6	398.3	431,900*
	135	74.9	396.9	420,300*
	140	74.1	395.5	408,800*
	145	73.4	394.0	394,000
	150	72.6	392.4	373,100
	155	71.9	390.8	353,800
	160	71.1	389.1	336,000
	165	70.4	387.3	319,500
	170	69.6	385.4	304,100
	175	68.8	383.5	289,800
	180	68.1	381.5	276,400
	185	67.3	379.4	263,900
	190	66.5	377.2	252,100
	195	65.7	375.0	241,000
	200	64.9	372.6	230,600
	205	64.1	370.2	220,800
	210	63.3	367.7	211,500
	215	62.5	365.1	202,700
	220	61.7	362.4	194,300
	225	60.9	359.6	186,400
	230	60.1	356.8	178,900
	235	59.2	353.8	171,700
	240	58.4	350.7	164,900
	245	57.5	347.5	158,300
	250	56.7	344.3	152,100
	255	55.8	340.9	146,200
	260	54.9	337.4	140,500
	265	54.1	333.8	135,000
	270	53.2	330.0	129,800
	275	52.3	326.2	124,700
	280	51.3	322.2	119,900
	285	50.4	318.0	115,300
	290	49.5	313.8	110,800
	295	48.5	309.4	106,500
	300	47.6	304.8	102,400