

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

1,577,600 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 1,577,600 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	1,800,000*
	65	76.8	156.9	1,800,000*
	70	74.8	155.5	1,800,000*
	75	72.8	154.0	1,641,100*
	80	70.8	152.2	1,462,500*
	85	68.7	150.3	1,315,200*
	90	66.6	148.1	1,191,600*
	95	64.5	145.7	1,086,300*
	100	62.4	143.1	995,500*
	105	60.2	140.3	916,300*
	110	57.9	137.1	846,600*
	115	55.6	133.7	784,700*
	120	53.2	130.0	729,300*
	125	50.8	126.0	679,300*
	130	48.2	121.5	633,900*
160	135	45.6	116.7	592,400*
	140	42.8	111.4	554,200*
	145	39.8	105.5	518,800*
	150	36.7	98.9	481,800*
	155	33.2	91.4	446,100*
	160	29.5	82.9	411,200*

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	1,587,800*
	70	77.0	181.4	1,587,800*
	75	75.3	180.1	1,574,900*
	80	73.6	178.6	1,487,700
	85	71.9	177.0	1,351,900
	90	70.2	175.2	1,237,800
	95	68.4	173.2	1,140,600
	100	66.6	171.0	1,056,700
	105	64.8	168.7	983,600
	110	63.0	166.1	919,400
	115	61.1	163.4	855,000*
	120	59.2	160.4	794,700*
	125	57.2	157.2	740,600*
	130	55.3	153.7	691,800*
185	135	53.2	150.0	647,500*
	140	51.1	146.0	607,000*
	145	49.0	141.7	569,900*
	150	46.7	137.0	535,700*
	155	44.4	132.0	504,100*
	160	42.0	126.5	474,500*
	165	39.4	120.5	446,900*
	170	36.7	113.9	420,800*
195	175	33.8	106.6	396,100*
	180	30.6	98.4	372,400*
	185	27.2	89.0	346,200*

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	1,417,700*
	75	77.2	205.9	1,400,000*
	80	75.7	204.6	1,382,200*
	85	74.2	203.2	1,347,200
	90	72.7	201.6	1,233,100
	95	71.2	199.9	1,135,800
	100	69.7	198.1	1,052,000
	105	68.1	196.1	978,900
	110	66.6	193.9	914,700
	115	65.0	191.6	857,800
	120	63.4	189.1	807,000
	125	61.8	186.4	761,500
	130	60.1	183.6	720,300
	135	58.4	180.5	683,000
205	140	56.7	177.2	649,000
	145	55.0	173.7	613,900*
	150	53.2	170.0	577,700*
	155	51.4	166.0	544,300*
	160	49.5	161.8	513,400*
	165	47.6	157.3	484,700*
	170	45.6	152.4	457,900*
	175	43.5	147.2	432,900*
	180	41.3	141.6	409,400*
	185	39.1	135.5	387,200*
210	190	36.7	128.9	366,100*
	195	34.2	121.7	346,000*
	200	31.5	113.7	326,700*
	205	28.6	104.8	308,000*

