

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

M-1200

BOOM NO. 72 WITH 882 TON BOOM POINT

MAST NO. 75 OR NO. 75A

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,753,600 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. 173399 AND WIRE ROPE SPECIFICATION CHART NO. 7683-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 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 THOSE SHOWN IN TABLE. 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 OR NO. 75A MAST, 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 52,000 LB. CRANE COUNTERWEIGHT AND 1,753,600 LB. AUXILIARY COUNTERWEIGHT.

WIND LIMITS DURING OPERATION	
MAXIMUM WIND VELOCITY MPH	BOOM LENGTH FEET
35	153 - 253
30	278 - 403

MAXIMUM BOOM LENGTH LIFTED UNASSISTED = 403'	DEDUCT 5,400 LBS. FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED
LOAD BLOCKS ON GROUND AT START.	

CONSULT JIB CHART FOR JIB CAPACITIES. JIB AND JIB BACKSTAYS MUST BE REMOVED FOR USE OF THIS CHART.

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
153	56	82.0	162.0	1,764,000*
	58	81.2	161.7	1,764,000*
	60	80.5	161.2	1,764,000*
	65	78.5	160.1	1,764,000*
	70	76.6	158.8	1,764,000*
	75	74.7	157.2	1,764,000*
	80	72.7	155.5	1,623,700
	85	70.7	153.6	1,473,600
	90	68.6	151.5	1,347,500
	95	66.6	149.2	1,240,000
	100	64.5	146.7	1,147,300
	105	62.3	143.9	1,066,500
	110	60.2	140.8	995,500
	115	57.9	137.5	932,600
	120	55.6	133.9	876,400
	125	53.2	130.0	826,000
	130	50.8	125.8	780,500
	135	48.2	121.1	739,200
	140	45.5	116.0	701,500
	145	42.7	110.4	667,000
	150	39.7	104.1	635,400
	155	36.5	97.1	606,100
	160	33.0	89.2	579,100
	165	29.1	80.0	553,900

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
178	65	80.2	185.7	1,764,000*
	70	78.5	184.6	1,764,000*
	75	76.9	183.3	1,764,000*
	80	75.2	181.8	1,615,500
	85	73.5	180.2	1,465,300
	90	71.8	178.5	1,339,100
	95	70.1	176.5	1,231,600
	100	68.3	174.4	1,138,800
	105	66.6	172.1	1,058,000
	110	64.8	169.6	987,000
	115	62.9	166.9	924,100
	120	61.1	164.0	867,900
	125	59.2	160.9	817,500
	130	57.2	157.5	772,000
	135	55.3	153.9	730,700
	140	53.2	150.0	693,000
	145	51.1	145.8	658,600
	150	48.9	141.3	626,900
	155	46.7	136.4	597,700
	160	44.4	131.1	570,800
	165	41.9	125.4	545,700
	170	39.3	119.1	522,400
	175	36.6	112.2	500,600
	180	33.6	104.4	480,300
	185	30.4	95.7	461,200

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
203	65	81.4	211.2	1,764,000*
	70	80.0	210.2	1,764,000*
	75	78.5	209.1	1,764,000*
	80	77.1	207.8	1,609,400
	85	75.6	206.4	1,459,200
	90	74.1	204.9	1,332,900
	95	72.6	203.2	1,225,300
	100	71.1	201.4	1,132,600
	105	69.6	199.4	1,051,700
	110	68.1	197.3	980,700
	115	66.5	195.0	917,700
	120	65.0	192.6	861,600
	125	63.4	189.9	811,100
	130	61.8	187.1	765,600
	135	60.1	184.1	724,300
	140	58.4	180.9	686,700
	145	56.7	177.5	652,300
	150	55.0	173.9	620,600
	155	53.2	170.0	591,400
	160	51.4	165.9	564,500
	165	49.5	161.5	539,400
	170	47.6	156.8	516,200
	175	45.5	151.7	494,500
	180	43.5	146.3	474,200
	185	41.3	140.4	455,100
	190	39.0	134.1	437,300
	195	36.6	127.2	420,500
	200	34.1	119.6	404,600
	205	31.3	111.2	389,600
	210	28.3	101.8	375,400

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

M-1200

BOOM NO. 72 WITH 882 TON BOOM POINT

MAST NO. 75 OR NO. 75A

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,753,600 LB. AUXILIARY COUNTERWEIGHT

