


Liftcrane Boom Capacities

Boom No. B20:350
75,200 lb Crane Counterweight
0 lb Carbody Counterweight
360 Degree Rating

MLC150-1 SERIES 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.

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. 80117859**, Wire Rope Specifications chart **No. 9848-A**, Counterweight Arrangements chart **No. 9828-A**, and Wind Conditions chart **No. 9847-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. 9846-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 ($^{\circ}$) 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 26 ft 2 in. crawlers, 48 in. treads, 17 ft 5 in. gantry, 10 part boom hoist reeving, boom straps, 75,200 lb crane counterweight, 0 lb carbody counterweight.

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

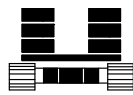
Boom Length (ft)	Over End or Side of Crawlers	Over End of Blocked Crawlers
	Block Weight (lb)	
49.2 - 147.6	7,700	7,700
157.5	6,100	6,900
167.3	4,400	5,500
177.2	2,800	4,100
187.0	1,400	3,200
196.9	#	2,500
206.7		#
<p>Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. <i>Crane tipping or structural damage can occur.</i></p>		

REFERENCE ONLY!

Explanation of Symbols



Boom No. B20:350



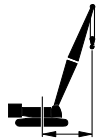
Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



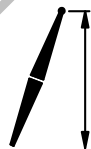
Boom Length



Operating Radius
(see page 1)



Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)



Lifting Capacities
(see page 1)

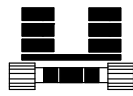
REFERENCE ONLY!

MLC150-1 S-1

ASME B30.5



B20



75,200 lb
+
0 lb



360°

49.2 ft			
ft	°	ft	lb
16	80.3	54.9	164,900
17	79.1	54.6	164,900
18	77.9	54.3	164,900
19	76.6	54.0	164,900
20	75.4	53.7	164,900
22	72.9	53.0	164,900
24	70.4	52.1	161,800
26	67.9	51.2	141,600
28	65.2	50.1	125,700
30	62.5	48.9	112,800
32	59.8	47.6	102,200
34	56.9	46.2	93,300
36	53.9	44.6	85,700
38	50.8	42.8	79,100
40	47.5	40.8	73,400
42	44.0	38.5	68,400
44	40.2	35.9	64,000
46	36.0	32.9	60,000
48	31.3	29.4	56,400
50	25.6	24.9	53,200

59.1 ft			
ft	°	ft	lb
18	79.9	64.5	177,600
19	78.9	64.2	177,600
20	77.9	64.0	177,600
22	75.9	63.4	177,600
24	73.9	62.7	162,000
26	71.8	61.9	141,800
28	69.7	61.1	125,800
30	67.5	60.2	113,000
32	65.4	59.1	102,300
34	63.1	58.0	93,400
36	60.9	56.8	85,800
38	58.5	55.4	79,200
40	56.1	54.0	73,500
42	53.7	52.4	68,500
44	51.1	50.6	64,100
46	48.4	48.7	60,100
48	45.6	46.6	56,600
50	42.6	44.2	53,300
55	34.1	37.0	46,500
59	25.3	28.8	42,000

68.9 ft			
ft	°	ft	lb
20	79.7	74.1	177,600
22	78.0	73.6	177,600
24	76.2	73.0	162,300
26	74.5	72.4	142,000
28	72.7	71.7	126,000
30	71.0	70.9	113,100
32	69.2	70.1	102,500
34	67.3	69.1	93,600
36	65.5	68.1	86,000
38	63.6	67.0	79,400
40	61.6	65.9	73,700
42	59.7	64.6	68,700
44	57.7	63.2	64,300
46	55.6	61.7	60,300
48	53.5	60.1	56,700
50	51.3	58.4	53,500
55	45.4	53.5	46,700
60	38.8	47.3	41,200
65	31.0	39.2	36,700
68	25.0	32.8	34,300

REFER TO

MLC150-1 S-1

ASME B30.5



75,200 lb
+
0 lb



78.7 ft

ft	o	ft	lb
21	80.3	84.0	177,600
22	79.5	83.7	177,600
24	78.0	83.2	162,400
26	76.5	82.7	142,100
28	75.0	82.1	126,100
30	73.5	81.4	113,100
32	71.9	80.7	102,500
34	70.3	79.9	93,500
36	68.8	79.0	85,900
38	67.2	78.1	79,300
40	65.5	77.1	73,600
42	63.9	76.1	68,600
44	62.2	74.9	64,100
46	60.5	73.7	60,200
48	58.8	72.4	56,600
50	57.0	71.0	53,400
55	52.4	67.1	46,600
60	47.4	62.5	41,100
65	42.0	56.9	36,600
70	35.9	50.1	32,800
75	28.5	41.2	29,600
76	26.7	39.1	29,000