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60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,577,600 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	1,249,600*
	80	77.3	230.4	1,235,100*
	85	76.0	229.2	1,220,500*
	90	74.7	227.8	1,205,900*
	95	73.4	226.3	1,191,300*
	100	72.0	224.7	1,176,700*
	105	70.7	222.9	1,162,100*
	110	69.3	221.0	1,147,500*
	115	68.0	219.0	1,132,900*
	120	66.6	216.8	1,118,300*
	125	65.2	214.5	1,103,700*
	130	63.7	212.1	1,089,100*
	135	62.3	209.4	1,074,500*
	140	60.8	206.7	1,059,900*
	145	59.4	203.7	1,045,300*
	150	57.9	200.6	1,030,700*
	155	56.3	197.3	1,016,100*
	160	54.8	193.7	1,001,500*
	165	53.2	190.0	986,900*
	170	51.6	186.1	972,300*
	175	49.9	181.9	957,700*
	180	48.2	177.4	943,100*
	185	46.5	172.7	928,500*
250	190	44.7	167.7	913,900*
	195	42.8	162.3	899,300*
	200	40.9	156.6	884,700*
	205	38.8	150.5	870,100*
	210	36.7	143.9	855,500*
	215	34.5	136.7	840,900*
	220	32.1	128.9	826,300*
	225	29.6	120.3	811,700*
	70	81.0	257.9	1,132,100*
	75	79.8	257.0	1,117,500*
	80	78.6	256.0	1,102,900*
	85	77.4	254.9	1,088,300*
	90	76.3	253.7	1,073,700*
	95	75.1	252.3	1,059,100*
	100	73.9	250.9	1,044,500*
	105	72.7	249.3	1,029,900*
	110	71.5	247.7	1,015,300*
	115	70.3	245.9	1,000,700*
	120	69.0	244.0	986,100*
	125	67.8	241.9	971,500*
	130	66.6	239.8	956,900*
	135	65.3	237.5	942,300*
	140	64.0	235.0	927,700*
	145	62.7	232.4	913,100*
	150	61.4	229.7	898,500*
	155	60.1	226.9	883,900*
	160	58.8	223.8	869,300*
	165	57.4	220.6	854,700*
300	170	56.0	217.3	840,100*
	175	54.6	213.7	825,500*
	180	53.2	210.0	810,900*
	185	51.7	206.1	796,300*
	190	50.2	201.9	781,700*
	195	48.7	197.6	767,100*
	200	47.2	193.0	752,500*
	205	45.6	188.1	737,900*
	210	43.9	183.0	723,300*
	215	42.2	177.5	708,700*
	220	40.5	171.7	694,100*
	225	38.6	165.5	679,500*
	230	36.7	158.9	664,900*
	235	34.8	151.8	650,300*
	240	32.7	144.1	635,700*
	245	30.4	135.8	621,100*
	250	28.0	126.6	606,500*

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	1,001,800*
	80	79.7	281.5	987,200*
	85	78.6	280.5	972,600*
	90	77.5	279.4	958,000*
	95	76.5	278.2	943,400*
	100	75.4	276.9	928,800*
	105	74.3	275.5	914,200*
	110	73.2	274.0	899,600*
	115	72.1	272.4	885,000*
	120	71.0	270.7	870,400*
	125	69.9	268.8	855,800*
	130	68.8	266.9	841,200*
	135	67.7	264.8	826,600*
	140	66.5	262.7	812,000*
	145	65.4	260.4	797,400*
	150	64.2	258.0	782,800*
	155	63.1	255.4	768,200*
	160	61.9	252.8	753,600*
	165	60.7	250.0	739,000*
	170	59.5	247.0	724,400*
	175	58.3	243.9	709,800*
	180	57.0	240.7	695,200*
	185	55.8	237.3	680,600*
	190	54.5	233.7	666,000*
	195	53.2	230.0	651,400*
300	200	51.9	226.1	636,800*
	205	50.5	222.0	622,200*
	210	49.1	217.7	607,600*
	215	47.7	213.2	593,000*
	220	46.3	208.4	578,400*
	225	44.8	203.4	563,800*
	230	43.3	198.2	549,200*
	235	41.8	192.6	534,600*
	240	40.1	186.7	520,000*
	245	38.5	180.5	505,400*
	250	36.8	173.9	490,800*
	255	35.0	166.8	476,200*
	260	33.1	159.2	461,600*
	265	31.1	151.1	447,000*
	270	29.0	142.2	432,400*
	75	81.5	307.8	899,400*
	80	80.5	306.9	884,800*
	85	79.6	306.0	870,200*
	90	78.6	305.0	855,600*
	95	77.6	303.9	841,000*
	100	76.6	302.7	826,400*
	105	75.7	301.4	811,800*
	110	74.7	300.1	797,200*
	115	73.7	298.6	782,600*
	120	72.7	297.0	768,000*
	125	71.7	295.4	753,400*
	130	70.6	293.6	738,800*
	135	69.6	291.8	724,200*
	140	68.6	289.8	709,600*
	145	67.6	287.7	695,000*
325	150	66.5	285.6	680,400*
	155	65.5	283.3	665,800*
	160	64.4	280.9	651,200*
	165	63.4	278.4	636,600*
	170	62.3	275.8	622,000*
	175	61.2	273.0	607,400*
	180	60.1	270.2	592,800*
	185	59.0	267.2	578,200*
	190	57.8	264.0	563,600*
	195	56.7	260.7	549,000*
	200	55.5	257.3	534,400*
	205	54.4	253.7	519,800*
	210	53.2	250.0	505,200*
	215	52.0	246.1	490,600*

