# Clamshell/Grapple Capacities



#### Boom No. 78 68,000 Lb. Counterweight **Pedestal Mount** 0 Degree thru 1 Degree and 1 Degree thru 3 Degree Machine List

LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and are based on 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 with turntable bearing properly supported and machine list not to exceed degrees noted. Refer to boom rigging No. 178288 and Wire Rope Specification chart No. 8156-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 center of gravity of 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 two 12 in. boom hoist cylinders, 26 Ft. mast, four 1-1/4 in. boom pendants and 68,000 Lb. counterweight.

## **Upper Boom Point Deduct**

Deduct 1,000 Lbs. from boom capacities when upper boom point is attached.

# **Multi-Part Rope Guard Deduct**

Deduct 500 Lbs. from boom capacities when lower boom point is equipped with multi-part rope guard (No. A02744).

### Wire Rope Guide Deduct (For Third Line)

Deduct 500 Lbs. from boom capacities when boom top wire rope guide (No. 192312) for third line is attached.

## Auxiliary Drum Deduct

Deduct 1,700 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	
	60	) Ft. BOOI	М	
30	66.5	29,500	29,500	
35	61.2	29,500	29,500	
40	55.4	29,500	29,500	
45	49.3	29,500	29,500	
50	42.5	29,500	27,100	
55	34.5	28,200	24,200	
60	24.3	25,700	21,700	
	7(	) Ft. BOOI	M	
35	65.6	29,500	29,500	
40	61.0	29,500	29,500	
45	56.1	29,500	29,500	
50	50.9	29,500	27,200	
55	45.3	28,300	24,300	
60	39.1	25,800	21,900	
65	31.8	23,600	19,800	
70	22.4	21,800	18,000	

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
	80	) Ft. BOOI	М
35	68.9	29,500	29,500
40	64.9	29,500	29,500
45	60.9	29,500	29,500
50	56.6	29,500	27,100
55	52.2	28,300	24,300
60	47.4	25,800	21,800
65	42.2	23,600	19,800
70	36.4	21,800	18,100
75	29.6	20,200	16,500

**Clamshell/Grapple Capacities** 



Boom No. 78 68,000 Lb. Counterweight Pedestal Mount 0 Degree thru 1 Degree and

0 Degree thru 1 Degree and 1 Degree thru 3 Degree Machine List

		0 Degree Thru	1 Degree Thru			0 Degree Thru	1 Degr
		1 Degree	3 Degree		Á	1 Degree	3 De
Oper.	Boom	Machine List	Machine List	Oper.	Boom	Machine List	Machi
Radius	Angle	Boom Capacity	Boom Capacity	Radius	Angle	<b>Boom Capacity</b>	Boom C
Feet	Deg.	Pounds	Pounds	Feet	Deg.	Pounds	Pou
90 Ft. BOOM				1	0 Ft. BOO	Μ	
40	67.9	29,500	29,500	50	66.5	29,500	26,
45	64.4	29,500	29,500	55	63.6	28,200	24,
50	60.8	29,500	27,100	60	60.6	25,700	21,
55	57.0	28,300	24,200	65	57.6	23,600	19,
60	53.1	25,700	21,800	70	54.4	21,700	17,9
65	48.9	23,600	19,800	75	51.1	20,200	16,4
70	44.5	21,800	18,100	80	47.6	18,800	15,1
75	39.6	20,200	16,600	85	43.9	17,500	13,9
80	34.2	18,800	15,200	90	40.0	16,500	12,9
85	27.8	17,600	14,000	95	35.6	15,500	12,0
90	19.6	16,500	13,000	100	30.8	14,600	11,
100 Ft. BOOM			105	25.0	13,800	10,3	
45	67.1	29,500	29,500		12	0 Ft. BOO	Μ
50	64.0	29,500	27,000	55	66.0	28,200	24,0
55	60.7	28,200	24,100	60	63.3	25,700	21,6
60	57.3	25,700	21,700	65	60.6	23,500	19,6
65	53.8	23,600	19,700	70	57.8	21,700	17,9
70	50.1	21,800	18,000	75	54.9	20,100	16,4
75	46.2	20,200	16,500	80	51.9	18,800	15,1
80	42.0	18,800	15,100	85	48.7	17,500	13,9
85	37.5	17,600	14,000	90	45.4	16,400	12,9
90	32.3	16,500	12,900	95	41.9	15,500	11,9
95	26.3	15,500	12,000	100	38.2	14,600	11,1
100	18.5	14,600	11,100	105	34.0	13,800	10,3
				110	29.4	13,100	9,0
				115	23.9	12,400	9,