


# Liftcrane Boom Capacities

**Boom No. B10:290**  
**33 120 kg Crane Counterweight**  
**10 500 kg Carbody Counterweight**  
**Rating Over End of Blocked Crawlers**  
**No Travel - Limited Swing**

## 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 9 070 kg. When Drum 1 or Drum 2 is used, capacity with single part whip line is 12 520 kg. 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. 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 **No. 9766-A**. 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.



**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 6 480 mm crawlers, 900 mm treads, 4 390 mm gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 33 120 kg crane counterweight, and 10 500 kg carbody counterweight.

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

Upper Boom Point Deduct
Deduct 260 kg from capacities when upper boom point is attached. Deduct does not apply to 19,0 m boom length.

Third Line Deduct
Deduct 120 kg 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 (m)	Deduct (kg)
9,1	2 050
12,2	2 400
15,2	2 800
18,3	3 350
Weight of jib and 325 kg 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.

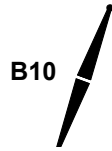
Combined weight beneath boom point sheaves must not exceed block weight shown.

**Table 1**

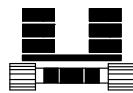
Boom Length (m)	<b>Over End of Blocked Crawlers</b>
	Block Weight (kg)
19,0 - 49,0	1 725
52,0	1 200
55,0 - 61,0	325

REFERENCE ONLY!

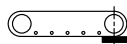
Explanation of Symbols



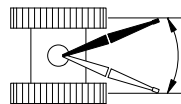
Boom No. B10:290



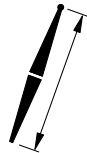
Crane Counterweight  
+  
Carbody Counterweight



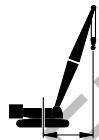
Blocked Crawler



Limited Swing



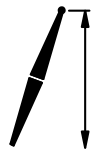
Boom Length



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)



Boom Point Elevation  
(see page 1)

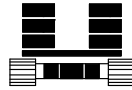
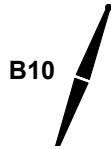


Lifting Capacities  
(see page 1)

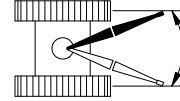
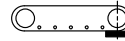
REFERENCE ONLY!

# MLC80A-1 S-2

ASME B30.5



33 120 kg  
+  
10 500 kg



**19,0 m**

m	°	m	kg
4,6	80,3	20,8	72 500
5,0	78,9	20,7	71 800
5,5	77,4	20,6	66 800
6,0	75,8	20,5	61 500
6,5	74,3	20,3	56 900
7,0	72,7	20,2	52 700
7,5	71,1	20,0	48 700
8,0	69,5	19,8	44 700
8,5	67,9	19,6	41 300
9,0	66,2	19,4	38 400
9,5	64,5	19,2	35 800
10,0	62,8	18,9	33 500
10,5	61,1	18,6	31 400
11,0	59,4	18,3	29 400
11,5	57,6	18,0	27 700
12,0	55,8	17,7	26 100
13,0	52,0	16,9	23 400
14,0	48,0	16,1	21 100
15,0	43,8	15,1	19 100
16,0	39,1	13,9	17 400
17,0	34,0	12,5	15 700
18,0	28,0	10,8	13 800

**22,0 m**

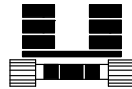
m	°	m	kg
4,9	80,8	23,8	72 100
5,0	80,5	23,8	71 600
5,5	79,1	23,7	66 900
6,0	77,8	23,6	61 500
6,5	76,5	23,5	57 000
7,0	75,1	23,3	53 000
7,5	73,8	23,2	49 300
8,0	72,4	23,0	45 700
8,5	71,0	22,9	42 200
9,0	69,6	22,7	39 200
9,5	68,2	22,5	36 600
10,0	66,8	22,3	34 300
10,5	65,4	22,0	32 200
11,0	64,0	21,8	30 300
11,5	62,5	21,5	28 700
12,0	61,0	21,3	27 200
13,0	58,0	20,6	24 500
14,0	54,8	20,0	22 100
15,0	51,5	19,2	20 100
16,0	48,1	18,3	18 400
17,0	44,4	17,4	16 800
18,0	40,5	16,2	15 400
19,0	36,3	15,0	14 200
20,0	31,6	13,4	13 000
21,0	26,0	11,6	11 500

