## MANITOWOC ENGINEERING CO.

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



## LIFTCRANE CAPACITIES

MEETS ANSI B30.5 REQUIREMENTS M-1200

BOOM NO. 72 WITH 800 METRIC TON BOOM POINT MAST NO. 75 18.3m RINGER ATTACHMENT ON SCREW JACK PEDESTALS 23 590 kg CRANE COUNTERWEIGHT 915 170 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. 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 IN WINDS UP TO 16 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 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, 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 23 590 kg CRANE COUNTERWEIGHT AND 915 170 kg AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH LIFTED UNASSISTED = 77.1m

LOAD BLOCK ON GROUND AT START.

CONSULT JIB CHART FOR JIB CAPACITIES. JIB 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. RAD. METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
4 6 6	1 5 3	17. 1 18. 0 19. 0 20. 0 22. 0 24. 0 26. 0 28. 0 30. 0 32. 0 34. 0 36. 0 38. 0 40. 0 42. 0 44. 0 46. 0 48. 0 50. 0	81. 9 80. 8 79. 6 78. 3 75. 8 73. 2 70. 6 67. 9 65. 1 62. 3 556. 5 53. 4 50. 1 46. 7 43. 1 39. 2 29. 9	49. 4 49. 2 49. 0 48. 7 48. 2 47. 5 46. 8 45. 9 45. 0 42. 6 41. 3 39. 7 38. 0 36. 1 33. 9 31. 4 28. 5 25. 0	800 000* 800 000* 800 000* 800 000* 800 000* 800 000* 752 200 669 900 603 600 548 500 501 900 462 100 427 700 397 500 371 000 347 400 325 500 295 600* 266 400*

BOOM LENGTH METERS	BOOM LGTH. FEET	OPER. RAD. METERS	BOOM ANG. DEG.	BOOM POINT ELEV. METERS	CAPACITY KILOGRAMS
5 4 3	1 7 8	19.8 20.0 22.0 24.0 26.0 28.0 30.0 32.0 34.0 36.0 38.0 40.0 44.0 44.0 45.0 50.0 50.0 51.0 52.0 54.0	80. 2 80. 0 77. 8 75. 4 71. 2 68. 9 66. 6 64. 2 61. 8 59. 3 56. 8 54. 1 51. 4 48. 5 42. 4 39. 0 35. 3 31. 2	56. 6 56. 6 56. 1 55. 5 54. 9 54. 2 53. 4 52. 5 50. 3 49. 1 47. 8 46. 3 44. 6 42. 8 40. 8 38. 6 36. 1 33. 2 29. 9	800 000* 800 000* 800 000* 800 000* 748 400 666 100 599 700 544 700 498 100 458 200 423 800 393 700 367 100 343 500 322 400 303 500 286 400 270 700 256 500 240 400*

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MEETS ANSI B30.5 REQUIREMENTS

BOOM NO. 72 WITH 800 METRIC TON BOOM POINT
MAST NO. 75
18.3m RINGER ATTACHMENT ON SCREW JACK PEDESTALS
23 590 kg CRANE COUNTERWEIGHT
915 170 kg AUXILIARY COUNTERWEIGHT
360 DEGREE RATING