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
300	220	50.7	242.0	327,000*
	225	49.5	237.8	312,400*
	230	48.2	233.3	297,800*
	235	46.9	228.7	283,200*
	240	45.6	223.8	268,600*
	245	44.2	218.7	254,000*
	250	42.8	213.3	239,400*
	255	41.4	207.7	224,800*
	260	39.9	201.8	210,200*
	265	38.3	195.5	195,600*
	270	36.8	188.9	181,000*
	275	35.1	181.9	166,400*
	280	33.4	174.4	151,800*
	285	31.6	166.4	137,200*
	290	29.7	157.8	122,600*
	295	27.7	148.4	108,000*
	80	81.3	332.3	784,500*
	85	80.4	331.4	769,900*
	90	79.5	330.5	755,300*
	95	78.6	329.5	740,700*
	100	77.7	328.4	726,100*
	105	76.8	327.2	711,500*
	110	75.9	326.0	696,900*
	115	75.0	324.6	682,300*
	120	74.0	323.2	667,700*
	125	73.1	321.7	653,100*
	130	72.2	320.1	638,500*
	135	71.3	318.4	623,900*
	140	70.3	316.6	609,300*
325	145	69.4	314.7	594,700*
	150	68.4	312.7	580,100*
	155	67.5	310.7	565,500*
	160	66.5	308.5	550,900*
	165	65.6	306.2	536,300*
	170	64.6	303.8	521,700*
	175	63.6	301.4	507,100*
	180	62.6	298.8	492,500*
	185	61.6	296.1	477,900*
	190	60.6	293.3	463,300*
	195	59.6	290.3	448,700*
	200	58.5	287.3	434,100*
	205	57.5	284.1	419,500*
	210	56.4	280.8	404,900*
	215	55.4	277.3	390,300*
	220	54.3	273.7	375,700*
	225	53.2	270.0	361,100*
	230	52.1	266.1	346,500*
	235	50.9	262.1	331,900*
	240	49.8	257.9	317,300*
	245	48.6	253.5	302,700*
	250	47.4	248.9	288,100*
	255	46.2	244.1	273,500*
	260	44.9	239.1	258,900*
	265	43.7	233.9	244,300*
	270	42.4	228.5	229,700*
	275	41.0	222.8	215,100*
350	280	39.7	216.8	200,500*
	285	38.2	210.5	185,900*
	290	36.8	203.9	171,300*
	295	35.3	196.9	156,700*
	300	33.7	189.5	142,100*
375	305	32.0	181.6	127,500*
	310	30.3	173.2	112,900*
	315	28.5	164.1	98,300*

