

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 OR NO. 75A

18.3m RINGER ATTACHMENT ON SCREW JACK PEDESTALS

23 590 kg CRANE COUNTERWEIGHT

715 590 kg 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 81 650 kg. 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 32 mm IN 18.3m AND PROPERLY SUPPORTED. REFER TO BOOM RIGGING NO. 173398 OR NO. 177315 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 13 m/s 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 13 m/s. LOWER BOOM TO GROUND WHEN WIND IS ABOVE 22 m/s.

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 18.3m RINGER ATTACHMENT, 9 373 mm CRAWLERS, 1 219 mm TREADS, 8 534 mm RETRACTABLE GANTRY, 45.7m NO. 75 MAST WITH 20 PART OR 32 PART BOOM HOIST REEVING OR NO. 75A MAST WITH 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 23 590 kg CRANE COUNTERWEIGHT AND 715 590 kg AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH LIFTED UNASSISTED = 121.9m	DEDUCT 2 450 kg FROM CAPACITIES WHEN UPPER BOOM POINT IS ATTACHED
LOAD BLOCKS ON GROUND AT START.	

JIB AND ALL JIB HARDWARE MUST BE REMOVED FOR USE OF THIS CHART.

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

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
4 5 7	1 5 0	16.8	80.7	48.5	816 400*
		18.0	79.1	48.2	816 400*
		20.0	76.5	47.8	814 400*
		22.0	73.9	47.2	783 200
		24.0	71.3	46.5	699 400
		26.0	68.6	45.8	611 300*
		28.0	65.9	44.9	537 900*
		30.0	63.1	43.9	478 100*
		32.0	60.2	42.8	428 100*
		34.0	57.2	41.5	385 400*
		36.0	54.1	40.1	348 500*
		38.0	50.9	38.5	316 200*
		40.0	47.6	36.7	287 300*
		42.0	44.0	34.7	261 400*
		44.0	40.2	32.4	237 600*
		46.0	36.0	29.7	215 500*
		48.0	31.4	26.6	194 400*

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
5 3 3	1 7 5	16.8	82.0	56.2	720 200*
		18.0	80.7	56.0	720 200*
		20.0	78.5	55.6	720 200*
		22.0	76.3	55.1	717 600*
		24.0	74.0	54.6	688 800
		26.0	71.8	53.9	611 000
		28.0	69.5	53.2	545 100
		30.0	67.2	52.3	491 600
		32.0	64.8	51.4	447 100
		34.0	62.4	50.4	409 500
		36.0	59.9	49.2	377 300
		38.0	57.4	48.0	347 600
		40.0	54.8	46.6	318 600*
		42.0	52.1	45.1	292 700*
		44.0	49.2	43.4	269 200*
		46.0	46.3	41.5	247 900*
		48.0	43.2	39.4	228 300*
		50.0	39.9	37.1	210 000*
		52.0	36.3	34.5	192 800*
		54.0	32.5	31.4	176 300*
		56.0	28.1	27.9	160 100*

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BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
6 1 · 0	2 0 0	18.3	81.6	63.7	655 300*
		20.0	79.9	63.4	650 100*
		22.0	78.0	63.0	639 500*
		24.0	76.1	62.5	628 900*
		26.0	74.1	61.9	610 200
		28.0	72.2	61.3	543 000
		30.0	70.2	60.6	489 400
		32.0	68.1	59.8	445 000
		34.0	66.1	58.9	407 300
		36.0	64.0	57.9	375 100
		38.0	61.9	56.9	347 300
		40.0	59.7	55.7	323 000
		42.0	57.5	54.5	301 600
		44.0	55.2	53.1	282 600
		46.0	52.9	51.6	265 300
		48.0	50.4	50.0	247 000*
		50.0	47.9	48.2	229 600*
		52.0	45.3	46.3	213 600*
		54.0	42.6	44.1	198 500*
		56.0	39.7	41.8	184 400*
6 8 · 6	2 2 5	58.0	36.6	39.2	170 900*
		60.0	33.2	36.2	157 800*
		62.0	29.5	32.8	145 100*
		19.8	81.2	71.1	579 600*
		20.0	81.1	71.1	578 900*
		22.0	79.4	70.7	570 400*
		24.0	77.7	70.3	561 800*
		26.0	75.9	69.8	553 200*
		28.0	74.2	69.3	537 800
		30.0	72.5	68.6	488 900
		32.0	70.7	67.9	443 200
		34.0	68.9	67.2	405 500
		36.0	67.1	66.3	373 400
		38.0	65.3	65.4	345 600
		40.0	63.4	64.4	321 200
		42.0	61.5	63.4	299 800
		44.0	59.6	62.2	280 800
		46.0	57.6	61.0	263 800
		48.0	55.6	59.6	248 500
		50.0	53.5	58.1	234 700
		52.0	51.4	56.6	222 100
		54.0	49.2	54.9	210 100
		56.0	46.9	53.0	196 900*
		58.0	44.5	51.0	184 600*
		60.0	42.1	48.9	172 900*
		62.0	39.5	46.5	161 800*
		64.0	36.7	43.9	151 100*
		66.0	33.8	41.0	140 700*
		68.0	30.6	37.7	130 600*

