


Liftcrane Boom Capacities

Boom No. B10:290
73,000 lb Crane Counterweight
23,100 lb Carbody Counterweight
360 Degree Rating

MLC80A-1 SERIES 2

 **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 20,000 lb. When Drum 1 or Drum 2 is used, capacity with single part whip line is 27,600 lb. 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.

OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 80121888**, Wire Rope Specifications chart **No. 9775-A**, Counterweight Arrangements chart **No. 9769-A**, and Wind Conditions chart **No. 9774-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. 9773-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 21 ft 3 in. crawlers, 35 in. treads, 14 ft 5 in. gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 73,000 lb crane counterweight, and 23,100 lb carbody counterweight.

Consult chart **No. 9776-A** when Jib No. 117 is attached.

Upper Boom Point Deduct
Deduct 600 lb from capacities when upper boom point is attached. Deduct does not apply to 62.3 ft boom length.

Third Line Deduct
Deduct 300 lb from capacities when boom top is equipped with optional 3rd sheave wire rope guide.

Deduct From Capacities When Jib No. 117 Is Attached	
Jib Length (ft)	Deduct (lb)
30.0	4,500
40.0	5,300
50.0	6,200
60.0	7,400
Weight of jib and 700 lb suspended beneath jib point have been included in determination of deduct.	

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.

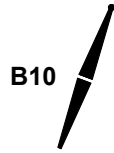
Combined weight beneath boom point sheaves must not exceed block weight shown.

Table 1

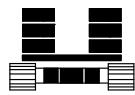
Boom Length (ft)	Over End or Side of Crawlers
	Block Weight (lb)
62.3 - 160.8	3,800
170.6	2,650
180.4 - 200.1	700

REFERENCE ONLY!

Explanation of Symbols



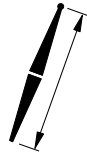
Boom No. B10:290



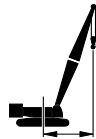
Crane Counterweight
+
Carbody Counterweight



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)

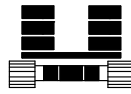
REFERENCE ONLY!

MLC80A-1 S-2

ASME B30.5




B10




73,000 lb
+
23,100 lb




 **62.3 ft**

ft	°	ft	lb
15	80.3	68.3	159,900
16	79.3	68.1	159,900
17	78.4	67.8	156,100
18	77.4	67.6	147,800
19	76.5	67.4	140,200
20	75.5	67.1	133,400
22	73.6	66.5	115,900
24	71.7	65.9	101,400
26	69.7	65.2	90,000
28	67.8	64.4	80,800
30	65.8	63.5	73,200
32	63.7	62.5	66,900
34	61.6	61.4	61,500
36	59.5	60.3	56,800
38	57.3	59.0	52,800
40	55.1	57.6	49,200
42	52.8	56.1	46,100
44	50.4	54.5	43,300
46	48.0	52.7	40,800
48	45.4	50.8	38,500
50	42.7	48.7	36,500
55	35.3	42.4	32,100
60	26.1	33.7	28,600

 **72.2 ft**

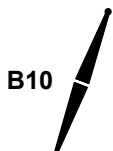
ft	°	ft	lb
16	80.8	78.1	159,100
17	80.0	77.9	156,300
18	79.2	77.7	147,900
19	78.4	77.5	140,400
20	77.6	77.3	133,600
22	75.9	76.8	116,200
24	74.3	76.2	101,700
26	72.6	75.6	90,300
28	70.9	74.9	81,100
30	69.2	74.2	73,500
32	67.5	73.3	67,200
34	65.8	72.5	61,800
36	64.0	71.5	57,100
38	62.2	70.5	53,100
40	60.4	69.3	49,600
42	58.6	68.1	46,400
44	56.7	66.8	43,600
46	54.7	65.4	41,100
48	52.7	63.9	38,900
50	50.7	62.3	36,800
55	45.3	57.7	32,400
60	39.3	52.1	28,900
65	32.5	45.0	26,000
70	23.9	35.5	23,500

 **82.0 ft**

ft	°	ft	lb
18	80.5	87.7	142,800
19	79.8	87.5	139,900
20	79.1	87.3	133,300
22	77.6	86.9	116,200
24	76.2	86.4	101,600
26	74.8	85.9	90,200
28	73.3	85.3	81,000
30	71.8	84.6	73,400
32	70.4	83.9	67,000
34	68.9	83.2	61,600
36	67.3	82.3	57,000
38	65.8	81.4	52,900
40	64.3	80.5	49,400
42	62.7	79.5	46,300
44	61.1	78.4	43,500
46	59.5	77.2	41,000
48	57.8	76.0	38,700
50	56.2	74.6	36,600
55	51.8	70.9	32,300
60	47.2	66.6	28,700
65	42.2	61.4	25,800
70	36.6	55.2	23,300
75	30.2	47.5	21,200
80	22.1	37.0	19,400

