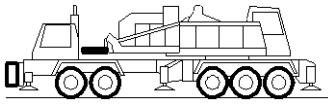
Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

Meets ANSI B30.5 Requirements

777T



Boom No. 78T With Heavy Lift Top
0 Lb. to 10,400 Lb. Crane Counterweight
With 25,000 Lb. Front Bumper Counterweight
Rating Over Side Sector On Rubber - 1/4 MPH Travel

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 29,500 Lbs. or 59,000 Lbs. with two part whip line. When boom butt mounted auxiliary drum is used, capacity with single part whip line is 20,000 Lbs. or 40,000 Lbs. with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib 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 in a level position on a firm uniformly supporting surface. Refer to boom rigging **No. 192043**, Wire Rope Specification chart **No. 7973-A** and Operating Range Diagram chart **No. 7974-D**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, ground conditions, condition and inflation of tires (116 PSI minimum), as well as adverse operating conditions and physical machine depreciation.

Loads lifted may increase radius due to tire deflection. This increase must be compensated for by raising boom. Refer to operators manual for operating guidelines.

MACHINE TRAVEL: Machine to travel (1/4 MPH) on a firm, level and uniformly supporting surface and boom within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 7976-A**, Maximum Allowable Traveling Weight chart **No. 7972-A** and Weight Distribution chart **No. 7975-A**.

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 Manitowoc 10 x 6 carrier, 277 in. wheel base, 117 in. front axle track, 100 in. rear axle track, 14.00 x 24 tires, 96 in. front outriggers, 70 in. rear outriggers, two 12 in. boom hoist cylinders, 26 Ft. mast, two boom support straps, crane counterweight as specified and with 25,000 Lb. front bumper counterweight.

Note: Travel not allowed with 95,400 Lb. crane counterweight without boom attached.

Swing over side on rubber not allowed with 27,400 Lb. thru 95,400 Lb. crane counterweight.

Swing over side on rubber with 0 Lb. or 10,400 Lb. crane counterweight is allowed with or without boom attached.

360 degree swing on rubber with 0 Lb. or 10,400 Lb. crane counterweight is allowed without boom attached.

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 134
30 Ft.	3,900 Lbs.
40 Ft.	4,700 Lbs.
50 Ft.	5,600 Lbs.
60 Ft.	6,600 Lbs.
70 Ft.	7,600 Lbs.
80 Ft.	8,700 Lbs.

Upper Boom Point Deduct
Deduct 1,000 Lbs. from capacities when upper boom point is attached.

Auxiliary Drum Deduct
Deduct 1,700 Lbs. from capacities when boom butt is equipped with auxiliary drum.

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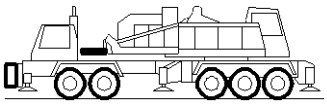

Boom No. 78T With Heavy Lift Top
0 Lb. to 10,400 Lb. Crane Counterweight
With 25,000 Lb. Front Bumper Counterweight
Rating Over Side Sector On Rubber - 1/4 MPH Travel

Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers			
Over Rear of Outriggers		Over Side of Fully Extended Outriggers	
Boom Length	Jib No. 134	Boom Length	Jib No. 134
95,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
(a) 270 Ft.	—	220 Ft.	—
(b) 260 Ft.	—	210 Ft.	—
250 Ft.	—	200 Ft.	30 Ft.
240 Ft.	30 Ft.	190 Ft.	60 Ft.
230 Ft.	50 Ft.	180 Ft.	80 Ft.
220 Ft.	80 Ft.		
78,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
250 Ft.	—	210 Ft.	—
240 Ft.	—	200 Ft.	—
230 Ft.	40 Ft.	190 Ft.	40 Ft.
220 Ft.	60 Ft.	180 Ft.	70 Ft.
210 Ft.	80 Ft.	170 Ft.	80 Ft.
61,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
230 Ft.	—	190 Ft.	—
220 Ft.	30 Ft.	180 Ft.	30 Ft.
210 Ft.	50 Ft.	170 Ft.	50 Ft.
200 Ft.	70 Ft.	160 Ft.	70 Ft.
190 Ft.	80 Ft.	150 Ft.	80 Ft.
44,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
220 Ft.	—	170 Ft.	—
210 Ft.	—	160 Ft.	30 Ft.
200 Ft.	30 Ft.	150 Ft.	50 Ft.
190 Ft.	60 Ft.	140 Ft.	80 Ft.
180 Ft.	80 Ft.		
Load block, hook and weight ball on ground at start. (a) Upper boom point and auxiliary drum cannot be used on 270 Ft. boom. (b) Upper boom point cannot be used on 260 Ft. boom over rear.			

