

# Clamshell/Grapple Capacities

**222**  
**222EX**

**Boom No. 222 With Open Throat Top**  
**28,500 Lb. Counterweight**  
**22 Ft. 4 in. Crawlers Extended**  
**360 Degree Rating**

**LIFTING CAPACITIES:** 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 with crawlers fully extended and gantry up. Refer to boom-rigging **No. 193744** or **No. 912644** and Wire Rope Specification chart **No. 9073-A**. 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 to the 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 22 Ft. 4 in. extendible crawlers, 36 in. treads, 15 Ft. 6 in. retractable gantry, 10 part boom hoist reeving, two 1-1/4 in. boom pendants and 28,500 Lb. counterweight.

Oper. Radius Feet	Boom Angle Deg.	Boom Capacity Pounds
<b>40 Ft. BOOM</b>		
20	66.8	17,600 *
22	63.7	17,600 *
24	60.4	17,600 *
26	57.0	17,600 *
28	53.5	17,600 *
30	49.8	17,600 *
32	45.9	17,600 *
34	41.8	17,600 *
36	37.2	17,600 *
38	32.1	17,600 *
40	26.1	17,600 *
<b>50 Ft. BOOM</b>		
24	66.7	17,600 *
26	64.2	17,600 *
28	61.6	17,600 *
30	59.0	17,600 *
32	56.3	17,600 *
34	53.4	17,600 *
36	50.5	17,600 *
38	47.5	17,600 *
40	44.2	17,600 *
45	35.2	17,600 *
50	23.3	15,300 *

Oper. Radius Feet	Boom Angle Deg.	Boom Capacity Pounds
<b>60 Ft. BOOM</b>		
28	66.7	17,600 *
30	64.6	17,600 *
32	62.4	17,600 *
34	60.3	17,600 *
36	58.0	17,600 *
38	55.7	17,600 *
40	53.4	17,600 *
45	47.1	17,600 *
50	40.2	16,200
55	32.0	14,200
60	21.2	11,600 *
<b>70 Ft. BOOM</b>		
34	64.9	17,600 *
36	63.0	17,600 *
38	61.2	17,600 *
40	59.3	17,600 *
45	54.4	17,600 *
50	49.1	16,100
55	43.4	14,100
60	37.1	12,500
65	29.5	11,200

Oper. Radius Feet	Boom Angle Deg.	Boom Capacity Pounds
<b>80 Ft. BOOM</b>		
38	65.0	17,600 *
40	63.5	17,600 *
45	59.4	17,600 *
50	55.1	15,900
55	50.6	13,900
60	45.8	12,300
65	40.5	11,000
70	34.6	9,900
75	27.6	9,000 *
<b>90 Ft. BOOM</b>		
40	66.6	17,600 *
45	63.1	17,600 *
50	59.4	15,800
55	55.7	13,800
60	51.7	12,200
65	47.5	10,900
70	43.0	9,800
75	38.1	8,800
80	32.5	8,000
85	26.0	7,300 *

Oper. Radius Feet	Boom Angle Deg.	Boom Capacity Pounds
<b>100 Ft. BOOM</b>		
45	66.0	17,600 *
50	62.8	15,700
55	59.5	13,700
60	56.1	12,100
65	52.6	10,800
70	48.8	10,000
75	44.9	8,700
80	40.7	7,900
85	36.0	7,200
90	30.8	6,500
95	24.6	5,700 *