



# TOWER CRANE INTERMEDIATE FALL CAPACITIES

**3900W SERIES-2  
CRAWLER**

**114' TO 164' NO. 9A TOWER WITH NO. 18 BOOM  
24' CRAWLERS — EXTENDED  
84,600 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 all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom, jib, and intermediate fall point sheaves, is considered part of the intermediate fall load. When jib is attached, a deduction for jib weight is not required for this chart only. 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 1/2" in 10 ft. and properly supported, and be rigged in accordance with and under conditions referred to in rigging drawing No. 65079 or No. 66096 and load line specification chart No. 5326 and chart No. 6633-A for recommended procedure for operating under various wind conditions. **BOOM MUST BE AT LEAST 14' SHORTER THAN TOWER IN ORDER TO FOLD BOOM UNDER TOWER.**

A maximum of two hoist lines may be used with one over the intermediate fall and one over the boom point or jib point. **SIMULTANEOUS HANDLING OF LOADS WITH HOIST LINES OVER THE INTERMEDIATE FALL AND BOOM POINT OR JIB POINT IS NOT PERMITTED.**

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.

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.

**INTERMEDIATE FALL POINT ELEVATION:** Intermediate fall point elevation, in feet, is the vertical distance from ground level to centerline of intermediate fall point shaft. Distances are given for 164' tower. Deduct 10' for each 10' reduction in tower height.

**MACHINE EQUIPMENT:** Machine equipped with 24' 0" extendible crawlers, 48" treads, 16' retractable gantry, 10 part boom hoist reeving, four 1 1/4" tower pendants, two 1 1/4" boom pendants, two 3/4" intermediate suspension pendants, 1st cwt. = 43,000 lbs., 2nd cwt. = 30,000 lbs., 3rd cwt. = 11,600 lbs.

## LOAD LINE SPECIFICATIONS

INTERMEDIATE FALL: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load on Intermediate Fall — 15,000 lbs. (Approx. Weight Per Ft. in lbs. 1.85)

## MAXIMUM TOWER AND BOOM LENGTHS LIFTED UNASSISTED

OVER FRONT OF BLOCKED CRAWLERS		OVER SIDE OF EXTENDED CRAWLERS	
Tower	Boom	Tower	Boom
164'	150'	144'	130'
(B) 154'	140'	(B) 134'	120'
(B) When tower equipped with 40' insert No. 191146 per rigging No. 66096.			
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.			

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Angle: Deg.	Int. Fall Point: Elev.	Capacity:
<b>120</b>	25	72.8	231.5	15,000
AND	30	68.0	229.6	15,000
AND	35	63.1	227.2	15,000
<b>130</b>	40	57.9	224.3	12,700
AND	45	52.3	220.6	11,200
<b>140</b>	50	46.3	216.1	10,000
AND	55	39.6	210.5	8,900
AND	60	31.6	203.2	8,100
<b>150</b>	65	21.1	192.5	7,500

Combined From Charts:  
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No. 5326 9-4-80