				DOOM	
DOOM	DOOM	٥٥٥٥	DOOM	BOOM	
BOOM	BOOM	OPER.	BOOM	POI NT	CAPACI TY
LENGTH	LGTH.	RAD. METERS	ANG.	ELEV. METERS	1
METERS	FEET	19.8	DEG. 81. 4	64. 4	KI LOGRAMS 800 000*
		20.0	81. 2	64. 3	800 000*
		20.0	79. 3	63. 9	800 000*
		24.0	77. 4	63. 4	800 000*
		26. 0	75. 5	62. 9	745 500
		28. 0	73. 6	62. 3	663 300
		30.0	71.6	61.6	596 900
		32. 0	69.6	60.8	541 800
6		34. 0	67. 6	59. 9	495 200
6	2	36. 0	65. 6	59.0	455 400
		38. 0	63. 5	58. 0	420 900
1	0	40. 0	61. 4	56.8	390 800
	U	42. 0	59. 2	55. 6	364 200
-		44. 0	57. 0	54.3	340 700
^	3	46. 0	54. 7	52.8	319 600
9		48. 0	52. 3	51. 2	300 600
		50. 0	49. 9	49.5	283 500
		52. 0	47. 3	47.6	267 900
		54.0	44. 7 41. 9	45. 5	253 700
		56. 0 58. 0	41. 9 38. 9	43. 3	240 700 228 700
		60.0	35. 7	37. 9	217 600
		62. 0	32. 2	34.7	207 300
		64. 0	28. 3	31.0	197 800
		21.2	01 1	71 0	000 000*
		21. 3 22. 0	81. 1 80. 5	71. 8 71. 7	800 000* 800 000*
		24. 0	78. 8	71.7	800 000*
		26. 0	77. 1	70.8	741 400
		28. 0	75. 4	70. 2	659 200
		30. 0	73. 7	69.6	592 800
		32. 0	72. 0	68. 9	537 700
		34.0	70. 2	68. 2	491 100
_		36. 0	68. 4	67. 4	451 200
6	_	38. 0	66. 6	66. 5	416 800
•	2	40.0	64. 8	65. 5	386 600
	_	42. 0	62. 9	64.4	360 100
9	2	44.0	61.0	63.3	336 500
•	_	46. 0 48. 0	59. 1 57. 1	62. 1 60. 7	315 400 296 400
-	8	50. 0	55. 1	59. 3	279 300
69.5	•	52. 0	53. 0	57. 8	263 700
		54. 0	50. 9	56. 1	249 500
		56. 0	48. 6	54.3	236 500
		58. 0	46. 3	52. 4	224 500
		60.0	43. 9	50. 3	213 500
		62. 0	41. 4	48. 0	203 200
		64.0	38. 8	45. 4	193 700
		66.0	36. 0	42. 7	184 800
		68. 0	32. 9	39.5	176 600
		70. 0	29. 6	36. 0	168 800

				BOOM	
BOOM	BOOM	OPER.	BOOM	POLNT	0404017)/
LENGTH	LGTH.	RAD.	ANG.	ELEV.	CAPACI TY
METERS	FEET	METERS	DEG.	METERS	KI LOGRAMS
		21. 3	82.0	79.6	800 000*
		22. 0 24. 0	81.5	79. 5 79. 1	800 000* 800 000*
		26.0	80. 0 78. 4	79. 1	800 000* 737 200
		28. 0	76. 9	78. 1	655 100
		30. 0	75. 4	77.6	588 700
		32.0	73. 8	77.0	533 600
		34. 0	72. 3	76.3	486 900
		36. 0	70. 7	75.6	447 100
		38. 0	69. 1	74.8	412 600
<b></b> -		40. 0	67.5	73. 9	382 400
[	2 5 3	42.0	65.8	73.0	355 900
7 7		44.0	64. 2	72.0	332 300
<del></del> -		46. 0	62.5	70. 9	311 200
[		48. 0	60.8	69.8	292 200
-		50. 0	59. 0	68. 6	275 100
		52. 0	57. 2	67. 2	259 500
1		54.0	55. 4	65.8	245 300
		56. 0	53. 6	64. 3	232 300
		58. 0	51.6	62.7	220 300
		60.0	49. 7	61.0	209 200
		62.0	47.7	59. 1	199 000
		64.0	45.6	57. 1	189 500
		66. 0 68. 0	43. 4 41. 1	55. 0 52. 7	180 600 172 400
		70. 0	38. 7	50. 1	164 600
		70.0	36. 7	47.4	157 400
		74.0	33. 5	44.3	150 600
		76. 0	30. 5	40. 9	144 100