



# LIFTCRANE CAPACITIES

# 3900 CRAWLER

## BOOM NO. 8 WITH OPEN THROAT TOP 74,000 LB. COUNTERWEIGHT

**LIFTING CAPACITIES:** Capacities for various boom lengths and operating radii may be based on per cent of tipping, strength of structural components, operating speeds and other factors.

Capacities are for freely suspended loads and do not exceed **75%** of a static load required to tip machine with boom across crawlers. Capacities based on structural competence are shown by shaded areas.

Capacities are shown in pounds. Weight of jib, (see chart A), all load blocks, hooks, weight ball, slings, hoist lines beneath boom and jib point sheaves, etc., 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 in level position on a firm surface with gantry in working position and under conditions referred to in rigging drawing No. 42925, No. 43258, No. 48029, or No. 48237, and load line specification chart No. 4899.

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, as well as adverse operating conditions & 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 11" 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.

**MACHINE EQUIPMENT:** Machine equipped with 20'-4" crawlers, 38" treads, 15' gantry, 10 or 12 part (No. 42925, No.

43258, No. 48029) or 10 part (No. 48237) boom hoist reeving, two 1 1/2" or 1 3/4" boom pendants, 1st cwt. 32,000 lbs., 2nd cwt. 26,500 lbs., 3rd cwt. 15,500 lbs. Total counterweight 74,000 pounds.

HOIST REEVEING FOR MAIN LOAD BLOCK						
No. Parts of Line	1	2	3	4	5	6
Max. Load - Lbs.	22,500	45,000	67,500	90,000	112,500	135,000
No. Parts of Line	7	8	9			
Max. Load - Lbs.	157,500	180,000	200,000			

LOAD AND WHIP LINE SPECIFICATIONS	
<b>LOAD LINE:</b> 1" - 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton.	
<b>WHIP LINE:</b> 1" - 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load - 22,500 lbs. per Line.	

MAXIMUM BOOM AND JIB LENGTHS LIFTED UNASSISTED											
OVER FRONT OF BLOCKED CRAWLERS					OVER SIDE OF CRAWLERS						
Boom Length	JIB NUMBER					Boom Length	JIB NUMBER				
	104	113	121	123	124		104	113	121	123	124
210'						190'					
200'			30'		30'	180'					
190'	30'	30'	60'		60'	170'	30'	30'	60'	30'	60'
180'		40'	60'	50'	60'	160'		40'	60'	60'	60'
170'		40'	60'	60'	60'						

Load block, hook and weight ball on ground at start.

(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED					
Jib Length	Jib No. 104	Jib No. 113	Jib No. 121	Jib No. 123	Jib No. 124
30'	2,250 Lb.	2,910 Lb.	1,800 Lb.	2,500 Lb.	1,800 Lb.
40'	---	3,550 Lb.	2,050 Lb.	3,100 Lb.	2,050 Lb.
50'	---	---	2,300 Lb.	3,700 Lb.	2,300 Lb.
60'	---	---	2,500 Lb.	4,400 Lb.	2,500 Lb.

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:		
60	16	78.1	65.4	180,200	70	45	53.8	63.2	43,800	90	18	80.8	95.6	162,600		
	17	77.1	65.2	180,200		50	48.5	59.2	38,100		19	80.2	95.4	148,500		
	18	76.1	65.0	163,400		55	42.8	54.3	33,700		20	79.5	95.2	136,600		
	19	75.2	64.7	149,400		60	36.4	48.2	30,000		22	78.2	94.8	117,600		
	20	74.2	64.4	137,500		65	28.7	40.4	27,100		24	76.9	94.4	103,100		
						70	18.5	29.0	24,500							
	22	72.2	63.8	118,600		16	81.1	85.8	179,700		26	75.6	93.9	91,700		
	24	70.1	63.2	104,100		17	80.4	85.6	179,700		28	74.2	93.4	82,400		
	26	68.1	62.4	92,700		18	79.6	85.4	162,900		30	73.0	92.8	74,700		
	28	66.0	61.5	83,400		19	78.9	85.2	148,800		32	71.6	92.1	68,300		
30	63.9	60.6	75,800	20	78.2	85.0	137,000	34	70.3	91.4	62,800					
70	32	61.8	59.6	69,400	80	22	76.7	84.6	118,000	100	36	68.9	90.7	58,100		
	34	59.6	58.5	63,900		24	75.2	84.1	103,500		40	66.2	89.0	50,400		
	36	57.3	57.2	59,200		26	73.8	83.5	92,000		45	62.6	86.6	43,000		
	38	55.0	55.9	55,100		28	72.3	82.9	82,800		50	59.0	83.9	37,400		
	40	52.7	54.4	51,500		30	70.8	82.2	75,100							
						32	69.2	81.5	68,700		55	55.2	80.6	32,900		
	45	46.4	50.2	44,200		34	67.7	80.7	63,200		60	51.2	76.9	29,300		
	50	39.4	44.8	38,500		36	66.1	79.9	58,500		65	47.0	72.5	26,300		
	55	31.1	37.7	34,100		38	64.6	79.0	54,400		70	42.5	67.5	23,800		
	60	20.0	27.3	30,500		40	63.0	78.0	50,800		75	37.5	61.5	21,600		
80	16	79.8	75.6	179,900	90	45	58.9	75.7	43,500	120	80	31.9	54.3	19,800		
	17	79.0	75.4	179,900		50	54.6	71.9	37,800		85	25.3	45.2	18,200		
	18	78.1	75.2	149,100		55	50.0	68.0	33,300		90	16.3	32.0	16,700		
	19	77.3	75.0	149,100		60	45.2	63.5	29,700							
	20	76.5	74.8	137,200		65	39.9	58.0	26,700							
						70	33.9	51.4	24,200		85	35.5	64.8	18,000		
	22	74.8	74.3	118,200		75	26.9	42.9	22,100		90	30.3	57.1	16,600		
	24	73.1	73.7	103,700		80	17.3	30.5	20,200		95	24.0	47.3	15,300		
	26	71.4	73.0	92,300							100	15.5	33.4	14,200		
	28	69.6	72.3	83,000												
30	67.9	71.6	75,400													
90	32	66.1	70.7	69,000												
	34	64.3	69.8	63,500												
	36	62.5	68.8	58,800												
	38	60.6	67.7	54,700												
	40	58.7	66.5	51,100												

Capacities continued on reverse side.