

# Liftcrane Boom Capacities

**Boom No. B10:290**

**0 kg Crane Counterweight**

**0 kg Carbody Counterweight**

**360 Degree Rating**

## MLC100-1



**LIFTING CAPACITIES:** Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Upper boom point capacity for liftcrane service with single part whip line from Drum 3 is 9 070 kg. When Drum 1 or Drum 2 is used, capacity with single part whip line is 12 520 kg. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of 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.

**BOOM BACKWARD STABILITY:** A minimum of 2 parts hoist line is required when using Drum 2 or 3 on 13,0 m and 16,0 m boom lengths to maintain boom stability at high boom angles. **Caution: Do not operate using Drum 2 or 3 without required parts of hoist line.** Boom may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.

**OPERATING CONDITIONS:** Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 84054317**, Wire Rope Specifications chart **No. 9709-A**, and Wind Conditions chart **No. 9708-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

**MACHINE TRAVEL:** Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9812-A**.



**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



**BOOM ANGLE:** Boom angle in degrees (°) 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 6 480 mm crawlers, 900 mm treads, 4 390 mm gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 0 kg crane counterweight, and 0 kg carbody counterweight.

### Upper Boom Point Deduct

Deduct 260 kg from capacities when upper boom point is attached. Deduct does not apply to 13,0 m thru 19,0 m boom lengths.

### Third Line Deduct

Deduct 120 kg from capacities when boom top is equipped with optional 3rd sheave wire rope guide.

Refer to Table 1 for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

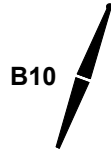
Combined weight beneath boom point sheaves must not exceed block weight shown.

**Table 1**

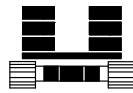
Boom Length (ft)	Over End or Side of Crawlers
	Block Weight (lb)
13,0 - 19,0	1 725
22,0	1 200
25,0	325
28,0	#

REFERENCE ONLY!

## Explanation of Symbols



Boom No. B10:290



Crane Counterweight  
+  
Carbody Counterweight



360 Degree Rating



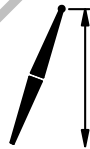
Boom Length



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)



Boom Point Elevation  
(see page 1)

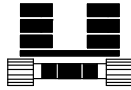
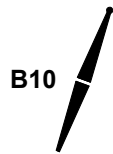


Lifting Capacities  
(see page 1)

REFERENCE ONLY!

# MLC100-1

ASME B30.5



0 kg  
+  
0 kg



360°

13,0 m			
m	°	m	kg
3,7	79,8	14,9	50 300
4,0	78,3	14,8	40 200
4,5	76,0	14,7	30 900
5,0	73,7	14,5	24 900
5,5	71,4	14,4	20 700
6,0	69,0	14,2	17 700
6,5	66,6	14,0	15 400
7,0	64,2	13,7	13 500
7,5	61,7	13,5	12 000
8,0	59,2	13,2	10 800
9,0	53,8	12,5	8 900
10,0	48,1	11,6	7 500
11,0	41,7	10,6	6 300
12,0	34,4	9,3	5 500
13,0	25,2	7,4	4 700

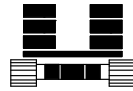
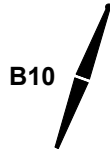
16,0 m			
m	°	m	kg
4,0	80,6	17,9	41 300
4,5	78,7	17,8	31 000
5,0	76,8	17,6	25 000
5,5	75,0	17,5	20 800
6,0	73,1	17,4	17 700
6,5	71,2	17,2	15 500
7,0	69,3	17,0	13 600
7,5	67,4	16,8	12 100
8,0	65,4	16,6	10 800
9,0	61,4	16,0	8 900
10,0	57,2	15,4	7 500
11,0	52,7	14,7	6 400
12,0	48,0	13,9	5 500
13,0	42,9	12,8	4 800
14,0	37,3	11,6	4 200
15,0	30,7	10,1	3 700

19,0 m			
m	°	m	kg
4,6	80,3	20,8	30 000
5,0	78,9	20,7	25 100
5,5	77,4	20,6	20 800
6,0	75,8	20,5	17 800
6,5	74,3	20,3	15 500
7,0	72,7	20,2	13 600
7,5	71,1	20,0	12 100
8,0	69,5	19,8	10 800
9,0	66,2	19,4	8 900
10,0	62,8	18,9	7 400
11,0	59,4	18,3	6 300
12,0	55,8	17,7	5 400
13,0	52,0	16,9	4 700
14,0	48,0	16,1	4 100
15,0	43,8	15,1	3 600
16,0	39,1	13,9	3 200
17,0	34,0	12,5	2 800
18,0	28,0	10,8	2 500

REFERENCED

# MLC100-1

ASME B30.5



0 kg  
+  
0 kg



**22,0 m**

m	°	m	kg
4,9	80,8	23,8	26 500
5,0	80,5	23,8	25 300
5,5	79,1	23,7	21 000
6,0	77,8	23,6	17 900
6,5	76,5	23,5	15 600
7,0	75,1	23,3	13 800
7,5	73,8	23,2	12 200
8,0	72,4	23,0	11 000
9,0	69,6	22,7	9 000
10,0	66,8	22,3	7 600
11,0	64,0	21,8	6 500
12,0	61,0	21,3	5 600
13,0	58,0	20,6	4 900
14,0	54,8	20,0	4 300
15,0	51,5	19,2	3 800
16,0	48,1	18,3	3 300
17,0	44,4	17,4	3 000
18,0	40,5	16,2	2 600
19,0	36,3	15,0	2 300
20,0	31,6	13,4	2 100
21,0	26,0	11,6	1 800

**25,0 m**

m	°	m	kg
5,5	80,5	26,7	21 100
6,0	79,3	26,6	17 900
6,5	78,1	26,5	15 600
7,0	76,9	26,4	13 700
7,5	75,8	26,3	12 200
8,0	74,6	26,1	10 900
9,0	72,2	25,8	9 000
10,0	69,7	25,5	7 500
11,0	67,3	25,1	6 400
12,0	64,7	24,6	5 500
13,0	62,2	24,1	4 800
14,0	59,5	23,5	4 200
15,0	56,8	22,9	3 700
16,0	54,0	22,2	3 300
17,0	51,1	21,4	2 900
18,0	48,1	20,6	2 500
19,0	44,9	19,6	2 300
20,0	41,5	18,5	2 000
21,0	37,9	17,3	1 800

**28,0 m**

m	°	m	kg
5,8	80,9	29,7	19 100
6,0	80,5	29,7	17 900
6,5	79,4	29,6	15 600
7,0	78,4	29,5	13 700
7,5	77,3	29,4	12 200
8,0	76,3	29,3	10 900
9,0	74,2	29,0	9 000
10,0	72,0	28,7	7 500
11,0	69,8	28,3	6 400
12,0	67,6	27,9	5 500
13,0	65,4	27,5	4 800
14,0	63,1	27,0	4 200
15,0	60,8	26,5	3 700
16,0	58,4	25,9	3 200
17,0	56,0	25,2	2 900
18,0	53,4	24,5	2 500
19,0	50,8	23,7	2 200

REFERENCE ONLY