

**1015**

# Clamshell/Grapple Capacities

**Boom No. 83**  
**53,000 Lb. Counterweight**  
**23 Ft. 6 in. Crawlers Extended**  
**Crawler Machine on a Barge**  
**0 Degree thru 1 Degree and**  
**1 Degree thru 3 Degree Machine List**  
**360 Degree Rating**

**LIFTING CAPACITIES:** Capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. 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.

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, machine list not to exceed degrees noted and gantry up. Refer to boom rigging **No. A06546** and Wire Rope Specification chart **No. 8474-B**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck to center of gravity of the 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

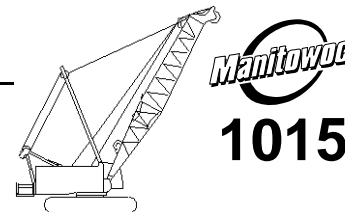
Deduct 1,300 Lbs. from capacities when upper boom point is attached.

## Auxiliary Drum Deduct

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

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
<b>50 Ft. Boom</b>			
30	64.1	40,000 *	40,000 *
35	57.4	40,000 *	40,000 *
40	50.0	40,000 *	40,000 *
45	41.6	40,000 *	40,000 *
50	31.2	38,100	36,100
<b>60 Ft. Boom</b>			
30	68.8	40,000 *	40,000 *
35	63.4	40,000 *	40,000 *
40	57.8	40,000 *	40,000 *
45	51.8	40,000 *	40,000 *
50	45.2	38,100	35,500
55	37.6	33,200	31,300
60	28.1	29,200	27,700

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
<b>70 Ft. Boom</b>			
35	67.5	40,000 *	40,000 *
40	62.9	40,000 *	40,000 *
45	58.1	40,000 *	40,000 *
50	53.1	37,900	35,000
55	47.6	33,100	30,800
60	41.5	29,200	27,300
65	34.5	25,900	24,400
70	25.9	23,000	21,900
<b>80 Ft. Boom</b>			
40	66.6	40,000 *	40,000 *
45	62.6	40,000 *	38,900
50	58.4	37,200	33,900
55	54.0	32,500	29,800
60	49.3	28,600	26,500
65	44.2	25,400	23,600
70	38.6	22,600	21,200
75	32.1	20,300	19,100
80	24.0	18,200	17,200



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**0 Degree thru 1 Degree and**

**1 Degree thru 3 Degree Machine List**

**360 Degree Rating**

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
<b>90 Ft. Boom</b>			
45	65.9	40,000 *	38,100
50	62.3	36,900	33,200
55	58.6	32,200	29,200
60	54.7	28,300	25,900
65	50.6	25,100	23,100
70	46.2	22,400	20,700
75	41.5	20,100	18,600
80	36.2	18,000	16,800
85	30.1	16,200	15,200
90	22.5	14,600	13,800
<b>100 Ft. Boom</b>			
50	65.3	36,400	32,400
55	62.1	31,700	28,500
60	58.7	27,900	25,200
65	55.2	24,700	22,400
70	51.6	22,000	20,100
75	47.8	19,700	18,000
80	43.7	17,700	16,200
85	39.2	15,900	14,700
90	34.2	14,300	13,300
95	28.5	12,900	12,000
100	21.3	11,600	10,900

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
<b>110 Ft. Boom</b>			
50	67.7	34,600 *	31,500 *
55	64.8	31,800	28,300
60	61.9	28,000	25,100
65	58.8	24,900	22,400
70	55.7	22,200	20,100
75	52.4	19,900	18,100
80	49.0	17,900	16,300
85	45.4	16,100	14,800
90	41.5	14,600	13,400
95	37.2	13,200	12,100
100	32.5	11,900	11,000
105	27.1	10,800	10,000
<b>120 Ft. Boom</b>			
55	67.1	31,400	27,600
60	64.4	27,600	24,400
65	61.7	24,500	21,800
70	58.9	21,800	19,500
75	56.1	19,500	17,500
80	53.1	17,500	15,800
85	50.0	15,700	14,200
90	46.7	14,200	12,900
95	43.3	12,800	11,600
100	39.6	11,600	10,500
105	35.6	10,400	