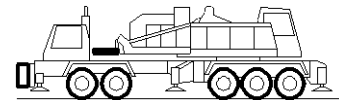


Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top
0 kg to 4 720 kg Crane Counterweight
With 11 340 kg Front Bumper Counterweight
Rating Over Side Sector On Rubber - 0.4 kms/hr 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 13 380 kg or 26 760 kg with two part whip line. When boom butt mounted auxiliary drum is used, capacity with single part whip line is 9 070 kg or 18 140 kg 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 (800 kPa 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 (0.4 kms/hr) 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, 7 036 mm wheel base, 2 972 mm front axle track, 2 540 mm rear axle track, 385/95 R 24 tires, 2 438 mm front outriggers, 1 778 mm rear outriggers, two 305 mm boom hoist cylinders, 7.9m mast, two boom support straps, crane counterweight as specified and with 11 340 kg front bumper counterweight.

Note: Travel not allowed with 43 270 kg crane counterweight without boom attached.

Swing over side on rubber not allowed with 12 430 kg thru 43 270 kg crane counterweight.

Swing over side on rubber with 0 kg or 4 720 kg crane counterweight is allowed with or without boom attached.

360 degree swing on rubber with 0 kg or 4 720 kg crane counterweight is allowed without boom attached.

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 134
9.1m	1 770 kg
12.2m	2 130 kg
15.2m	2 540 kg
18.3m	2 990 kg
21.3m	3 450 kg
24.4m	3 950 kg

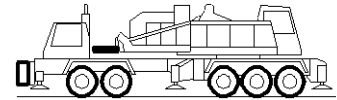
Upper Boom Point Deduct
Deduct 450 kg from capacities when upper boom point is attached.

Auxiliary Drum Deduct
Deduct 770 kg from capacities when boom butt is equipped with auxiliary drum.

Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top
0 kg to 4 720 kg Crane Counterweight
With 11 340 kg Front Bumper Counterweight
Rating Over Side Sector On Rubber - 0.4 kms/hr Travel

Meets
 ANSI B30.5
 Requirements



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
43 270 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
(a) 82.3m	—	67.1m	—
(b) 79.2m	—	64.0m	—
76.2m	—	61.0m	9.1m
73.2m	9.1m	57.9m	18.3m
70.1m	15.2m	54.9m	24.4m
67.1m	24.4m		
35 560 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
76.2m	—	64.0m	—
73.2m	—	61.0m	—
70.1m	12.2m	57.9m	12.2m
67.1m	18.3m	54.9m	21.3m
64.0m	24.4m	51.8m	24.4m
27 850 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
70.1m	—	57.9m	—
67.1m	9.1m	54.9m	9.1m
64.0m	15.2m	51.8m	15.2m
61.0m	21.3m	48.8m	21.3m
57.9m	24.4m	45.7m	24.4m
20 140 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
67.1m	—	51.8m	—
64.0m	—	48.8m	9.1m
61.0m	9.1m	45.7m	15.2m
57.9m	18.3m	42.7m	24.4m
54.9m	24.4m		
Load block, hook and weight ball on ground at start. (a) Upper boom point and auxiliary drum cannot be used on 82.3m boom. (b) Upper boom point cannot be used on 79.2m boom over rear.			

Maximum Boom and Jib Lengths Lifted Unassisted On Rubber		
Over Rear		Over Side
Boom Length	Jib No. 134	Boom Length
43 270 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.		
Not Allowed		
35 560 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.		
Not Allowed		
27 850 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.		
Not Allowed		
20 140 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.		
42.7m	—	Not Allowed
39.6m	—	
36.6m	15.2m	
33.5m	18.3m	
30.5m	24.4m	
Load block, hook and weight ball on ground at start.		

Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top
0 kg to 4 720 kg Crane Counterweight
With 11 340 kg Front Bumper Counterweight
Rating Over Side Sector On Rubber - 0.4 kms/hr Travel

Meets
 ANSI B30.5
 Requirements



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
12 430 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
61.0m	—	45.7m	—
57.9m	—	42.7m	9.1m
54.9m	15.2m	39.6m	18.3m
51.8m	21.3m	36.6m	24.4m
48.8m	24.4m		
4 720 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
54.9m	—	39.6m	—
51.8m	9.1m	36.6m	9.1m
48.8m	15.2m	33.5m	15.2m
45.7m	21.3m	30.5m	24.4m
42.7m	24.4m		
0 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
51.8m	—	36.6m	—
48.8m	—	33.5m	—
45.7m	15.2m	30.5m	12.2m
42.7m	21.3m		
39.6m	24.4m		
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	
12 430 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
36.6m 33.5m 30.5m	— 9.1m 15.2m	Not Allowed	
4 720 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
30.5m	—		13.0m
0 kg Crane Counterweight + 11 340 kg Front Bumper Cwt.			
27.4m	—	13.0m	
Load block, hook and weight ball on ground at start.			

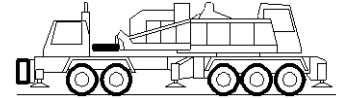
Jib may remain attached as shown in raising table for raising over rear on rubber but must not be used to pick loads on rubber.

Refer to chart **No. 8063-AM, -BM or -CM** (0, 3 630 or 11 340 kg front bumper counterweight [FBC]) for fully extended outrigger boom capacities, chart **No. 8094-AM, -CM or -EM** (0, 3 630 or 11 340 kg FBC) for straight over rear on rubber boom capacities, chart **No. 8094-BM, -DM or -FM** (0, 3 630 or 11 340 kg FBC) for over side sector on rubber boom capacities, chart **No. 8095-AM** for partially extended outrigger boom capacities and chart **No. 8096-AM** for fully retracted outrigger boom capacities.

Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top
0 kg to 4 720 kg Crane Counterweight
With 11 340 kg Front Bumper Counterweight
Rating Over Side Sector On Rubber - 0.4 kms/hr Travel

Meets
ANSI B30.5
Requirements



13.0m (42.5 Ft.)

Boom

Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight	0 kg Crane Counterweight
			11 340 kg Bumper Cwt.	11 340 kg Bumper Cwt.
			Boom Capacity Kilograms	Boom Capacity Kilograms
4.0	80.2	15.3	22 300 *	16 600 *
4.5	77.8	15.1	19 000 *	13 900 *
5.0	75.4	15.0	16 600 *	11 900 *
5.5	73.1	14.8	14 600 *	10 300 *
6.0	70.7	14.6	12 800 *	8 900 *
7.0	65.7	14.1	10 000 *	6 700 *
8.0	60.6	13.6	7 900 *	4 900 *
9.0	55.1	12.8	6 200 *	3 500 *
10.0	49.1	12.0	4 800 *	2 400 *
11.0	42.5	10.9	3 600 *	1 400 *
12.0	34.8	9.5	2 600 *	

21.3m (70 Ft.)

Boom

Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight	0 kg Crane Counterweight
			11 340 kg Bumper Cwt.	11 340 kg Bumper Cwt.
			Boom Capacity Kilograms	Boom Capacity Kilograms
5.2	80.9	23.7	15 500 *	11 100 *
5.5	80.0	23.6	14 300 *	10 200 *
6.0	78.6	23.5	12 700 *	8 800 *
7.0	75.8	23.3	10 000 *	6 700 *
8.0	73.0	23.0	8 000 *	5 100 *
9.0	70.2	22.6	6 400 *	3 800 *
10.0	67.2	22.1	5 100 *	2 700 *
11.0	64.2	21.7	4 100 *	1 900 *
12.0	61.2	21.1	3 100 *	1 100 *
14.0	54.7	19.7	1 700 *	

18.3m (60 Ft.)

Boom

Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight	0 kg Crane Counterweight
			11 340 kg Bumper Cwt.	11 340 kg Bumper Cwt.
			Boom Capacity Kilograms	Boom Capacity Kilograms
4.9	80.3	20.7	16 500 *	11 800 *
5.0	79.9	20.6	15 900 *	11 300 *
5.5	78.3	20.5	14 000 *	9 800 *
6.0	76.7	20.4	12 300 *	8 400 *
7.0	73.4	20.1	9 600 *	6 200 *
8.0	70.0	19.7	7 600 *	4 600 *
9.0	66.6	19.3	5 900 *	3 300 *
10.0	63.1	18.7	4 600 *	2 200 *
11.0	59.4	18.1	3 500 *	1 300 *
12.0	55.6	17.4	2 600 *	

24.4m (80 Ft.)

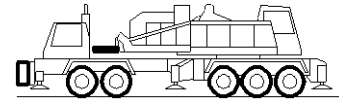
Boom

Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight	0 kg Crane Counterweight
			11 340 kg Bumper Cwt.	11 340 kg Bumper Cwt.
			Boom Capacity Kilograms	Boom Capacity Kilograms
5.8	80.6	26.7	13 200 *	9 200 *
6.0	80.1	26.6	12 500 *	8 700 *
7.0	77.7	26.4	9 900 *	6 600 *
8.0	75.2	26.1	7 900 *	5 000 *
9.0	72.8	25.8	6 400 *	3 700 *
10.0	70.2	25.5	5 100 *	2 700 *
11.0	67.7	25.0	4 000 *	1 800 *
12.0	65.1	24.6	3 100 *	1 100 *
14.0	59.7	23.5	1 600 *	

Liftcrane Boom Capacities

Boom No. 78T With Heavy Lift Top
0 kg to 4 720 kg Crane Counterweight
With 11 340 kg Front Bumper Counterweight
Rating Over Side Sector On Rubber - 0.4 kms/hr Travel

Meets
ANSI B30.5
Requirements



27.4m (90 Ft.)
Boom



Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight	0 kg Crane Counterweight
			11 340 kg Bumper Cwt.	11 340 kg Bumper Cwt.
			Boom Capacity Kilograms	Boom Capacity Kilograms
6.1	81.0	29.7	12 100 *	8 300 *
7.0	79.1	29.6	9 800 *	6 500 *
8.0	76.9	29.3	7 800 *	4 900 *
9.0	74.7	29.0	6 300 *	3 700 *
10.0	72.5	28.7	5 000 *	2 600 *
11.0	70.3	28.3	3 900 *	1 700 *
12.0	68.1	27.9	3 100 *	1 000 *
14.0	63.4	27.0	1 600 *	

30.5m (100 Ft.)
Boom



Oper. Rad. m	Boom Ang. Deg.	Boom Point Elev. m	4 720 kg Crane Counterweight
			11 340 kg Bumper Cwt.
			Boom Capacity Kilograms
6.7	80.7	32.7	10 300 *
7.0	80.2	32.7	9 600 *
8.0	78.2	32.5	7 600 *
9.0	76.3	32.2	6 100 *
10.0	74.3	31.9	4 800 *
11.0	72.4	31.6	3 700 *
12.0	70.4	31.2	2 900 *

REFERENCE ONLY