

# Clamshell/Grapple Capacities

## 999 SERIES 1

**Boom No. 22E With Open Throat Top**  
**114,600 Lb. Counterweight**  
**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.

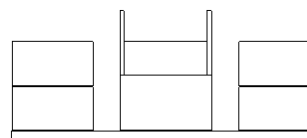
Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate on a firm uniformly supporting surface with gantry up and machine list not to exceed degrees noted. Refer to boom rigging **No. 196151** and Wire Rope Specification chart **No. 8223-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 freely suspended load. Boom angle is angle above true

horizontal and a line drawn through boom hinge pin and boom point shaft centerline.

**MACHINE EQUIPMENT:** Machine equipped with 28 Ft. 2 in. crawlers, 48 in. treads, 10 Ft. 3 in. retractable gantry, 30 Ft. live mast, 20 part boom hoist reeving, four 1-3/8 in. boom pendants and 114,600 Lb. counterweight.



114,600 Lb. Crane Counterweight  
4 Side Boxes - 1 Center Box

### Auxiliary Drum Deduct

Deduct 4,000 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>70 Ft. BOOM</b>			
35	67.1	30,000 *	30,000 *
40	62.9	30,000 *	30,000 *
45	58.4	30,000 *	30,000 *
50	53.7	30,000 *	30,000 *
55	48.7	30,000 *	30,000 *
60	43.3	30,000 *	30,000 *
65	37.3	30,000 *	30,000 *
70	30.3	30,000 *	30,000 *
<b>80 Ft. BOOM</b>			
40	66.3	30,000 *	30,000 *
45	62.5	30,000 *	30,000 *
50	58.6	30,000 *	30,000 *
55	54.5	30,000 *	30,000 *
60	50.2	30,000 *	30,000 *
65	45.5	30,000 *	30,000 *
70	40.5	30,000 *	30,000 *
75	34.9	30,000 *	30,000 *
80	28.4	30,000 *	29,600 *

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>			
40	69.0	30,000 *	30,000 *
45	65.7	30,000 *	30,000 *
50	62.3	30,000 *	30,000 *
55	58.7	30,000 *	30,000 *
60	55.1	30,000 *	30,000 *
65	51.3	30,000 *	30,000 *
70	47.2	30,000 *	30,000 *
75	42.9	30,000 *	30,000 *
80	38.2	30,000 *	29,400 *
85	33.0	30,000 *	27,300 *
90	26.8	27,900	25,500 *



# Clamshell/Grapple Capacities

## 999 SERIES 1

Boom No. 22E With Open Throat Top  
114,600 Lb. Counterweight  
Crawler Machine on a Barge  
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>100 Ft. BOOM</b>			
45	68.1	30,000 *	30,000 *
50	65.1	30,000 *	30,000 *
55	62.0	30,000 *	30,000 *
60	58.9	30,000 *	30,000 *
65	55.6	30,000 *	30,000 *
70	52.2	30,000 *	30,000 *
75	48.6	30,000 *	30,000 *
80	44.8	30,000 *	29,300 *
85	40.7	30,000 *	27,200 *
90	36.3	27,600	25,400 *
95	31.3	25,300	23,800 *
100	25.5	23,300	22,000
<b>110 Ft. BOOM</b>			
50	67.4	30,000 *	30,000 *
55	64.7	30,000 *	30,000 *
60	61.9	30,000 *	30,000 *
65	59.0	30,000 *	30,000 *
70	56.0	30,000 *	30,000 *
75	52.9	30,000 *	30,000 *
80	49.6	30,000 *	29,000 *
85	46.2	29,600	27,000 *
90	42.7	27,100	25,000
95	38.8	24,800	23,000
100	34.6	22,800	21,300
105	29.8	21,000	19,600
<b>120 Ft. BOOM</b>			
55	66.9	30,000 *	30,000 *
60	64.3	30,000 *	30,000 *
65	61.7	30,000 *	30,000 *
70	59.0	30,000 *	30,000 *
75	56.3	30,000 *	30,000 *
80	53.5	30,000 *	28,900 *
85	50.5	29,200	26,700
90	47.5	26,700	24,400
95	44.2	24,400	22,500
100	40.8	22,400	20,700
105	37.1	20,600	19,100
110	33.1	19,000	17,700
115	28.6	17,500	16,300