

1015

Duty Cycle Capacities

Boom No. 83A
53,000 Lb. Counterweight
Pedestal Mount
0 Degree thru 1 Degree and
1 Degree thru 3 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, machine list not to exceed degrees noted 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

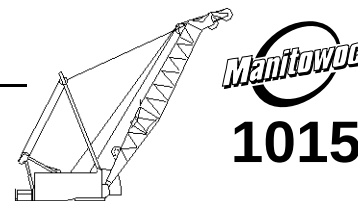
Deduct 2,000 Lbs. from boom capacities when boom butt is equipped with auxiliary drum.

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 Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
50 Ft. Boom			
30	64.1	65,500	57,200
35	57.4	61,900	56,100
40	50.0	54,000	48,600
45	41.6	47,800	42,800
50	31.2	42,900	38,100
60 Ft. Boom			
30	68.8	65,100	56,600
35	63.4	61,900	56,000
40	57.8	54,000	48,600
45	51.8	47,800	42,700
50	45.2	42,900	38,100
55	37.6	38,800	34,200
60	28.1	35,400	31,000

Oper. Radius Feet	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
70 Ft. Boom			
30	72.0	64,900	56,400
35	67.5	61,900	56,000
40	62.9	54,000	48,500
45	58.1	47,800	42,700
50	53.1	42,900	38,100
55	47.6	38,800	34,300
60	41.5	35,500	31,100
65	34.5	32,600	28,400
70	25.9	30,100	26,000

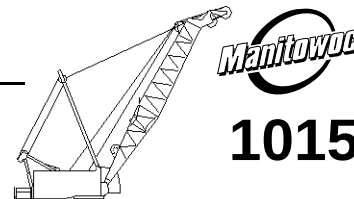


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80 Ft. Boom			
25	78.0	64,300	55,800
30	74.3	64,500	56,300
35	70.5	61,800	55,700
40	66.6	53,900	48,300
45	62.6	47,700	42,500
50	58.4	42,800	37,900
55	54.0	38,700	34,100
60	49.3	35,400	30,900
65	44.2	32,500	28,200
70	38.6	30,100	25,900
75	32.1	28,000	23,900
80	24.0	26,100	22,100
90 Ft. Boom			
25	79.4	61,700	55,500
30	76.1	60,000	54,500
35	72.8	58,300	53,100
40	69.4	53,800	48,200
45	65.9	47,700	42,400
50	62.3	42,700	37,800
55	58.6	38,700	34,000
60	54.7	35,300	30,800
65	50.6	32,500	28,100
70	46.2	30,100	25,800
75	41.5	27,900	23,800
80	36.2	26,100	22,100
85	30.1	24,400	20,500
90	22.5	21,800	19,100

Oper. Radius Feet	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
100 Ft. Boom			
25	80.4	57,500	
30	77.5	56,000	50,600
35	74.5	54,600	49,300
40	71.5	53,200	48,000
45	68.4	47,600	42,200
50	65.3	42,700	37,600
55	62.1	38,600	33,800
60	58.7	35,300	30,700
65	55.2	32,400	28,000
70	51.6	30,000	25,700
75	47.8	27,900	23,700
80	43.7	26,000	22,000
85	39.2	24,400	20,400
90	34.2	22,900	19,000
95	28.5	20,600	17,800
100	21.3	17,100	16,600
110 Ft. Boom			
25	81.3	50,800	
30	78.7	49,600	44,500
35	76.0	48,400	43,400
40	73.3	47,200	42,400
45	70.5	46,000	41,400
50	67.7	42,700	37,600
55	64.8	38,600	33,800
60	61.9	35,300	30,600
65	58.8	32,400	28,000
70	55.7	30,000	25,700
75	52.4	27,900	23,700
80	49.0	26,000	21,900
85	45.4	24,400	20,400
90	41.5	22,900	19,000
95	37.2	21,600	17,800
100	32.5	19,500	16,700
105	27.1	16,600	15,700
110	20.2	13,700	13,300