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73,000 lb
+
23,100 lb



91.9 ft

ft	o	ft	lb
19	80.9	97.5	129,300
20	80.3	97.4	126,900
22	79.0	97.0	116,100
24	77.7	96.5	101,600
26	76.4	96.1	90,200
28	75.1	95.5	80,900
30	73.8	95.0	73,300
32	72.5	94.3	67,000
34	71.2	93.7	61,600
36	69.9	92.9	56,900
38	68.6	92.2	52,900
40	67.2	91.3	49,400
42	65.8	90.4	46,200
44	64.5	89.5	43,400
46	63.1	88.5	40,900
48	61.6	87.4	38,700
50	60.2	86.3	36,600
55	56.5	83.1	32,200
60	52.7	79.5	28,700
65	48.6	75.4	25,800
70	44.3	70.5	23,300
75	39.6	64.9	21,200
80	34.3	58.1	19,400
85	28.2	49.7	17,800
90	20.5	38.4	16,400

101.7 ft

ft	o	ft	lb
22	80.1	107.0	114,500
24	78.9	106.6	101,500
26	77.8	106.2	90,000
28	76.6	105.7	80,800
30	75.4	105.2	73,200
32	74.3	104.6	66,800
34	73.1	104.0	61,400
36	71.9	103.4	56,800
38	70.7	102.7	52,700
40	69.5	102.0	49,200
42	68.3	101.2	46,000
44	67.1	100.3	43,200
46	65.9	99.4	40,700
48	64.6	98.5	38,500
50	63.4	97.5	36,400
55	60.1	94.8	32,000
60	56.8	91.6	28,500
65	53.4	88.1	25,500
70	49.8	84.1	23,100
75	45.9	79.5	21,000
80	41.8	74.2	19,200
85	37.4	68.0	17,600
90	32.4	60.8	16,200
95	26.6	51.7	14,900

111.5 ft

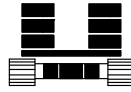
ft	o	ft	lb
22	81.0	117.0	105,900
24	79.9	116.6	101,400
26	78.9	116.2	89,900
28	77.8	115.8	80,700
30	76.8	115.3	73,100
32	75.7	114.8	66,700
34	74.6	114.3	61,300
36	73.6	113.7	56,600
38	72.5	113.1	52,600
40	71.4	112.4	49,000
42	70.3	111.7	45,900
44	69.2	111.0	43,100
46	68.1	110.2	40,600
48	67.0	109.3	38,300
50	65.9	108.4	36,200
55	63.0	106.0	31,900
60	60.1	103.2	28,300
65	57.1	100.1	25,400
70	53.9	96.6	22,900
75	50.7	92.7	20,800
80	47.2	88.3	19,000
85	43.6	83.3	17,400
90	39.7	77.6	16,000
95	35.5	71.0	14,800
100	30.7	63.2	13,700
105	25.1	53.6	12,700

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B10



73,000 lb
+
23,100 lb



360°

121.4 ft

ft	o	ft	lb
24	80.7	126.6	96,100
26	79.8	126.3	89,800
28	78.8	125.9	80,500
30	77.9	125.5	72,900
32	76.9	125.0	66,500
34	75.9	124.5	61,100
36	74.9	124.0	56,400
38	74.0	123.4	52,400
40	73.0	122.8	48,800
42	72.0	122.1	45,700
44	71.0	121.5	42,900
46	70.0	120.7	40,400
48	69.0	120.0	38,100
50	67.9	119.2	36,000
55	65.4	117.0	31,700
60	62.7	114.5	28,100
65	60.0	111.7	25,200
70	57.3	108.6	22,700
75	54.4	105.2	20,600
80	51.4	101.4	18,800
85	48.3	97.1	17,200
90	45.1	92.3	15,800
95	41.6	86.9	14,500
100	37.9	80.8	13,400
105	33.8	73.8	12,400
110	29.2	65.6	11,500
115	23.9	55.4	10,700