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
7 6 · 2	2 5 0	21.3	81.0	78.6	513 500*
		22.0	80.5	78.5	511 200*
		24.0	78.9	78.1	504 200*
		26.0	77.4	77.7	497 000*
		28.0	75.8	77.2	489 800*
		30.0	74.3	76.6	478 700
		32.0	72.7	76.0	441 000
		34.0	71.1	75.3	403 400
		36.0	69.5	74.6	371 200
		38.0	67.9	73.8	343 400
		40.0	66.2	72.9	319 100
		42.0	64.6	72.0	297 600
		44.0	62.9	71.0	278 600
		46.0	61.2	69.9	261 600
		48.0	59.4	68.7	246 300
		50.0	57.7	67.4	232 500
		52.0	55.9	66.1	219 900
		54.0	54.0	64.7	208 500
		56.0	52.1	63.1	198 000
		58.0	50.2	61.5	188 300
8 3 · 8	2 7 5	60.0	48.2	59.7	179 100
		62.0	46.1	57.8	168 800*
		64.0	43.9	55.8	159 200*
		66.0	41.7	53.6	150 000*
		68.0	39.3	51.2	141 100*
		70.0	36.9	48.6	132 600*
		72.0	34.3	45.7	124 200*
		74.0	31.4	42.5	115 900*
		76.0	28.4	39.0	107 700*
		21.3	81.8	86.3	461 000*
		22.0	81.3	86.2	459 200*
		24.0	79.9	85.9	453 700*
		26.0	78.5	85.5	447 900*
		28.0	77.1	85.0	441 000*
		30.0	75.7	84.5	429 000*
		32.0	74.3	84.0	416 900*
		34.0	72.9	83.4	392 900*
		36.0	71.4	82.7	364 200*
		38.0	70.0	82.0	339 600*
		40.0	68.5	81.2	317 400
		42.0	67.0	80.4	296 000
		44.0	65.5	79.5	276 900
		46.0	64.0	78.5	259 900
		48.0	62.5	77.5	244 600
		50.0	60.9	76.4	230 800
		52.0	59.3	75.2	218 200
		54.0	57.7	73.9	206 800
		56.0	56.1	72.6	196 300
		58.0	54.4	71.2	186 600
		60.0	52.7	69.7	177 800
		62.0	50.9	68.1	169 500
		64.0	49.1	66.4	161 900
		66.0	47.3	64.5	153 600*
		68.0	45.4	62.6	145 600*
		70.0	43.4	60.5	138 000*
		72.0	41.4	58.3	130 500*
		74.0	39.2	55.9	123 400*
		76.0	37.0	53.3	116 400*
		78.0	34.6	50.4	109 600*
		80.0	32.1	47.3	102 900*
		82.0	29.4	43.9	96 200*

