

# Clamshell/Grapple Capacities

**Boom No. 84**  
**71,500 Lb. Counterweight**  
**Crawler Machine on a Barge**  
**0 Degree thru 1 Degree and**  
**1 Degree thru 3 Degree Machine List**  
**360 Degree Rating**

**555 SERIES 1**

**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 and machine list not to exceed degrees noted. Refer to boom rigging **No. A00952** and Wire Rope Specification chart **No. 8443-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. 10 in. crawlers, 48 in. treads, 23 Ft. live mast, 16 part boom hoist reeving, boom support straps, rotating bed No. A01066<sup>1</sup> or No. A03188 (refer to I.D. plate at front of rotating bed) and 71,500 Lb. crane counterweight.

**<sup>1</sup>WARNING:** 1,250 Lb. front counterweight is required for cranes with rotating bed No. A01066 that do not have free-fall option. Counterweight can be removed only if crane has free-fall option on both front and rear drums.



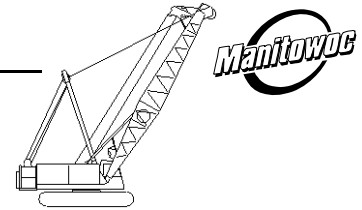
71,500 Lb. Crane Counterweight  
4 Side Boxes

## Wire Rope Guide Deduct (For Third Line)

Deduct 600 Lbs. from boom capacities when upper wire rope guide (No. A04352) for third line is attached.

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>			
28	66.2	25,000 *	25,000 *
30	63.7	25,000 *	25,000 *
32	61.0	25,000 *	25,000 *
34	58.3	25,000 *	25,000 *
36	55.5	25,000 *	25,000 *
38	52.6	25,000 *	25,000 *
40	49.6	25,000 *	25,000 *
45	41.2	25,000 *	25,000 *
50	30.9	25,000 *	25,000 *

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
<b>60 Ft. BOOM</b>			
32	66.3	25,000 *	25,000 *
34	64.1	25,000 *	25,000 *
36	62.0	25,000 *	25,000 *
38	59.7	25,000 *	25,000 *
40	57.4	25,000 *	25,000 *
45	51.4	25,000 *	25,000 *
50	44.9	25,000 *	25,000 *
55	37.3	25,000 *	22,500 *
60	28.0	23,300 *	20,200 *



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## 555 SERIES 1

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>			
36	66.3	25,000 *	25,000 *
38	64.5	25,000 *	25,000 *
40	62.6	25,000 *	25,000 *
45	57.8	25,000 *	25,000 *
50	52.8	25,000 *	25,000 *
55	47.3	25,000 *	22,600 *
60	41.3	23,200 *	20,300 *
65	34.3	20,500 *	18,300 *
70	25.8	18,100 *	16,600 *
<b>80 Ft. BOOM</b>			
38	67.9	25,000 *	25,000 *
40	66.3	25,000 *	25,000 *
45	62.3	25,000 *	25,000 *
50	58.1	25,000 *	25,000 *
55	53.7	25,000 *	22,600 *
60	49.0	23,200 *	20,300 *
65	44.0	20,500 *	18,400 *
70	38.4	18,200 *	16,600 *
75	32.0	16,100 *	14,800 *
80	24.0	14,300 *	13,100 *
<b>90 Ft. BOOM</b>			
45	65.6	25,000 *	25,000 *
50	62.0	25,000 *	25,000 *
55	58.3	25,000 *	22,500 *
60	54.4	22,700 *	20,200 *
65	50.4	20,100 *	18,000 *
70	46.0	17,800 *	16,000 *
75	41.3	15,800 *	14,200 *
80	36.1	14,000 *	12,600 *
85	30.0	12,400 *	11,200 *
90	22.5	10,900 *	9,900 *
<b>100 Ft. BOOM</b>			
50	65.1	25,000 *	25,000 *
55	61.8	25,000 *	22,500 *
60	58.5	22,700 *	20,100 *
65	55.0	20,100 *	17,800 *
70	51.4	17,800 *	15,800 *
75	47.6	15,800 *	14,100 *
80	43.5	14,000 *	12,500 *
85	39.0	12,500 *	11,100 *
90	34.1	11,000 *	9,900 *
95	28.4	9,700 *	8,700 *

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>110 Ft. BOOM</b>			
50	67.5	25,000 *	25,000 *
55	64.6	25,000 *	22,000 *
60	61.7	22,200 *	19,400 *
65	58.6	19,600 *	17,200 *
70	55.5	17,300 *	15,200 *
75	52.2	15,400 *	13,500 *
80	48.8	13,600 *	12,000 *
85	45.2	12,100 *	10,600 *
90	41.3	10,700 *	9,400 *
95	37.1	9,400 *	8,200 *
100	32.4	8,200 *	7,200 *
105	27.0	7,200 *	6,300 *
<b>120 Ft. BOOM</b>			
55	66.9	24,800 *	21,400 *
60	64.2	21,800 *	18,900 *
65	61.5	19,200 *	16,700 *
70	58.7	17,000 *	14,700 *
75	55.9	15,000 *	13,000 *
80	52.9	13,300 *	11,500 *
85	49.8	11,800 *	10,200 *
90	46.6	10,400 *	9,000 *
95	43.1	9,100 *	7,900 *
100	39.4	8,000 *	6,900 *
105	35.4	7,000 *	5,900 *
110	31.0	6,000 *	5,100 *
115	25.8	5,100 *	4,300 *