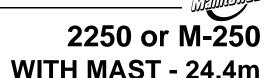
Manitowoc, Wisconsin 54220 U.S.A.

## **Liftcrane Boom Capacities**

Boom No. 49A-44 With Heavy Lift Top No Crane Counterweight 360 Degree Rating



**LIFTING CAPACITIES:** Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (\*).

Upper boom point capacity for liftcrane service with single part whip line is 13 610 kg or 27 220 kg with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

**OPERATING CONDITIONS:** Machine to operate on a firm uniformly supporting surface with gantry and mast up. Refer to boom rigging **No. 176364** or **No. 192633** and Wire Rope Specification chart **No. 7581-L**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. <u>Refer to operators manual for operating guidelines.</u>

MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface with boom within boom angle range shown in capacity chart. Travel may be limited depending upon ground conditions. Refer to Maximum Allowable Travel Specification chart No. 7748-B when operating without load.

**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

**BOOM POINT ELEVATION:** Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

**MACHINE EQUIPMENT:** Machine equipped with 9 373m crawlers, 1 219 mm treads, 8 534 mm retractable gantry, 24.4m mast, 12 part boom hoist reeving, four 38 mm boom pendants or boom support straps and no crane counterweight.

Maximum Boom Lengths Lifted Unassisted			
Over End of Blocked Crawlers	Over Side of Crawlers		
Boom Length	Boom Length		
48.8m	42.7m		
Load block, hook and weight ball on ground at start.			



## **Liftcrane Boom Capacities**

Boom No. 49A-44 With Heavy Lift Top No Crane Counterweight 360 Degree Rating

## 2250 or M-250 WITH MAST - 24.4m

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms		
30.5	30.5m (100 Ft.) BOOM				
6.4	82.7	33.2	161 300		
6.5	82.5	33.2	156 100		
7.0	81.6	33.1	132 400		
7.5	80.6	33.0	115 000		
8.0	79.6	32.9	101 300		
8.5	78.7	32.8	90 400		
9.0	77.7	32.6	81 400		
10.0	75.8	32.4	67 600		
11.0	73.8	32.1	57 400		
12.0	71.8	31.7	49 600		
13.0	69.8	31.3	43 500		
14.0	67.8	30.9	38 500		
15.0	65.7	30.5	34 400		
16.0	63.6	30.0	30 800		
18.0	59.2	28.8	25 400		
20.0	54.7	27.4	21 200		
22.0	49.8	25.8	17 800		
24.0	44.5	23.8	15 200		
26.0	38.7	21.4	13 000		
28.0	31.9	18.4	11 100		

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms		
36.6	36.6m (120 Ft.) BOOM				
7.0	83.0	39.2	133 300		
7.5	82.2	39.2	116 000		
8.0	81.4	39.1	102 200		
8.5	80.6	39.0	91 200		
9.0	79.8	38.9	82 100		
10.0	78.2	38.7	68 200		
11.0	76.6	38.4	57 900		
12.0	75.0	38.1	50 000		
13.0	73.3	37.8	43 900		
14.0	71.7	37.5	38 800		
15.0	70.0	37.1	34 600		
16.0	68.3	36.7	31 100		
18.0	64.8	35.8	25 500		
20.0	61.3	34.7	21 300		
22.0	57.6	33.5	18 000		
24.0	53.7	32.0	15 200		
26.0	49.7	30.4	13 000		
28.0	45.3	28.4	11 200		
30.0	40.6	26.2	9 600		
32.0	35.3	23.5	8 200		
34.0	29.2	20.1	7 000		
42.7m (140 Ft.) BOOM					
7.9	82.7	45.3	102 600		
8.0	82.6	45.3	100 900		
8.5	82.0	45.2	89 800		
9.0	81.3	45.1	80 600		
10.0	79.9	44.9	66 700		
11.0	78.5	44.7	56 400		
12.0	77.2	44.5	48 600		
13.0	75.8	44.2	42 300		
14.0	74.4	43.9	37 300		
15.0	73.0	43.6	33 100		

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms	
42.7	42.7m (140 Ft.) BOOM			
16.0	71.5	43.2	29 600	
18.0	68.7	42.5	24 000	
20.0	65.7	41.6	19 800	
22.0	62.7	40.6	16 500	
24.0	59.6	39.4	13 800	
26.0	56.4	38.1	11 600	
28.0	53.1	36.6	9 700	
30.0	49.6	35.0	8 100	
32.0	45.9	33.1	6 800	
34.0	41.9	30.9	5 500	
48.8m (160 Ft.) BOOM				
8.5	82.9	51.3	89 600	
9.0	82.4	51.3	81 300	
10.0	81.2	51.1	67 000	
11.0	80.0	50.9	56 700	
12.0	78.8	50.7	48 800	
13.0	77.6	50.5	42 500	
14.0	76.4	50.2	37 500	
15.0	75.2	50.0	33 300	
16.0	73.9	49.7	29 700	
18.0	71.5	49.0	24 100	
20.0	68.9	48.2	19 900	
22.0	66.4	47.4	16 500	
24.0	63.8	46.4	13 800	
26.0	61.1	45.3	11 600	
28.0	58.3	44.1	9 700	
30.0	55.5	42.7	8 100	
32.0	52.6	41.2	6 800	
34.0	49.5	39.5	5 500	