Manitowoc Cranes, Inc. Manitowoc, Wisconsin 54220 U.S.A.

Dynamic Compaction 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.

A dynamic compaction mode must be selected to operate. Minimum boom angle for dynamic compaction operation is 60 degrees.

Weight of compaction equipment 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. 8714-A. 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. gantry, 25 Ft. live mast, 12 part boom hoist reeving, wire rope guide (No. A10525) on boom top, two 1-1/2 in. pendants and 53,000 Lb. counterweight.

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	66,000 *		
35	57.4	62,300		
60 Ft. Boom				
30	68.8	66,000 *		
35	63.4	62,000		
40	57.8	51,600		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
70 Ft. Boom				
30	72.0	66,000 *		
35	67.5	61,500		
40	62.9	51,300		
45	58.1	43,600		
80 Ft. Boom				
25	78.0	66,000 *		
30	74.3	66,000 *		
35	70.5	60,500		
40	66.6	50,400		
45	62.6	42,900		
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50	58.4	37,000		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
90 Ft. Boom				
25	79.4	66,000 *		
30	76.1	66,000 *		
35	72.8	59,900		
40	69.4	49,900		
45	65.9	42,400		
50	62.3	36,600		
55	58.6	31,900		
100 Ft. Boom				
25	80.4	66,000 *		
30	77.5	66,000 *		
35	74.5	59,300		
40	71.5	49,400		
45	68.4	41,900		
50	65.3	36,100		
55	62.1	31,500		
60	58.7	27,700		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds			
110	110 Ft. Boom				
30	78.7	66,000 *			
35	76.0	58,700			
40	73.3	48,900			
45	70.5	41,600			
50	67.7	35,800			
55	64.8	31,200			
60	61.9	27,500			
65	58.8	24,300			
120	120 Ft. Boom				
30	79.6	66,000 *			
35	77.2	58,100			
40	74.7	48,400			
45	72.2	41,000			
50	69.7	35,300			
55	67.1	30,700			
60	64.4	27,000			
65	61.7	23,800			
70	58.9	21,200			

Upper boom point must be removed before use of this chart.