Maximum Boom and Jib Lengths Lifted Unassisted On Rubber		
Over Rear		Over Side
Boom Length	Jib No. 134	Boom Length
95,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
Not Allowed		
78,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
Not Allowed		
61,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
Not Allowed		
44,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
140 Ft.	—	**Not Allowed**
130 Ft.	—	
120 Ft.	50 Ft.	
110 Ft.	60 Ft.	
100 Ft.	80 Ft.	
Load block, hook and weight ball on ground at start.		

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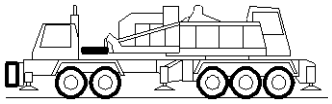

Boom No. 78T With Heavy Lift Top
0 Lb. to 10,400 Lb. Crane Counterweight
With 25,000 Lb. Front Bumper Counterweight
Rating Over Side Sector On Rubber - 1/4 MPH Travel

Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers			
Over Rear of Outriggers		Over Side of Fully Extended Outriggers	
Boom Length	Jib No. 134	Boom Length	Jib No. 134
27,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
200 Ft.	—	150 Ft.	—
190 Ft.	—	140 Ft.	30 Ft.
180 Ft.	50 Ft.	130 Ft.	60 Ft.
170 Ft.	70 Ft.	120 Ft.	80 Ft.
160 Ft.	80 Ft.		
10,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
180 Ft.	—	130 Ft.	—
170 Ft.	30 Ft.	120 Ft.	30 Ft.
160 Ft.	50 Ft.	110 Ft.	50 Ft.
150 Ft.	70 Ft.	100 Ft.	80 Ft.
140 Ft.	80 Ft.		
0 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
170 Ft.	—	120 Ft.	—
160 Ft.	—	110 Ft.	—
150 Ft.	50 Ft.	100 Ft.	40 Ft.
140 Ft.	70 Ft.		
130 Ft.	80 Ft.		
Load block, hook and weight ball on ground at start.			

Maximum Boom and Jib Lengths Lifted Unassisted On Rubber		
Over Rear		Over Side
Boom Length	Jib No. 134	Boom Length
27,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
120 Ft.	—	**Not Allowed**
110 Ft.	30 Ft.	
100 Ft.	50 Ft.	
10,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
100 Ft.	—	42.5 Ft.
0 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.		
90 Ft.	—	42.5 Ft.
Load block, hook and weight ball on ground at start.		

Jib may remain attached as shown in raising table for raising over rear on rubber but must not be used to pick loads on rubber.

Refer to chart **No. 8063-A**, **-B** or **-C** (0, 8,000 or 25,000 Lb. front bumper counterweight [FBC]) for fully extended outrigger boom capacities, chart **No. 8094-A, -C** or **-E** (0, 8,000 or 25,000 Lb. FBC) for straight over rear on rubber boom capacities, chart **No. 8094-B**, **-D** or **-F** (0, 8,000 or 25,000 Lb. FBC) for over side sector on rubber boom capacities, chart **No. 8095-A** for partially extended outrigger boom capacities and chart **No. 8096-A** for fully retracted outrigger boom capacities.

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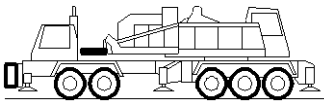

Boom No. 78T With Heavy Lift Top
0 Lb. to 10,400 Lb. Crane Counterweight
With 25,000 Lb. Front Bumper Counterweight
Rating Over Side Sector On Rubber - 1/4 MPH Travel

42.5 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds	0 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
13	80.2	50.1	49,200 *	36,600 *
14	78.8	49.8	44,900 *	33,100 *
15	77.4	49.6	41,200 *	30,100 *
16	76.0	49.3	37,900 *	27,400 *
17	74.6	48.9	34,900 *	25,100 *
18	73.1	48.6	32,300 *	22,900 *
19	71.7	48.2	29,900 *	21,000 *
20	70.2	47.8	27,700 *	19,200 *
22	67.2	46.9	23,900 *	16,100 *
24	64.1	45.8	20,600 *	13,500 *
26	61.0	44.6	17,800 *	11,200 *
28	57.7	43.3	15,400 *	9,300 *
30	54.2	41.8	13,300 *	7,500 *
32	50.6	40.0	11,400 *	6,000 *
34	46.8	38.1	9,700 *	4,600 *
36	42.7	35.8	8,100 *	3,300 *
38	38.2	33.2	6,700 *	2,100 *
40	33.1	30.0	5,400 *	
45	12.7	16.0	2,200 *	

