

# Clamshell/Grapple Capacities

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

**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.

**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.

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. 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 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.

**Upper Boom Point Deduct**

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

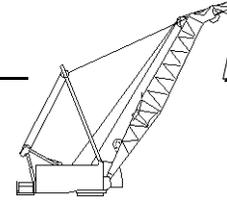
**Auxiliary Drum Deduct**

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

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
<b>50 Ft. Boom</b>		
30	64.1	40,000
35	57.4	40,000
40	50.0	40,000
45	41.6	40,000
50	31.2	38,600
<b>60 Ft. Boom</b>		
30	68.8	40,000
35	63.4	40,000
40	57.8	40,000
45	51.8	40,000
50	45.2	38,300
55	37.6	34,600
60	28.1	31,500
<b>70 Ft. Boom</b>		
35	67.5	40,000
40	62.9	40,000
45	58.1	40,000
50	53.1	38,000
55	47.6	34,400
60	41.5	31,400
65	34.5	28,700
70	25.9	26,400

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
<b>80 Ft. Boom</b>		
40	66.6	40,000
45	62.6	40,000
50	58.4	37,400
55	54.0	33,900
60	49.3	31,000
65	44.2	28,400
70	38.6	26,100
75	32.1	24,200
80	24.0	22,400
<b>90 Ft. Boom</b>		
45	65.9	40,000
50	62.3	36,900
55	58.6	33,600
60	54.7	30,700
65	50.6	28,100
70	46.2	25,900
75	41.5	24,000
80	36.2	22,200
85	30.1	20,700
90	22.5	19,300

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
<b>100 Ft. Boom</b>		
50	65.3	36,400
55	62.1	33,100
60	58.7	30,200
65	55.2	27,800
70	51.6	25,600
75	47.8	23,700
80	43.7	22,000
85	39.2	20,500
90	34.2	19,100
95	28.5	17,800
100	21.3	16,700



# Clamshell/Grapple Capacities

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

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
<b>110 Ft. Boom</b>		
50	67.7	36,100
55	64.8	32,900
60	61.9	30,100
65	58.8	27,700
70	55.7	25,600
75	52.4	23,700
80	49.0	22,000
85	45.4	20,500
90	41.5	19,200
95	37.2	18,000
100	32.5	16,800
105	27.1	15,800

Oper. Radius Feet	Boom Angle Deg.	0 Degree Machine List Boom Capacity Pounds
<b>120 Ft. Boom</b>		
55	67.1	32,400
60	64.4	29,700
65	61.7	27,300
70	58.9	25,300
75	56.1	23,400
80	53.1	21,800
85	50.0	20,300
90	46.7	18,900
95	43.3	17,700
100	39.6	16,600
105	35.6	15,600
110	31.1	14,700
115	25.8	13,800