131.2 ft

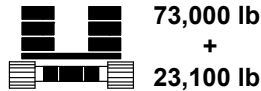
ft	o	ft	lb
26	80.6	136.3	87,400
28	79.7	135.9	80,400
30	78.8	135.5	72,800
32	77.9	135.1	66,400
34	77.0	134.6	61,000
36	76.1	134.1	56,300
38	75.2	133.6	52,200
40	74.3	133.1	48,700
42	73.4	132.5	45,500
44	72.5	131.8	42,700
46	71.5	131.2	40,200
48	70.6	130.5	37,900
50	69.7	129.7	35,900
55	67.3	127.7	31,500
60	64.9	125.5	28,000
65	62.5	123.0	25,000
70	60.0	120.2	22,500
75	57.4	117.1	20,400
80	54.8	113.7	18,600
85	52.1	110.0	17,000
90	49.2	105.8	15,600
95	46.3	101.2	14,400
100	43.1	96.1	13,300
105	39.8	90.4	12,300
110	36.2	83.9	11,400
115	32.3	76.5	10,600
120	27.9	67.7	9,900
125	22.8	57.0	9,200

141.1 ft

ft	o	ft	lb
28	80.4	145.9	77,800
30	79.6	145.5	72,600
32	78.7	145.2	66,200
34	77.9	144.7	60,800
36	77.1	144.3	56,100
38	76.2	143.8	52,100
40	75.4	143.3	48,500
42	74.6	142.7	45,300
44	73.7	142.1	42,500
46	72.9	141.5	40,000
48	72.0	140.9	37,700
50	71.2	140.2	35,700
55	69.0	138.4	31,300
60	66.8	136.3	27,700
65	64.6	134.0	24,800
70	62.3	131.5	22,300
75	60.0	128.7	20,200
80	57.6	125.6	18,400
85	55.1	122.2	16,800
90	52.6	118.5	15,400
95	50.0	114.5	14,200
100	47.3	110.0	13,100
105	44.4	105.1	12,100
110	41.4	99.7	11,200
115	38.2	93.6	10,400
120	34.8	86.8	9,600
125	31.0	79.0	8,900
130	26.8	69.8	8,300
135	21.8	58.5	7,700

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ASME B30.5



150.9 ft

ft	o	ft	lb
30	80.3	155.6	70,700
32	79.5	155.2	66,000
34	78.7	154.8	60,600
36	77.9	154.4	55,900
38	77.2	153.9	51,900
40	76.4	153.4	48,300
42	75.6	152.9	45,100
44	74.8	152.4	42,300
46	74.0	151.8	39,800
48	73.2	151.2	37,500
50	72.4	150.6	35,500
55	70.4	148.9	31,100
60	68.4	147.0	27,500
65	66.3	144.9	24,600
70	64.2	142.5	22,100
75	62.1	140.0	20,000
80	59.9	137.2	18,200
85	57.7	134.1	16,600
90	55.4	130.8	15,200
95	53.1	127.1	14,000
100	50.6	123.1	12,900
105	48.1	118.8	11,900
110	45.5	114.1	11,000
115	42.8	108.9	10,200
120	39.9	103.1	9,400
125	36.8	96.7	8,700
130	33.5	89.5	8,100
135	29.8	81.3	7,500
140	25.7	71.7	7,000
145	20.9	59.9	6,500

160.8 ft

ft	o	ft	lb
30	80.9	165.5	62,900
32	80.1	165.2	61,900
34	79.4	164.8	60,400
36	78.7	164.4	58,800
38	78.0	164.0	57,700
40	77.2	163.6	56,800
42	76.5	163.1	55,800
44	75.8	162.6	54,700
46	75.0	162.0	53,600
48	74.3	161.5	52,500
50	73.5	160.9	51,500
55	71.7	159.3	48,100
60	69.8	157.5	44,900
65	67.9	155.6	42,100
70	65.9	153.4	39,600
75	63.9	151.0	37,300
80	61.9	148.4	35,300
85	59.9	145.6	33,000
90	57.8	142.6	30,900
95	55.7	139.3	27,300
100	53.5	135.7	24,400
105	51.2	131.8	21,900
110	48.9	127.5	19,800
115	46.5	122.9	17,900
120	43.9	117.9	16,400
125	41.3	112.4	15,000
130	38.5	106.4	13,700
135	35.5	99.7	12,600
140	32.3	92.2	11,600
145	28.8	83.6	10,700
150	24.8	73.6	9,900
155	20.0	61.3	9,200

