

Liftcrane Boom Capacities

Boom No. B20:350


50 120 kg Crane Counterweight

15 880 kg 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 7 980 mm crawlers, 1 200 mm treads, 5 300 mm gantry, 10 part boom hoist reeving, boom straps, 50 120 kg crane counterweight, and 15 880 kg 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 (m)	Over End of Blocked Crawlers
	Block Weight (kg)
15,0 - 57,0	3 475
60,0	3 125
63,0	900
66,0	#

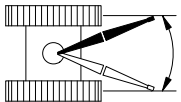
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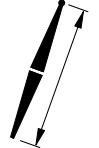
Explanation of Symbols


B20  Boom No. B20:350


 Crane Counterweight
+
Carbody Counterweight

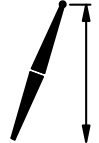
 Blocked Crawler


 Limited Swing

 Boom Length

 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

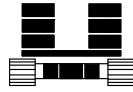
 Boom Point Elevation
(see page 1)

 Lifting Capacities
(see page 1)

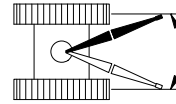
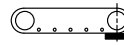
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MLC150-1 S-2

ASME B30.5



50 120 kg
+
15 880 kg



15,0 m

m	°	m	kg
4,9	80,3	16,7	74 800
5,0	79,8	16,7	74 800
5,5	77,8	16,5	74 800
6,0	75,8	16,4	74 800
6,5	73,8	16,2	74 800
7,0	71,7	16,0	74 800
8,0	67,5	15,6	74 100
9,0	63,2	15,0	64 500
10,0	58,6	14,3	56 300
11,0	53,8	13,6	50 200
12,0	48,5	12,6	45 900
13,0	42,8	11,5	42 800
14,0	36,1	10,1	40 800
15,0	27,9	8,2	39 600
15,2	25,5	7,6	39 200

18,0 m

m	°	m	kg
5,5	79,9	19,7	80 500
6,0	78,2	19,5	80 500
6,5	76,6	19,4	80 500
7,0	74,9	19,2	80 500
8,0	71,5	18,9	80 000
9,0	68,1	18,4	72 200
10,0	64,5	17,9	65 000
11,0	60,8	17,3	59 100
12,0	56,9	16,6	54 200
13,0	52,9	15,8	50 000
14,0	48,5	14,9	46 400
15,0	43,8	13,8	42 800
16,0	38,6	12,5	39 200
17,0	32,6	10,9	35 800
18,0	25,4	8,8	33 100

21,0 m

m	°	m	kg
6,1	79,7	22,6	80 500
6,5	78,6	22,5	80 500
7,0	77,1	22,4	80 500
8,0	74,3	22,0	80 000
9,0	71,4	21,7	72 200
10,0	68,4	21,2	65 000
11,0	65,4	20,8	59 100
12,0	62,3	20,2	54 200
13,0	59,0	19,6	50 000
14,0	55,7	18,8	46 400
15,0	52,2	18,0	42 900
16,0	48,4	17,1	39 300
17,0	44,5	16,0	36 000
18,0	40,2	14,8	33 200
19,0	35,4	13,4	30 800
20,0	29,8	11,6	28 600
20,7	25,0	10,0	27 200

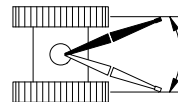
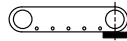
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MLC150-1 S-2

ASME B30.5



50 120 kg
+
15 880 kg



24,0 m			
m	°	m	kg
6,4	80,3	25,6	80 500
6,5	80,0	25,6	80 500
7,0	78,8	25,4	80 500
8,0	76,3	25,2	80 000
9,0	73,8	24,9	72 200
10,0	71,3	24,5	65 000
11,0	68,7	24,1	59 100
12,0	66,0	23,6	54 200
13,0	63,3	23,1	50 000
14,0	60,6	22,5	46 400
15,0	57,7	21,8	42 800
16,0	54,7	21,1	39 200
17,0	51,6	20,2	35 900
18,0	48,4	19,3	33 200
19,0	44,9	18,3	30 800
20,0	41,3	17,1	28 600
22,0	32,8	14,2	25 100
23,2	26,7	11,9	23 300

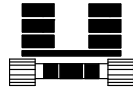
27,0 m			
m	°	m	kg
7,0	80,0	28,5	80 500
8,0	77,9	28,3	80 000
9,0	75,7	28,0	72 200
10,0	73,4	27,7	65 000
11,0	71,2	27,3	59 100
12,0	68,9	26,9	54 200
13,0	66,6	26,5	50 000
14,0	64,2	25,9	46 400
15,0	61,8	25,4	42 800
16,0	59,3	24,8	39 200
17,0	56,7	24,1	35 900
18,0	54,0	23,3	33 100
19,0	51,3	22,5	30 800
20,0	48,4	21,6	28 600
22,0	42,2	19,4	25 100
24,0	35,0	16,7	22 200
25,9	26,4	13,1	19 900

