

Liftcrane Boom Capacities

Boom No. B20:350


110,500 lb Crane Counterweight

35,000 lb Carbody Counterweight

Rating Over End of Blocked Crawlers

No Travel - Limited Swing

MLC150-1 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.

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. Drive and idler tumbler must be properly blocked so that centerline of tumbler become tipping fulcrum. Swing is limited to that sector shown on Operating Range Diagram chart **No. 9831-A**. 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, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.



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, 110,500 lb crane counterweight, and 35,000 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 of Blocked Crawlers
	Block Weight (lb)
49.2 - 187.0	7,700
196.9	6,900
206.7	2,000
216.5	#

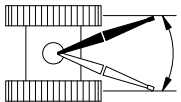
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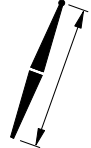
Explanation of Symbols


B20  Boom No. B20:350


 Crane Counterweight
+
Carbody Counterweight

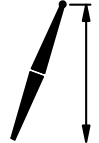
 Blocked Crawler


 Limited Swing

 Boom Length

 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

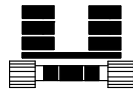
 Boom Point Elevation
(see page 1)

 Lifting Capacities
(see page 1)

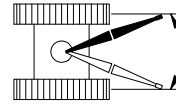
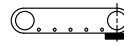
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MLC150-1 S-2

ASME B30.5



110,500 lb
+
35,000 lb



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	164,900
26	67.9	51.2	164,900
28	65.2	50.1	152,800
30	62.5	48.9	139,100
32	59.8	47.6	127,800
34	56.9	46.2	118,600
36	53.9	44.6	111,000
38	50.8	42.8	104,800
40	47.5	40.8	99,600
42	44.0	38.5	95,400
44	40.2	35.9	92,100
46	36.0	32.9	89,900
48	31.3	29.4	88,900
50	25.6	24.9	86,500

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	177,600
26	71.8	61.9	177,600
28	69.7	61.1	167,900
30	67.5	60.2	156,700
32	65.4	59.1	146,900
34	63.1	58.0	138,200
36	60.9	56.8	130,600
38	58.5	55.4	123,700
40	56.1	54.0	117,500
42	53.7	52.4	111,900
44	51.1	50.6	106,800
46	48.4	48.7	102,200
48	45.6	46.6	97,700
50	42.6	44.2	92,200
55	34.1	37.0	80,500
59	25.3	28.8	72,900

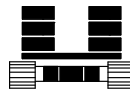
68.9 ft

ft	°	ft	lb
20	79.7	74.1	177,600
22	78.0	73.6	177,600
24	76.2	73.0	177,600
26	74.5	72.4	177,600
28	72.7	71.7	167,900
30	71.0	70.9	156,700
32	69.2	70.1	146,900
34	67.3	69.1	138,200
36	65.5	68.1	130,600
38	63.6	67.0	123,700
40	61.6	65.9	117,500
42	59.7	64.6	111,900
44	57.7	63.2	106,800
46	55.6	61.7	102,200
48	53.5	60.1	97,900
50	51.3	58.4	92,400
55	45.4	53.5	80,800
60	38.8	47.3	71,500
65	31.0	39.2	64,000
68	25.0	32.8	60,100

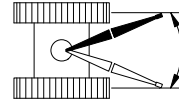
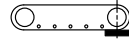
REFER TO

MLC150-1 S-2

ASME B30.5



110,500 lb
+
35,000 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	177,600
26	76.5	82.7	177,600
28	75.0	82.1	167,900
30	73.5	81.4	156,700
32	71.9	80.7	146,900
34	70.3	79.9	138,200
36	68.8	79.0	130,600
38	67.2	78.1	123,700
40	65.5	77.1	117,500
42	63.9	76.1	111,900
44	62.2	74.9	106,800
46	60.5	73.7	102,200
48	58.8	72.4	97,900
50	57.0	71.0	92,300
55	52.4	67.1	80,700
60	47.4	62.5	71,500
65	42.0	56.9	63,900
70	35.9	50.1	57,700
75	28.5	41.2	52,400
76	26.7	39.1	51,400