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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	606,800*
	120	75.2	349.2	593,400*
	125	74.4	347.8	579,900*
	130	73.5	346.3	565,900*
	135	72.6	344.7	552,100*
	140	71.8	343.1	538,100*
	145	70.9	341.4	524,200*
	150	70.0	339.5	508,400*
	155	69.2	337.6	488,300*
	160	68.3	335.7	469,400*
	165	67.4	333.6	451,700*
	170	66.5	331.4	435,000*
	175	65.6	329.1	419,200*
	180	64.7	326.8	404,300*
	185	63.8	324.3	390,100*
	190	62.9	321.8	376,700*
	195	62.0	319.1	363,800*
	200	61.0	316.3	351,500*
	205	60.1	313.5	339,800*
	210	59.1	310.5	328,500*
	215	58.2	307.4	317,600*
	220	57.2	304.2	307,200*
	225	56.2	300.8	297,200*
	230	55.2	297.3	287,500*
	235	54.2	293.7	278,100*
	240	53.2	290.0	269,000*
	245	52.1	286.1	260,200*
	250	51.1	282.1	251,700*
	255	50.0	277.9	243,400*
	260	48.9	273.6	235,300*
	265	47.8	269.1	227,400*
	270	46.7	264.4	219,700*
	275	45.6	259.5	212,100*
	280	44.4	254.4	204,800*
	285	43.2	249.1	197,500*
	290	42.0	243.6	190,400*
	295	40.7	237.9	183,500*
	300	39.5	231.8	176,600*
	305	38.1	225.5	169,200*
	310	36.8	218.9	161,000*
	315	35.4	211.9	153,000*
	320	33.9	204.6	145,300*
	325	32.4	196.8	137,700*
	330	30.8	188.5	130,400*
	335	29.2	179.7	123,200*

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	510,000*
	130	74.6	372.4	497,000*
	135	73.8	370.9	484,100*
	140	73.0	369.4	471,500*
	145	72.2	367.8	459,000*
	150	71.4	366.1	446,700*
	155	70.6	364.3	434,600*
	160	69.8	362.5	422,600*
	165	69.0	360.6	410,600*
	170	68.2	358.6	398,800*
	175	67.3	356.5	387,200*
	180	66.5	354.3	375,900*
	185	65.7	352.1	364,700*
	190	64.8	349.7	353,700*
	195	64.0	347.3	342,300*
	200	63.1	344.7	331,100*
	205	62.3	342.1	320,200*
	210	61.4	339.4	309,500*
	215	60.5	336.6	299,000*
	220	59.6	333.6	288,800*
	225	58.7	330.6	278,700*
	230	57.8	327.5	268,800*
	235	56.9	324.2	259,200*
	240	56.0	320.8	249,700*
	245	55.1	317.4	240,400*
	250	54.1	313.8	231,300*
	255	53.2	310.0	222,400*
	260	52.2	306.1	213,600*
	265	51.2	302.1	204,900*
	270	50.2	298.0	196,400*
	275	49.2	293.7	188,100*
	280	48.2	289.2	179,900*
	285	47.2	284.6	171,800*
	290	46.1	279.8	163,900*
	295	45.0	274.9	156,000*
	300	43.9	269.7	148,300*
	305	42.8	264.3	140,800*
	310	41.7	258.7	133,300*
	315	40.5	252.9	125,900*
	320	39.3	246.9	118,600*
	325	38.1	240.5	111,400*
	330	36.8	233.9	104,300*

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	397,000*
	150	72.6	392.4	385,400*
	155	71.9	390.8	374,000*
	160	71.1	389.1	362,800*
	165	70.4	387.3	351,800*
	170	69.6	385.4	341,000*
	175	68.8	383.5	330,400*
	180	68.1	381.5	320,000*
	185	67.3	379.4	309,400*
	190	66.5	377.2	298,800*
	195	65.7	375.0	288,400*
	200	64.9	372.6	278,000*
	205	64.1	370.2	267,700*
	210	63.3	367.7	257,600*
	215	62.5	365.1	247,800*
	220	61.7	362.4	238,100*
	225	60.9	359.6	228,700*
	230	60.1	356.8	219,400*
	235	59.2	353.8	210,400*
	240	58.4	350.7	201,500*
	245	57.5	347.5	192,800*
	250	56.7	344.3	184,300*
	255	55.8	340.9	175,900*
	260	54.9	337.4	167,700*
	265	54.1	333.8	159,700*
	270	53.2	330.0	151,800*
	275	52.3	326.2	144,100*
	280	51.3	322.2	136,400*
	285	50.4	318.0	129,000*
	290	49.5	313.8	121,600*
	295	48.5	309.4	114,400*
	300	47.6	304.8	107,200*
	305	46.6	300.1	100,200*