30,0 m			
m	°	m	kg
7,3	80,4	31,5	80 500
8,0	79,1	31,4	80 000
9,0	77,1	31,1	72 200
10,0	75,2	30,8	65 000
11,0	73,1	30,5	59 100
12,0	71,1	30,1	54 200
13,0	69,1	29,7	50 000
14,0	67,0	29,3	46 400
15,0	64,8	28,8	42 700
16,0	62,7	28,3	39 100
17,0	60,4	27,7	35 800
18,0	58,2	27,0	33 100
19,0	55,8	26,3	30 700
20,0	53,4	25,5	28 500
22,0	48,3	23,8	25 000
24,0	42,8	21,7	22 100
26,0	36,5	19,1	19 700
28,0	29,0	15,7	17 700
28,7	26,1	14,3	17 100

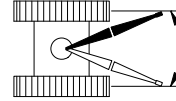
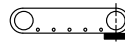
REFERENCED

MLC150-1 S-2

ASME B30.5



50 120 kg
+
15 880 kg



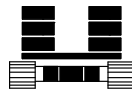
33,0 m			
m	°	m	kg
7,9	80,3	34,5	80 500
8,0	80,1	34,5	80 000
9,0	78,3	34,2	72 200
10,0	76,6	34,0	65 000
11,0	74,7	33,7	59 100
12,0	72,9	33,4	54 200
13,0	71,1	33,0	50 000
14,0	69,2	32,6	46 400
15,0	67,3	32,1	42 700
16,0	65,4	31,7	39 100
17,0	63,4	31,1	35 800
18,0	61,4	30,6	33 000
19,0	59,4	30,0	30 600
20,0	57,3	29,3	28 400
22,0	53,0	27,8	24 900
24,0	48,4	26,0	22 000
26,0	43,4	24,0	19 600
28,0	37,8	21,5	17 700
30,0	31,4	18,3	16 000
31,4	26,0	15,6	14 900

36,0 m			
m	°	m	kg
8,5	80,1	37,4	76 100
9,0	79,3	37,3	72 200
10,0	77,7	37,1	65 000
11,0	76,0	36,8	59 100
12,0	74,4	36,5	54 200
13,0	72,7	36,2	50 000
14,0	71,0	35,8	46 400
15,0	69,3	35,4	42 600
16,0	67,6	35,0	39 000
17,0	65,8	34,5	35 700
18,0	64,0	34,0	32 900
19,0	62,2	33,5	30 500
20,0	60,4	32,9	28 300
22,0	56,6	31,5	24 800
24,0	52,6	30,0	21 900
26,0	48,3	28,3	19 500
28,0	43,8	26,2	17 600
30,0	38,8	23,8	15 900
32,0	33,1	20,8	14 400
34,0	26,3	17,0	13 100
34,1	25,7	16,7	13 000

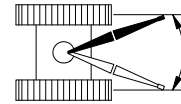
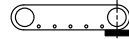
39,0 m			
m	°	m	kg
8,8	80,4	40,4	73 500
9,0	80,2	40,4	72 200
10,0	78,7	40,2	65 000
11,0	77,2	39,9	59 100
12,0	75,6	39,6	54 200
13,0	74,1	39,3	50 000
14,0	72,6	39,0	46 400
15,0	71,0	38,6	42 500
16,0	69,4	38,3	38 900
17,0	67,8	37,8	35 600
18,0	66,2	37,4	32 800
19,0	64,6	36,9	30 400
20,0	62,9	36,3	28 200
22,0	59,5	35,2	24 700
24,0	56,0	33,8	21 800
26,0	52,3	32,3	19 400
28,0	48,3	30,5	17 500
30,0	44,2	28,5	15 800
32,0	39,6	26,1	14 300
34,0	34,5	23,3	13 000
36,0	28,7	19,8	11 900
36,9	25,6	18,0	11 500

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ASME B30.5



50 120 kg
+
15 880 kg



42,0 m

m	o	m	kg
9,4	80,3	43,3	68 700
10,0	79,5	43,2	65 000
11,0	78,1	43,0	59 100
12,0	76,7	42,7	54 200
13,0	75,3	42,5	50 000
14,0	73,8	42,2	46 400
15,0	72,4	41,8	42 400
16,0	71,0	41,5	38 800
17,0	69,5	41,1	35 400
18,0	68,0	40,7	32 700
19,0	66,5	40,2	30 300
20,0	65,0	39,7	28 100
22,0	61,9	38,7	24 600
24,0	58,7	37,4	21 700
26,0	55,4	36,1	19 300
28,0	52,0	34,5	17 300
30,0	48,3	32,7	15 600
32,0	44,4	30,7	14 200
34,0	40,3	28,4	12 900
36,0	35,7	25,7	11 800
38,0	30,5	22,4	10 800
39,6	25,5	19,2	10 100

