

MANITOWOC ENGINEERING CO.

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



LIFTCRANE BOOM CAPACITIES

M-1200

**BOOM NO. 72 OR NO. 72A WITH 800 METRIC TON BOOM POINT
MAST NO. 75 OR NO. 75A
18.3m RINGER ATTACHMENT ON SCREW JACK PEDESTALS
23 590 kg CRANE COUNTERWEIGHT
815 380 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 RADIUS WILL BE RESTRICTED WITH BOOM AT MAXIMUM ANGLE.

WEIGHT OF ALL LOAD BLOCKS, HOOKS, SLINGS, HOIST LINES, ETC., BENEATH MAIN BOOM AND UPPER BOOM POINT SHEAVES, IS CONSIDERED PART OF MAIN BOOM LOAD. BOOM IS NOT TO BE LOWERED BEYOND RADIUS 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. 173399, NO. 175673 OR NO. 175955 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 IN WINDS UP TO 16 m/s 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 16 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, 1 229 mm TREADS, 8 534 mm RETRACTABLE GANTRY, 45.7m NO. 75 MAST WITH 32 PART BOOM HOIST REEVING OR NO. 75A MAST WITH 36 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 23 590 kg CRANE COUNTERWEIGHT AND 815 380 kg AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH
LIFTED UNASSISTED = 77.1m
LOAD BLOCKS ON GROUND AT START.

UPPER BOOM POINT CANNOT BE USED ON BOOM NO. 72.

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 LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	BOOM CAPACITY KILOGRAMS
4 6 · 6	1 5 3	17.1	82.0	49.4	800 000*
		18.0	80.8	49.2	800 000*
		19.0	79.6	49.0	800 000*
		20.0	78.3	48.7	800 000*
		22.0	75.8	48.2	800 000*
		24.0	73.2	47.5	752 500
		26.0	70.6	46.8	664 600
		28.0	67.9	45.9	592 000
		30.0	65.1	45.0	532 900
		32.0	62.3	43.9	483 800
		34.0	59.5	42.6	442 300
		36.0	56.5	41.3	406 800
		38.0	53.4	39.7	376 000
		40.0	50.1	38.0	349 200
		42.0	46.7	36.1	325 500
		44.0	43.1	33.9	304 400
46.0	39.2	31.4	285 600		
48.0	34.8	28.5	268 700		
50.0	29.9	25.0	253 300		

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	BOOM CAPACITY KILOGRAMS
5 4 · 3	1 7 8	19.8	80.2	56.6	800 000*
		20.0	80.0	56.6	800 000*
		22.0	77.8	56.1	800 000*
		24.0	75.6	55.5	749 700
		26.0	73.4	54.9	660 800
		28.0	71.2	54.2	588 200
		30.0	68.9	53.4	529 000
		32.0	66.6	52.5	479 900
		34.0	64.2	51.5	438 400
		36.0	61.8	50.3	402 900
		38.0	59.3	49.1	372 200
		40.0	56.8	47.8	345 300
		42.0	54.1	46.3	321 600
		44.0	51.4	44.6	300 600
		46.0	48.5	42.8	281 800
		48.0	45.6	40.8	264 900
50.0	42.4	38.6	249 600		
52.0	39.0	36.1	235 700		
54.0	35.3	33.2	222 900		
56.0	31.2	29.9	211 300		

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6 1 · 9	2 0 3	19.8	81.4	64.4	800 000*
		20.0	81.2	64.3	800 000*
		22.0	79.3	63.9	800 000*
		24.0	77.4	63.4	747 600
		26.0	75.5	62.9	658 100
		28.0	73.6	62.3	585 400
		30.0	71.6	61.6	526 200
		32.0	69.6	60.8	477 100
		34.0	67.6	59.9	435 500
		36.0	65.6	59.0	400 000
		38.0	63.5	58.0	369 300
		40.0	61.4	56.8	342 400
		42.0	59.2	55.6	318 700
		44.0	57.0	54.3	297 800
		46.0	54.7	52.8	278 900
		48.0	52.3	51.2	262 000
		50.0	49.9	49.5	246 700
		52.0	47.3	47.6	232 900
		54.0	44.7	45.5	220 200
		56.0	41.9	43.3	208 500
58.0	38.9	40.7	197 900		
60.0	35.7	37.9	188 000		
62.0	32.2	34.7	178 700		
64.0	28.3	31.0	169 800		
6 9 · 5	2 2 8	21.3	81.1	71.8	800 000*
		22.0	80.5	71.7	800 000*
		24.0	78.8	71.3	744 600
		26.0	77.1	70.8	654 000
		28.0	75.4	70.2	581 300
		30.0	73.7	69.6	522 100
		32.0	72.0	68.9	473 000
		34.0	70.2	68.2	431 400
		36.0	68.4	67.4	395 900
		38.0	66.6	66.5	365 200
		40.0	64.8	65.5	338 200
		42.0	62.9	64.4	314 600
		44.0	61.0	63.3	293 500
		46.0	59.1	62.1	274 800
		48.0	57.1	60.7	257 800
		50.0	55.1	59.3	242 500
		52.0	53.0	57.8	228 600
		54.0	50.9	56.1	216 000
		56.0	48.6	54.3	204 300
		58.0	46.3	52.4	193 700
60.0	43.9	50.3	183 800		
62.0	41.4	48.0	174 700		
64.0	38.8	45.4	166 200		
66.0	36.0	42.7	158 000		
68.0	32.9	39.5	150 200		
70.0	29.6	36.0	142 900		

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RADIUS METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	BOOM CAPACITY KI LOGRAMS
7 7 · 1	2 5 3	21.3	82.0	79.6	800 000*
		22.0	81.5	79.5	800 000*
		24.0	80.0	79.1	741 700
		26.0	78.4	78.6	650 000
		28.0	76.9	78.1	577 300
		30.0	75.4	77.6	518 000
		32.0	73.8	77.0	468 900
		34.0	72.3	76.3	427 300
		36.0	70.7	75.6	391 700
		38.0	69.1	74.8	361 000
		40.0	67.5	73.9	334 100
		42.0	65.8	73.0	310 400
		44.0	64.2	72.0	289 400
		46.0	62.5	70.9	270 500
		48.0	60.8	69.8	253 600
		50.0	59.0	68.6	238 300
		52.0	57.2	67.2	224 400
		54.0	55.4	65.8	211 700
		56.0	53.6	64.3	200 100
		58.0	51.6	62.7	189 500
60.0	49.7	61.0	179 600		
62.0	47.7	59.1	170 400		
64.0	45.6	57.1	162 000		
66.0	43.4	55.0	154 000		
68.0	41.1	52.7	146 400		
70.0	38.7	50.1	139 200		
72.0	36.2	47.4	132 400		
74.0	33.5	44.3	126 000		
76.0	30.5	40.9	119 900		