70 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds	0 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
17	80.9	77.8	34,300 *	24,600 *
18	80.0	77.6	31,800 *	22,600 *
19	79.2	77.4	29,500 *	20,700 *
20	78.4	77.2	27,400 *	19,100 *
22	76.7	76.6	23,800 *	16,100 *
24	75.0	76.1	20,700 *	13,700 *
26	73.2	75.4	18,100 *	11,600 *
28	71.5	74.7	15,800 *	9,700 *
30	69.7	73.9	13,800 *	8,100 *
32	68.0	73.1	12,100 *	6,700 *
34	66.2	72.1	10,500 *	5,400 *
36	64.3	71.1	9,100 *	4,300 *
38	62.5	70.0	7,800 *	3,200 *
40	60.6	68.9	6,700 *	2,300 *
45	55.6	65.5	4,200 *	
50	50.4	61.5	2,200 *	

60 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds	0 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
16	80.3	67.8	36,400 *	26,100 *
17	79.3	67.6	33,500 *	23,700 *
18	78.3	67.4	31,000 *	21,700 *
19	77.3	67.1	28,600 *	19,800 *
20	76.4	66.8	26,500 *	18,100 *
22	74.4	66.2	22,800 *	15,100 *
24	72.3	65.5	19,700 *	12,600 *
26	70.3	64.8	17,100 *	10,500 *
28	68.2	63.9	14,700 *	8,600 *
30	66.1	63.0	12,700 *	7,000 *
32	64.0	61.9	10,900 *	5,500 *
34	61.8	60.8	9,300 *	4,200 *
36	59.5	59.6	7,900 *	3,100 *
38	57.2	58.2	6,600 *	2,000 *
40	54.9	56.8	5,400 *	
45	48.6	52.5	2,900 *	

80 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds	0 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
19	80.6	87.6	29,200 *	20,500 *
20	79.8	87.4	27,100 *	18,800 *
22	78.4	87.0	23,500 *	15,900 *
24	76.9	86.4	20,500 *	13,500 *
26	75.4	85.9	17,900 *	11,400 *
28	73.9	85.3	15,600 *	9,500 *
30	72.4	84.6	13,700 *	7,900 *
32	70.9	83.9	11,900 *	6,500 *
34	69.3	83.1	10,400 *	5,300 *
36	67.8	82.2	9,000 *	4,200 *
38	66.2	81.3	7,700 *	3,100 *
40	64.6	80.3	6,600 *	2,200 *
45	60.5	77.5	4,100 *	
50	56.2	74.2	2,100 *	

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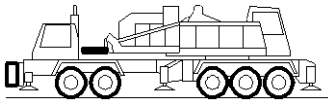

Boom No. 78T With Heavy Lift Top
0 Lb. to 10,400 Lb. Crane Counterweight
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Rating Over Side Sector On Rubber - 1/4 MPH Travel

90 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds	0 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
20	81.0	97.6	26,800 *	18,500 *
22	79.7	97.2	23,300 *	15,700 *
24	78.4	96.8	20,300 *	13,200 *
26	77.1	96.3	17,700 *	11,200 *
28	75.7	95.7	15,400 *	9,400 *
30	74.4	95.1	13,500 *	7,800 *
32	73.1	94.5	11,700 *	6,400 *
34	71.7	93.8	10,200 *	5,100 *
36	70.4	93.0	8,800 *	4,000 *
38	69.0	92.2	7,600 *	3,000 *
40	67.6	91.4	6,500 *	2,100 *
45	64.1	89.0	4,000 *	
50	60.4	86.2	2,100 *	

100 Ft. Boom

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	10,400 Lb. Crane Counterweight 25,000 Lb. Bumper Ctwt. Boom Capacity Pounds
22	80.7	107.4	22,800 *
24	79.6	107.0	19,800 *
26	78.4	106.5	17,200 *
28	77.2	106.1	15,000 *
30	76.0	105.5	13,100 *
32	74.8	105.0	11,300 *
34	73.6	104.3	9,800 *
36	72.4	103.7	8,400 *
38	71.2	103.0	7,200 *
40	70.0	102.2	6,100 *
45	66.9	100.1	3,700 *