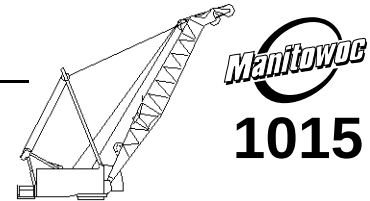

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Oper. Radius Feet	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
120 Ft. Boom			
30	79.6	46,300	41,300
35	77.2	45,200	40,400
40	74.7	44,100	39,400
45	72.2	43,100	38,500
50	69.7	42,100	37,400
55	67.1	38,600	33,600
60	64.4	35,200	30,500
65	61.7	32,400	27,800
70	58.9	29,900	25,500
75	56.1	27,800	23,500
80	53.1	26,000	21,800
85	50.0	24,300	20,200
90	46.7	22,900	18,900
95	43.3	21,600	17,600
100	39.6	20,200	16,500
105	35.6	17,600	15,500
110	31.1	15,200	14,600
115	25.8	12,800	12,400
120	19.3	10,400	10,000
130 Ft. Boom			
30	80.4	40,800	
35	78.2	39,900	35,300
40	75.9	39,000	34,500
45	73.6	38,000	33,700
50	71.3	37,200	33,000
55	68.9	36,300	32,200
60	66.5	35,100	30,300
65	64.1	32,300	27,700
70	61.6	29,900	25,400
75	59.0	27,800	23,400
80	56.4	25,900	21,600
85	53.6	24,300	20,100
90	50.8	22,800	18,700
95	47.9	21,500	17,500
100	44.8	20,000	16,400
105	41.5	18,000	15,400
110	37.9	15,900	14,500
115	34.1	13,700	13,000
120	29.8	11,700	11,200
125	24.8	9,700	9,300
130	18.5	7,600	7,300

Oper. Radius Feet	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
140 Ft. Boom			
30	81.1	39,000	
35	79.0	38,200	33,600
40	76.9	37,400	32,900
45	74.8	36,400	32,200
50	72.7	35,400	31,500
55	70.5	34,500	30,600
60	68.3	33,600	29,900
65	66.1	32,200	27,500
70	63.8	29,800	25,200
75	61.5	27,700	23,200
80	59.1	25,800	21,500
85	56.6	24,200	19,900
90	54.1	22,800	18,600
95	51.5	21,300	17,300
100	48.8	19,200	16,200
105	46.0	17,300	15,200
110	43.0	15,500	14,300
115	39.9	13,900	13,100
120	36.5	12,100	11,300
125	32.8	10,300	9,700
130	28.6	8,600	8,100
135	23.8	6,800	6,500
140	17.8	5,000	4,700
150 Ft. Boom			
30	81.7	35,200	
35	79.8	34,400	30,100
40	77.8	33,700	29,500
45	75.9	33,000	28,900
50	73.9	32,300	28,200
55	71.9	31,500	27,700
60	69.8	30,800	27,100
65	67.8	30,200	26,500
70	65.7	29,500	25,100
75	63.5	27,600	23,100
80	61.4	25,800	21,400
85	59.1	24,200	19,800
90	56.9	22,700	18,500
95	54.5	20,700	17,300
100	52.1	18,700	16,200
105	49.6	16,800	15,200
110	47.0	15,100	14,000
115	44.3	13,500	12,600
120	41.5	12,100	11,300
125	38.4	10,800	10,000
130	35.2	9,200	8,500
135	31.6	7,700	7,100
140	27.6	6,200	5,700
145	23.0	4,700	4,300



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Oper. Radius Feet	Boom Angle Deg.	0 Degree Thru 1 Degree Machine List Boom Capacity Pounds	1 Degree Thru 3 Degree Machine List Boom Capacity Pounds
160 Ft. Boom			
35	80.4	32,700	
40	78.6	32,000	
45	76.8	31,400	27,300
50	74.9	30,700	26,700
55	73.0	29,900	26,200
60	71.1	29,100	25,600
65	69.2	28,400	24,900
70	67.3	27,700	24,300
75	65.3	27,000	22,900
80	63.3	25,700	21,200
85	61.3	24,100	19,700
90	59.2	22,100	18,300
95	57.1	19,800	17,100
100	54.9	17,800	16,000
105	52.6	16,000	14,600
110	50.3	14,300	13,100
115	47.9	12,800	11,700
120	45.4	11,400	10,400
125	42.8	10,100	9,200
130	40.1	8,900	8,100
135	37.1	7,700	7,000
140	34.0	6,300	5,700
145	30.5	5,000	4,500