88.6 ft

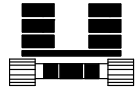
ft	o	ft	lb
23	80.0	93.6	177,600
24	79.4	93.4	177,600
26	78.0	92.9	177,600
28	76.7	92.3	167,900
30	75.4	91.8	156,700
32	74.0	91.1	146,900
34	72.6	90.4	138,200
36	71.3	89.7	130,600
38	69.9	88.9	123,700
40	68.5	88.0	117,500
42	67.0	87.1	111,900
44	65.6	86.1	106,800
46	64.1	85.1	102,200
48	62.7	84.0	97,800
50	61.2	82.8	92,200
55	57.3	79.5	80,600
60	53.2	75.7	71,400
65	48.9	71.3	63,800
70	44.3	66.2	57,600
75	39.2	60.1	52,300
80	33.4	52.7	47,800
85	26.4	43.0	43,900

98.4 ft

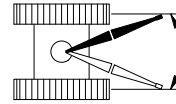
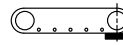
ft	o	ft	lb
24	80.5	103.4	177,600
26	79.3	103.0	177,600
28	78.1	102.5	167,900
30	76.9	102.0	156,700
32	75.7	101.4	146,900
34	74.4	100.8	138,200
36	73.2	100.1	130,600
38	72.0	99.4	123,700
40	70.7	98.7	117,500
42	69.5	97.9	111,900
44	68.2	97.0	106,800
46	66.9	96.1	102,200
48	65.6	95.1	97,600
50	64.3	94.1	92,100
55	61.0	91.3	80,400
60	57.5	88.0	71,200
65	53.9	84.3	63,600
70	50.1	80.1	57,400
75	46.0	75.3	52,100
80	41.7	69.7	47,600
85	36.8	63.0	43,700
90	31.3	55.0	40,200
94	26.1	47.0	37,800

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ASME B30.5



110,500 lb
+
35,000 lb



108.3 ft

ft	°	ft	lb
26	80.3	113.1	177,600
28	79.2	112.6	167,900
30	78.1	112.2	156,700
32	77.0	111.6	146,900
34	75.9	111.1	138,200
36	74.8	110.5	130,600
38	73.7	109.9	123,700
40	72.6	109.2	117,500
42	71.4	108.4	111,900
44	70.3	107.7	106,800
46	69.2	106.9	102,200
48	68.0	106.0	97,500
50	66.8	105.1	92,000
55	63.9	102.6	80,300
60	60.8	99.7	71,100
65	57.7	96.5	63,500
70	54.4	92.9	57,300
75	51.0	88.8	52,000
80	47.4	84.2	47,500
85	43.6	78.9	43,600
90	39.4	72.9	40,200
95	34.8	65.8	37,100
100	29.6	57.2	34,500
103	25.9	51.0	33,000

118.1 ft

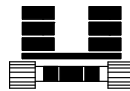
ft	°	ft	lb
28	80.1	122.7	167,900
30	79.1	122.3	156,700
32	78.1	121.8	146,900
34	77.1	121.3	138,200
36	76.1	120.8	130,600
38	75.1	120.2	123,700
40	74.1	119.5	117,500
42	73.1	118.9	111,900
44	72.0	118.2	106,800
46	71.0	117.5	102,200
48	69.9	116.7	97,300
50	68.9	115.8	91,800
55	66.2	113.6	80,100
60	63.5	111.1	70,800
65	60.7	108.2	63,300
70	57.9	105.0	57,000
75	54.9	101.5	51,700
80	51.8	97.5	47,200
85	48.5	93.0	43,300
90	45.1	88.0	39,900
95	41.4	82.4	36,900
100	37.5	75.9	34,200
105	33.1	68.3	31,800
110	28.0	59.2	29,600
112	25.8	55.0	28,800