88.6 ft

ft	o	ft	lb
23	80.0	93.6	174,800
24	79.4	93.4	162,400
26	78.0	92.9	142,100
28	76.7	92.3	126,000
30	75.4	91.8	113,100
32	74.0	91.1	102,400
34	72.6	90.4	93,400
36	71.3	89.7	85,800
38	69.9	88.9	79,200
40	68.5	88.0	73,500
42	67.0	87.1	68,500
44	65.6	86.1	64,000
46	64.1	85.1	60,100
48	62.7	84.0	56,500
50	61.2	82.8	53,300
55	57.3	79.5	46,500
60	53.2	75.7	41,000
65	48.9	71.3	36,500
70	44.3	66.2	32,700
75	39.2	60.1	29,500
80	33.4	52.7	26,700
85	26.4	43.0	24,300

98.4 ft

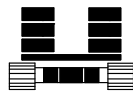
ft	o	ft	lb
24	80.5	103.4	162,400
26	79.3	103.0	142,000
28	78.1	102.5	126,000
30	76.9	102.0	113,000
32	75.7	101.4	102,300
34	74.4	100.8	93,300
36	73.2	100.1	85,700
38	72.0	99.4	79,100
40	70.7	98.7	73,300
42	69.5	97.9	68,300
44	68.2	97.0	63,800
46	66.9	96.1	59,900
48	65.6	95.1	56,300
50	64.3	94.1	53,100
55	61.0	91.3	46,300
60	57.5	88.0	40,800
65	53.9	84.3	36,300
70	50.1	80.1	32,500
75	46.0	75.3	29,300
80	41.7	69.7	26,500
85	36.8	63.0	24,100
90	31.3	55.0	22,000
94	26.1	47.0	20,400

MLC150-1 S-1

ASME B30.5



B20



75,200 lb
+
0 lb



360°

108.3 ft

ft	o	ft	lb
26	80.3	113.1	142,000
28	79.2	112.6	125,900
30	78.1	112.2	112,900
32	77.0	111.6	102,200
34	75.9	111.1	93,200
36	74.8	110.5	85,500
38	73.7	109.9	78,900
40	72.6	109.2	73,200
42	71.4	108.4	68,200
44	70.3	107.7	63,700
46	69.2	106.9	59,700
48	68.0	106.0	56,200
50	66.8	105.1	52,900
55	63.9	102.6	46,100
60	60.8	99.7	40,600
65	57.7	96.5	36,100
70	54.4	92.9	32,300
75	51.0	88.8	29,100
80	47.4	84.2	26,400
85	43.6	78.9	24,000
90	39.4	72.9	21,900
95	34.8	65.8	20,000
100	29.6	57.2	18,300
103	25.9	51.0	17,400

118.1 ft

ft	o	ft	lb
28	80.1	122.7	125,800
30	79.1	122.3	112,800
32	78.1	121.8	102,000
34	77.1	121.3	93,000
36	76.1	120.8	85,400
38	75.1	120.2	78,800
40	74.1	119.5	73,000
42	73.1	118.9	68,000
44	72.0	118.2	63,500
46	71.0	117.5	59,500
48	69.9	116.7	55,900
50	68.9	115.8	52,700
55	66.2	113.6	45,900
60	63.5	111.1	40,400
65	60.7	108.2	35,800
70	57.9	105.0	32,100
75	54.9	101.5	28,900
80	51.8	97.5	26,100
85	48.5	93.0	23,700
90	45.1	88.0	21,600
95	41.4	82.4	19,700
100	37.5	75.9	18,100
105	33.1	68.3	16,500
110	28.0	59.2	15,200
112	25.8	55.0	14,700

128.0 ft

ft	o	ft	lb
29	80.4	132.5	118,800
30	80.0	132.3	112,600
32	79.0	131.9	101,900
34	78.1	131.4	92,900
36	77.2	130.9	85,200
38	76.3	130.4	78,600
40	75.3	129.8	72,800
42	74.4	129.2	67,800
44	73.5	128.6	63,300
46	72.5	127.9	59,300
48	71.6	127.2	55,700
50	70.6	126.5	52,500
55	68.2	124.4	45,600
60	65.7	122.1	40,100
65	63.2	119.5	35,600
70	60.6	116.7	31,800
75	58.0	113.5	28,600
80	55.3	110.0	25,800
85	52.4	106.1	23,400
90	49.5	101.8	21,300
95	46.4	97.0	19,500
100	43.1	91.7	17,800
105	39.6	85.6	16,300
110	35.8	78.8	15,000
115	31.5	70.8	13,700
120	26.7	61.1	12,600
121	25.6	58.9	12,400