**25,0 m**

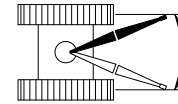
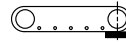
m	°	m	kg
5,5	80,5	26,7	64 700
6,0	79,3	26,6	61 400
6,5	78,1	26,5	56 900
7,0	76,9	26,4	52 900
7,5	75,8	26,3	49 300
8,0	74,6	26,1	46 100
8,5	73,4	26,0	42 500
9,0	72,2	25,8	39 500
9,5	71,0	25,7	36 800
10,0	69,7	25,5	34 500
10,5	68,5	25,3	32 400
11,0	67,3	25,1	30 500
11,5	66,0	24,9	28 800
12,0	64,7	24,6	27 300
13,0	62,2	24,1	24 600
14,0	59,5	23,5	22 300
15,0	56,8	22,9	20 300
16,0	54,0	22,2	18 600
17,0	51,1	21,4	17 100
18,0	48,1	20,6	15 700
19,0	44,9	19,6	14 500
20,0	41,5	18,5	13 400
21,0	37,9	17,3	12 500
22,0	33,9	15,9	11 600
23,0	29,5	14,2	10 700
24,0	24,3	12,2	9 400

# MLC80A-1 S-2

ASME B30.5



33 120 kg  
+  
10 500 kg



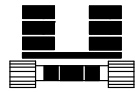
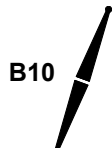
28,0 m			
m	°	m	kg
5,8	80,9	29,7	58 600
6,0	80,5	29,7	57 900
6,5	79,4	29,6	55 800
7,0	78,4	29,5	52 800
7,5	77,3	29,4	49 300
8,0	76,3	29,3	46 100
8,5	75,2	29,1	43 200
9,0	74,2	29,0	40 100
9,5	73,1	28,8	37 400
10,0	72,0	28,7	35 000
10,5	70,9	28,5	32 800
11,0	69,8	28,3	30 900
11,5	68,7	28,1	29 100
12,0	67,6	27,9	27 600
13,0	65,4	27,5	24 700
14,0	63,1	27,0	22 300
15,0	60,8	26,5	20 300
16,0	58,4	25,9	18 600
17,0	56,0	25,2	17 100
18,0	53,4	24,5	15 900
19,0	50,8	23,7	14 700
20,0	48,1	22,8	13 700
21,0	45,3	21,9	12 800
22,0	42,3	20,8	11 900
23,0	39,1	19,6	11 100
24,0	35,7	18,3	10 400
25,0	32,0	16,8	9 700
26,0	27,9	15,0	9 000
27,0	23,0	12,8	7 900

31,0 m			
m	°	m	kg
6,7	80,1	32,6	51 900
7,0	79,5	32,6	51 100
7,5	78,6	32,5	49 000
8,0	77,6	32,3	46 000
8,5	76,7	32,2	43 300
9,0	75,7	32,1	40 300
9,5	74,8	32,0	37 600
10,0	73,8	31,8	35 100
10,5	72,8	31,7	32 900
11,0	71,9	31,5	31 000
11,5	70,9	31,3	29 200
12,0	69,9	31,1	27 500
13,0	67,9	30,8	24 600
14,0	65,9	30,3	22 200
15,0	63,8	29,8	20 200
16,0	61,8	29,3	18 600
17,0	59,6	28,7	17 000
18,0	57,5	28,1	15 800
19,0	55,2	27,4	14 700
20,0	52,9	26,7	13 600
21,0	50,6	25,9	12 800
22,0	48,1	25,0	12 000
23,0	45,6	24,1	11 200
24,0	42,9	23,0	10 500
25,0	40,1	21,9	9 800
26,0	37,1	20,6	9 200
27,0	33,8	19,2	8 600
28,0	30,3	17,6	8 100

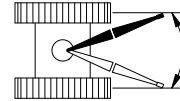
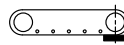
34,0 m			
m	°	m	kg
6,7	80,9	35,7	48 000
7,0	80,4	35,6	47 300
7,5	79,6	35,5	46 000
8,0	78,7	35,4	44 800
8,5	77,9	35,3	43 100
9,0	77,0	35,2	40 700
9,5	76,1	35,1	38 100
10,0	75,3	34,9	35 600
10,5	74,4	34,8	33 300
11,0	73,5	34,6	31 100
11,5	72,6	34,5	29 200
12,0	71,7	34,3	27 500
13,0	69,9	34,0	24 600
14,0	68,1	33,6	22 100
15,0	66,3	33,1	20 100
16,0	64,4	32,7	18 500
17,0	62,5	32,2	17 000
18,0	60,6	31,6	15 700
19,0	58,7	31,0	14 600
20,0	56,7	30,4	13 600
21,0	54,6	29,7	12 700
22,0	52,5	28,9	11 900
23,0	50,3	28,1	11 200
24,0	48,1	27,3	10 500
25,0	45,8	26,3	9 900
26,0	43,3	25,3	9 300
27,0	40,8	24,2	8 800
28,0	38,1	22,9	8 200
29,0	35,3	21,6	7 700
30,0	32,2	20,0	7 200
32,0	25,1	16,3	6 400