45,0 m

m	o	m	kg
10,1	80,1	46,3	64 400
11,0	78,9	46,1	59 100
12,0	77,6	45,8	54 200
13,0	76,3	45,6	50 000
14,0	74,9	45,3	46 400
15,0	73,6	45,0	42 300
16,0	72,3	44,6	38 700
17,0	70,9	44,3	35 300
18,0	69,6	43,9	32 600
19,0	68,2	43,5	30 200
20,0	66,8	43,0	28 000
22,0	63,9	42,1	24 500
24,0	61,0	40,9	21 600
26,0	58,0	39,7	19 200
28,0	54,9	38,3	17 200
30,0	51,7	36,7	15 500
32,0	48,3	35,0	14 100
34,0	44,7	33,0	12 800
36,0	40,8	30,7	11 700
38,0	36,6	28,1	10 700
40,0	31,9	25,0	9 800
42,0	26,5	21,2	9 000
42,4	25,3	20,4	8 900

48,0 m

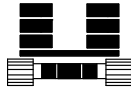
m	o	m	kg
10,4	80,4	49,3	60 400
11,0	79,6	49,1	58 800
12,0	78,4	48,9	54 200
13,0	77,2	48,7	50 000
14,0	75,9	48,4	46 400
15,0	74,7	48,1	42 200
16,0	73,4	47,8	38 600
17,0	72,2	47,5	35 200
18,0	70,9	47,1	32 500
19,0	69,6	46,7	30 100
20,0	68,3	46,3	27 900
22,0	65,7	45,4	24 300
24,0	63,0	44,4	21 400
26,0	60,3	43,3	19 000
28,0	57,5	42,0	17 100
30,0	54,5	40,6	15 400
32,0	51,5	39,0	13 900
34,0	48,3	37,2	12 700
36,0	44,9	35,2	11 600
38,0	41,4	33,0	10 600
40,0	37,5	30,5	9 700
42,0	33,2	27,5	8 900
44,0	28,4	23,9	8 200
45,1	25,3	21,6	7 800

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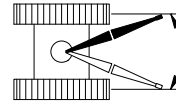
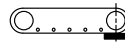
ASME B30.5



B20



50 120 kg
+
15 880 kg



51,0 m			
m	o	m	kg
11,0	80,3	52,2	55 800
12,0	79,1	52,0	53 500
13,0	77,9	51,8	50 000
14,0	76,8	51,5	46 400
15,0	75,6	51,2	42 100
16,0	74,4	50,9	38 400
17,0	73,3	50,6	35 100
18,0	72,1	50,3	32 300
19,0	70,9	49,9	29 900
20,0	69,7	49,6	27 800
22,0	67,2	48,7	24 200
24,0	64,7	47,8	21 300
26,0	62,2	46,7	18 900
28,0	59,6	45,5	16 900
30,0	56,9	44,2	15 300
32,0	54,2	42,8	13 800
34,0	51,3	41,2	12 500
36,0	48,3	39,4	11 400
38,0	45,1	37,5	10 400
40,0	41,8	35,3	9 600
42,0	38,2	32,8	8 800
44,0	34,3	29,9	8 100
46,0	29,9	26,6	7 400
47,9	25,2	22,8	6 900

54,0 m			
m	o	m	kg
11,3	80,5	55,2	51 300
12,0	79,7	55,1	49 800
13,0	78,6	54,9	47 800
14,0	77,5	54,6	46 000
15,0	76,4	54,4	42 000
16,0	75,3	54,1	38 300
17,0	74,2	53,8	35 000
18,0	73,1	53,5	32 200
19,0	72,0	53,1	29 800
20,0	70,9	52,8	27 600
22,0	68,6	52,0	24 100
24,0	66,3	51,1	21 200
26,0	63,9	50,1	18 800
28,0	61,5	49,0	16 800
30,0	59,0	47,9	15 100
32,0	56,5	46,5	13 600
34,0	53,8	45,1	12 400
36,0	51,1	43,5	11 300
38,0	48,3	41,7	10 300
40,0	45,3	39,7	9 400
42,0	42,2	37,6	8 600
44,0	38,8	35,1	7 900
46,0	35,2	32,4	7 300
48,0	31,2	29,2	6 700
50,0	26,7	25,3	6 100
50,6	25,1	24,0	6 000

