

Liftcrane Boom Capacities

Boom No. B10:500

175 200 kg VPC (Variable Position Counterweight)

Rating Over End of Blocked Crawlers

No Travel - Limited Swing

**MLC300
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 over end of machine with crawlers blocked 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 6 is 13 600 kg or 27 200 kg with two part whip line. When Drum 2 or Drum 3 is used, capacity with single part whip line is 16 600 kg or 33 300 kg with two part whip line. 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 and jib 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.

BOOM BACKWARD STABILITY: Capacities indicated by (b) require 2 270 kg minimum weight. **Caution: Do not operate in areas indicated by (b) without required minimum weight. Boom may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.**

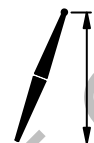
OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Drive and idler tumblers must be properly blocked so that centerline of tumblers becomes tipping fulcrum. Swing is limited to that sector shown on Operating Range Diagram **No. 9348-A**. Refer to Boom Rigging **No. 81023380**, Wire Rope Specifications chart **No. 9341-A**, Counterweight Arrangements chart **No. 9345-A**, and Wind Conditions chart **No. 9344-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 (°) 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 9 700 mm crawlers, 1 219 mm or 1 524 mm treads, 9 144 mm live mast, 24 part boom hoist reeving, boom support straps, and 175 200 kg VPC.

Consult chart **No. 9455-AM** when Jib No. 148 is attached.

Luffing Jib Backstay Deduct	
Boom Length (m)	Deduct (kg)
30,0	1 400
36,0	1 600
42,0	1 900
48,0	2 100
54,0	2 400
60,0	2 700
66,0	3 000
72,0	3 200
78,0	3 500
84,0	3 700
90,0	4 000
Deduct the appropriate value from capacities when luffing jib backstays are stored on boom.	

Deduct From Capacities When Jib No. 148 Is Attached	
Jib Length (m)	Deduct (kg)
12,0	9 100
18,0	13 800
24,0	18 100
30,0	22 100
36,0	27 800
42,0	31 300
Weight of jib and 3 000 kg suspended beneath jib point have been included in determination of deduct.	

Refer to Table 1 (with luffing jib backstays stored) and Table 2 (without luffing jib backstays stored) 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. For boom lengths shown with (a), upper boom point must be removed. Raising is not permitted in shaded areas of table.

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

Table 1: With Luffing Jib Backstays

Over End of Blocked Crawlers	
Boom Length (m)	Block Weight (kg)
30,0	10 300
36,0	10 300
42,0	10 300
48,0	10 300
54,0	10 300
60,0	10 300
66,0	10 300
72,0	7 100
78,0	3 700
84,0	#
90,0	#
96,0	Raising Not Permitted
102,0	

Table 2: Without Luffing Jib Backstays

Over End of Blocked Crawlers	
Boom Length (m)	Block Weight (kg)
30,0	10 300
36,0	10 300
42,0	10 300
48,0	10 300
54,0	10 300
60,0	10 300
66,0	10 300
72,0	10 300
78,0	7 100
84,0	3 700
90,0	#
96,0	#
(a)102,0	#

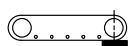
Explanation of Symbols



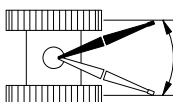
Boom No. B10:500



VPC (Variable Position Counterweight)



Blocked Crawler



Limited Swing

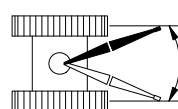
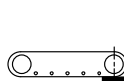


Boom Length

Operating Radius
(see page 1)Boom Angle
(see page 1)Boom Point Elevation
(see page 1)Lifting Capacities
(see page 1)



175 200 kg



30,0 m			
m	°	m	kg
5,5	84,5	31,9	300 000 b
6,0	83,5	31,9	300 000 b
6,5	82,5	31,8	296 900 b
7,0	81,6	31,7	281 400 b
8,0	79,6	31,5	253 100
9,0	77,6	31,2	230 000
10,0	75,7	31,0	210 700
12,0	71,6	30,3	179 600
14,0	67,5	29,5	144 800
16,0	63,2	28,5	119 300
18,0	58,8	27,3	101 500
20,0	54,1	25,8	88 100
22,0	49,0	24,1	77 700
24,0	43,6	22,1	69 400
26,0	37,4	19,5	62 700
28,0	30,2	16,3	57 100
30,0	20,5	11,7	51 700