360 DEGREE RATING

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
228	70	81.1	235.7	1,764,000*
	75	79.8	234.7	1,764,000*
	80	78.5	233.6	1,600,600
	85	77.2	232.3	1,450,300
	90	75.9	231.0	1,324,000
	95	74.6	229.5	1,216,400
	100	73.3	227.9	1,123,600
	105	72.0	226.2	1,042,700
	110	70.6	224.3	971,600
	115	69.3	222.3	908,600
	120	67.9	220.2	852,400
	125	66.5	217.9	802,000
	130	65.1	215.5	756,400
	135	63.7	212.9	715,100
	140	62.3	210.2	677,500
	145	60.8	207.3	643,000
	150	59.4	204.2	611,400
	155	57.9	201.0	582,200
	160	56.3	197.5	555,200
	165	54.8	193.9	530,200
	170	53.2	190.0	506,900
	175	51.6	185.9	485,200
	180	49.9	181.6	464,900
	185	48.2	177.0	445,900
	190	46.4	172.1	428,100
253	195	44.6	166.9	411,300
	200	42.8	161.4	395,500
	205	40.8	155.4	380,500
	210	38.8	149.0	366,400
	215	36.6	142.2	353,000
	220	34.4	134.7	340,300
	225	32.0	126.6	328,200
	230	29.4	117.5	316,700
	70	82.0	261.0	1,764,000*
	75	80.8	260.2	1,764,000*
	80	79.7	259.2	1,591,900
	85	78.5	258.1	1,441,500
	90	77.3	256.9	1,315,100
	95	76.2	255.5	1,207,400
	100	75.0	254.1	1,114,500
	105	73.8	252.6	1,033,600
	110	72.6	250.9	962,500
	115	71.4	249.1	899,500
	120	70.2	247.3	843,200
	125	69.0	245.3	792,800
	130	67.8	243.1	747,200
	135	66.5	240.8	705,900
	140	65.3	238.5	668,200
	145	64.0	235.9	633,800
	150	62.7	233.2	602,100
	155	61.4	230.4	572,900
	160	60.1	227.4	545,900
	165	58.8	224.3	520,900
303	170	57.4	221.0	497,600
	175	56.0	217.5	475,900
	180	54.6	213.9	455,600
	185	53.2	210.0	436,600
	190	51.7	206.0	418,800
	195	50.2	201.7	402,000
	200	48.7	197.2	386,200
	205	47.2	192.4	371,200
	210	45.6	187.4	357,100
	215	43.9	182.1	343,700
	220	42.2	176.4	331,100
	225	40.4	170.4	319,000
	230	38.6	164.0	307,600
	235	36.7	157.2	296,600
	240	34.6	149.8	286,200
	245	32.5	141.8	276,300
	250	30.2	133.1	266,800
	255	27.8	123.5	257,700

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
278	75	81.7	285.6	1,764,000*
	80	80.6	284.6	1,585,800
	85	79.6	283.6	1,435,300
	90	78.5	282.6	1,308,900
	95	77.4	281.4	1,201,200
	100	76.4	280.1	1,108,200
	105	75.3	278.7	1,027,300
	110	74.2	277.2	956,100
	115	73.2	275.6	893,100
	120	72.1	273.9	836,800
	125	71.0	272.1	786,400
	130	69.9	270.2	740,800
	135	68.8	268.2	699,400
	140	67.6	266.0	661,800
	145	66.5	263.8	627,300
	150	65.4	261.4	595,600
	155	64.2	258.9	566,500
	160	63.1	256.3	539,500
	165	61.9	253.5	514,400
	170	60.7	250.6	491,100
	175	59.5	247.6	469,400
	180	58.3	244.4	449,100
	185	57.0	241.0	430,100
	190	55.8	237.5	412,300
	195	54.5	233.9	395,500
303	200	53.2	230.0	379,700
	205	51.9	226.0	364,800
	210	50.5	221.8	350,700
	215	49.1	217.3	337,300
	220	47.7	212.7	324,600
	225	46.3	207.8	312,600
	230	44.8	202.6	301,200
	235	43.3	197.2	290,300
	240	41.7	191.5	279,900
	245	40.1	185.4	269,900
	250	38.4	179.0	260,500
	255	36.7	172.2	251,400
	260	34.9	164.9	242,700
	265	32.9	157.0	234,400
	270	30.9	148.6	226,400
	275	28.8	139.3	218,700
	80	81.4	310.1	1,577,100
	85	80.4	309.1	1,426,500
	90	79.5	308.1	1,300,000
	95	78.5	307.0	1,192,200
	100	77.5	305.9	1,099,200
	105	76.6	304.6	1,018,200
	110	75.6	303.2	947,000
	115	74.6	301.8	884,000
	120	73.6	300.3	827,700
	125	72.6	298.6	777,200
	130	71.6	296.9	731,600
	135	70.6	295.0	690,200
	140	69.6	293.1	652,500
	145	68.6	291.1	618,000
	150	67.5	288.9	586,400
328	155	66.5	286.7	557,200
	160	65.5	284.3	530,100
	165	64.4	281.8	505,100
	170	63.3	279.2	481,800
	175	62.3	276.5	460,100
	180	61.2	273.7	439,800
	185	60.1	270.7	420,800
	190	59.0	267.6	402,900
	195	57.8	264.4	386,200
	200	56.7	261.0	370,300
	205	55.5	257.5	355,400
	210	54.4	253.9	341,300
	215	53.2	250.0	327,900
	220	52.0	246.0	315,300
	225	50.7	241.8	303,200