# MLC80A-1 S-2

ASME B30.5



33 120 kg  
+  
10 500 kg



**37,0 m**

m	°	m	kg
7,3	80,7	38,6	43 600
7,5	80,4	38,6	43 200
8,0	79,7	38,5	42 100
8,5	78,9	38,4	41 100
9,0	78,1	38,3	40 100
9,5	77,3	38,2	38 100
10,0	76,5	38,0	35 600
10,5	75,7	37,9	33 200
11,0	74,9	37,8	31 000
11,5	74,1	37,6	29 100
12,0	73,3	37,5	27 400
13,0	71,6	37,2	24 500
14,0	70,0	36,8	22 100
15,0	68,3	36,4	20 000
16,0	66,7	36,0	18 400
17,0	65,0	35,5	16 900
18,0	63,2	35,0	15 600
19,0	61,5	34,5	14 500
20,0	59,7	33,9	13 500
21,0	57,9	33,3	12 600
22,0	56,0	32,7	11 800
23,0	54,1	32,0	11 100
24,0	52,2	31,2	10 400
25,0	50,2	30,4	9 900
26,0	48,1	29,5	9 300
27,0	46,0	28,6	8 800
28,0	43,8	27,6	8 300
29,0	41,5	26,5	7 800
30,0	39,1	25,3	7 300
32,0	33,8	22,5	6 400
34,0	27,7	19,1	5 700

**40,0 m**

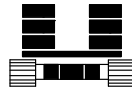
m	°	m	kg
7,9	80,6	41,5	39 600
8,0	80,4	41,5	39 500
8,5	79,7	41,4	38 500
9,0	79,0	41,3	37 600
9,5	78,2	41,2	36 700
10,0	77,5	41,1	35 200
10,5	76,8	41,0	33 200
11,0	76,0	40,9	31 000
11,5	75,3	40,7	29 000
12,0	74,6	40,6	27 300
13,0	73,1	40,3	24 400
14,0	71,6	40,0	22 000
15,0	70,0	39,6	20 000
16,0	68,5	39,2	18 300
17,0	66,9	38,8	16 800
18,0	65,4	38,4	15 500
19,0	63,8	37,9	14 400
20,0	62,2	37,4	13 400
21,0	60,5	36,8	12 500
22,0	58,9	36,2	11 700
23,0	57,2	35,6	11 000
24,0	55,4	34,9	10 400
25,0	53,7	34,2	9 800
26,0	51,9	33,4	9 200
27,0	50,0	32,6	8 800
28,0	48,1	31,7	8 300
29,0	46,1	30,8	7 800
30,0	44,1	29,8	7 400
32,0	39,8	27,5	6 500
34,0	35,0	24,9	5 800
36,0	29,6	21,7	5 100
38,0	23,1	17,6	4 500

**43,0 m**

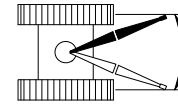
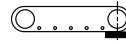
m	°	m	kg
8,5	80,4	44,5	35 300
9,0	79,8	44,4	34 500
9,5	79,1	44,3	33 600
10,0	78,4	44,2	32 800
10,5	77,7	44,1	31 900
11,0	77,0	44,0	30 900
11,5	76,4	43,9	29 000
12,0	75,7	43,7	27 300
13,0	74,3	43,5	24 300
14,0	72,9	43,2	21 900
15,0	71,5	42,8	19 900
16,0	70,1	42,5	18 200
17,0	68,7	42,1	16 700
18,0	67,2	41,7	15 500
19,0	65,8	41,2	14 300
20,0	64,3	40,8	13 300
21,0	62,8	40,3	12 400
22,0	61,3	39,7	11 700
23,0	59,7	39,1	10 900
24,0	58,2	38,5	10 300
25,0	56,6	37,9	9 700
26,0	55,0	37,2	9 100
27,0	53,3	36,5	8 700
28,0	51,6	35,7	8 200
29,0	49,9	34,9	7 800
30,0	48,1	34,0	7 400
32,0	44,4	32,1	6 500
34,0	40,5	29,8	5 800
36,0	36,1	27,3	5 100
38,0	31,3	24,3	4 500
40,0	25,6	20,5	4 000