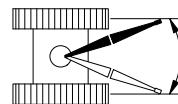
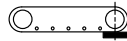
57,0 m			
m	o	m	kg
11,9	80,4	58,1	47 000
12,0	80,2	58,1	46 800
13,0	79,2	57,9	45 100
14,0	78,2	57,7	43 300
15,0	77,2	57,5	41 400
16,0	76,1	57,2	38 200
17,0	75,1	56,9	34 900
18,0	74,0	56,6	32 100
19,0	73,0	56,3	29 700
20,0	71,9	56,0	27 500
22,0	69,8	55,2	23 900
24,0	67,6	54,4	21 000
26,0	65,4	53,5	18 600
28,0	63,1	52,5	16 700
30,0	60,8	51,3	15 000
32,0	58,5	50,1	13 500
34,0	56,0	48,8	12 300
36,0	53,5	47,3	11 100
38,0	51,0	45,7	10 200
40,0	48,3	43,9	9 300
42,0	45,5	42,0	8 500
44,0	42,5	39,8	7 800
46,0	39,4	37,4	7 100
48,0	36,0	34,7	6 600
50,0	32,3	31,6	6 000
52,0	28,2	28,0	5 500
53,3	25,0	25,2	5 200

MLC150-1 S-2

ASME B30.5



50 120 kg
+
15 880 kg



60,0 m

m	o	m	kg
12,5	80,3	61,1	43 100
13,0	79,8	61,0	42 300
14,0	78,8	60,8	40 700
15,0	77,8	60,6	39 100
16,0	76,8	60,3	37 100
17,0	75,8	60,0	34 800
18,0	74,8	59,8	32 000
19,0	73,9	59,5	29 600
20,0	72,9	59,1	27 400
22,0	70,8	58,4	23 800
24,0	68,8	57,7	20 900
26,0	66,7	56,8	18 500
28,0	64,6	55,9	16 500
30,0	62,4	54,8	14 800
32,0	60,2	53,7	13 400
34,0	58,0	52,4	12 100
36,0	55,7	51,1	11 000
38,0	53,3	49,6	10 000
40,0	50,8	47,9	9 100
42,0	48,3	46,2	8 300
44,0	45,6	44,2	7 600
46,0	42,8	42,1	7 000
48,0	39,9	39,7	6 400
50,0	36,7	37,1	5 900
52,0	33,3	34,1	5 400
54,0	29,5	30,7	4 900
55,8	25,7	27,2	4 400

63,0 m

m	o	m	kg
12,8	80,4	64,1	38 100
13,0	80,3	64,0	38 000
14,0	79,3	63,8	37 300
15,0	78,4	63,6	35 900
16,0	77,5	63,4	34 500
17,0	76,5	63,1	33 100
18,0	75,6	62,9	31 500
19,0	74,6	62,6	29 400
20,0	73,7	62,3	27 200
22,0	71,8	61,6	23 700
24,0	69,8	60,9	20 800
26,0	67,9	60,1	18 400
28,0	65,9	59,2	16 400
30,0	63,9	58,2	14 700
32,0	61,8	57,1	13 200
34,0	59,7	55,9	12 000
36,0	57,5	54,7	10 800
38,0	55,3	53,3	9 900
40,0	53,0	51,8	9 000
42,0	50,7	50,2	8 200
44,0	48,3	48,4	7 500
46,0	45,7	46,5	6 800
48,0	43,1	44,3	6 200
50,0	40,3	42,0	5 700
52,0	37,3	39,4	5 200
54,0	34,1	36,6	4 800
56,0	30,6	33,3	4 300
58,0	26,7	29,5	3 700
58,5	25,6	28,3	3 600

66,0 m

m	o	m	kg
13,4	80,3	67,0	33 800
14,0	79,8	66,9	33 400
15,0	78,9	66,7	32 700
16,0	78,0	66,5	31 900
17,0	77,2	66,2	31 000
18,0	76,3	66,0	29 800
19,0	75,4	65,7	28 500
20,0	74,5	65,4	27 100
22,0	72,6	64,8	23 500
24,0	70,8	64,1	20 600
26,0	68,9	63,3	18 200
28,0	67,0	62,5	16 200
30,0	65,1	61,5	14 500
32,0	63,2	60,5	13 100
34,0	61,2	59,4	11 800
36,0	59,2	58,2	10 700
38,0	57,1	56,9	9 700
40,0	55,0	55,5	8 800
42,0	52,8	54,0	8 000
44,0	50,6	52,4	7 300
46,0	48,3	50,6	6 700
48,0	45,8	48,7	6 100
50,0	43,3	46,6	5 500
52,0	40,7	44,3	5 100
54,0	37,9	41,8	4 600
56,0	34,9	38,9	4 100
58,0	31,6	35,8	3 600
60,0	28,0	32,1	3 100
61,3	25,5	29,5	2 800