MLC150-1 S-1

ASME B30.5



75,200 lb
+
0 lb



137.8 ft

ft	o	ft	lb
31	80.3	142.2	106,900
32	79.8	142.0	101,700
34	79.0	141.5	92,700
36	78.1	141.1	85,000
38	77.3	140.6	78,400
40	76.4	140.1	72,600
42	75.6	139.5	67,500
44	74.7	138.9	63,000
46	73.8	138.3	59,000
48	72.9	137.6	55,400
50	72.1	136.9	52,200
55	69.8	135.1	45,400
60	67.6	133.0	39,800
65	65.3	130.6	35,300
70	62.9	128.0	31,500
75	60.6	125.2	28,300
80	58.1	122.0	25,500
85	55.6	118.5	23,100
90	53.0	114.7	21,000
95	50.2	110.5	19,200
100	47.4	105.9	17,500
105	44.4	100.8	16,000
110	41.3	95.1	14,600
115	37.9	88.7	13,400
120	34.3	81.5	12,300
125	30.2	73.0	11,300
130	25.5	62.9	10,300

147.6 ft

ft	o	ft	lb
33	80.1	151.8	96,800
34	79.7	151.6	92,500
36	78.9	151.2	84,800
38	78.1	150.7	78,100
40	77.3	150.2	72,400
42	76.5	149.7	67,300
44	75.7	149.2	62,800
46	74.9	148.6	58,800
48	74.1	148.0	55,200
50	73.3	147.3	52,000
55	71.2	145.6	45,100
60	69.2	143.7	39,600
65	67.1	141.5	35,100
70	64.9	139.1	31,300
75	62.7	136.5	28,100
80	60.5	133.6	25,300
85	58.2	130.5	22,900
90	55.8	127.1	20,800
95	53.4	123.3	18,900
100	50.9	119.2	17,300
105	48.3	114.7	15,800
110	45.6	109.8	14,400
115	42.7	104.4	13,200
120	39.7	98.4	12,100
125	36.4	91.7	11,100
130	32.9	84.0	10,100
135	28.9	75.2	9,300
139	25.4	66.9	8,600

157.5 ft

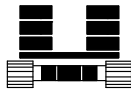
ft	o	ft	lb
34	80.4	161.6	92,300
36	79.6	161.2	84,600
38	78.9	160.8	77,900
40	78.1	160.4	72,200
42	77.4	159.9	67,100
44	76.6	159.4	62,600
46	75.9	158.8	58,600
48	75.1	158.3	55,000
50	74.4	157.7	51,700
55	72.5	156.0	44,800
60	70.5	154.2	39,300
65	68.6	152.2	34,800
70	66.6	150.0	31,000
75	64.6	147.6	27,700
80	62.5	145.0	25,000
85	60.4	142.1	22,600
90	58.3	139.0	20,500
95	56.1	135.6	18,600
100	53.8	131.9	16,900
105	51.5	127.9	15,400
110	49.1	123.5	14,100
115	46.6	118.8	12,900
120	43.9	113.6	11,800
125	41.2	107.9	10,700
130	38.2	101.5	9,800
135	35.1	94.5	8,900
140	31.7	86.5	8,100
145	27.8	77.2	7,400
148	25.3	70.9	6,900

MLC150-1 S-1

ASME B30.5



B20



75,200 lb
+
0 lb



360°

167.3 ft

ft	o	ft	lb
36	80.3	171.3	84,400
38	79.6	170.9	77,700
40	78.9	170.4	71,900
42	78.2	170.0	66,800
44	77.5	169.5	62,300
46	76.7	169.0	58,300
48	76.0	168.5	54,700
50	75.3	167.9	51,500
55	73.5	166.4	44,600
60	71.7	164.7	39,000
65	69.9	162.8	34,500
70	68.1	160.8	30,700
75	66.2	158.6	27,500
80	64.3	156.1	24,700
85	62.3	153.5	22,300
90	60.4	150.6	20,200
95	58.3	147.5	18,300
100	56.3	144.1	16,600
105	54.2	140.5	15,100
110	52.0	136.5	13,800
115	49.7	132.3	12,600
120	47.4	127.6	11,500
125	45.0	122.6	10,400
130	42.4	117.2	9,500
135	39.8	111.2	8,600
140	36.9	104.5	7,800
145	33.9	97.2	7,100
150	30.5	88.8	6,400
155	26.8	79.2	5,700
157	25.2	74.8	5,500

