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

## **Dynamic Compaction Capacities**



Boom No. 83 With 48 in. Sheaves **Two 2-Part Line Operation** 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. A15438 and Wire Rope Specification chart No. 8735-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, two 1-1/2 in. pendants, two 48 in. sheaves in boom point 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	62.3	60,000 *		
35	55.4	60,000 *		
60 Ft. Boom				
30	67.3	60,000 *		
35	61.9	60,000 *		
40	56.2	50,800		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
70 Ft. Boom				
30	70.7	60,000 *		
35	66.3	60,000 *		
40	61.6	50,500		
45	56.8	42,800		
80 Ft. Boom				
25	77.0	60,000 *		
30	73.2	60,000 *		
35	69.4	59,600		
40	65.5	49,600		
45	61.4	42,100		
50	57.2	36,200		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds		
90 Ft. Boom				
25	78.5	60,000 *		
30	75.2	60,000 *		
35	71.8	59,000		
40	68.4	49,100		
45	64.9	41,600		
50	61.3	35,800		
55	57.5	31,200		
100 Ft. Boom				
25	79.6	60,000 *		
30	76.7	60,000 *		
35	73.7	58,300		
40	70.7	48,500		
45	67.6	41,100		
50	64.4	35,300		
55	61.1	30,700		
60	57.8	26,900		

Oper. Rad. Feet	Boom Ang. Deg.	Boom Capacity Pounds			
11	110 Ft. Boom				
30	77.9	60,000 *			
35	75.2	57,800			
40	72.5	48,100			
45	69.7	40,800			
50	66.9	35,000			
55	64.0	30,500			
60	61.0	26,700			
65	58.0	23,600			
12	120 Ft. Boom				
30	78.9	60,000 *			
35	76.5	57,100			
40	74.0	47,500			
45	71.5	40,200			
50	68.9	34,500			
55	66.3	30,000			
60	63.7	26,200			
65	60.9	23,100			
70	58.1	20,500			