Manitowoc Cranes, Inc.

Manitowoc, Wisconsin 54220 U.S.A.

# Liftcrane Boom Capacities

Boom No. 78T With Long Reach Top 61,400 Lb. to 95,400 Lb. Crane Counterweight Without 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</u> 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. 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 without front bumper counterweight.

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

Swing over side on rubber not allowed with 61,400 Lb. thru 95,400 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.			

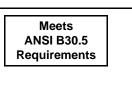
#### **Auxiliary Drum Deduct**

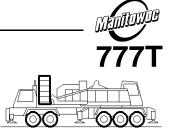
Deduct 1,700 Lbs. from capacities when boom butt is equipped with auxiliary drum.

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Maximum Boom and Jib Lengths Lifted Unassisted On Outriggers				Maximum Boom Lengths Lifted Unassisted On Outriggers		
Over Rear of Outriggers		Over Side of Fully Extended Outriggers			Over Rear of Outriggers	Over Side of Fully Extended Outriggers
Boom Length	Jib No. 134	Boom Length	Jib No. 134	$\checkmark$	Boom Length	Boom Length
95,400 Lb. Crane Counterweight			44,400 Lb. Cran	e Counterweight		
258 Ft.	—	248 Ft.	—		208 Ft.	188 Ft.
248 Ft.	—	238 Ft.	—		27,400 Lb. Cran	e Counterweight
238 Ft.		228 Ft.			188 Ft.	168 Ft.
228 Ft. 218 Ft.	50 Ft. 70 Ft.	218 Ft. 208 Ft.	40 Ft. 60 Ft.		10.400 Lb. Cran	e Counterweight
208 Ft.	80 Ft.	198 Ft.	80 Ft.		158 Ft.	148 Ft.
78,40	78,400 Lb. Crane Counterweight			0 Lb. Crane C	Counterweight	
238 Ft.		228 Ft.			148 Ft.	Not Allowed
228 Ft.	—	218 Ft.	+		Load block, hoo	k and weight ball
218 Ft.	30 Ft.	208 Ft.			on ground at sta	
208 Ft.	50 Ft.	198 Ft.	40 Ft.			
198 Ft.	80 Ft.	188 Ft.	60 Ft.			
		178 Ft.	80 Ft.			
61,40	61,400 Lb. Crane Counterweight					
218 Ft.		208 Ft.	_ /			
208 Ft.	4	198 Ft.	—			
198 Ft.	40 Ft,	188 Ft.	—			
188 Ft.	60 Ft.	178 Ft.	50 Ft.	▼		
178 Ft.	80 Ft.	168 Ft.	70 Ft.			
		158 Ft.	80 Ft.			
Load block at start.	k, hook and	weight ball	on ground	]		

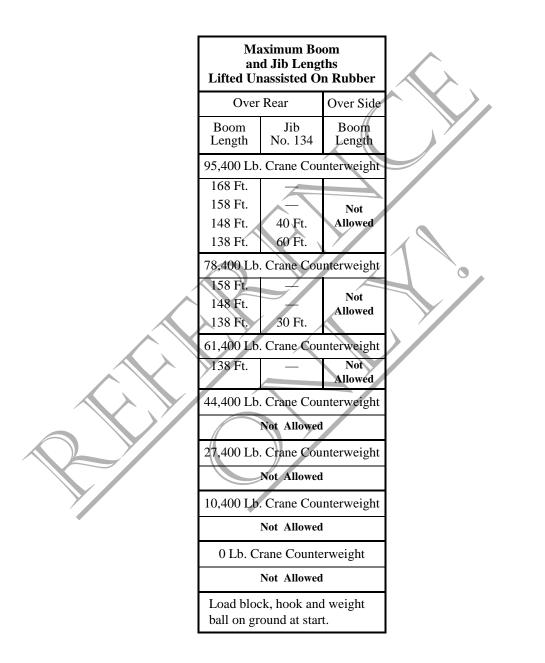
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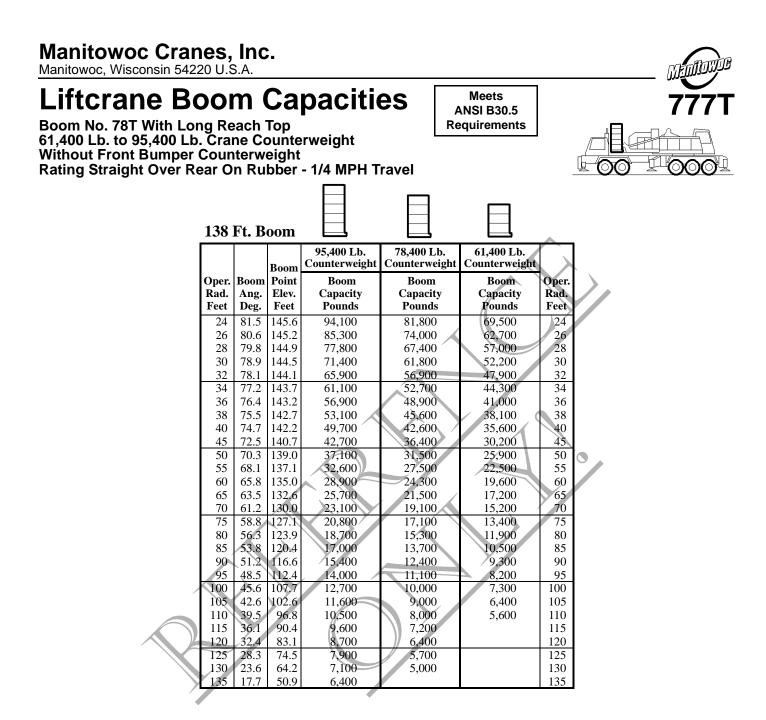
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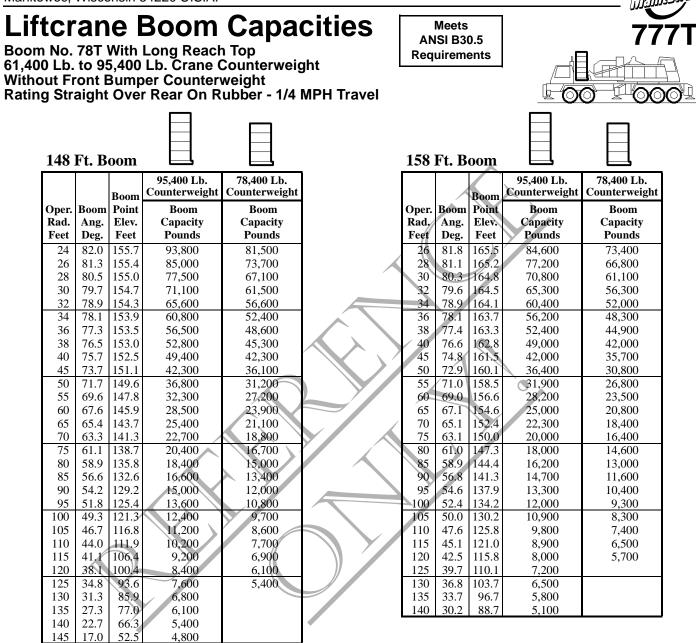
Jib may remain attached as shown in raising table for raising over rear on rubber but must not be used to pick loads on rubber.

Refer to chart **No. 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.





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