



Clamshell/Grapple Capacities

Boom No. 83
53,000 Lb. Counterweight
23 Ft. 6 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 gantry up. Refer to boom rigging **No. A06546** and Wire Rope Specification chart **No. 8474-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 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 23 Ft. 6 in. extendible crawlers, 39-3/8 in. treads, 9 Ft. 7 in. gantry, 25 Ft. live mast, 12 part boom hoist reeving, two 1-1/2 in. pendants and 53,000 Lb. counterweight.

Upper Boom Point Deduct

Deduct 1,300 Lbs. from capacities when upper boom point is attached.

Auxiliary Drum Deduct

Deduct 2,000 Lbs. from boom capacities when boom butt is equipped with auxiliary drum.

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
50 Ft. Boom		
30	64.1	40,000 *
35	57.4	40,000 *
40	50.0	40,000 *
45	41.6	40,000 *
50	31.2	39,100
60 Ft. Boom		
30	68.8	40,000 *
35	63.4	40,000 *
40	57.8	40,000 *
45	51.8	40,000 *
50	45.2	39,400
55	37.6	34,200
60	28.1	29,900
70 Ft. Boom		
35	67.5	40,000 *
40	62.9	40,000 *
45	58.1	40,000 *
50	53.1	39,500
55	47.6	34,400
60	41.5	30,200
65	34.5	26,700
70	25.9	23,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
80 Ft. Boom		
40	66.6	40,000 *
45	62.6	40,000 *
50	58.4	39,100
55	54.0	34,000
60	49.3	29,800
65	44.2	26,400
70	38.6	23,400
75	32.1	20,900
80	24.0	18,700
90 Ft. Boom		
45	65.9	40,000 *
50	62.3	38,900
55	58.6	33,800
60	54.7	29,700
65	50.6	26,200
70	46.2	23,300
75	41.5	20,800
80	36.2	18,700
85	30.1	16,700
90	22.5	15,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
100 Ft. Boom		
50	65.3	38,600
55	62.1	33,500
60	58.7	29,400
65	55.2	26,000
70	51.6	23,000
75	47.8	20,600
80	43.7	18,400
85	39.2	16,500
90	34.2	14,800
95	28.5	13,300
100	21.3	11,900
110 Ft. Boom		
50	67.7	36,400 *
55	64.8	33,800
60	61.9	29,700
65	58.8	26,200
70	55.7	23,300
75	52.4	20,900
80	49.0	18,700
85	45.4	16,800
90	41.5	15,200
95	37.2	13,700
100	32.5	12,400
105	27.1	11,200
110	20.2	10,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds
120 Ft. Boom		
55	67.1	33,400 *
60	64.4	29,400
65	61.7	25,900
70	58.9	23,000
75	56.1	20,600
80	53.1	18,400
85	50.0	16,500
90	46.7	14,900
95	43.3	13,400
100	39.6	12,100
105	35.6	10,900