# MLC80A-1 S-2

ASME B30.5



33 120 kg  
+  
10 500 kg



**46,0 m**

m	°	m	kg
9,1	80,3	47,4	32 000
9,5	79,8	47,3	31 500
10,0	79,2	47,2	30 700
10,5	78,5	47,1	29 900
11,0	77,9	47,0	29 200
11,5	77,3	46,9	28 500
12,0	76,6	46,8	27 100
13,0	75,3	46,6	24 300
14,0	74,0	46,3	21 800
15,0	72,7	46,0	19 800
16,0	71,4	45,6	18 200
17,0	70,1	45,3	16 600
18,0	68,8	44,9	15 400
19,0	67,4	44,5	14 200
20,0	66,1	44,1	13 200
21,0	64,7	43,6	12 400
22,0	63,3	43,1	11 600
23,0	61,9	42,6	10 800
24,0	60,5	42,0	10 200
25,0	59,0	41,4	9 600
26,0	57,6	40,8	9 000
27,0	56,1	40,1	8 600
28,0	54,5	39,4	8 100
29,0	53,0	38,7	7 700
30,0	51,4	37,9	7 300
32,0	48,1	36,2	6 500
34,0	44,7	34,3	5 800
36,0	41,0	32,1	5 100
38,0	37,0	29,6	4 500
40,0	32,6	26,7	4 000
42,0	27,6	23,2	3 500
44,0	21,5	18,8	3 000

**49,0 m**

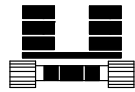
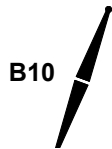
m	°	m	kg
9,1	80,9	50,5	28 500
9,5	80,4	50,4	28 200
10,0	79,8	50,3	27 900
10,5	79,2	50,2	27 600
11,0	78,7	50,1	27 200
11,5	78,1	50,0	26 600
12,0	77,5	49,9	25 900
13,0	76,3	49,7	24 200
14,0	75,0	49,4	21 700
15,0	73,8	49,1	19 700
16,0	72,6	48,8	18 100
17,0	71,4	48,5	16 500
18,0	70,1	48,1	15 300
19,0	68,9	47,8	14 100
20,0	67,6	47,3	13 100
21,0	66,4	46,9	12 200
22,0	65,1	46,5	11 500
23,0	63,8	46,0	10 700
24,0	62,5	45,5	10 100
25,0	61,1	44,9	9 500
26,0	59,8	44,3	8 900
27,0	58,4	43,7	8 500
28,0	57,0	43,1	8 000
29,0	55,6	42,4	7 600
30,0	54,2	41,7	7 200
32,0	51,2	40,2	6 500
34,0	48,1	38,5	5 700
36,0	44,9	36,6	5 100
38,0	41,5	34,4	4 500
40,0	37,8	32,0	4 000
42,0	33,8	29,2	3 500
44,0	29,3	25,9	3 000
46,0	24,0	21,8	2 600

**52,0 m**

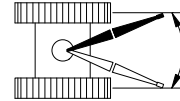
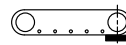
m	°	m	kg
9,8	80,7	53,4	24 100
10,0	80,4	53,4	23 900
10,5	79,9	53,3	23 700
11,0	79,3	53,2	23 400
11,5	78,7	53,1	23 100
12,0	78,2	53,0	22 900
13,0	77,1	52,7	22 300
14,0	75,9	52,5	21 300
15,0	74,8	52,2	19 600
16,0	73,6	51,9	18 000
17,0	72,5	51,6	16 500
18,0	71,3	51,3	15 200
19,0	70,2	50,9	14 100
20,0	69,0	50,6	13 000
21,0	67,8	50,2	12 200
22,0	66,6	49,7	11 400
23,0	65,4	49,3	10 600
24,0	64,2	48,8	10 000
25,0	62,9	48,3	9 400
26,0	61,7	47,8	8 900
27,0	60,4	47,2	8 400
28,0	59,1	46,6	7 900
29,0	57,8	46,0	7 500
30,0	56,5	45,4	7 100
32,0	53,8	44,0	6 400
34,0	51,0	42,4	5 800
36,0	48,1	40,7	5 100
38,0	45,1	38,8	4 500
40,0	41,9	36,7	4 000
42,0	38,4	34,3	3 500
44,0	34,7	31,5	3 100
46,0	30,6	28,4	2 700
48,0	25,9	24,6	2 300

