## 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 1,433 TON BOOM POINT MAST NO. 75 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 (\*).

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 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 IN WINDS UP TO 35 MPH 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 35 MPH. 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 MAST, 32 PART BOOM HOIST REEVING, STRAP BOOM PENDANTS, 52,000 LB. CRANE COUNTERWEIGHT AND 1,753,600 LB. AUXILIARY COUNTERWEIGHT.

MAXIMUM BOOM LENGTH LIFTED UNASSISTED = 253

LOAD BLOCK ON GROUND AT START.

BOOM

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 LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACI TY POUNDS
	56 58 60 65 70	82. 0 81. 2 80. 5 78. 5 76. 6	161. 7 161. 2 160. 1 158. 8	2, 866, 500* 2, 854, 600 2, 672, 300 2, 301, 400 2, 017, 400
1	75 80 85 90 95	74. 7 72. 7 70. 7 68. 6 66. 6	153. 6 151. 5	
1 5 3	100 105 110 115 120	64. 5 62. 3 60. 2 57. 9 55. 6	146. 7 143. 9 140. 8 137. 5	1, 134, 300 1, 053, 400 982, 300
3	125 130 135 140 145	53. 2 50. 8 48. 2 45. 5 42. 7	130. 0 125. 8 121. 1	812, 600
	150 155 160 165	39. 7 36. 5 33. 0 29. 1	104. 1 97. 1 89. 2 80. 0	621, 700 592, 400 565, 300 540, 100

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	POI NT ELEV. FEET	CAPACI TY POUNDS
	65 70 75 80 85 90	76. 9 75. 2 73. 5 71. 8 70. 1	185. 7 184. 6 183. 3 181. 8 180. 2 178. 5 176. 5	2, 293, 500 2, 009, 400 1, 784, 900 1, 603, 000 1, 452, 700 1, 326, 400 1, 218, 700
1	100 105 110	68. 3 66. 6 64. 8	174. 4 172. 1 169. 6	1, 125, 900 1, 045, 000 973, 800
1 7 8	115 120 125 130 135	55. 3	166. 9 164. 0 160. 9 157. 5 153. 9	910, 800 854, 600 804, 100 758, 600 717, 200
8	140 145 150 155 160	53. 2 51. 1 48. 9 46. 7 44. 4	150. 0 145. 8 141. 3 136. 4 131. 1	679, 500 645, 000 613, 300 584, 100 557, 100
	165 170 175 180 185	41. 9 39. 3 36. 6 33. 6 30. 4	125. 4 119. 1	532,000 508,600 486,800 466,500 447,300

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACI TY POUNDS
	65 70 75 80 85	81. 4 80. 0 78. 5 77. 1 75. 6	211. 2 210. 2 209. 1 207. 8 206. 4	2, 287, 700 2, 003, 400 1, 778, 900 1, 596, 900
	90	74. 1	204. 9	1, 320, 200
	95	72. 6	203. 2	1, 212, 500
	100	71. 1	201. 4	1, 119, 600
	105	69. 6	199. 4	1, 038, 700
	110	68. 1	197. 3	967, 600
2	115	66. 5	195. 0	904, 500
	120	65. 0	192. 6	848, 300
	125	63. 4	189. 9	797, 800
	130	61. 8	187. 1	752, 200
	135	60. 1	184. 1	710, 900
2 0 3	140 145 150 155 160	58. 4 56. 7 55. 0 53. 2 51. 4	180. 9 177. 5 173. 9 170. 0 165. 9	673, 200 638, 700 607, 100 577, 800 550, 800
	165	49. 5	161. 5	525, 800
	170	47. 6	156. 8	502, 500
	175	45. 5	151. 7	480, 700
	180	43. 5	146. 3	460, 400
	185	41. 3	140. 4	441, 300
	190	39. 0	134. 1	423, 400
	195	36. 6	127. 2	406, 600
	200	34. 1	119. 6	390, 700
	205	31. 3	111. 2	375, 700
	210	28. 3	101. 8	361, 500

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## LIFTCRANE CAPACITIES. **BOOM NO. 72 WITH 1,433 TON BOOM POINT**

MEETS ANSI B30.5 REQUIREMENTS

MAST NO. 75 **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 70	BOOM ANG. DEG. 81.1	BOOM POINT ELEV. FEET 235. 7	CAPACI TY POUNDS 1, 995, 000
	75 80 85 90	79. 8 78. 5 77. 2 75. 9	234. 7 233. 6 232. 3 231. 0	1, 770, 200 1, 588, 200 1, 437, 700 1, 311, 300
	95 100 105 110 115	74. 6 73. 3 72. 0 70. 6 69. 3	229. 5 227. 9 226. 2 224. 3 222. 3 220. 2	1, 203, 500 1, 110, 600 1, 029, 700 958, 500 895, 400
2	120 125 130 135 140	67. 9 66. 5 65. 1 63. 7 62. 3	217. 9 215. 5 212. 9	839, 200 788, 700 743, 100 701, 700 664, 000
2 2 8	145 150 155 160 165	60. 8 59. 4 57. 9 56. 3 54. 8	210. 2 207. 3 204. 2 201. 0 197. 5 193. 9	629, 500 597, 900 568, 700 541, 600 516, 600
	170 175 180 185 190	53. 2 51. 6 49. 9 48. 2 46. 4	190. 0 185. 9 181. 6 177. 0 172. 1	493, 300 471, 500 451, 200 432, 200 414, 300
	195 200 205 210 215 220	44. 6 42. 8 40. 8 38. 8 36. 6	166. 9 161. 4 155. 4 149. 0 142. 2	397, 500 381, 700 366, 700 352, 500 339, 100
	220 225	34. 4 32. 0	134. 7 126. 6	326, 400 314, 300

BOOM LGTH. FEET	OPER. RAD. FEET	BOOM ANG. DEG.	BOOM POINT ELEV. FEET	CAPACI TY POUNDS
	70	82. 0	261. 0	1, 986, 500
	75	80. 8	260. 2	1, 761, 600
	80	79. 7	259. 2	1, 579, 500
	85	78. 5	258. 1	1, 428, 900
	90	77. 3	256. 9	1, 302, 400
	95	76. 2	255. 5	1, 194, 600
	100	75. 0	254. 1	1, 101, 600
	105	73. 8	252. 6	1, 020, 600
	110	72. 6	250. 9	949, 400
	115	71. 4	249. 1	886, 300
	120	70. 2	247. 3	830, 000
	125	69. 0	245. 3	779, 500
	130	67. 8	243. 1	733, 900
	135	66. 5	240. 8	692, 500
	140	65. 3	238. 5	654, 800
2 5 3	145 150 155 160 165	64. 0 62. 7 61. 4 60. 1 58. 8	235. 9 233. 2 230. 4 227. 4 224. 3	620, 300 588, 600 559, 400 532, 400 507, 300
3	170	57. 4	221. 0	484,000
	175	56. 0	217. 5	462,200
	180	54. 6	213. 9	441,900
	185	53. 2	210. 0	422,900
	190	51. 7	206. 0	405,000
	195 200 205 210 215	50. 2 48. 7 47. 2 45. 6 43. 9	206. 0 201. 7 197. 2 192. 4 187. 4 182. 1	388, 200 372, 400 357, 400 343, 300 329, 900
	220	42. 2	176. 4	317, 200
	225	40. 4	170. 4	305, 100
	230	38. 6	164. 0	293, 700
	235	36. 7	157. 2	282, 700
	240	34. 6	149. 8	272, 300
	245	32. 5	141. 8	262, 300
	250	30. 2	133. 1	252, 800
	255	27. 8	123. 5	243, 700