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
303	230	49.5	237.5	291,800
	235	48.2	232.9	280,900
	240	46.9	228.1	270,500
	245	45.6	223.1	260,600
	250	44.2	217.9	251,100
	255	42.8	212.4	242,100
	260	41.3	206.6	233,400
	265	39.8	200.5	225,100
	270	38.3	194.0	217,100
	275	36.7	187.2	209,400
	280	35.0	179.9	202,100
	285	33.3	172.2	195,000
328	290	31.5	163.9	188,200
	295	29.5	155.0	181,600
	300	27.5	145.3	175,300
	85	81.2	334.5	1,420,000
	90	80.3	333.6	1,293,400
	95	79.4	332.6	1,185,600
	100	78.5	331.5	1,092,600
	105	77.6	330.4	1,011,500
	110	76.7	329.1	940,300
	115	75.8	327.8	877,200
	120	74.9	326.4	820,900
	125	74.0	324.9	770,400
	130	73.1	323.3	724,800
	135	72.1	321.6	683,400
	140	71.2	319.8	645,700
	145	70.3	318.0	611,200
	150	69.3	316.0	579,500
	155	68.4	314.0	550,300
	160	67.5	311.8	523,300
	165	66.5	309.6	498,200
	170	65.5	307.2	474,900
	175	64.6	304.8	453,200
	180	63.6	302.2	432,900
	185	62.6	299.6	413,900
	190	61.6	296.8	396,000
	195	60.6	293.9	379,200
	200	59.6	290.9	363,400
	205	58.5	287.7	348,500
	210	57.5	284.5	334,400
	215	56.4	281.1	321,000
	220	55.4	277.5	308,300
	225	54.3	273.8	296,300
	230	53.2	270.0	284,900
	235	52.1	266.0	274,000
	240	50.9	261.9	263,600
	245	49.8	257.6	253,700
	250	48.6	253.1	244,200
	255	47.4	248.4	235,200
	260	46.2	243.5	226,500
	265	44.9	238.4	218,200
	270	43.7	233.0	210,200
	275	42.3	227.5	202,600
	280	41.0	221.6	195,200
	285	39.6	215.5	188,200
	290	38.2	209.0	181,400
	295	36.7	202.2	174,800
	300	35.2	195.0	168,500
	305	33.6	187.4	162,400
	310	31.9	179.2	156,500
	315	30.2	170.5	150,800
	320	28.3	161.1	145,300

MANITOWOC ENGINEERING CO.

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



LIFTCRANE CAPACITIES

M-1200

BOOM NO. 72 WITH 882 TON BOOM POINT

MAST NO. 75 OR NO. 75A

60' RINGER ATTACHMENT ON SCREW JACK PEDESTALS

52,000 LB. CRANE COUNTERWEIGHT

1,753,600 LB. AUXILIARY COUNTERWEIGHT

360 DEGREE RATING

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
353	85	81.8	359.9	1,411,300
	90	81.0	359.0	1,284,600
	95	80.2	358.1	1,176,700
	100	79.3	357.1	1,083,600
	105	78.5	356.0	1,002,500
	110	77.7	354.9	931,300
	115	76.8	353.7	868,100
	120	76.0	352.3	811,800
	125	75.1	351.0	761,200
	130	74.3	349.5	715,600
	135	73.5	347.9	674,200
	140	72.6	346.3	636,500
	145	71.7	344.6	601,900
	150	70.9	342.8	570,200
	155	70.0	340.9	541,000
	160	69.1	338.9	514,000
	165	68.3	336.7	488,900
	170	67.4	334.7	465,600
	175	66.5	332.5	443,900
	180	65.6	330.2	423,600
	185	64.7	327.7	404,500
	190	63.8	325.2	386,700
	195	62.9	322.6	369,900
	200	61.9	319.8	354,100
	205	61.0	317.0	339,100
	210	60.1	314.0	325,000
	215	59.1	311.0	311,600
	220	58.2	307.8	299,000
	225	57.2	304.5	286,900
	230	56.2	301.1	275,500
	235	55.2	297.5	264,600
	240	54.2	293.8	254,200
	245	53.2	290.0	244,300
	250	52.1	286.1	234,800
	255	51.1	281.9	225,800
	260	50.0	277.7	217,100
	265	48.9	273.2	208,800
	270	47.8	268.6	200,800
	275	46.7	263.8	193,200
	280	45.6	258.8	185,900
	285	44.4	253.6	178,800
	290	43.2	248.2	172,000
	295	42.0	242.6	165,500
	300	40.7	236.6	159,100
	305	39.4	230.5	153,100
	310	38.1	224.0	147,200
	315	36.7	217.2	141,500
	320	35.3	210.0	136,000
	325	33.8	202.5	130,700
	330	32.3	194.5	125,600
	335	30.7	186.0	120,600
	340	29.0	176.9	115,800
	345	27.2	167.1	111,100