170.6 ft

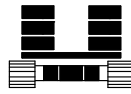
ft	o	ft	lb
32	80.7	175.2	53,200
34	80.0	174.8	52,400
36	79.3	174.5	51,700
38	78.7	174.1	51,000
40	78.0	173.6	50,400
42	77.3	173.2	49,900
44	76.6	172.7	49,400
46	75.9	172.2	48,900
48	75.2	171.7	48,400
50	74.5	171.1	47,900
55	72.8	169.7	47,400
60	71.0	168.0	46,900
65	69.2	166.2	46,400
70	67.4	164.1	45,900
75	65.6	161.9	45,400
80	63.7	159.5	44,900
85	61.8	156.9	44,400
90	59.9	154.1	43,900
95	57.9	151.1	43,400
100	55.9	147.8	42,900
105	53.8	144.2	42,400
110	51.7	140.4	41,900
115	49.5	136.2	41,400
120	47.3	131.8	40,900
125	44.9	126.9	40,400
130	42.5	121.6	40,000
135	39.9	115.9	39,600
140	37.2	109.5	39,200
145	34.3	102.5	38,800
150	31.2	94.7	38,400
155	27.8	85.8	38,000
160	23.9	75.3	37,600

MLC80A-1 S-2

ASME B30.5



B10



73,000 lb
+
23,100 lb



360°

180.4 ft			
ft	°	ft	lb
34	80.6	184.8	46,000
36	79.9	184.5	45,400
38	79.3	184.1	44,700
40	78.6	183.7	44,100
42	78.0	183.3	43,200
44	77.3	182.8	41,700
46	76.7	182.4	39,200
48	76.0	181.9	36,900
50	75.4	181.3	34,900
55	73.7	179.9	30,500
60	72.1	178.4	26,900
65	70.4	176.7	23,900
70	68.7	174.8	21,500
75	67.0	172.7	19,400
80	65.2	170.5	17,500
85	63.5	168.0	15,900
90	61.7	165.4	14,500
95	59.9	162.6	13,300
100	58.0	159.5	12,200
105	56.1	156.3	11,200
110	54.2	152.8	10,300
115	52.2	149.0	9,500
120	50.1	144.9	8,800
125	48.0	140.5	8,100
130	45.8	135.8	7,400
135	43.6	130.7	6,900
140	41.2	125.2	6,300
145	38.7	119.2	5,800
150	36.1	112.6	5,400
155	33.3	105.3	4,900
160	30.2	97.1	4,500
165	26.9	87.8	4,100

190.3 ft			
ft	°	ft	lb
36	80.5	194.5	43,500
38	79.8	194.1	43,000
40	79.2	193.7	42,500
42	78.6	193.3	42,000
44	78.0	192.9	41,500
46	77.4	192.5	39,000
48	76.8	192.0	36,700
50	76.2	191.5	34,600
55	74.6	190.2	30,200
60	73.0	188.7	26,600
65	71.4	187.1	23,700
70	69.8	185.3	21,200
75	68.2	183.4	19,100
80	66.6	181.3	17,300
85	64.9	179.0	15,700
90	63.3	176.5	14,300
95	61.6	173.9	13,000
100	59.8	171.1	11,900
105	58.1	168.0	10,900
110	56.3	164.8	10,000
115	54.4	161.3	9,200
120	52.6	157.6	8,500
125	50.6	153.6	7,800
130	48.6	149.3	7,200
135	46.6	144.7	6,600
140	44.5	139.7	6,100
145	42.3	134.4	5,600
150	40.0	128.6	5,100
155	37.6	122.3	4,700
160	35.0	115.5	4,300
165	32.3	107.9	3,900

200.1 ft			
ft	°	ft	lb
36	80.9	204.5	38,800
38	80.4	204.1	38,300
40	79.8	203.8	37,800
42	79.2	203.4	37,400
44	78.6	203.0	36,900
46	78.0	202.6	36,400
48	77.4	202.1	36,000
50	76.8	201.6	34,400
55	75.4	200.4	29,900
60	73.9	199.0	26,400
65	72.4	197.5	23,400
70	70.9	195.8	20,900
75	69.4	193.9	18,800
80	67.8	192.0	17,000
85	66.3	189.8	15,400
90	64.7	187.5	14,000
95	63.1	185.0	12,700
100	61.5	182.4	11,600
105	59.8	179.5	10,600
110	58.1	176.5	9,700
115	56.4	173.3	8,900
120	54.7	169.8	8,200
125	52.9	166.1	7,500
130	51.1	162.2	6,900
135	49.2	158.0	6,300
140	47.3	153.5	5,800
145	45.3	148.7	5,300
150	43.3	143.5	4,800
155	41.1	137.9	4,400
160	38.9	131.9	4,000