

TOWER CRANE 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 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 ft. on 100' and 110' boom, 3/4" in 10 ft. on 120' thru 150' boom 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.**

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. Add 12" to boom point radius for radius of sheave when using single part 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 164' tower. Deduct 10' for each 10' reduction in tower height.

MACHINE EQUIPMENT: Machine equipped with 24' 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 3/8" intermediate suspension pendants as specified on rigging drawing. 1st cwt. = 43,000 lbs., 2nd cwt. = 30,000 lbs., 3rd cwt. = 11,600 lbs.

LOAD LINE SPECIFICATIONS	
LOAD LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load per Line — 22,500 lbs. (Approx. Weight Per Ft. in lbs. 1.85)	
WHIP LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load per Line — 22,500 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'
(C) 154'	140'	(C) 134'	120'

(C) 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.

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

For Jib Capacities, Consult Jib Chart

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
100	35	71.9	265.9	38,000B	100	40	72.5	285.3	33,000	140	45	73.0	304.7	27,600	150	50	72.1	313.6	21,800
	40	68.9	264.1	36,000B		45	70.0	283.6	31,600		55	70.8	303.0	26,500		55	70.1	311.9	20,900
	45	65.8	262.0	34,900		50	67.5	281.6	30,300		60	68.6	301.2	25,400		60	68.1	310.0	20,100
	50	62.6	259.6	33,300		55	64.8	279.4	29,000		65	66.4	299.1	24,300		65	66.0	307.8	19,200
	55	59.3	256.8	31,800		60	62.2	276.9	27,700		65	64.2	296.8	23,200		65	63.9	305.5	18,400
110	60	55.9	253.7	30,400	110	65	59.4	274.1	26,500	150	70	61.9	294.3	22,200	160	75	61.7	302.9	17,600
	65	52.4	250.0	29,100		70	56.6	271.0	25,400		75	59.5	291.5	21,200		80	59.6	300.1	16,800
	70	48.7	245.9	27,900		75	53.7	267.5	24,300		80	57.1	288.4	20,200		85	57.3	297.1	16,000
	75	44.8	241.2	26,300		80	50.7	263.7	23,200		85	54.6	285.0	19,200		90	55.0	293.7	15,200
	80	40.5	235.8	24,400		85	47.5	259.3	22,100		90	52.1	281.3	18,400		95	52.7	290.0	14,500
120	85	35.9	229.4	22,700	120	90	44.2	254.5	20,600	160	95	49.5	277.2	17,500	170	100	50.2	286.1	13,800
	90	30.7	221.8	21,100		95	40.7	249.0	19,300		100	46.7	272.7	16,700		105	47.7	281.7	13,100
	95	24.5	212.3	19,800		100	36.9	242.8	18,100		105	43.8	267.8	15,900		110	45.0	276.9	12,500
	100	16.3	198.8	18,600		105	32.7	235.6	17,000		110	40.8	262.3	15,100		115	42.3	271.7	11,900
						110	28.0	227.1	16,000		115	37.5	256.1	14,400		120	39.3	265.9	11,300
130	35	73.6	276.3	36,000B	130	115	22.3	216.4	15,100	170	120	34.0	249.2	13,700	180	125	36.2	259.5	10,700
	40	70.9	274.7	34,900		120	14.8	201.5	14,300		125	30.2	241.2	13,000		130	32.9	252.2	10,100
	45	68.1	272.9	33,400		40	73.9	295.7	31,900		130	25.8	231.8	12,400		135	29.2	243.9	9,600
	50	65.3	270.7	31,900		45	71.6	294.2	30,700		135	20.7	220.2	11,700		140	25.0	234.1	9,100
	55	62.4	268.3	30,600		50	69.3	292.4	29,400		140	13.7	204.0	11,100		145	19.9	222.0	8,700
140	60	59.4	265.5	29,300	140	55	66.9	290.4	28,200	180	145	13.3	205.2	10,500	190	150	13.3	205.2	8,500
	65	56.3	262.3	28,000		60	64.5	288.1	27,000										
	70	53.1	258.8	26,800		65	62.0	285.6	25,800										
	75	49.8	254.8	25,700		70	59.5	282.8	24,700										
	80	46.3	250.3	24,100		75	56.9	279.7	23,600										
150	85	42.6	245.2	22,400	150	80	54.2	276.3	22,600	190	90	49.5	277.2	21,500	200	95	47.7	281.7	19,100
	90	38.2	239.4	20,900		85	51.5	272.5	21,600										
	95	34.2	233.6	19,500		90	48.6	268.3	20,400										
	100	29.2	224.5	18,300		95	45.6	263.6	19,100										
	105	23.3	214.4	17,200		100	42.4	258.5	17,900										
160	110	15.5	200.2	16,300	160	105	39.0	252.7	16,800	200	110	35.4	246.1	15,800	210	115	31.4	238.5	14,900
						110	35.4	246.1	15,800										
						115	31.4	238.5	14,900										
						120	26.8	229.5	14,100										
						125	21.4	218.3	13,300										
						130	14.3	202.8	12,600										

Combined From Charts:
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