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BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
9 1 · 4	3 0 0	22.9	81.5	93.8	407 900*
		24.0	80.8	93.6	405 000*
		26.0	79.5	93.3	395 700*
		28.0	78.2	92.8	385 500*
		30.0	76.9	92.4	375 200*
		32.0	75.7	91.9	365 100*
		34.0	74.4	91.3	355 000*
		36.0	73.0	90.7	343 200*
		38.0	71.7	90.1	322 900*
		40.0	70.4	89.4	302 500*
		42.0	69.1	88.6	284 500*
		44.0	67.7	87.8	268 100*
		46.0	66.3	86.9	253 300*
		48.0	65.0	86.0	239 700*
		50.0	63.6	85.0	227 100*
		52.0	62.1	84.0	215 500*
		54.0	60.7	82.8	204 600
		56.0	59.3	81.7	194 000
		58.0	57.8	80.4	184 400
		60.0	56.3	79.1	175 500
		62.0	54.7	77.7	167 200
		64.0	53.2	76.2	159 600
		66.0	51.6	74.6	152 200*
		68.0	50.0	73.0	144 900*
		70.0	48.3	71.2	138 000*
		72.0	46.6	69.3	131 300*
		74.0	44.8	67.4	124 900*
		76.0	43.0	65.2	118 700*
		78.0	41.1	63.0	112 700*
		80.0	39.1	60.6	106 800*
		82.0	37.1	58.0	101 000*
		84.0	34.9	55.2	95 400*
		86.0	32.6	52.1	89 800*
		88.0	30.2	48.8	84 300*
9 9 · 1	3 2 5	24.4	81.3	101.3	355 800*
		26.0	80.3	101.0	349 000*
		28.0	79.2	100.6	340 400*
		30.0	78.0	100.2	331 600*
		32.0	76.8	99.7	322 900*
		34.0	75.6	99.2	314 300*
		36.0	74.4	98.7	305 700*
		38.0	73.2	98.1	297 200*
		40.0	72.0	97.4	287 800*
		42.0	70.7	96.7	270 500*
		44.0	69.5	96.0	255 400*
		46.0	68.3	95.2	241 600*
		48.0	67.0	94.4	229 000*
		50.0	65.7	93.5	217 500*
		52.0	64.5	92.5	206 700*
		54.0	63.2	91.5	196 800*
		56.0	61.9	90.5	187 500*
		58.0	60.5	89.3	178 800*
		60.0	59.2	88.2	170 600*
		62.0	57.8	86.9	162 900*
		64.0	56.4	85.6	155 500*
		66.0	55.0	84.2	148 600*
9 9 · 1	3 5 0	68.0	53.6	82.7	141 900*
		70.0	52.1	81.2	135 600*
		72.0	50.6	79.6	129 500*
		74.0	49.1	77.9	123 700*
		76.0	47.6	76.1	118 100*
		78.0	46.0	74.1	112 700*
		80.0	44.3	72.1	107 400*
		82.0	42.6	70.0	102 300*
		84.0	40.9	67.7	97 300*
		86.0	39.0	65.3	92 500*
		88.0	37.2	62.7	87 700*
		90.0	35.2	59.9	83 000*
		92.0	33.1	56.9	78 300*
		94.0	30.9	53.6	73 700*
		96.0	28.5	50.0	69 000*
1 0 6 · 7	3 5 0	24.4	81.9	109.0	315 400*
		26.0	81.0	108.7	309 600*
		28.0	79.9	108.4	302 200*
		30.0	78.8	108.0	294 600*
		32.0	77.7	107.6	287 000*
		34.0	76.6	107.1	279 200*
		36.0	75.5	106.6	271 400*
		38.0	74.4	106.0	263 400*
		40.0	73.3	105.4	255 100*
		42.0	72.2	104.8	246 800*
		44.0	71.0	104.1	238 500*
		46.0	69.9	103.4	229 000*
		48.0	68.7	102.6	217 100*
		50.0	67.6	101.8	206 300*
		52.0	66.4	100.9	196 400*
		54.0	65.2	100.0	187 100*
		56.0	64.0	99.0	178 500*
		58.0	62.8	98.0	170 500*
		60.0	61.6	97.0	162 900*
		62.0	60.4	95.8	155 700*
		64.0	59.1	94.6	149 000*
		66.0	57.9	93.4	142 500*
		68.0	56.6	92.1	136 500*
		70.0	55.3	90.7	130 700*
		72.0	53.9	89.3	125 100*
		74.0	52.6	87.7	119 700*
		76.0	51.2	86.2	114 600*
		78.0	49.8	84.5	109 700*
		80.0	48.4	82.7	104 900*
		82.0	46.9	80.9	100 300*
		84.0	45.4	78.9	95 800*
		86.0	43.9	76.9	91 400*
		88.0	42.3	74.7	87 100*
		90.0	40.7	72.4	83 000*
		92.0	39.0	70.0	78 900*
		94.0	37.2	67.4	74 900*
		96.0	35.4	64.6	70 900*
		98.0	33.5	61.6	67 000*
		100.0	31.4	58.4	63 000*
		102.0	29.3	55.0	59 100*

