

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

MEETS
ANSI B30.5
REQUIREMENTS

M-1200

BOOM NO. 72/75A

MAST NO. 75

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

2,017,600 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 (*).

WEIGHT OF ALL LOAD BLOCKS, HOOKS, SLINGS, HOIST LINES, ETC., BENEATH BOOM 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 ROLLER PATH LEVEL WITHIN A TOLERANCE OF 1-1/4" IN 60' AND PROPERLY SUPPORTED. REFER TO BOOM RIGGING NO. 174950 AND WIRE ROPE SPECIFICATION CHART NO. 7683-B. 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 THE 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 MAST, 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 52,000 LB. CRANE COUNTERWEIGHT AND 2,017,600 LB. AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH
LIFTED UNASSISTED = 378'

LOAD BLOCK 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
303	75	81.6	310.8	1,764,000*
	80	80.6	310.0	1,764,000*
	85	79.7	309.1	1,630,000
	90	78.7	308.1	1,488,100
	95	77.7	307.0	1,367,200
	100	76.8	305.8	1,262,900
	105	75.8	304.5	1,172,100
	110	74.8	303.2	1,092,300
	115	73.8	301.7	1,021,600
	120	72.8	300.2	958,600
	125	71.8	298.5	902,000
	130	70.8	296.8	851,000
	135	69.8	295.0	804,600
	140	68.8	293.0	762,500
	145	67.8	291.0	723,900
	150	66.8	288.9	688,400
	155	65.7	286.6	655,700
	160	64.7	284.2	625,500
	165	63.6	281.8	597,500
	170	62.6	279.2	571,500
303	175	61.5	276.5	547,200
	180	60.4	273.6	524,500
	185	59.3	270.7	503,200
	190	58.2	267.6	483,300
	195	57.1	264.3	464,500
	200	55.9	261.0	446,900
	205	54.8	257.5	430,200
	210	53.6	253.8	414,400
	215	52.4	249.9	399,500
	220	51.2	245.9	385,400
303	225	50.0	241.8	371,900
	230	48.7	237.4	359,100
	235	47.4	232.8	347,000
	240	46.1	228.0	335,400
	245	44.8	223.0	324,400
	250	43.4	217.8	313,800
	255	42.0	212.3	303,700
	260	40.6	206.5	294,000
	265	39.1	200.4	284,800
	270	37.5	193.9	275,900
303	275	35.9	187.1	267,400
	280	34.3	179.8	259,200
	285	32.5	172.1	251,300
	290	30.7	163.8	243,700
	295	28.8	154.9	236,400

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BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
3 2 8	80	81.4	335.3	1,393,200*
	85	80.5	334.5	1,328,100*
	90	79.6	333.6	1,268,000*
	95	78.7	332.6	1,212,500*
	100	77.8	331.5	1,160,800*
	105	76.9	330.3	1,112,500*
	110	76.0	329.1	1,067,200*
	115	75.1	327.7	1,019,100
	120	74.2	326.3	956,000
	125	73.3	324.8	899,500
	130	72.4	323.2	848,400
	135	71.4	321.6	802,100
	140	70.5	319.8	759,900
	145	69.6	317.9	721,300
	150	68.6	316.0	685,900
	155	67.7	313.9	653,200
	160	66.7	311.8	623,000
	165	65.8	309.5	595,000
	170	64.8	307.2	568,900
	175	63.9	304.7	544,600
	180	62.9	302.2	521,900
	185	61.9	299.5	500,700
	190	60.9	296.7	480,800
	195	59.9	293.8	462,000
	200	58.9	290.8	444,300
	205	57.8	287.7	427,700
	210	56.8	284.4	411,900
	215	55.7	281.0	397,000
	220	54.7	277.5	382,800
	225	53.6	273.8	369,400
	230	52.5	269.9	356,600
	235	51.4	266.0	344,500
	240	50.2	261.8	332,900
	245	49.1	257.5	321,800
	250	47.9	253.0	311,300
	255	46.7	248.3	301,200
	260	45.5	243.4	291,500
	265	44.2	238.3	282,300
	270	42.9	233.0	273,400
	275	41.6	227.4	264,900
	280	40.3	221.5	256,700
	285	38.9	215.4	248,900
	290	37.5	208.9	241,300
	295	36.0	202.1	231,800*
	300	34.5	194.9	218,400*
	305	32.9	187.2	205,200*
	310	31.2	179.1	192,100*
	315	29.5	170.4	179,100*
	320	27.6	161.0	166,100*

