Clamshell/Grapple Capacities

777 SERIES 1

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.

Auxiliary Drum Deduct

Deduct 1,700 Lbs. from boom capacities when boom butt is equipped with auxiliary drum.

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.

Oper. Radius	Boom Angle	0 Degree Thru 1 Degree Machine List Boom Capacity	1 Degree Thru 3 Degree Machine List Boom Capacity		
Feet	Deg.	Pounds	Pounds		
	60 Ft. BOOM				
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		
70 Ft. BOOM					
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. BOOM				
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		



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777 SERIES 1

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

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		
90 Ft. BOOM					
40	67.9	29,500	29,500		
45	64.4	29,500	29,500		
50	60.8	29,500	27,100		
55	57.0	28,300	24,200		
60	53.1	25,700	21,800		
65	48.9	23,600	19,800		
70	44.5	21,800	18,100		
75	39.6	20,200	16,600		
80	34.2	18,800	15,200		
85	27.8	17,600	14,000		
90	19.6	16,500	13,000		
	100 Ft. BOOM				
45	67.1	29,500	29,500		
50	64.0	29,500	27,000		
55	60.7	28,200	24,100		
60	57.3	25,700	21,700		
65	53.8	23,600	19,700		
70	50.1	21,800	18,000		
75	46.2	20,200	16,500		
80	42.0	18,800	15,100		
85	37.5	17,600	14,000		
90	32.3	16,500	12,900		
95	26.3	15,500	12,000		
100	18.5	14,600	11,100		

			0 Degree Thru 1 Degree	1 Degree Thru 3 Degree		
	Oper.	Boom	Machine List	Machine List		
	Radius	Angle	Boom Capacity	Boom Capacity		
	Feet	Deg.	Pounds	Pounds		
	110 Ft. BOOM					
	50	66.5	29,500	26,900		
	55	63.6	28,200	24,100		
	60	60.6	25,700	21,700		
	65	57.6	23,600	19,700		
	70	54.4	21,700	17,900		
	75	51.1	20,200	16,400		
	80	47.6	18,800	15,100		
	85	43.9	17,500	13,900		
4	90	40.0	16,500	12,900		
	95	35.6	15,500	12,000		
	100	30.8	14,600	11,100		
	105	25.0	13,800	10,300		
			0 Ft. BOO	M		
	55	66.0	28,200	24,000		
	60	63.3	25,700	21,600		
	65	60.6	23,500	19,600		
	70	57.8	21,700	17,900		
	75	54.9	20,100	16,400		
	80	51.9	18,800	15,100		
	85	48.7	17,500	13,900		
4	90	45.4	16,400	12,900		
	95	41.9	15,500	11,900		
	100	38.2	14,600	11,100		
	105	34.0	13,800	10,300		
	110	29.4	13,100	9,600		
	115	23.9	12,400	9,000		