

MANITOWOC ENGINEERING CO.

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



M-1200

LIFT CRANE CAPACITIES

MEETS
ANSI B30.5
REQUIREMENTS

BOOM NO. 72/75A

MAST NO. 75

18.3m RINGER ATTACHMENT ON SCREW JACK PEDESTALS

23 590 kg CRANE COUNTERWEIGHT

795 420 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 (*).

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 32 mm IN 18.3m 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 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, 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 23 590 kg CRANE COUNTERWEIGHT AND 795 420 kg AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH
LIFTED UNASSISTED = 115.2m

LOAD BLOCK ON GROUND AT START.

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
9 2 · 4	3 0 3	22.9	81.6	94.7	800 000*
		24.0	80.9	94.6	740 200
		26.0	79.6	94.2	648 000
		28.0	78.4	93.8	575 200
		30.0	77.1	93.3	515 900
		32.0	75.8	92.8	466 700
		34.0	74.5	92.3	425 100
		36.0	73.2	91.7	389 600
		38.0	71.9	91.0	358 900
		40.0	70.6	90.3	332 000
		42.0	69.3	89.6	308 400
		44.0	67.9	88.8	287 400
		46.0	66.6	87.9	268 600
		48.0	65.2	87.0	251 700
		50.0	63.8	86.0	236 500
		52.0	62.4	85.0	222 600
		54.0	61.0	83.9	209 900

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
9 2 · 4	3 0 3	56.0	59.6	82.7	198 400
		58.0	58.1	81.5	187 700
		60.0	56.7	80.2	177 900
		62.0	55.1	78.8	168 800
		64.0	53.6	77.4	160 400
		66.0	52.0	75.8	152 500
		68.0	50.4	74.2	145 200
		70.0	48.8	72.4	138 300
		72.0	47.1	70.6	131 900
		74.0	45.4	68.7	125 900
		76.0	43.6	66.6	120 200
		78.0	41.7	64.4	114 900
		80.0	39.8	62.0	109 800
		82.0	37.8	59.5	105 000
		84.0	35.7	56.8	100 500
		86.0	33.5	53.8	96 200
		88.0	31.2	50.6	92 100

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BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KI LOGRAMS
100.0	32.8	24.4	81.3	102.2	631 900*
		26.0	80.4	101.9	600 700*
		28.0	79.3	101.6	564 000*
		30.0	78.1	101.1	516 700
		32.0	76.9	100.7	465 600
		34.0	75.7	100.2	424 000
		36.0	74.5	99.6	388 400
		38.0	73.3	99.0	357 700
		40.0	72.1	98.4	330 900
		42.0	70.9	97.7	307 200
		44.0	69.7	97.0	286 200
		46.0	68.5	96.2	267 400
		48.0	67.2	95.4	250 600
		50.0	66.0	94.5	235 300
		52.0	64.7	93.5	221 400
		54.0	63.4	92.5	208 800
		56.0	62.1	91.5	197 200
		58.0	60.8	90.4	186 600
		60.0	59.5	89.2	176 700
		62.0	58.2	88.0	167 700
		64.0	56.8	86.7	159 200
		66.0	55.4	85.3	151 400
		68.0	54.0	83.9	144 100
		70.0	52.5	82.4	137 200
		72.0	51.1	80.8	130 800
		74.0	49.6	79.1	124 800
		76.0	48.0	77.3	119 100
		78.0	46.5	75.4	113 700
		80.0	44.9	73.4	108 700
		82.0	43.2	71.3	103 900
		84.0	41.5	69.1	99 300
		86.0	39.7	66.7	95 100
		88.0	37.8	64.2	91 000
		90.0	35.9	61.5	87 100
		92.0	33.9	58.6	83 400
		94.0	31.7	55.4	79 900
		96.0	29.5	52.0	76 500
107.6	35.3	24.4	82.0	109.9	605 300*
		26.0	81.1	109.7	575 800*
		28.0	80.0	109.3	542 400*
		30.0	78.9	108.9	509 800
		32.0	77.8	108.5	464 500
		34.0	76.8	108.0	422 900
		36.0	75.7	107.5	387 400
		38.0	74.6	107.0	356 700
		40.0	73.4	106.4	329 800
		42.0	72.3	105.8	306 200
		44.0	71.2	105.1	285 200
		46.0	70.1	104.4	266 400
		48.0	68.9	103.6	249 500
		50.0	67.8	102.8	234 300
		52.0	66.6	101.9	220 400
		54.0	65.5	101.0	207 800
		56.0	64.3	100.1	196 200
		58.0	63.1	99.1	185 600
		60.0	61.9	98.0	175 700
		62.0	60.7	96.9	166 600
		64.0	59.4	95.7	158 200
		66.0	58.2	94.5	150 300
107.6	35.3	68.0	56.9	93.2	143 000
		70.0	55.6	91.8	136 200
		72.0	54.3	90.4	129 700
		74.0	53.0	88.9	123 700
		76.0	51.6	87.3	118 100
		78.0	50.2	85.7	112 700
		80.0	48.8	83.9	107 700
		82.0	47.4	82.1	102 900
		84.0	45.9	80.2	98 300
		86.0	44.4	78.2	94 000
		88.0	42.8	76.1	90 000
		90.0	41.2	73.8	86 100
		92.0	39.6	71.4	82 400
		94.0	37.9	68.9	78 400*
		96.0	36.1	66.2	71 700*
		98.0	34.2	63.3	64 600*
		100.0	32.2	60.2	57 500*
		102.0	30.2	56.8	50 600*
115.2	37.8	25.9	81.7	117.4	497 300*
		26.0	81.7	117.4	495 900*
		28.0	80.7	117.1	466 200*
		30.0	79.7	116.7	439 000*
		32.0	78.7	116.3	413 900*
		34.0	77.6	115.9	390 600*
		36.0	76.6	115.4	369 000*
		38.0	75.6	114.9	348 900*
		40.0	74.6	114.3	328 900
		42.0	73.5	113.7	304 600
		44.0	72.5	113.1	283 600
		46.0	71.4	112.5	264 900
		48.0	70.4	111.7	248 000
		50.0	69.3	111.0	232 800
		52.0	68.3	110.2	218 900
		54.0	67.2	109.4	206 300
		56.0	66.1	108.5	194 700
		58.0	65.0	107.6	184 000
		60.0	63.9	106.6	174 200
		62.0	62.8	105.6	165 100
		64.0	61.6	104.5	156 700
		66.0	60.5	103.4	148 800
		68.0	59.3	102.2	141 500
		70.0	58.2	101.0	134 600
		72.0	57.0	99.7	128 000
		74.0	55.8	98.3	119 800*
		76.0	54.6	96.9	111 100*
		78.0	53.3	95.4	102 800*
		80.0	52.1	93.9	94 700*
		82.0	50.8	92.3	86 800*
		84.0	49.5	90.6	79 100*
		86.0	48.2	88.8	71 700*
		88.0	46.8	86.9	64 400*
		90.0	45.4	85.0	57 400*
		92.0	44.0	82.9	50 500*