128.0 ft

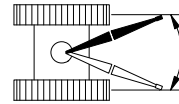
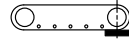
ft	°	ft	lb
29	80.4	132.5	162,100
30	80.0	132.3	156,700
32	79.0	131.9	146,900
34	78.1	131.4	138,200
36	77.2	130.9	130,600
38	76.3	130.4	123,700
40	75.3	129.8	117,500
42	74.4	129.2	111,900
44	73.5	128.6	106,800
46	72.5	127.9	102,200
48	71.6	127.2	97,100
50	70.6	126.5	91,600
55	68.2	124.4	79,900
60	65.7	122.1	70,600
65	63.2	119.5	63,100
70	60.6	116.7	56,800
75	58.0	113.5	51,500
80	55.3	110.0	47,000
85	52.4	106.1	43,100
90	49.5	101.8	39,700
95	46.4	97.0	36,600
100	43.1	91.7	34,000
105	39.6	85.6	31,600
110	35.8	78.8	29,400
115	31.5	70.8	27,500
120	26.7	61.1	25,700
121	25.6	58.9	25,300

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ASME B30.5



110,500 lb
+
35,000 lb



137.8 ft

ft	o	ft	lb
31	80.3	142.2	151,600
32	79.8	142.0	146,900
34	79.0	141.5	138,200
36	78.1	141.1	130,600
38	77.3	140.6	123,700
40	76.4	140.1	117,500
42	75.6	139.5	111,900
44	74.7	138.9	106,800
46	73.8	138.3	102,200
48	72.9	137.6	96,900
50	72.1	136.9	91,300
55	69.8	135.1	79,700
60	67.6	133.0	70,400
65	65.3	130.6	62,800
70	62.9	128.0	56,500
75	60.6	125.2	51,200
80	58.1	122.0	46,700
85	55.6	118.5	42,800
90	53.0	114.7	39,400
95	50.2	110.5	36,300
100	47.4	105.9	33,700
105	44.4	100.8	31,300
110	41.3	95.1	29,100
115	37.9	88.7	27,200
120	34.3	81.5	25,400
125	30.2	73.0	23,800
130	25.5	62.9	22,300

147.6 ft

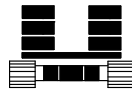
ft	o	ft	lb
33	80.1	151.8	142,000
34	79.7	151.6	138,200
36	78.9	151.2	130,600
38	78.1	150.7	123,700
40	77.3	150.2	117,500
42	76.5	149.7	111,900
44	75.7	149.2	106,800
46	74.9	148.6	102,200
48	74.1	148.0	96,700
50	73.3	147.3	91,100
55	71.2	145.6	79,400
60	69.2	143.7	70,100
65	67.1	141.5	62,600
70	64.9	139.1	56,300
75	62.7	136.5	51,000
80	60.5	133.6	46,500
85	58.2	130.5	42,600
90	55.8	127.1	39,100
95	53.4	123.3	36,100
100	50.9	119.2	33,400
105	48.3	114.7	31,100
110	45.6	109.8	28,900
115	42.7	104.4	27,000
120	39.7	98.4	25,200
125	36.4	91.7	23,600
130	32.9	84.0	22,100
135	28.9	75.2	20,700
139	25.4	66.9	19,700

157.5 ft

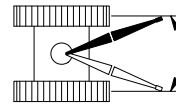
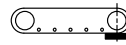
ft	o	ft	lb
34	80.4	161.6	133,100
36	79.6	161.2	130,000
38	78.9	160.8	123,700
40	78.1	160.4	117,500
42	77.4	159.9	111,900
44	76.6	159.4	106,800
46	75.9	158.8	102,200
48	75.1	158.3	96,500
50	74.4	157.7	90,900
55	72.5	156.0	79,200
60	70.5	154.2	69,900
65	68.6	152.2	62,300
70	66.6	150.0	56,000
75	64.6	147.6	50,700
80	62.5	145.0	46,200
85	60.4	142.1	42,200
90	58.3	139.0	38,800
95	56.1	135.6	35,800
100	53.8	131.9	33,100
105	51.5	127.9	30,700
110	49.1	123.5	28,600
115	46.6	118.8	26,600
120	43.9	113.6	24,900
125	41.2	107.9	23,300
130	38.2	101.5	21,800
135	35.1	94.5	20,400
140	31.7	86.5	19,100
145	27.8	77.2	18,000
148	25.3	70.9	17,300