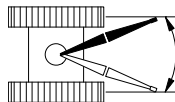
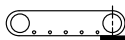
36,0 m			
m	°	m	kg
5,8	84,9	37,9	294 700 b
6,0	84,6	37,9	293 700 b
6,5	83,8	37,8	289 700
7,0	83,0	37,8	274 500
8,0	81,4	37,6	247 700
9,0	79,7	37,4	225 800
10,0	78,1	37,2	207 300
12,0	74,8	36,6	177 900
14,0	71,5	36,0	146 700
16,0	68,0	35,2	120 800
18,0	64,5	34,2	102 700
20,0	60,9	33,1	89 300
22,0	57,1	31,8	78 800
24,0	53,1	30,3	70 400
26,0	48,9	28,6	63 600
28,0	44,4	26,6	58 000
30,0	39,5	24,2	53 200
32,0	33,9	21,4	49 100
34,0	27,3	17,7	45 500

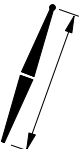
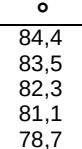
42,0 m			
m	°	m	kg
6,4	84,8	43,9	267 800
6,5	84,7	43,9	267 400
7,0	84,0	43,8	263 200
8,0	82,6	43,7	241 000
9,0	81,2	43,5	220 300
10,0	79,8	43,3	202 800
12,0	77,0	42,9	174 700
14,0	74,2	42,3	147 800
16,0	71,3	41,6	121 400
18,0	68,4	40,8	103 300
20,0	65,4	39,9	89 700
22,0	62,3	38,9	79 200
24,0	59,1	37,7	70 800
26,0	55,8	36,3	64 000
28,0	52,4	34,8	58 200
30,0	48,8	33,1	53 400
32,0	45,0	31,1	49 300
34,0	40,9	28,8	45 800
36,0	36,3	26,2	42 600
38,0	31,2	23,0	39 900
40,0	25,2	19,1	37 400

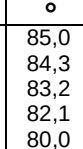
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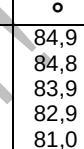


175 200 kg



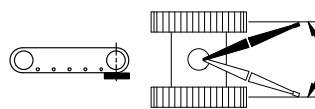
48,0 m			
			
m	°	m	kg
7,3	84,4	49,8	243 500
8,0	83,5	49,8	234 200
9,0	82,3	49,6	214 600
10,0	81,1	49,4	198 100
12,0	78,7	49,0	171 400
14,0	76,2	48,5	149 300
16,0	73,7	48,0	122 300
18,0	71,2	47,3	104 000
20,0	68,7	46,5	90 300
22,0	66,1	45,6	79 700
24,0	63,4	44,6	71 300
26,0	60,6	43,5	64 400
28,0	57,8	42,2	58 600
30,0	54,9	40,8	53 800
32,0	51,9	39,3	49 600
34,0	48,7	37,5	46 000
36,0	45,4	35,6	42 900
38,0	41,9	33,4	40 100
40,0	38,0	30,9	37 600
42,0	33,8	28,0	35 300
44,0	29,1	24,6	32 800
46,0	23,4	20,3	30 500

54,0 m			
			
m	°	m	kg
7,3	85,0	55,9	222 700
8,0	84,3	55,8	220 400
9,0	83,2	55,7	209 100
10,0	82,1	55,5	193 200
12,0	80,0	55,2	168 100
14,0	77,8	54,7	147 800
16,0	75,6	54,2	123 900
18,0	73,4	53,6	105 100
20,0	71,1	52,9	91 400
22,0	68,9	52,2	80 700
24,0	66,6	51,3	72 200
26,0	64,2	50,3	65 200
28,0	61,8	49,3	59 500
30,0	59,3	48,1	54 600
32,0	56,8	46,8	50 400
34,0	54,2	45,3	46 800
36,0	51,5	43,8	43 600
38,0	48,7	42,0	40 900
40,0	45,7	40,1	38 200
42,0	42,6	38,0	35 300
44,0	39,3	35,6	32 800
46,0	35,7	32,8	30 500
48,0	31,8	29,7	28 400
50,0	27,3	26,0	26 500
52,0	22,0	21,4	24 700

60,0 m			
			
m	°	m	kg
7,9	84,9	61,8	192 300
8,0	84,8	61,9	192 100
9,0	83,9	61,7	187 700
10,0	82,9	61,6	179 200
12,0	81,0	61,3	163 600
14,0	79,0	60,9	145 300
16,0	77,1	60,4	125 600
18,0	75,1	59,9	106 100
20,0	73,1	59,3	92 200
22,0	71,1	58,6	81 500
24,0	69,0	57,8	72 900
26,0	67,0	57,0	65 900
28,0	64,9	56,0	60 100
30,0	62,7	55,0	55 200
32,0	60,5	53,9	51 000
34,0	58,3	52,7	47 300
36,0	56,0	51,3	44 000
38,0	53,6	49,8	40 700
40,0	51,2	48,2	37 500
42,0	48,6	46,5	34 700
44,0	46,0	44,6	32 200
46,0	43,2	42,5	29 900
48,0	40,3	40,2	27 800
50,0	37,2	37,6	25 900
52,0	33,8	34,7	24 200
54,0	30,1	31,3	22 600
56,0	25,9	27,4	21 100
58,0	20,8	22,5	19 500



