



# TOWER CRANE CAPACITIES

**4000W  
CRAWLER**

**173' TO 213' NO. 22 TOWER WITH NO. 23 BOOM  
 24' CRAWLERS — EXTENDED  
 104,400 LB. COUNTERWEIGHT**

**CAUTION  
 OUTSIDE ASSIST REQUIRED**

**LIFTING CAPACITIES:** Capacities for various tower lengths, and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. **CAPACITIES SHOWN BY SHADED AREAS ARE BASED ON STRUCTURAL COMPETENCE.**

Capacities are shown in pounds. Weight of jib, (see chart A) all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point 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.

**OPERATING CONDITIONS:** Machine to operate on a firm surface with crawlers fully extended and roller path level within a tolerance of 1/4" in 10' and properly supported, and be rigged in accordance with and under conditions referred to in rigging drawing No. 50602 and load line specification chart No. 5334, chart No. 6662-A for recommended procedure for operating under various wind conditions.

**CAUTION: OUTSIDE ASSIST REQUIRED. SEE CHART NO. 6485-A FOR TOWER AND BOOM RAISING PROCEDURE.**

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.

**OPERATING RADIUS:** Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block with the load freely suspended. Add 12" to boom point radius for radius of sheave when using single part of hoist line.

Boom angle is the 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:** Boom point elevation, in feet, is the vertical distance from ground level to centerline of boom point shaft. Distances are given for 213' tower. Deduct 10' for each 10' reduction of tower height.

**MACHINE EQUIPMENT:** Machine equipped with 24'-0" extendible crawlers, 48" treads, 15' retractable gantry, 10 part boom hoist reeving, four 1-1/4" tower pendants, two 1-3/8" boom pendants, two 7/8" intermediate suspension pendants, 1st cwt. 40,100 lbs., 2nd cwt. 35,800 lbs., 3rd cwt. 28,500 lbs. Total counterweight 104,400 pounds.

LOAD LINE SPECIFICATIONS	
LOAD LINE: 1-1/8" — 6 x 31 Warrington-Seale, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 56.5 Ton. Maximum Load — 28,300 lbs. per line. (Approx. Weight Per Ft. in Lbs. 2.34).	

(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
Jib Length	Jib No. 124
30'	2,000 lb.
40'	2,400 lb.
50'	2,800 lb.
60'	3,200 lb.

Load block, hook & weight ball on ground until tower is in vertical position and boom is in operating range. Jib to be attached with tower in vertical position and with boom in a position which will allow jib to be attached.

For jib capacities, consult jib chart.

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:
160	55	71.7	371.4	24,000
	60	69.8	369.7	23,500
	65	67.9	267.8	22,700
	70	65.9	365.6	21,900
	75	63.9	363.3	21,000
	80	61.9	360.7	19,900
	85	59.9	357.9	19,000
	90	57.8	354.9	18,000
	95	55.6	351.6	17,000
	100	53.4	348.1	16,000
	105	51.2	344.2	15,100
	110	48.8	340.0	14,300
	115	46.4	335.5	13,500
	120	43.9	330.5	12,800
	125	41.2	325.0	12,200
	130	38.5	319.0	11,500
135	35.5	312.4	11,000	
140	32.3	304.9	10,500	
145	28.7	296.5	10,000	
150	24.8	286.5	9,300	
155	20.0	274.4	8,700	
160	13.9	258.0	7,900	

Combined From Charts:  
 No. 5277-B1 4-4-84  
 No. 5334 4-6-82