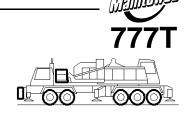
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

Boom No. 78T With Long Reach Top 27,400 Lb. to 44,400 Lb. Crane Counterweight 25,000 Lb. Front Bumper Counterweight Rating Straight Over Rear On Rubber - 1/4 MPH Travel Meets ANSI B30.5 Requirements



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 (*).

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. 192093**, Wire Rope Specification chart **No. 8104-A** and Operating Range Diagram chart **No. 7974-D**. Crane operator judgment must be used to allow for dynamic load effects of 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. <u>Refer to operators manual for operating guidelines.</u>

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. 8102-A**, Maximum

Allowable Traveling Weight chart **No. 7972-A** and reference 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 25,000 Lb. front bumper counterweight.

Note: Swing over side on rubber not allowed with 27,400 Lb. thru 44,400 Lb. crane counterweight.

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.		

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

Boom No. 78T With Long Reach Top 27,400 Lb. to 44,400 Lb. Crane Counterweight 25,000 Lb. Front Bumper Counterweight Rating Straight Over Rear On Rubber - 1/4 MPH Travel

Meets **ANSI B30.5** Requirements





Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers					
Over R Outrig		Over Side of Fully Extended Outriggers			
Boom Length			Jib No. 134		
95,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.					
(a) 298 Ft.		248 Ft.	_		
(a) 288 Ft.	_	238 Ft.	_		
278 Ft.	_	228 Ft.	30 Ft.		
(b) 268 Ft.	30 Ft.	218 Ft.	60 Ft.		
258 Ft.	30 Ft.	208 Ft.	80 Ft.		
248 Ft.	60 Ft.				
238 Ft.	80 Ft.				
I and blook book and waight hall an awaynd					

Load block, hook and weight ball on ground at start. (a) Auxiliary drum cannot be used. (b) Auxiliary drum cannot be used and one load line only run up boom to jib (boom point operation not allowed).

Maximum Boom Lengths Lifted Unassisted On Outriggers				
Over Rear of Outriggers	Over Side of Fully Extended Outriggers			
Boom Length	Boom Length			
78,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.				
278 Ft.	238 Ft.			
+ 25,000 Lb. Fro	61,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
258 Ft. 218 Ft.				
44,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt. 248 Ft. 198 Ft.				
				27,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.
238 Ft.	178 Ft.			
4 P	10,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
208 Ft.	158 Ft.			
	0 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.			
198 Ft.	148 Ft.			
Load block, hook and weight ball on ground at start.				

Boom No. 78T With Long Reach Top 27,400 Lb. to 44,400 Lb. Crane Counterweight 25,000 Lb. Front Bumper Counterweight Rating Straight Over Rear On Rubber - 1/4 MPH Travel

Meets **ANSI B30.5** Requirements



Maximum Boom Lengths Lifted Unassisted On Rubber								
Over Rear	Over Side							
Boom Length	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.								
				158 Ft. Not Allowed				
				27,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.				
				148 Ft.	Not Allowed			
				10,400 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.				
				Not Allowed				
0 Lb. Crane Counterweight + 25,000 Lb. Front Bumper Ctwt.								
Not Allowed								
Load block, hook ground at start.	and weight ball on							

Refer to chart No. 8083-A or -B (0 or 25,000 Lb. front bumper counterweight [FBC]) for fully extended outrigger boom capacities and chart No. 8098-A or -B (0 or 25,000 Lb. FBC) for straight over rear on rubber boom capacities.

Boom No. 78T With Long Reach Top 27,400 Lb. to 44,400 Lb. Crane Counterweight 25,000 Lb. Front Bumper Counterweight Rating Straight Over Rear On Rubber - 1/4 MPH Travel

Meets **ANSI B30.5** Requirements

148 Ft Room





138 Ft. Boom		oom		
			44,400 Lb. Crane Counterweight	27,400 Lb. Crane Counterweight
		Boom	25,000 Lb. Bumper Ctwt.	25,000 Lb. Bumper Ctwt.
Oper.	Boom	Point	Boom	Boom
Rad.	Ang.	Elev.	Capacity	Capacity
Feet	Deg.	Feet	Pounds	Pounds
24	81.5	145.6	86,700	74,300
26	80.6	145.2	78,400	67,200
28	79.8	144.9	71,500	61,100
30	78.9	144.5	65,600	56,000
32	78.1	144.1	60,500	51,500
34	77.2	143.7	56,000	47,600
36	76.4	143.2	52,100	44,100
38	75.5	142.7	48,600	41,100
40	74.7	142.2	45,400	38,400
45	72.5	140.7	38,900	32,700
50	70.3	139.0	33,700	28,100
55	68.1	137.1	29,500	24,500
60	65.8	135.0	26,100	21,500
65	63.5	132.6	23,200	18,900
70	61.2	130.0	20,700	16,700
75	58.8	127.1	18,500	14,900
80	56.3	123.9	16,700	13,200
85	53.8	120.4	15,000	11,800
90	51.2	116.6	13,600	10,500
95	48.5	112.4	12,200	9,400
100	45.6	107.7	11,100	8,300
105	42.6	102.6	10,000	7,400
110	39.5	96.8	9,000	6,600
115	36.1	90.4	8,100	5,800
120	32.4	83.1	7,300	5,000
125	28.3	74.5	6,500	4,400
130	23.6	64.2	5,800	
135	17.7	50.9	5,100	

	148 Ft. Boom				
				44,400 Lb. Crane Counterweight	27,400 Lb. Crane Counterweight
				25,000 Lb.	25,000 Lb.
			Boom	Bumper Ctwt.	Bumper Ctwt.
	Oper.	Boom	Point	Boom	Boom
	Rad.	Ang.	Elev.	Capacity	Capacity
	Feet	Deg.	Feet	Pounds	Pounds
	24	82.0	155.7	86,400	74,000
	26	81.3	155.4	78,100	66,900
1	28	80.5	155.0	71,200	60,800
	30	79.7	154.7	65,300	55,600
	32	78.9	154.3	60,200	51,200
	34	78.1	153.9	55,700	47,300
	36	<i>1</i> 7.3	153.5	51,700	43,800
	38	76.5	153.0	48,200	40,800
	40	75.7	152.5	45,100	38,000
4	45	73.7	151.1	38,600	32,300
	50	71.7	149.6	33,400	27,800
	55	69.6	147.8	29,200	24,100
	60	67.6	145.9	25,700	21,100
A	65	65.4	143.7	22,800	18,600
	70	63.3	141.3	20,300	16,400
	75	61.1	138.7	18,200	14,500
	80	58.9	135.8	16,300	12,900
	85	56.6	132.6	14,700	11,500
	90	54.2	129.2	13,200	10,200
	95	51.8	125.4	11,900	9,000
/	100	49.3	121.3	10,700	8,000
	105	46.7	116.8	9,700	7,100
	110	44.0	111.9	8,700	6,200
	115	41.1	106.4	7,800	5,400
	120	38.1	100.4	7,000	4,700
	125	34.8	93.6	6,200	
	130	31.3	85.9	5,500	
	135	27.3	77.0	4,900	
	140	22.7	66.3	4,300	

Boom No. 78T With Long Reach Top 27,400 Lb. to 44,400 Lb. Crane Counterweight 25,000 Lb. Front Bumper Counterweight Rating Straight Over Rear On Rubber - 1/4 MPH Travel

Meets **ANSI B30.5** Requirements



