



Duty Cycle Capacities

Boom No. 83A
53,000 Lb. Counterweight
23 Ft. 6 in. Crawlers Extended
360 Degree Rating - Limited Duty

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 67.5% of a static tipping load. Capacities are based on tipping, structural competence(*), operating speeds and other factors.

Duty cycle capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Refer to boom rigging **No. A14196** and Wire Rope Specification chart **No. 8697-C**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of gravity of freely suspended load. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius.

MACHINE EQUIPMENT: Machine equipped with 23 Ft. 6 in. extendible crawlers, 39-3/8 in. treads, 9 Ft. 7 in. gantry, 25 Ft. live mast, 12 part boom hoist reeving, two 1-1/2 in. pendants and 53,000 Lb. counterweight.

Upper Boom Point Deduct

Deduct 1,300 Lbs. from capacities when upper boom point is attached.

Auxiliary Drum Deduct

Deduct 2,000 Lbs. from boom capacities when boom butt is equipped with auxiliary drum.

Wire Rope Guard Deduct

Deduct 1,000 Lbs. from boom capacities when boom top is equipped with wire rope guard **No. A13283**.

Maximum Boom Lengths Lifted Unassisted			
Over Front of Blocked Crawlers	Over Rear of Blocked Crawlers	Over Side of Extended Crawlers	Over Side of Retracted Crawlers
170 Ft.	170 Ft.	140 Ft.	130 Ft.

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
50 Ft. Boom		
30	64.1	66,000 *
35	57.4	65,400
40	50.0	54,000
45	41.6	45,600
50	31.2	39,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
60 Ft. Boom		
30	68.8	66,000 *
35	63.4	65,500
40	57.8	54,200
45	51.8	45,800
50	45.2	39,300
55	37.6	34,200
60	28.1	29,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
70 Ft. Boom		
30	72.0	66,000 *
35	67.5	65,600
40	62.9	54,300
45	58.1	45,900
50	53.1	39,400
55	47.6	34,300
60	41.5	30,100
65	34.5	26,600
70	25.9	23,600

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
80 Ft. Boom		
25	78.0	66,000 *
30	74.3	66,000 *
35	70.5	65,000
40	66.6	53,700
45	62.6	45,400
50	58.4	39,000
55	54.0	33,900
60	49.3	29,700
65	44.2	26,300
70	38.6	23,300
75	32.1	20,800
80	24.0	18,600



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Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
90 Ft. Boom		
25	79.4	65,000 *
30	76.1	63,100 *
35	72.8	61,300 *
40	69.4	53,600
45	65.9	45,200
50	62.3	38,800
55	58.6	33,700
60	54.7	29,600
65	50.6	26,100
70	46.2	23,200
75	41.5	20,700
80	36.2	18,600
85	30.1	16,700
90	22.5	14,900
100 Ft. Boom		
25	80.4	60,800 *
30	77.5	59,200 *
35	74.5	57,600 *
40	71.5	53,300
45	68.4	45,000
50	65.3	38,500
55	62.1	33,400
60	58.7	29,300
65	55.2	25,900
70	51.6	22,900
75	47.8	20,500
80	43.7	18,300
85	39.2	16,400
90	34.2	14,700
95	28.5	13,200
100	21.3	11,800
110 Ft. Boom		
25	81.3	53,900 *
30	78.7	52,500 *
35	76.0	51,200 *
40	73.3	49,900 *
45	70.5	44,900
50	67.7	38,500
55	64.8	33,400
60	61.9	29,200
65	58.8	25,800
70	55.7	22,900
75	52.4	20,400
80	49.0	18,300
85	45.4	16,400
90	41.5	14,700
95	37.2	13,300
100	32.5	11,900
105	27.1	10,700
110	20.2	9,600

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
120 Ft. Boom		
25	82.1	50,400 *
30	79.6	49,200 *
35	77.2	48,000 *
40	74.7	46,800 *
45	72.2	44,600
50	69.7	38,100
55	67.1	33,000
60	64.4	28,900
65	61.7	25,500
70	58.9	22,600
75	56.1	20,100
80	53.1	17,900
85	50.0	16,100
90	46.7	14,400
95	43.3	12,900
100	39.6	11,600
105	35.6	10,400
110	31.1	9,300
115	25.8	8,300
120	19.3	7,400
130 Ft. Boom		
25	82.7	44,500 *
30	80.4	43,500 *
35	78.2	42,500 *
40	75.9	41,500 *
45	73.6	40,500 *
50	71.3	37,800
55	68.9	32,700
60	66.5	28,600
65	64.1	25,100
70	61.6	22,200
75	59.0	19,800
80	56.4	17,600
85	53.6	15,700
90	50.8	14,100
95	47.9	12,600
100	44.8	11,300
105	41.5	10,100
110	37.9	9,000
115	34.1	8,100
120	29.8	7,100
125	24.8	6,300
130	18.5	5,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
140 Ft. Boom		
30	81.1	41,700 *
35	79.0	40,800 *
40	76.9	39,800 *
45	74.8	38,700 *
50	72.7	37,500
55	70.5	32,400
60	68.3	28,200
65	66.1	24,800
70	63.8	21,900
75	61.5	19,400
80	59.1	17,200
85	56.6	15,400
90	54.1	13,700
95	51.5	12,200
100	48.8	10,900
105	46.0	9,700
110	43.0	8,700
115	39.9	7,700
120	36.5	6,800
125	32.8	5,900
130	28.6	5,200
135	23.8	4,500
150 Ft. Boom		
30	81.7	37,800 *
35	79.8	37,000 *
40	77.8	36,100 *
45	75.9	35,300 *
50	73.9	34,600 *
55	71.9	32,100
60	69.8	28,000
65	67.8	24,500
70	65.7	21,600
75	63.5	19,200
80	61.4	17,000
85	59.1	15,100
90	56.9	13,500
95	54.5	12,000
100	52.1	10,700
105	49.6	9,500
110	47.0	8,500
115	44.3	7,500
120	41.5	6,600
125	38.4	5,800
130	35.2	5,000
135	31.6	4,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
160 Ft. Boom		
30	82.2	35,600 *
35	80.4	35,200 *
40	78.6	34,500 *
45	76.8	33,700 *
50	74.9	32,900 *
55	73.0	31,800
60	71.1	27,600
65	69.2	24,200
70	67.3	21,300
75	65.3	18,800
80	63.3	16,600
85	61.3	14,800
90	59.2	13,100
95	57.1	11,600
100	54.9	10,300
105	52.6	9,100
110	50.3	8,100
115	47.9	7,100
120	45.4	6,200
125	42.8	5,400
130	40.1	4,600
170 Ft. Boom		
30	82.7	31,100 *
35	81.0	31,100 *
40	79.3	30,900 *
45	77.6	30,300 *
50	75.8	29,600 *
55	74.1	29,000 *
60	72.3	27,300
65	70.5	23,800
70	68.7	20,900
75	66.9	18,400
80	65.0	16,300
85	63.1	14,400
90	61.2	12,700
95	59.3	11,300
100	57.3	10,000
105	55.2	8,800
110	53.1	7,700
115	50.9	6,700
120	48.7	5,800
125	46.4	5,000
130	44.0	4,300