Clamshell/Grapple Capacities

Boom No. 83A 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. A14196 and Wire Rope Specification chart No. 8697-B. Crane operator judgment must be used to allow for adverse operating conditions and physical machine depreciation. Refer to Operator's 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.

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	39,000		
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	39,300		
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	39,400		
55	47.6	34,300		
60	41.5	30,100		
65	34.5	26,600		
70	25.9	23,600		

80 Ft. Boom 40 66.6 40,000 * 45 62.6 40,000 * 50 58.4 39,000 55 54.0 33,900 60 49.3 29,700 65 44.2 26,300 70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600 85 30.1 16,700	Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
45 62.6 40,000 * 50 58.4 39,000 55 54.0 33,900 60 49.3 29,700 65 44.2 26,300 70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	80 Ft. Boom				
50 58.4 39,000 55 54.0 33,900 60 49.3 29,700 65 44.2 26,300 70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	40	66.6	40,000		
55 54.0 33,900 60 49.3 29,700 65 44.2 26,300 70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	45	62.6	40,000 *		
60 49.3 29,700 65 44.2 26,300 70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	50	58.4	39,000		
65	55	54.0	33,900		
70 38.6 23,300 75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	60	49.3	29,700		
75 32.1 20,800 80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	65	44.2	26,300		
80 24.0 18,600 90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	70	38.6	23,300		
90 Ft. Boom 45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	75	32.1	20,800		
45 65.9 40,000 * 50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	80	24.0	18,600		
50 62.3 38,800 55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	90 Ft. Boom				
55 58.6 33,700 60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	45	65.9	40,000 *		
60 54.7 29,600 65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	50	62.3	38,800		
65 50.6 26,100 70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	55	58.6	33,700		
70 46.2 23,200 75 41.5 20,700 80 36.2 18,600	60	54.7	29,600		
75 41.5 20,700 80 36.2 18,600	65		26,100		
80 36.2 18,600	70	46.2	23,200		
	75	41.5	20,700		
85 30.1 16.700	80	36.2	18,600		
	85	30.1	16,700		
90 22.5 14,900	90	22.5	14,900		

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.

Wire Rope Guard Deduct

Deduct 1,000 Lbs. from boom capacities when boom top is equipped with wire rope guard No. A13283.

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds	
100	7 Ft. 1	Boom	
50	65.3	38,500	
55	62.1	33,400	
60	58.7	29,300	
65	55.2	25,900	
70	51.6	22,900	
75	47.8	20,500	
80	43.7	18,300	
85	39.2	16,400	
90	34.2	14,700	
95	28.5	13,200	
100	21.3	11,800	
110 Ft. Boom			
50	67.7	38,500	
55	64.8	33,400	
60	61.9	29,200	
65	58.8	25,800	
70	55.7	22,900	
75	52.4	20,400	
80	49.0	18,300	
85	45.4	16,400	
90	41.5	14,700	
95	37.2	13.300	

11,900 10,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
120 Ft. Boom				
55	67.1	33,000		
60	64.4	28,900		
65	61.7	25,500		
70	58.9	22,600		
75	56.1	20,100		
80	53.1	17,900		
85	50.0	16,100		
90	46.7	14,400		
95	43.3	12,900		
100	39.6	11,600		
105	35.6	10,400		
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