

Duty Cycle Capacities

Boom No. 83A
53,000 Lb. Counterweight
Pedestal Mount - Land Based
0 Degree Machine List
360 Degree Rating - Limited Duty

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and are based on 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 with turntable bearing properly supported and 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 at top of turntable bearing to center of vertical hoist line or load block. 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 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.

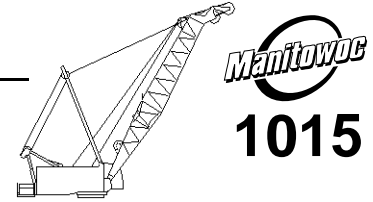
Wire Rope Guard Deduct

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

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
50 Ft. Boom		
30	64.1	57,200
35	57.4	56,100
40	50.0	48,600
45	41.6	42,800
50	31.2	38,100
60 Ft. Boom		
30	68.8	56,600
35	63.4	56,000
40	57.8	48,600
45	51.8	42,700
50	45.2	38,100
55	37.6	34,200
60	28.1	31,000

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
70 Ft. Boom		
30	72.0	56,400
35	67.5	56,000
40	62.9	48,500
45	58.1	42,700
50	53.1	38,100
55	47.6	34,300
60	41.5	31,100
65	34.5	28,400
70	25.9	26,000
80 Ft. Boom		
25	78.0	55,800
30	74.3	56,300
35	70.5	55,700
40	66.6	48,300
45	62.6	42,500
50	58.4	37,900
55	54.0	34,100
60	49.3	30,900
65	44.2	28,200
70	38.6	25,900
75	32.1	23,900
80	24.0	22,100

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
90 Ft. Boom		
25	79.4	55,500
30	76.1	54,500
35	72.8	53,100
40	69.4	48,200
45	65.9	42,400
50	62.3	37,800
55	58.6	34,000
60	54.7	30,800
65	50.6	28,100
70	46.2	25,800
75	41.5	23,800
80	36.2	22,100
85	30.1	20,500
90	22.5	19,100



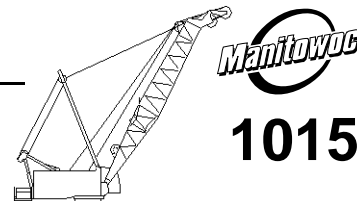
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100 Ft. Boom		
25	80.4	57,500
30	77.5	50,600
35	74.5	49,300
40	71.5	48,000
45	68.4	42,200
50	65.3	37,600
55	62.1	33,800
60	58.7	30,700
65	55.2	28,000
70	51.6	25,700
75	47.8	23,700
80	43.7	22,000
85	39.2	20,400
90	34.2	19,000
95	28.5	17,800
100	21.3	16,600
110 Ft. Boom		
25	81.3	50,800
30	78.7	44,500
35	76.0	43,400
40	73.3	42,400
45	70.5	41,400
50	67.7	37,600
55	64.8	33,800
60	61.9	30,600
65	58.8	28,000
70	55.7	25,700
75	52.4	23,700
80	49.0	21,900
85	45.4	20,400
90	41.5	19,000
95	37.2	17,800
100	32.5	16,700
105	27.1	15,700
110	20.2	13,300

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
120 Ft. Boom		
30	79.6	41,300
35	77.2	40,400
40	74.7	39,400
45	72.2	38,500
50	69.7	37,400
55	67.1	33,600
60	64.4	30,500
65	61.7	27,800
70	58.9	25,500
75	56.1	23,500
80	53.1	21,800
85	50.0	20,200
90	46.7	18,900
95	43.3	17,600
100	39.6	16,500
105	35.6	15,500
110	31.1	14,600
115	25.8	12,400
120	19.3	10,000
130 Ft. Boom		
30	80.4	40,800
35	78.2	35,300
40	75.9	34,500
45	73.6	33,700
50	71.3	33,000
55	68.9	32,200
60	66.5	30,300
65	64.1	27,700
70	61.6	25,400
75	59.0	23,400
80	56.4	21,600
85	53.6	20,100
90	50.8	18,700
95	47.9	17,500
100	44.8	16,400
105	41.5	15,400
110	37.9	14,500
115	34.1	13,000
120	29.8	11,200
125	24.8	9,300
130	18.5	7,300

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
140 Ft. Boom		
30	81.1	39,000
35	79.0	33,600
40	76.9	32,900
45	74.8	32,200
50	72.7	31,500
55	70.5	30,600
60	68.3	29,900
65	66.1	27,500
70	63.8	25,200
75	61.5	23,200
80	59.1	21,500
85	56.6	19,900
90	54.1	18,600
95	51.5	17,300
100	48.8	16,200
105	46.0	15,200
110	43.0	14,300
115	39.9	13,100
120	36.5	11,300
125	32.8	9,700
130	28.6	8,100
135	23.8	6,500
140	17.8	4,700
150 Ft. Boom		
30	81.7	35,200
35	79.8	30,100
40	77.8	29,500
45	75.9	28,900
50	73.9	28,200
55	71.9	27,700
60	69.8	27,100
65	67.8	26,500
70	65.7	25,100
75	63.5	23,100
80	61.4	21,400
85	59.1	19,800
90	56.9	18,500
95	54.5	17,300
100	52.1	16,200
105	49.6	15,200
110	47.0	14,000
115	44.3	12,600
120	41.5	11,300
125	38.4	10,000
130	35.2	8,500
135	31.6	7,100
140	27.6	5,700
145	23.0	4,300



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Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
160 Ft. Boom		
35	80.4	32,700
40	78.6	32,000
45	76.8	27,300
50	74.9	26,700
55	73.0	26,200
60	71.1	25,600
65	69.2	24,900
70	67.3	24,300
75	65.3	22,900
80	63.3	21,200
85	61.3	19,700
90	59.2	18,300
95	57.1	17,100
100	54.9	16,000
105	52.6	14,600
110	50.3	13,100
115	47.9	11,700
120	45.4	10,400
125	42.8	9,200
130	40.1	8,100
135	37.1	7,000
140	34.0	5,700
145	30.5	4,500