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
378	90	81.6	384.4	1,258,600*
	95	80.8	383.5	1,169,800
	100	80.0	382.6	1,076,700
	105	79.3	381.6	995,600
	110	78.5	380.5	924,300
	115	77.7	379.4	861,100
	120	76.9	378.2	804,700
	125	76.2	376.9	754,100
	130	75.4	375.5	708,500
	135	74.6	374.1	667,100
	140	73.8	372.6	629,300
	145	73.0	371.0	594,800
	150	72.2	369.3	563,100
	155	71.4	367.6	533,800
	160	70.6	365.8	506,800
	165	69.8	363.8	481,700
	170	69.0	361.9	458,400
	175	68.1	359.8	436,700
	180	67.3	357.6	416,300
	185	66.5	355.4	397,300
	190	65.6	353.1	379,400
	195	64.8	350.7	362,600
	200	64.0	348.2	346,800
	205	63.1	345.6	331,900
	210	62.2	342.9	317,800
	215	61.4	340.1	304,400
	220	60.5	337.2	291,700
	225	59.6	334.2	279,700
	230	58.7	331.1	268,200
	235	57.8	327.9	257,300
	240	56.9	324.5	246,900
	245	56.0	321.1	237,000
	250	55.1	317.5	227,600
	255	54.1	313.8	218,500
	260	53.2	310.0	209,900
	265	52.2	306.1	201,600
	270	51.2	302.0	193,600
	275	50.2	297.7	185,900
	280	49.2	293.3	178,600
	285	48.2	288.8	171,500
	290	47.2	284.1	164,800
	295	46.1	279.2	158,200
	300	45.0	274.1	151,900
	305	43.9	268.8	145,800
	310	42.8	263.3	140,000
	315	41.6	257.6	134,300
	320	40.5	251.7	128,800
	325	39.3	245.5	123,500
	330	38.0	239.0	118,400
	335	36.7	232.2	113,500
	340	35.4	225.1	108,700
	345	34.0	217.6	104,000

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACITY POUNDS
403	95	81.4	408.9	1,108,400*
	100	80.7	408.0	1,034,800*
	105	79.9	407.1	970,300*
	110	79.2	406.1	913,300*
	115	78.5	405.0	852,100
	120	77.8	403.9	795,700
	125	77.0	402.7	745,100
	130	76.3	401.4	699,400
	135	75.6	400.1	657,900
	140	74.8	398.7	620,200
	145	74.1	397.2	585,600
	150	73.3	395.6	553,900
	155	72.6	394.0	524,600
	160	71.8	392.3	497,600
	165	71.1	390.5	472,500
	170	70.3	388.7	449,100
	175	69.6	386.8	427,400
	180	68.8	384.8	407,100
	185	68.0	382.7	388,000
	190	67.3	380.6	370,100
	195	66.5	378.3	353,300
	200	65.7	376.0	337,500
	205	64.9	373.6	322,600
	210	64.1	371.1	308,400
	215	63.3	368.5	295,100
	220	62.5	365.9	282,400
	225	61.7	363.1	270,300
	230	60.9	360.3	258,900
	235	60.1	357.3	248,000
	240	59.2	354.3	237,600
	245	58.4	351.2	227,700
	250	57.5	347.9	218,200
	255	56.7	344.6	209,100
	260	55.8	341.1	200,500
	265	54.9	337.5	192,200
	270	54.1	333.8	184,200
	275	53.2	330.0	176,600
	280	52.3	326.1	169,200
	285	51.3	322.0	162,200
	290	50.4	317.8	155,400
	295	49.5	313.5	148,800
	300	48.5	309.0	142,500
	305	47.5	304.3	136,500
	310	46.6	299.5	130,600
	315	45.6	294.5	124,900
	320	44.5	289.4	119,500
	325	43.5	284.0	114,200
	330	42.4	278.5	109,100
	335	41.4	272.7	104,100