

## Clamshell/Grapple Capacities

Boom No. B10:290
45,400 lb Crane Counterweight
0 lb Carbody Counterweight
Crawler Machine on a Barge
0 Degree thru 1 Degree and
1 Degree thru 3 Degree Static Machine List
No Travel - 360 Degree Rating

MLC100A-1 SERIES 1

LIFTING CAPACITIES: Capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. 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.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

Clamshell/grapple capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

OPERATING CONDITIONS: Machine to operate on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging No. 80121889, Wire Rope Specifications chart No. 9800-B, and Counterweight Arrangements chart No. 9794-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

WIND CONDITIONS: Machine may be operated in winds up to 35 mph provided crane operator judgment is used to allow for wind effect on lifted load and other considerations noted on capacity chart are followed. Wind speed to be measured at boom point elevation. Operation is not permitted when wind is above 35 mph. Park crane with bucket on ground or secured and position boom at 50 degrees. Lower boom onto blocking at ground level when wind is above 50 mph.



**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck to center of gravity of freely suspended load.



**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.

**MACHINE EQUIPMENT:** Machine equipped with 21 ft 3 in. crawlers, 35 in. treads, 14 ft 5 in. gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 45,400 lb crane counterweight, and 0 lb carbody counterweight.

Raising Ability Over End or Side of Crawlers			
Boom Length (ft)	Machine List		
	0°	1º - 3º	
	Bucket Weight (lb)		
52.5 - 91.9	8,500	8,500	
101.7	8,500	4,800	
111.5 - 121.4	4,800	4,800	

Bucket weight includes the weight of all blocks, hooks, bucket, weight ball, slings and hoist lines beneath boom point sheaves.

Manitowoc Cranes 9807-A. 2019-11-15



## **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)



Machine List



Lifting Capacities (see page 1)

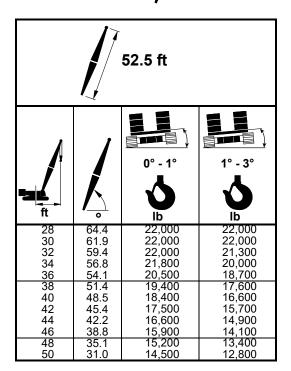


B10



45,400 lb + 0 lb





62.3 ft			
		0° - 1°	1° · 3°
ft 32 34	64.7 62.6	22,000 21,700	lb 21,200 19,800
36	60.5	20,500	18,600
38	58.3	19,300	17,500
40	56.1	18,300	16,500
42	53.9	17,400	15,600
44	51.5	16,600	14,700
46	49.1	15,800	14,000
48	46.6	15,100	13,300
50	44.0	14,400	12,700
52	41.2	13,800	12,100
54	38.3	13,300	11,500
56	35.2	12,800	11,000
58	31.8	12,300	10,600

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72.2 ft			
Talk fit		0° - 1°	g
36 38 40 42 44	64.8 63.1 61.3 59.4 57.6	20,500 19,300 18,300 17,400 16,600	18,600 17,500 16,500 15,600 14,700
46 48 50 52 54	55.6 53.7 51.7 49.6 47.5	15,800 15,100 14,400 13,900 13,300	14,000 13,300 12,700 12,100 11,600
56 58 60 62 64	45.2 42.9 40.5 38.0 35.3	12,800 12,300 11,900 11,400 11,000	11,100 10,600 10,100 9,700 9,400 9,000

82.0 ft			
*		0° - 1°	1° · 3°
40	65.0	18,300	16,400
42	63.4	17,400	15,500
44	61.9	16,500	14,700
46	60.2	15,800	13,900
48	58.6	15,100	13,200
50	57.0	14,400	12,600
52	55.3	13,800	12,000
54	53.5	13,300	11,500
56	51.8	12,800	11,000
58	49.9	12,300	10,500
60	48.1	11,800	10,100
62	46.2	11,400	9,700
64	44.2	11,000	9,300
66	42.1	10,700	8,900
68	39.9	10,000	8,600
70	37.7	9,300	8,300
72	35.3	8,700	8,000
74	32.8	8,100	7,700
76	30.1	7,500	7,200

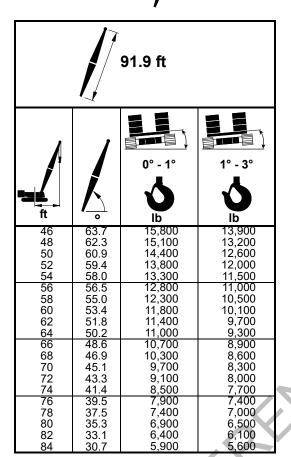


B10



45,400 lb + 0 lb





101.7 ft			
	/	0° - 1°	1° - 3°
ft 50	63.9	lb 14,400	lb 12,500
52 54 56 58	62.7 61.4 60.1 58.8	13,800 13,200 12,700 12,200	11,900 11,300 10,800 10,400
60 62 64 66 68	57.4 56.1 54.7 53.3 51.9	11,800 11,400 11,000 10,600 10,100	9,900 9,500 9,100 8,800 8,400
70 72 74 76 78	50.4 48.9 47.4 45.9 44.3	9,500 8,800 8,200 7,700 7,200	8,100 7,800 7,500 7,100 6,600
80 82 84 86 88	42.6 40.9 39.1 37.3 35.4	6,700 6,200 5,700 5,300 4,900	6,200 5,700 5,300 4,900

## MLC100A-1 S-1







111.5 ft			
The state of the s		0° - 1°	1° - 3°
54	64.1	13,200	11,200
56	63.0	12,600	10,700
58	61.8	12,200	10,200
60	60.6	11,700	9,800
62	59.4	11,300	9,400
64	58.2	10,900	9,000
66	57.0	10,500	8,700
68	55.8	9,900	8,300
70	54.5	9,300	8,000
72	53.2	8,600	7,700
74	51.9	8,000	7,300
76	50.6	7,500	6,800
78	49.3	7,000	6,300
80	47.9	6,500	5,900
82	46.5	6,000	5,400
84	45.0	5,500	5,000
86	43.6	5,100	

121.4 ft			
		0° - 1°	1° - 3°
58 60 62 64 66	64.3 63.2 62.2 61.1 60.0	12,200 11,700 11,300 10,900 10,500	10,200 9,800 9,400 9,000 8,600
68 70 72 74 76	58.9 57.8 56.7 55.5 54.4	10,100 9,400 8,800 8,200 7,600	8,300 8,000 7,600 7,100 6,600
78 80 82 84 86 88	53.2 52.0 50.8 49.5 48.3 47.0	7,100 6,600 6,100 5,700 5,200 4,800	6,100 5,600 5,100