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33 120 kg  
+  
10 500 kg



55,0 m			
m	°	m	kg
10,4	80,6	56,3	20 800
10,5	80,4	56,3	20 800
11,0	79,9	56,2	20 500
11,5	79,4	56,1	20 300
12,0	78,8	56,0	20 100
13,0	77,8	55,8	19 400
14,0	76,7	55,6	18 700
15,0	75,6	55,3	18 100
16,0	74,5	55,1	17 300
17,0	73,5	54,8	16 400
18,0	72,4	54,4	15 100
19,0	71,3	54,1	14 000
20,0	70,2	53,8	12 900
21,0	69,1	53,4	12 100
22,0	67,9	53,0	11 300
23,0	66,8	52,6	10 500
24,0	65,7	52,1	9 900
25,0	64,5	51,6	9 300
26,0	63,3	51,2	8 800
27,0	62,2	50,6	8 300
28,0	61,0	50,1	7 800
29,0	59,8	49,5	7 400
30,0	58,6	48,9	7 000
32,0	56,1	47,6	6 300
34,0	53,5	46,2	5 700
36,0	50,9	44,6	5 000
38,0	48,1	42,9	4 400
40,0	45,3	41,0	3 900
42,0	42,2	38,9	3 400
44,0	39,0	36,5	3 000
46,0	35,5	33,9	2 600
48,0	31,8	30,9	2 200
50,0	27,5	27,3	1 900

58,0 m			
m	°	m	kg
11,0	80,5	59,3	19 700
11,5	79,9	59,2	19 500
12,0	79,4	59,1	19 300
13,0	78,4	58,9	18 900
14,0	77,4	58,7	18 600
15,0	76,4	58,4	18 200
16,0	75,4	58,2	17 300
17,0	74,3	57,9	16 300
18,0	73,3	57,6	15 000
19,0	72,3	57,3	13 900
20,0	71,2	57,0	12 800
21,0	70,2	56,6	12 000
22,0	69,1	56,2	11 200
23,0	68,1	55,8	10 400
24,0	67,0	55,4	9 800
25,0	65,9	55,0	9 200
26,0	64,8	54,5	8 600
27,0	63,7	54,0	8 100
28,0	62,6	53,5	7 700
29,0	61,5	53,0	7 300
30,0	60,4	52,4	6 900
32,0	58,1	51,2	6 200
34,0	55,7	49,9	5 500
36,0	53,3	48,5	4 900
38,0	50,8	46,9	4 300
40,0	48,1	45,2	3 800
42,0	45,4	43,3	3 300
44,0	42,6	41,2	2 900
46,0	39,5	38,9	2 500
48,0	36,3	36,3	2 100
50,0	32,8	33,4	1 800

61,0 m			
m	°	m	kg
11,0	80,9	62,3	17 600
11,5	80,4	62,2	17 400
12,0	79,9	62,1	17 200
13,0	79,0	61,9	16 900
14,0	78,0	61,7	16 500
15,0	77,1	61,5	16 200
16,0	76,1	61,3	15 800
17,0	75,1	61,0	15 400
18,0	74,2	60,7	14 700
19,0	73,2	60,4	13 700
20,0	72,2	60,1	12 700
21,0	71,2	59,8	11 800
22,0	70,2	59,4	11 000
23,0	69,2	59,1	10 300
24,0	68,2	58,7	9 700
25,0	67,2	58,2	9 100
26,0	66,2	57,8	8 500
27,0	65,1	57,3	8 000
28,0	64,1	56,9	7 600
29,0	63,0	56,4	7 100
30,0	62,0	55,8	6 700
32,0	59,8	54,7	6 000
34,0	57,6	53,5	5 400
36,0	55,3	52,2	4 800
38,0	53,0	50,7	4 200
40,0	50,6	49,1	3 700
42,0	48,1	47,4	3 200
44,0	45,6	45,5	2 800
46,0	42,8	43,4	2 400
48,0	40,0	41,1	2 000