

**MANITOWOC ENGINEERING CO.**

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



# TOWER CRANE JIB LIFTING CAPACITIES **4100W**

## **4100W SERIES-1**

183' TO 253' NO. 22A TOWER WITH 170' 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 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:
65	72.9	20,000
70	71.4	20,000
75	69.9	20,000
80	68.4	20,000
85	66.8	20,000
90	65.3	20,000
95	63.7	20,000
100	62.1	19,900
105	60.4	19,500
110	58.8	19,100
115	57.1	18,700
120	55.4	18,200
125	53.6	17,800
130	51.8	17,400
135	50.0	16,900
140	48.1	16,400
145	46.1	16,000
150	44.1	15,600
155	42.0	15,200
160	39.8	14,800
165	37.5	14,500
170	35.1	14,200
175	32.5	13,900
180	29.7	13,600
185	26.6	13,100
190	23.2	12,500
195	19.2	12,000

40 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
65	73.9	14,000
70	72.5	14,000
75	71.0	14,000
80	69.6	14,000
85	68.1	14,000
90	66.7	14,000
95	65.2	14,000
100	63.7	14,000
105	62.1	14,000
110	60.6	14,000
115	59.0	14,000
120	57.4	14,000
125	55.7	14,000
130	54.1	14,000
135	52.4	14,000
140	50.6	14,000
145	48.8	14,000
150	47.0	14,000
155	45.1	13,600
160	43.1	13,300
165	41.1	12,900
170	38.9	12,600
175	36.7	12,300
180	34.3	12,100
185	31.8	11,800
190	29.1	11,500
195	26.1	11,300
200	22.7	11,100
205	18.8	10,900

50 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
70	73.2	10,000
75	71.8	10,000
80	70.5	10,000
85	69.1	10,000
90	67.7	10,000
95	66.3	10,000
100	64.8	10,000
105	63.4	10,000
110	61.9	10,000
115	60.4	10,000
120	58.9	10,000
125	57.4	10,000
130	55.8	10,000
135	54.3	10,000
140	52.6	10,000
145	51.0	10,000
150	49.3	10,000
155	47.5	10,000
160	45.7	10,000
165	43.9	10,000
170	42.0	10,000
175	40.0	10,000
180	37.9	10,000
185	35.7	10,000
190	33.4	10,000
195	30.9	9,900
200	28.3	9,800
205	25.4	9,700
210	22.1	9,600
215	18.3	9,400

60 FOOT JIB		
Jib Point Radius Feet	Boom Angle: Deg.	Capacity:
70	73.6	5,000
75	72.3	5,000
80	71.0	5,000
85	69.7	5,000
90	68.3	5,000
95	67.0	5,000
100	65.7	5,000
105	64.3	5,000
110	62.9	5,000
115	61.5	5,000
120	60.1	5,000
125	58.6	5,000
130	57.2	5,000
135	55.7	5,000
140	54.2	5,000
145	52.6	5,000
150	51.0	5,000
155	49.4	5,000
160	47.8	5,000
165	46.1	5,000
170	44.3	5,000
175	42.5	5,000
180	40.7	5,000
185	38.7	5,000
190	36.7	5,000
195	34.6	5,000
200	32.3	5,000
205	29.9	5,000
210	27.3	5,000
215	24.5	5,000
220	21.3	5,000
225	17.6	5,000