TOWER CRANE CAPACITIES — 4600

154′ TO 164′ NO. 27B TOWER
BOOM NO. 22B WITH LIGHT TAPERED TOP
123,000 LB. COUNTERWEIGHT

SERIES-4

CRAWLER

LIFTING CAPACITIES: Capacities for various tower heights, 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 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 1,500 POUNDS TO PREVENT BOOM FROM COMING BACK AGAINST BOOM STOP AS LOAD IS RELEASED.

OPERATING CONDITIONS: Machine to operate on a firm surface with roller path level within a tolerance of 1/2" in 10 feet and properly supported, and be rigged in accordance with and under conditions referred to in rigging drawing No. 65156 or No. 66235 and load line specification chart No. 6517-A and chart No. 7264-A for recommended procedure for operating under various wind conditions. **BOOM LENGTHS MUST BE 14′ 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. Add 1.2′ 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 164′ tower. Deduct 10′ for each 10′ reduction of tower height.

MACHINE EQUIPMENT: Machine equipped with 30′5" crawlers, 60" treads, 33′ retractable gantry, 12 part boom hoist reeving, four 1-1/2" tower pendants, four 1-3/8" boom pendants, and 123,000 lb. counterweight (120,000 lb. with counterweight assembly No. 49667).

HOIST REEVING FOR MAIN LOAD BLOCK				
No. Parts of Line	1	2	3	4
Maximum Load — Lbs.	40,000	80,000	120,000	160,000

LOAD AND WHIP LINE SPECIFICATIONS
LOAD LINE: 1-1/4" — 6x31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 79.9 Ton. Approx. Weight Per Ft. in lbs. 2.89.
WHIP LINE: 1-1/4" — 6x31 Warrington-Seale, Extra Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 79.9 Ton. Maximum Load — 40,000 lbs. Per Line. Approx. Weight Per Ft. in lbs. 2.89.

MAXIMUM TOWER AND BOOM LENGTHS LIFTED UNASSISTED			
OVER FRONT OF BLOCKED CRAWLERS		OVER SIDE OF CRAWLERS	
Tower	Boom	Tower	Boom
194′	180′	174′	160′
Load block, hook & weight ball on ground until tower is in vertical position and boom is in operating range.			

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
100	35	73.4	269.2	139,000B
	40	70.4	267.6	130,600B
	45	67.4	265.7	122,600B
	50	64.2	263.4	116,200
	55	61.0	260.8	110,800
	60	57.7	257.9	106,100
	65	54.2	254.5	102,000
	70	50.6	250.6	98,600
	75	46.8	246.2	94,500
	80	42.7	241.2	87,300
	85	38.3	235.3	81,100
	90	33.4	228.4	75,700
	95	27.7	219.9	70,800
	100	20.8	208.9	66,500
110	40	72.3	278.2	125,300B
	45	69.5	276.4	119,200
	50	66.7	274.4	112,200
	55	63.8	272.1	106,800
	60	60.9	269.5	102,200
	65	57.9	266.5	98,200
	70	54.7	263.2	94,700
	75	51.5	259.5	91,700
	80	48.1	255.2	86,600
	85	44.5	250.4	80,400
	90	40.6	245.0	74,900
	95	36.4	238.7	70,100
	100	31.8	231.3	65,700
	105	26.4	222.4	61,800
	110	19.8	210.6	58,300

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
120	40	73.8	288.6	120,900
	45	71.3	287.0	110,900
	50	68.7	285.2	109,600
	55	66.2	283.1	103,300
	60	63.5	280.8	98,800
	65	60.8	278.2	94,900
	70	58.1	275.2	91,400
	75	55.2	271.9	88,400
	80	52.2	268.2	85,700
	85	49.1	264.1	79,600
	90	45.9	259.6	74,100
	95	42.5	254.4	69,300
	100	38.8	248.6	64,900
	105	34.8	241.9	61,000
	110	30.4	234.1	57,500
	115	25.3	224.6	54,300
	120	18.9	212.3	51,400
130	45	72.8	297.6	110,200
	50	70.5	295.9	102,100
	55	68.1	294.0	101,500
	60	65.7	291.9	95,600
	65	63.3	289.5	91,800
	70	60.8	286.8	88,400
	75	58.2	283.9	85,400
	80	55.6	280.6	82,800
	85	52.9	277.0	78,800
	90	50.0	273.0	73,300
	95	47.1	268.6	68,500
	100	44.0	263.7	64,100
	105	40.7	258.2	60,200
	110	37.2	252.0	56,700
	115	33.4	245.0	53,500
	120	29.2	236.8	50,600
	125	24.3	226.8	47,900
	130	18.2	214.0	45,500

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
140	45	74.0	308.0	106,700
	50	71.9	306.5	101,400
	55	69.7	304.7	94,800
	60	67.5	302.8	92,000
	65	65.3	300.6	89,000
	70	63.0	298.2	85,700
	75	60.7	295.5	82,900
	80	58.3	292.5	80,200
	85	55.9	289.3	77,900
	90	53.4	285.8	72,900
	95	50.8	281.9	68,000
	100	48.1	277.6	63,700
	105	45.3	272.9	59,800
	110	42.3	267.7	56,200
	115	39.2	261.9	53,000
	120	35.8	255.3	50,100
	125	32.2	247.9	47,400
	130	28.1	239.3	45,000
	135	23.4	229.0	42,700
	140	17.5	215.6	40,300
150	50	73.1	316.9	98,200
	55	71.1	315.3	93,800
	60	69.1	313.5	88,400
	65	67.0	311.5	85,800
	70	65.0	309.3	83,200
	75	62.8	306.8	80,400
	80	60.7	304.1	77,800
	85	58.4	301.2	75,500
	90	56.2	298.0	72,100
	95	53.8	294.5	67,200
	100	51.4	290.7	62,900
	105	49.0	286.5	59,000
	110	46.4	282.0	55,400
	115	43.7	277.0	52,200
	120	40.8	271.5	49,300
	125	37.8	265.4	46,600
	130	34.6	258.5	44,200
	135	31.1	250.8	41,900
	140	27.1	241.8	39,800
	145	22.6	231.0	37,900
	150	16.9	217.1	35,500

Combined From Charts:
No. 6901-B 5-22-85
No. 6517-A 12-22-80