177.2 ft

ft	o	ft	lb
37	80.5	181.1	80,700
38	80.1	180.9	77,500
40	79.5	180.5	71,700
42	78.8	180.1	66,600
44	78.2	179.6	62,100
46	77.5	179.2	58,000
48	76.8	178.7	54,400
50	76.2	178.1	51,200
55	74.5	176.7	44,300
60	72.8	175.1	38,700
65	71.1	173.4	34,200
70	69.3	171.5	30,400
75	67.6	169.4	27,100
80	65.8	167.1	24,300
85	64.0	164.6	21,900
90	62.2	161.9	19,800
95	60.3	159.1	17,900
100	58.4	155.9	16,300
105	56.5	152.6	14,800
110	54.5	149.0	13,400
115	52.4	145.1	12,200
120	50.3	141.0	11,100
125	48.1	136.5	10,100
130	45.9	131.6	9,100
135	43.5	126.3	8,300
140	41.1	120.6	7,500
145	38.5	114.3	6,700
150	35.7	107.4	6,000
155	32.8	99.7	5,400
160	29.5	91.1	4,800
165	25.9	81.0	4,200
166	25.1	78.8	4,100

187.0 ft

ft	o	ft	lb
39	80.4	190.7	74,200
40	80.0	190.5	71,400
42	79.4	190.1	66,300
44	78.8	189.7	61,800
46	78.2	189.3	57,800
48	77.5	188.8	54,200
50	76.9	188.3	50,900
55	75.3	187.0	44,000
60	73.7	185.5	38,400
65	72.1	183.8	33,900
70	70.5	182.0	30,100
75	68.8	180.0	26,800
80	67.2	177.9	24,100
85	65.5	175.6	21,700
90	63.8	173.1	19,500
95	62.0	170.4	17,700
100	60.3	167.5	16,000
105	58.5	164.4	14,500
110	56.6	161.1	13,200
115	54.7	157.5	11,900
120	52.8	153.7	10,800
125	50.8	149.6	9,800
130	48.8	145.2	8,900
135	46.7	140.5	8,000
140	44.5	135.4	7,200
145	42.2	129.9	6,500
150	39.8	123.9	5,800
155	37.3	117.4	5,100
160	34.6	110.2	4,500
165	31.7	102.2	3,900
170	28.6	93.2	3,200


MLC150-1 S-1

ASME B30.5




75,200 lb
+
0 lb



 **196.9 ft**

ft	°	ft	lb
41	80.3	200.4	68,600
42	80.0	200.2	66,100
44	79.4	199.8	61,600
46	78.8	199.4	57,500
48	78.2	198.9	53,900
50	77.6	198.4	50,600
55	76.1	197.2	43,700
60	74.6	195.8	38,200
65	73.0	194.2	33,600
70	71.5	192.5	29,800
75	70.0	190.6	26,500
80	68.4	188.6	23,700
85	66.8	186.4	21,300
90	65.2	184.1	19,200
95	63.6	181.6	17,300
100	61.9	178.9	15,700
105	60.2	176.0	14,200
110	58.5	172.9	12,800
115	56.8	169.6	11,600
120	55.0	166.1	10,500
125	53.2	162.3	9,400
130	51.3	158.3	8,500
135	49.4	154.0	7,600
140	47.4	149.4	6,800
145	45.4	144.4	6,100
150	43.2	139.1	5,400
155	41.0	133.3	4,800
160	38.7	127.1	4,100
165	36.2	120.3	3,400

 **206.7 ft**

ft	°	ft	lb
42	80.4	210.2	65,800
44	79.9	209.8	61,300
46	79.3	209.4	57,300
48	78.7	209.0	53,600
50	78.2	208.5	50,400
55	76.8	207.3	43,400
60	75.3	206.0	37,800
65	73.9	204.5	33,300
70	72.4	202.9	29,400
75	70.9	201.1	26,200
80	69.5	199.2	23,400
85	68.0	197.2	21,000
90	66.5	195.0	18,900
95	64.9	192.6	17,000
100	63.4	190.1	15,300
105	61.8	187.4	13,800
110	60.2	184.5	12,500
115	58.6	181.4	11,200
120	56.9	178.1	10,100
125	55.2	174.6	9,100
130	53.5	170.9	8,200
135	51.7	166.9	7,300
140	49.9	162.7	6,500
145	48.0	158.2	5,800
150	46.1	153.4	5,100
155	44.1	148.2	4,400
160	42.0	142.6	3,600