MLC150-1 S-2

ASME B30.5



110,500 lb
+
35,000 lb



167.3 ft

ft	o	ft	lb
36	80.3	171.3	123,000
38	79.6	170.9	120,100
40	78.9	170.4	117,200
42	78.2	170.0	111,900
44	77.5	169.5	106,800
46	76.7	169.0	102,200
48	76.0	168.5	96,300
50	75.3	167.9	90,700
55	73.5	166.4	78,900
60	71.7	164.7	69,600
65	69.9	162.8	62,000
70	68.1	160.8	55,700
75	66.2	158.6	50,400
80	64.3	156.1	45,900
85	62.3	153.5	42,000
90	60.4	150.6	38,500
95	58.3	147.5	35,500
100	56.3	144.1	32,800
105	54.2	140.5	30,400
110	52.0	136.5	28,300
115	49.7	132.3	26,300
120	47.4	127.6	24,600
125	45.0	122.6	23,000
130	42.4	117.2	21,500
135	39.8	111.2	20,100
140	36.9	104.5	18,800
145	33.9	97.2	17,700
150	30.5	88.8	16,600
155	26.8	79.2	15,600
157	25.2	74.8	15,200

177.2 ft

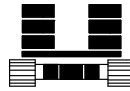
ft	o	ft	lb
37	80.5	181.1	113,100
38	80.1	180.9	111,700
40	79.5	180.5	109,000
42	78.8	180.1	106,300
44	78.2	179.6	103,800
46	77.5	179.2	101,400
48	76.8	178.7	96,000
50	76.2	178.1	90,400
55	74.5	176.7	78,700
60	72.8	175.1	69,300
65	71.1	173.4	61,700
70	69.3	171.5	55,400
75	67.6	169.4	50,100
80	65.8	167.1	45,600
85	64.0	164.6	41,600
90	62.2	161.9	38,200
95	60.3	159.1	35,200
100	58.4	155.9	32,500
105	56.5	152.6	30,100
110	54.5	149.0	28,000
115	52.4	145.1	26,000
120	50.3	141.0	24,200
125	48.1	136.5	22,600
130	45.9	131.6	21,100
135	43.5	126.3	19,800
140	41.1	120.6	18,500
145	38.5	114.3	17,300
150	35.7	107.4	16,300
155	32.8	99.7	15,200
160	29.5	91.1	14,300
165	25.9	81.0	13,400
166	25.1	78.8	13,200

187.0 ft

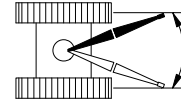
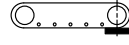
ft	o	ft	lb
39	80.4	190.7	103,800
40	80.0	190.5	102,600
42	79.4	190.1	100,200
44	78.8	189.7	97,900
46	78.2	189.3	95,500
48	77.5	188.8	93,300
50	76.9	188.3	90,200
55	75.3	187.0	78,400
60	73.7	185.5	69,100
65	72.1	183.8	61,500
70	70.5	182.0	55,200
75	68.8	180.0	49,800
80	67.2	177.9	45,300
85	65.5	175.6	41,400
90	63.8	173.1	37,900
95	62.0	170.4	34,900
100	60.3	167.5	32,200
105	58.5	164.4	29,800
110	56.6	161.1	27,700
115	54.7	157.5	25,700
120	52.8	153.7	24,000
125	50.8	149.6	22,300
130	48.8	145.2	20,900
135	46.7	140.5	19,500
140	44.5	135.4	18,200
145	42.2	129.9	17,100
150	39.8	123.9	16,000
155	37.3	117.4	15,000
160	34.6	110.2	14,000
165	31.7	102.2	13,100
170	28.6	93.2	12,300
175	25.1	82.8	11,400