175 200 kg



66,0 m			
m	°	m	kg
8,5	84,8	67,8	169 300
9,0	84,4	67,8	166 900
10,0	83,6	67,6	160 400
12,0	81,8	67,3	147 800
14,0	80,0	67,0	136 100
16,0	78,3	66,6	124 000
18,0	76,5	66,1	107 100
20,0	74,7	65,5	92 800
22,0	72,9	64,9	82 000
24,0	71,0	64,2	73 400
26,0	69,2	63,5	66 400
28,0	67,3	62,6	60 500
30,0	65,4	61,7	55 600
32,0	63,4	60,7	51 300
34,0	61,5	59,6	47 600
36,0	59,4	58,5	44 100
38,0	57,4	57,2	40 500
40,0	55,3	55,8	37 300
42,0	53,1	54,3	34 500
44,0	50,9	52,7	32 000
46,0	48,6	50,9	29 700
48,0	46,2	49,0	27 700
50,0	43,7	47,0	25 800
52,0	41,0	44,7	24 000
54,0	38,3	42,2	22 400
56,0	35,3	39,4	20 900
58,0	32,1	36,3	19 600
60,0	28,6	32,8	18 100
62,0	24,5	28,6	16 700
64,0	19,7	23,4	15 200

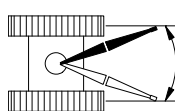
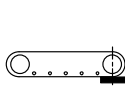
72,0 m			
m	°	m	kg
9,1	84,8	73,8	140 100
10,0	84,1	73,7	139 300
12,0	82,5	73,4	132 000
14,0	80,9	73,1	122 200
16,0	79,3	72,7	113 200
18,0	77,6	72,3	104 700
20,0	76,0	71,8	93 800
22,0	74,3	71,2	82 700
24,0	72,7	70,6	74 000
26,0	71,0	69,9	67 000
28,0	69,3	69,1	61 100
30,0	67,6	68,3	56 100
32,0	65,8	67,4	51 800
34,0	64,1	66,4	47 200
36,0	62,3	65,4	43 200
38,0	60,4	64,3	39 700
40,0	58,6	63,0	36 600
42,0	56,7	61,7	33 800
44,0	54,7	60,3	31 300
46,0	52,7	58,8	29 000
48,0	50,7	57,2	26 900
50,0	48,5	55,4	25 000
52,0	46,4	53,5	23 300
54,0	44,1	51,5	21 700
56,0	41,7	49,3	20 100
58,0	39,2	46,8	18 600
60,0	36,6	44,2	17 200
62,0	33,7	41,3	15 800
64,0	30,7	38,0	14 500
66,0	27,3	34,2	13 300
68,0	23,5	29,8	12 100
70,0	18,9	24,4	10 900

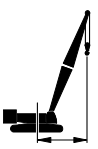
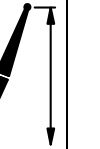
78,0 m			
m	°	m	kg
9,8	84,7	79,7	116 300
10,0	84,6	79,7	116 100
12,0	83,1	79,5	114 600
14,0	81,6	79,2	113 100
16,0	80,1	78,8	111 500
18,0	78,6	78,4	107 200
20,0	77,1	78,0	94 300
22,0	75,6	77,4	83 300
24,0	74,0	76,9	74 600
26,0	72,5	76,2	67 400
28,0	71,0	75,6	61 500
30,0	69,4	74,8	56 500
32,0	67,8	74,0	51 500
34,0	66,2	73,1	47 000
36,0	64,6	72,2	43 000
38,0	62,9	71,1	39 400
40,0	61,2	70,0	36 300
42,0	59,5	68,9	33 500
44,0	57,8	67,6	31 000
46,0	56,0	66,3	28 700
48,0	54,2	64,8	26 600
50,0	52,4	63,3	24 700
52,0	50,5	61,7	22 900
54,0	48,5	59,9	21 200
56,0	46,5	58,0	19 600
58,0	44,4	56,0	18 100
60,0	42,2	53,8	16 700
62,0	40,0	51,4	15 400
64,0	37,6	48,9	14 200
66,0	35,0	46,1	13 000
68,0	32,3	43,0	11 800
70,0	29,4	39,5	10 800
72,0	26,2	35,6	9 700
74,0	22,5	31,0	8 700
76,0	18,1	25,4	7 700

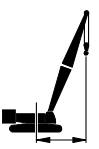
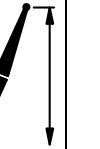
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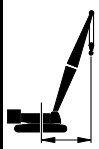
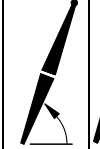


