Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top 0 Lb. to 10,400 Lb. Crane Counterweight With 8,000 Lb. Front Bumper Counterweight Adapter Rating Over Side Sector 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 (*).

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 8,000 Lb. front bumper counterweight adapter.

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.	

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

Auviliary Drum Deduct

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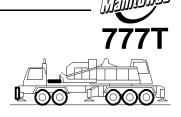




Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers					
	Rear of ggers	Over Side of Fully Extended Outriggers			
Boom Length	Jib No. 134	Boom Length	Jib No. 134		
	00 Lb. Crand 000 Lb. Fron				
240 Ft.		220 Ft.			
230 Ft.		210 Ft.			
220 Ft.	50 Ft.	200 Ft.	30 Ft.		
210 Ft.	70 Ft.	190 Ft.	60 Ft.		
200 Ft.	80 Ft.	180 Ft.	80 Ft.		
	00 Lb. Crane 000 Lb. Fron				
230 Ft.		200 Ft.	1		
220 Ft.		190 Ft.	30 Ft.		
210 Ft.	30 Ft.	180 Ft.	50 Ft.		
200 Ft.	60 Ft.	170 Ft.	80 Ft.		
190 Ft.	80 Ft.				
	00 Lb. Crane 000 Lb. Fron				
210 Ft.	1	180 Ft.			
200 Ft.		170 Ft.	40 Ft.		
190 Ft.	40 Ft.	160 Ft.	60 Ft.		
180 Ft.	70 Ft.	150 Ft.	80 Ft.		
170 Ft.	80 Ft.				
44,400 Lb. Crane Counterweight + 8,000 Lb. Front Bumper Ctwt.					
190 Ft.		170 Ft.			
180 Ft.	30 Ft.	160 Ft.			
170 Ft.	50 Ft.	150 Ft.	40 Ft.		
160 Ft.	70 Ft.	140 Ft.	60 Ft.		
150 Ft.	80 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	Over Side				
Boom Length	Jib No. 134	Boom Length			
	o. Crane Cour b. Front Bum				
Not Allowed					
+ 8,000 L	o. Crane Cour b. Front Bum				
140 Ft. 130 Ft. 120 Ft. 110 Ft.	30 Ft. 60 Ft. 80 Ft.	Not Allowed			
	o. Crane Coun b. Front Bum				
130 Ft. 120 Ft. 110 Ft. 100 Ft.	 40 Ft. 70 Ft.	Not Allowed			
44,400 Lb. Crane Counterweight + 8,000 Lb. Front Bumper Ctwt.					
110 Ft.		Not Allowed			
Load block, hook and weight ball on ground at start.					

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Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers				Maximum Boom and Jib Lengths Lifted Unassisted On Rubber			
Over Rear of Ful		Fully E	Over Side of Fully Extended Outriggers		Over	Rear	Over Side
Boom Length	Jib No. 134	Boom Length	Jib No. 134	/	Boom Length	Jib No. 134	Boom Length
	00 Lb. Crane 000 Lb. Fron					o. Crane Coun b. Front Bum	
170 Ft. 160 Ft. 150 Ft. 140 Ft.	 30 Ft. 50 Ft. 80 Ft.	140 Ft. 130 Ft. 120 Ft. 110 Ft.	40 Ft. 70 Ft. 80 Ft.		90 Ft.		Not Allowed
	00 Lb. Crane 000 Lb. Fron		_		10,400 Lb. Crane Counterweight + 8,000 Lb. Front Bumper Ctwt.		
150 Ft. 140 Ft. 130 Ft. 120 Ft.	30 Ft. 60 Ft. 80 Ft.	120 Ft. 110 Ft. 100 Ft.	30 Ft. 60 Ft.		70 Ft.		42.5 Ft.
0 Lb. Crane Counterweight + 8,000 Lb. Front Bumper Ctwt.					Crane Counter b. Front Bum	_	
140 Ft. 130 Ft. 120 Ft. 110 Ft. 100 Ft.	30 Ft. 50 Ft. 70 Ft. 80 Ft.	110 Ft.			60 Ft.		Not Allowed
Load block, hook and weight ball on ground at start.					Load block, ground at st	hook and we art.	ight ball on

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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42.5	Ft. B	oom		Ц
			10,400 Lb. Crane Counterweight	0 Lb. Crane Counterweight
		Boom	8,000 Lb. Bumper Ctwt.	8,000 Lb. Bumper Ctwt.
Oper.	Boom	Point	Boom	Boom
Rad.	Ang.	Elev.	Capacity	Capacity
Feet	Deg.	Feet	Pounds	Pounds
13	80.2	50.1	70,400 *	60,300
14	78.8	49.8	65,400 *	52,900
15	77.4	49.6	61,000 *	46,900
16	76.0	49.3	56,700	41,900
17	74.6	48.9	51,400	37,700
18	73.1	48.6	46,700	34,100
19	71.7	48.2	42,700	30,900
20	70.2	47.8	39,300	28,200
22	67.2	46.9	33,400	23,600
24	64.1	45.8	28,800	19,900
26	61.0	44.6	24,900	16,900
28	57.7	43.3	21,700	14,400
30	54.2	41.8	19,000	12,200
32	50.6	40.0	16,600	10,300
34	46.8	38.1	14,600	8,700
36	42.7	35.8	12,700	7,200
38	38.2	33.2	11,100	5,900
40	33.1	30.0	9,600	4,700
45	12.7	16.0	6,200	Y

	60 Ft. Boom		om		Ш
				10,400 Lb. Crane Counterweight	0 Lb. Crane Counterweight
			Boom	8,000 Lb. Bumper Ctwt.	8,000 Lb. Bumper Ctwt.
	Oper.	Boom	Point	Boom	Boom
	Rad.	Ang.	Elev.	Capacity	Capacity
	Feet	Deg.	Feet	Pounds	Pounds
	16	80.3	67.8	55,100 *	42,300
	17	79.3	67.6	51,600 *	38,100
-	18	78.3	67.4	47,100	34,400
	19	77.3	67.1	43,100	31,200
	20	76.4	66.8	39,600	28,500
	22	74.4	66.2	33,700	23,900
	24	72.3	65,5	29,000	20,200
	26	70.3	64.8	25,200	17,200
	28	68.2	63.9	22,000	14,600
	30	66.1	63.0	19,300	12,500
	32	64.0	61.9	17,000	10,700
	34	61.8	60.8	15,000	9,100
	36	59.5	59.6	13,200	7,700
	38	57.2	58.2	11,600	6,400
	40	54.9	56.8	10,200	5,300
	45	48.6	52.5	7,300	3,000
	50	41.6	47.1	4,900	
	55	33.3	40.0	3,000	

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