

TOWER CRANE CAPACITIES

4000W CRAWLER

123' TO 163' NO. 22 TOWER WITH NO. 23 BOOM 24' CRAWLERS — EXTENDED 104,400 LB. COUNTERWEIGHT

LIFTING CAPACITIES: Capacities for various tower lengths, boom 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.

CAPACITY INDICATED BY "B" REPRESENTS A BOOM POSITION WHICH REQUIRES LOAD HANDLING DEVICES OF AT LEAST 2,000 POUNDS TO PREVENT BOOM FROM COMING BACK AGAINST BOOM STOP AS LOAD IS RELEASED.

OPERATING CONDITIONS: Machine to operate on a firm surface with crawlers fully extended and roller path level within a tolerance of 1/2" 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 and chart No. 6662-A for recommended procedure for operating under various wind conditions.

BOOM LENGTHS MUST BE 13' SHORTER THAN TOWER HEIGHT, TO FOLD BOOM UNDER TOWER.

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 163' tower. Deduct 10' for each 10' reduction at 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 as specified on rigging drawing. 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).

MAXIMUM TOWER AND BOOM LENGTHS LIFTED UNASSISTED

OVER FRONT OF BLOCKED CRAWLERS		OVER SIDE OF EXTENDED CRAWLERS	
Tower	Boom	Tower	Boom
163'	150'	143'	130'

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.

(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.

For jib capacities, consult jib chart.

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Boom Point: Elev.	Capacity:
110	40	70.7	273.4	47,500B	130	45	71.5	292.8	39,000	150	50	72.0	312.2	30,000
	45	67.9	271.5	45,800		50	69.1	291.0	37,500		55	70.0	310.5	28,600
	50	65.1	269.3	44,000		55	66.7	289.0	36,000		60	67.9	308.6	27,800
	55	62.2	266.8	42,200		60	64.3	286.7	34,600		65	65.9	306.4	26,900
	60	59.2	264.0	40,600		65	61.8	284.2	33,100		70	63.8	304.1	26,000
	65	56.1	260.9	39,100		70	59.3	281.4	31,800		75	61.6	301.5	25,300
	70	52.9	257.3	37,600		75	56.7	278.2	30,500		80	59.4	298.7	24,600
	75	49.6	253.3	36,300		80	54.0	274.8	29,200		85	57.2	295.6	23,600
	80	46.1	248.8	35,000		85	51.3	271.0	28,000		90	54.9	292.2	22,700
	85	42.3	243.6	33,300		90	48.4	266.7	26,800		95	52.5	288.5	21,900
120	90	38.3	237.7	31,100	140	95	45.4	262.1	25,700	160	100	50.0	284.5	21,100
	95	33.9	230.9	29,100		100	42.2	256.8	24,600		105	47.5	280.2	20,300
	100	28.9	222.7	27,400		105	38.8	251.0	23,600		110	44.9	275.4	19,500
	105	22.9	212.4	25,800		110	35.1	244.3	22,700		115	42.1	270.1	18,800
	110	14.8	197.7	23,400		115	31.1	236.7	21,800		120	39.1	264.2	18,200
	40	72.4	283.9	44,500		120	26.5	227.6	21,000		125	36.0	257.7	17,500
	45	69.9	282.2	42,800		125	21.0	216.2	19,900		130	32.6	250.4	16,900
	50	67.3	280.2	41,200		130	13.6	200.2	18,100		135	28.9	242.0	16,300
	55	64.7	278.0	39,100		50	70.7	301.7	33,800		140	24.6	232.1	15,800
	60	62.0	275.5	37,600		55	68.5	299.8	32,300		145	19.6	219.8	15,000
130	65	59.3	272.7	36,100	150	60	66.3	297.7	31,200		150	12.7	202.5	14,300
	70	56.4	269.6	34,700		65	64.0	295.4	30,000					
	75	53.5	266.1	33,400		70	61.7	292.8	28,900					
	80	50.5	262.1	32,100		75	59.4	290.0	27,900					
	85	47.3	257.8	30,600		80	57.0	286.9	26,900					
	90	44.0	252.9	28,900		85	54.5	283.5	25,800					
	95	40.4	247.4	27,400		90	51.9	279.8	24,700					
	100	36.6	241.1	26,000		95	49.3	275.7	23,700					
	105	32.4	233.8	24,700		100	46.5	271.1	22,800					
	110	27.6	225.2	23,000		105	43.6	266.2	21,400					
140	115	21.9	214.3	22,100	160	110	40.6	260.7	20,800					
	120	14.2	199.0	21,400		115	37.3	254.4	19,900					
						120	33.8	247.4	19,100					
						125	29.9	239.4	18,300					
						130	25.5	229.9	17,500					
						135	20.3	218.0	16,800					
						140	13.1	201.4	16,100					

Combined From Charts:

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No. 5334 4-6-82

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