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
3 5 3	80	82.0	360.6	1,334,500*
	85	81.2	359.8	1,273,200*
	90	80.3	359.0	1,216,200*
	95	79.5	358.1	1,163,300*
	100	78.7	357.1	1,113,700*
	105	77.8	356.0	1,067,200*
	110	77.0	354.8	1,023,500*
	115	76.2	353.6	982,300*
	120	75.3	352.3	943,400*
	125	74.5	350.9	897,200
	130	73.7	349.4	846,100
	135	72.8	347.9	799,800
	140	71.9	346.3	757,600
	145	71.1	344.5	719,000
	150	70.2	342.7	683,600
	155	69.4	340.9	650,900
	160	68.5	338.9	620,700
	165	67.6	336.8	592,700
	170	66.7	334.7	566,600
	175	65.8	332.4	542,400
	180	64.9	330.1	519,700
	185	64.0	327.7	498,400
	190	63.1	325.1	478,500
	195	62.2	322.5	459,700
	200	61.3	319.8	442,100
	205	60.4	316.9	425,400
	210	59.4	314.0	409,600
	215	58.5	310.9	394,700
	220	57.5	307.7	380,600
	225	56.5	304.4	367,200
	230	55.5	301.0	354,400
	235	54.5	297.5	342,200
	240	53.5	293.8	330,700
	245	52.5	290.0	319,600
	250	51.5	286.0	309,100
	255	50.4	281.9	299,000
	260	49.4	277.6	289,300
	265	48.3	273.1	280,100
	270	47.2	268.5	271,200
	275	46.0	263.7	261,500*
	280	44.9	258.7	247,800*
	285	43.7	253.5	234,300*
	290	42.5	248.1	221,100*
	295	41.3	242.5	208,100*
	300	40.1	236.6	195,300*
	305	38.8	230.4	182,700*
	310	37.4	223.9	170,300*
	315	36.1	217.1	158,100*
	320	34.6	209.9	146,100*
	325	33.2	202.4	134,200*
	330	31.6	194.4	122,500*
	335	30.0	185.8	110,900*

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
3 7 8	85	81.7	385.2	1,096,400*
	90	81.0	384.4	1,045,800*
	95	80.2	383.5	998,600*
	100	79.4	382.6	954,300*
	105	78.7	381.6	912,500*
	110	77.9	380.5	873,100*
	115	77.1	379.3	835,900*
	120	76.3	378.1	800,600*
	125	75.5	376.8	767,200*
	130	74.8	375.5	735,300*
	135	74.0	374.0	705,000*
	140	73.2	372.5	676,000*
	145	72.4	370.9	648,200*
	150	71.6	369.3	621,600*
	155	70.8	367.5	596,100*
	160	70.0	365.7	571,600*
	165	69.2	363.8	548,000*
	170	68.4	361.8	525,300*
	175	67.5	359.7	503,300*
	180	66.7	357.6	482,100*
	185	65.9	355.4	461,600*
	190	65.0	353.0	441,800*
	195	64.2	350.6	422,600*
	200	63.4	348.1	403,900*
	205	62.5	345.5	385,900*
	210	61.6	342.8	368,200*
	215	60.8	340.0	351,100*
	220	59.9	337.1	334,500*
	225	59.0	334.1	318,300*
	230	58.1	331.0	302,500*
	235	57.2	327.8	287,200*
	240	56.3	324.5	272,200*
	245	55.4	321.0	257,500*
	250	54.5	317.5	243,200*
	255	53.5	313.8	229,200*
	260	52.6	310.0	215,500*
	265	51.6	306.0	202,100*
	270	50.6	301.9	189,000*
	275	49.6	297.7	176,100*
	280	48.6	293.3	163,500*
	285	47.6	288.7	151,200*
	290	46.5	284.0	139,100*
	295	45.5	279.1	127,300*
	300	44.4	274.0	115,600*
	305	43.3	268.8	104,200*