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BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
1 1 4 · 3	3 7 5	25.9	81.7	116.5	273 700*
		26.0	81.6	116.5	273 500*
		28.0	80.6	116.1	267 200*
		30.0	79.6	115.8	260 700*
		32.0	78.6	115.4	254 000*
		34.0	77.5	114.9	246 800*
		36.0	76.5	114.5	239 400*
		38.0	75.5	113.9	231 700*
		40.0	74.4	113.4	223 900*
		42.0	73.4	112.8	216 300*
		44.0	72.3	112.2	208 900*
		46.0	71.3	111.5	201 600*
		48.0	70.2	110.8	194 400*
		50.0	69.1	110.0	187 200*
		52.0	68.1	109.2	180 200*
		54.0	67.0	108.4	173 300*
		56.0	65.9	107.5	166 700*
		58.0	64.8	106.5	160 100*
		60.0	63.7	105.6	153 300*
		62.0	62.5	104.5	146 700*
		64.0	61.4	103.4	140 400*
		66.0	60.2	102.3	134 100*
		68.0	59.1	101.1	128 100*
		70.0	57.9	99.9	122 200*
		72.0	56.7	98.6	116 500*
		74.0	55.5	97.2	110 900*
		76.0	54.2	95.8	105 400*
		78.0	53.0	94.3	100 100*
		80.0	51.7	92.7	94 900*
		82.0	50.4	91.1	89 800*
		84.0	49.1	89.4	84 800*
		86.0	47.8	87.6	80 000*
		88.0	46.4	85.7	75 200*
		90.0	45.0	83.7	70 500*
		92.0	43.5	81.6	66 000*
		94.0	42.0	79.4	61 500*
		96.0	40.5	77.1	57 100*
		98.0	38.9	74.7	52 700*
		100.0	37.3	72.1	48 500*
1 2 1 · 9	4 0 0	27.4	81.5	123.9	234 100*
		28.0	81.2	123.9	233 400*
		30.0	80.3	123.5	229 300*
		32.0	79.3	123.1	222 600*
		34.0	78.3	122.7	215 700*
		36.0	77.4	122.3	208 600*
		38.0	76.4	121.8	201 600*
		40.0	75.4	121.3	194 500*
		42.0	74.5	120.7	187 700*
		44.0	73.5	120.1	180 700*
		46.0	72.5	119.5	173 800*
		48.0	71.5	118.9	167 100*
		50.0	70.5	118.2	160 500*
		52.0	69.5	117.4	154 000*
		54.0	68.5	116.6	147 800*
		56.0	67.5	115.8	141 500*
		58.0	66.5	114.9	135 200*
		60.0	65.4	114.0	129 000*
		62.0	64.4	113.1	122 900*
		64.0	63.3	112.1	116 800*
		66.0	62.3	111.0	111 000*
		68.0	61.2	109.9	105 300*
		70.0	60.1	108.8	99 800*
		72.0	59.0	107.6	94 400*

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
1 2 1 · 9	4 0 0	74.0	57.9	106.4	89 100*
		76.0	56.8	105.1	84 000*
		78.0	55.7	103.7	79 100*
		80.0	54.5	102.3	74 200*
		82.0	53.3	100.8	69 500*
		84.0	52.2	99.3	64 900*
		86.0	50.9	97.7	60 400*
		88.0	49.7	96.0	56 000*
		90.0	48.5	94.2	51 700*
		92.0	47.2	92.4	47 400*