MLC150-1 S-2

ASME B30.5



110,500 lb
+
35,000 lb



196.9 ft

ft	o	ft	lb
41	80.3	200.4	95,100
42	80.0	200.2	94,000
44	79.4	199.8	91,800
46	78.8	199.4	89,700
48	78.2	198.9	87,500
50	77.6	198.4	85,300
55	76.1	197.2	78,200
60	74.6	195.8	68,800
65	73.0	194.2	61,200
70	71.5	192.5	54,900
75	70.0	190.6	49,500
80	68.4	188.6	45,000
85	66.8	186.4	41,100
90	65.2	184.1	37,600
95	63.6	181.6	34,600
100	61.9	178.9	31,900
105	60.2	176.0	29,500
110	58.5	172.9	27,300
115	56.8	169.6	25,400
120	55.0	166.1	23,600
125	53.2	162.3	22,000
130	51.3	158.3	20,500
135	49.4	154.0	19,200
140	47.4	149.4	17,900
145	45.4	144.4	16,700
150	43.2	139.1	15,600
155	41.0	133.3	14,600
160	38.7	127.1	13,700
165	36.2	120.3	12,800
170	33.6	112.9	12,000
175	30.8	104.6	11,200
180	27.7	95.2	10,300
183	25.7	89.0	9,700

206.7 ft

ft	o	ft	lb
42	80.4	210.2	84,100
44	79.9	209.8	83,100
46	79.3	209.4	82,200
48	78.7	209.0	80,500
50	78.2	208.5	78,500
55	76.8	207.3	73,900
60	75.3	206.0	68,500
65	73.9	204.5	60,900
70	72.4	202.9	54,600
75	70.9	201.1	49,200
80	69.5	199.2	44,700
85	68.0	197.2	40,700
90	66.5	195.0	37,300
95	64.9	192.6	34,300
100	63.4	190.1	31,600
105	61.8	187.4	29,200
110	60.2	184.5	27,000
115	58.6	181.4	25,100
120	56.9	178.1	23,300
125	55.2	174.6	21,700
130	53.5	170.9	20,200
135	51.7	166.9	18,800
140	49.9	162.7	17,600
145	48.0	158.2	16,400
150	46.1	153.4	15,300
155	44.1	148.2	14,300
160	42.0	142.6	13,400
165	39.9	136.7	12,500
170	37.6	130.2	11,600
175	35.2	123.2	10,900
180	32.7	115.4	10,100
185	29.9	106.9	9,200
190	26.9	97.2	8,300
192	25.6	93.0	7,900

216.5 ft

ft	o	ft	lb
44	80.3	219.8	74,500
46	79.8	219.5	73,600
48	79.3	219.0	72,800
50	78.7	218.6	71,900
55	77.4	217.5	69,100
60	76.0	216.2	64,900
65	74.6	214.8	60,600
70	73.2	213.3	54,300
75	71.9	211.6	48,900
80	70.4	209.8	44,400
85	69.0	207.8	40,400
90	67.6	205.8	37,000
95	66.1	203.5	33,900
100	64.7	201.1	31,200
105	63.2	198.6	28,800
110	61.7	195.9	26,700
115	60.2	193.0	24,700
120	58.6	189.9	22,900
125	57.0	186.6	21,300
130	55.4	183.1	19,800
135	53.8	179.5	18,500
140	52.1	175.5	17,200
145	50.4	171.4	16,000
150	48.6	167.0	15,000
155	46.8	162.2	13,900
160	44.9	157.2	13,000
165	43.0	151.8	12,100
170	40.9	146.1	11,300
175	38.8	139.9	10,500
180	36.6	133.2	9,800
185	34.3	125.9	9,000
190	31.8	117.9	8,100
195	29.1	109.1	7,200
200	26.2	99.1	6,300
201	25.5	97.0	6,200