

MANITOWOC ENGINEERING CO.

A Division of The Manitowoc Company, Inc. Manitowoc, Wisconsin 54220



TOWER CRANE JIB LIFTING CAPACITIES **4100W** **4100W SERIES-1**

173' TO 253' NO. 22A TOWER WITH 160' NO. 23 BOOM AND
NO. 124 JIB EXTENSION — 18' JIB STRUT
26'6" CRAWLERS — EXTENDED
122,400 LB. COUNTERWEIGHT

**CAUTION OUTSIDE
ASSIST REQUIRED**

0 DEGREE JIB OFFSET ANGLE

Chart supplements Tower Capacity Chart No. 6193-A, No. 6193-B or No. 6193-C. Capacities for various tower lengths, jib 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 SHADED AREAS.** Capacities are shown in pounds.

Machine to operate on a firm surface with crawlers fully extended and roller path level within a tolerance of $\frac{1}{4}$ " in 10 ft. and properly supported. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Tower Rigging No. 50805, Jib Assembly No. 43348, Chart No. 5527 for recommended procedure for operating under various wind conditions and Chart No. 5393 for tower and boom raising procedure.

Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block. Boom angle is the angle between horizontal and centerline of the

boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of the jib load. Boom and jib are 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.

All machines with towers over 183 ft. require outside assist in raising tower and boom. Jib to be attached with tower in vertical position and with boom in a position which will allow jib to be attached.

JIB LOAD LINE SPECIFICATIONS

1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. (Approx. Weight Per Ft. in Lbs. 1.85)

30 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
60	73.6	20,000
65	72.0	20,000
70	70.4	20,000
75	68.8	20,000
80	67.2	20,000
85	65.5	20,000
90	63.9	20,000
95	62.2	20,000
100	60.5	20,000
105	58.7	20,000
110	56.9	20,000
115	55.1	19,600
120	53.3	18,900
125	51.4	18,300
130	49.4	17,800
135	47.4	17,200
140	45.3	16,700
145	43.1	16,300
150	40.9	15,900
155	38.5	15,400
160	36.0	15,000
165	33.3	14,700
170	30.5	14,400
175	27.3	14,100
180	23.8	13,800
185	19.7	13,300

40 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
65	73.1	14,000
70	71.6	14,000
75	70.1	14,000
80	68.5	14,000
85	67.0	14,000
90	65.4	14,000
95	63.8	14,000
100	62.2	14,000
105	60.6	14,000
110	58.9	14,000
115	57.3	14,000
120	55.5	14,000
125	53.8	14,000
130	52.0	14,000
135	50.1	14,000
140	48.2	14,000
145	46.3	14,000
150	44.2	14,000
155	42.1	13,700
160	39.9	13,300
165	37.6	13,000
170	35.2	12,700
175	32.6	12,400
180	29.8	12,200
185	26.8	11,900
190	23.3	11,700
195	19.3	11,500

50 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
65	73.8	10,000
70	72.4	10,000
75	70.9	10,000
80	69.5	10,000
85	68.0	10,000
90	66.6	10,000
95	65.1	10,000
100	63.5	10,000
105	62.0	10,000
110	60.5	10,000
115	58.9	10,000
120	57.3	10,000
125	55.6	10,000
130	54.0	10,000
135	52.3	10,000
140	50.5	10,000
145	48.7	10,000
150	46.9	10,000
155	45.0	10,000
160	43.0	10,000
165	41.0	10,000
170	38.8	10,000
175	36.6	10,000
180	34.2	10,000
185	31.7	10,000
190	29.0	10,000
195	26.0	9,900
200	22.7	9,800
205	18.7	9,700

60 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
70	72.8	5,000
75	71.5	5,000
80	70.1	5,000
85	68.7	5,000
90	67.3	5,000
95	65.9	5,000
100	64.5	5,000
105	63.0	5,000
110	61.6	5,000
115	60.1	5,000
120	58.6	5,000
125	57.0	5,000
130	55.5	5,000
135	53.9	5,000
140	52.3	5,000
145	50.6	5,000
150	48.9	5,000
155	47.2	5,000
160	45.4	5,000
165	43.5	5,000
170	41.6	5,000
175	39.6	5,000
180	37.5	5,000
185	35.4	5,000
190	33.1	5,000
195	30.6	5,000
200	27.9	5,000
205	25.0	5,000
210	21.8	5,000
215	18.0	5,000