

# Clamshell/Grapple Capacities

Boom No. 22 with Open Throat Top  
 75,900 lb Counterweight  
 24 ft Crawlers Extended  
 0 Degree thru 1 Degree and  
 1 Degree thru 3 Degree Static Machine List

## 4000W VICON

**CAPACITIES:** Capacities are for a crawler machine when operating on a barge. Machine must 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. 48168** and Wire Rope Specification chart **No. 5342**. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation.

**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 of a line drawn through boom hinge pin and upper boom point shaft centerline.

**MACHINE EQUIPMENT:** Machine equipped with 24 ft extendible crawlers, 48 in. treads, 15 ft gantry, 12 part boom hoist reeving, and four 1-3/8 in. boom pendants. First counterweight = 40,100 lb Second counterweight = 35,800 lb.

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
70.0 ft			
34	66.9	28,000 *	28,000 *
36	65.2	28,000 *	28,000 *
38	63.4	28,000 *	28,000 *
40	61.7	28,000 *	28,000 *
45	57.2	28,000 *	28,000 *
50	52.4	28,000 *	28,000 *
55	47.3	28,000 *	28,000 *
60	41.8	28,000 *	28,000 *
65	35.6	28,000 *	28,000 *
70	28.2	28,000 *	27,400
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
80.0 ft			
38	66.8	28,000 *	28,000 *
40	65.3	28,000 *	28,000 *
45	61.5	28,000 *	28,000 *
50	57.5	28,000 *	28,000 *
55	53.4	28,000 *	28,000 *
60	49.0	28,000 *	28,000 *
65	44.2	28,000 *	28,000 *
70	39.1	28,000 *	26,300
75	33.3	25,400	24,000
80	26.4	23,100	22,000

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90.0 ft			
40	68.1	28,000 *	28,000 *
45	64.8	28,000 *	28,000 *
50	61.3	28,000 *	28,000 *
55	57.8	28,000 *	28,000 *
60	54.1	28,000 *	28,000 *
65	50.2	28,000 *	28,000 *
70	46.1	27,400	25,400
75	41.7	24,800	23,100
80	36.9	22,500	21,100
85	31.4	20,500	19,300
90	25.0	18,700	17,800
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
100.0 ft			
45	67.3	28,000 *	28,000 *
50	64.3	28,000 *	28,000 *
55	61.2	28,000 *	28,000 *
60	58.0	28,000 *	28,000 *
65	54.7	28,000 *	26,600 *
70	51.2	26,700	24,200 *
75	47.6	24,000	22,100
80	43.7	21,700	20,100
85	39.6	19,700	18,300
90	35.0	18,000	16,800
95	29.8	16,400	15,400
100	23.7	15,100	14,200

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
110.0 ft			
50	66.7	28,000 *	28,000 *
55	63.9	28,000 *	28,000 *
60	61.1	28,000 *	27,800 *
65	58.2	28,000 *	25,200 *
70	55.2	26,100	23,000 *
75	52.0	23,500	20,900 *
80	48.8	21,200	19,100 *
85	45.3	19,200	17,500 *
90	41.7	17,500	16,100 *
95	37.7	15,900	14,700
100	33.4	14,500	13,500
105	28.5	13,300	12,400
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
120.0 ft			
55	66.2	28,000 *	28,000 *
60	63.6	28,000 *	26,200 *
65	61.0	28,000 *	23,700 *
70	58.3	25,200 *	21,400 *
75	55.6	22,700 *	19,400 *
80	52.7	20,500 *	17,700 *
85	49.7	18,500	16,100 *
90	46.6	16,800	14,600 *
95	43.3	15,200	13,300 *
100	39.9	13,800 *	12,200 *
105	36.1	12,500 *	11,100 *
110	32.0	11,300 *	10,100 *
115	27.3	10,100 *	9,100 *