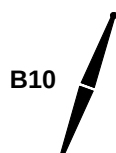
175 200 kg



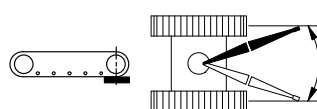
84,0 m			
			
m	°	m	kg
10,4	84,7	85,7	98 000
12,0	83,6	85,5	96 800
14,0	82,2	85,3	95 500
16,0	80,8	84,9	94 200
18,0	79,4	84,6	92 100
20,0	78,0	84,1	87 200
22,0	76,6	83,7	82 200
24,0	75,2	83,1	75 500
26,0	73,8	82,5	67 400
28,0	72,4	81,9	60 700
30,0	70,9	81,2	55 000
32,0	69,5	80,5	50 000
34,0	68,0	79,7	45 600
36,0	66,5	78,8	41 700
38,0	65,0	77,9	38 200
40,0	63,5	76,9	35 100
42,0	61,9	75,8	32 300
44,0	60,4	74,7	29 700
46,0	58,8	73,4	27 400
48,0	57,2	72,2	25 300
50,0	55,5	70,8	23 300
52,0	53,8	69,3	21 500
54,0	52,1	67,8	19 800
56,0	50,3	66,1	18 200
58,0	48,5	64,4	16 800
60,0	46,6	62,5	15 400
62,0	44,7	60,5	14 100
64,0	42,7	58,3	12 900
66,0	40,6	56,0	11 800
68,0	38,4	53,5	10 700
70,0	36,1	50,8	9 600
72,0	33,7	47,9	8 700
74,0	31,1	44,7	7 700
76,0	28,3	41,0	6 800
78,0	25,2	36,9	5 900

90,0 m			
			
m	°	m	kg
11,0	84,7	91,7	82 500
12,0	84,0	91,6	81 900
14,0	82,7	91,3	80 600
16,0	81,4	91,0	76 600
18,0	80,1	90,7	72 400
20,0	78,8	90,3	68 600
22,0	77,5	89,8	65 200
24,0	76,2	89,3	62 100
26,0	74,9	88,8	59 300
28,0	73,6	88,2	56 600
30,0	72,2	87,6	54 200
32,0	70,9	86,9	50 100
34,0	69,5	86,1	45 700
36,0	68,2	85,3	41 800
38,0	66,8	84,5	38 300
40,0	65,4	83,6	35 100
42,0	64,0	82,6	32 300
44,0	62,5	81,5	29 800
46,0	61,1	80,4	27 400
48,0	59,6	79,3	25 300
50,0	58,1	78,0	23 300
52,0	56,6	76,7	21 500
54,0	55,0	75,3	19 800
56,0	53,4	73,8	18 200
58,0	51,8	72,3	16 800
60,0	50,2	70,6	15 400
62,0	48,5	68,8	14 100
64,0	46,7	67,0	12 900
66,0	44,9	65,0	11 800
68,0	43,1	62,9	10 700
70,0	41,2	60,6	9 700
72,0	39,2	58,2	8 700
74,0	37,1	55,6	7 800
76,0	34,9	52,7	6 900
78,0	32,5	49,7	6 100
80,0	30,0	46,3	5 200

96,0 m			
			
m	°	m	kg
11,0	85,0	97,7	71 000
12,0	84,4	97,6	70 500
14,0	83,2	97,4	69 400
16,0	82,0	97,1	68 400
18,0	80,8	96,8	67 500
20,0	79,6	96,4	66 500
22,0	78,3	96,0	65 500
24,0	77,1	95,5	63 800
26,0	75,9	95,0	61 800
28,0	74,6	94,5	59 200
30,0	73,4	93,9	53 600
32,0	72,1	93,2	48 500
34,0	70,9	92,5	44 100
36,0	69,6	91,8	40 200
38,0	68,3	91,0	36 700
40,0	67,0	90,1	33 600
42,0	65,7	89,2	30 800
44,0	64,4	88,3	28 300
46,0	63,1	87,3	25 900
48,0	61,7	86,2	23 800
50,0	60,3	85,1	21 900
52,0	58,9	83,9	20 100
54,0	57,5	82,6	18 400
56,0	56,1	81,2	16 800
58,0	54,6	79,8	15 400
60,0	53,1	78,3	14 000
62,0	51,6	76,8	12 800
64,0	50,1	75,1	11 600
66,0	48,5	73,3	10 500
68,0	46,8	71,5	9 400
70,0	45,2	69,5	8 400
72,0	43,4	67,4	7 500
74,0	41,6	65,2	6 500
76,0	39,8	62,8	5 700



175 200 kg



11,6	84,9	103,7	59 800
12,0	84,7	103,6	59 600
14,0	83,6	103,4	58 700
16,0	82,4	103,1	57 700
18,0	81,3	102,8	56 800
20,0	80,2	102,5	54 400
22,0	79,0	102,1	51 700
24,0	77,9	101,7	49 200
26,0	76,7	101,2	46 800
28,0	75,6	100,7	44 700
30,0	74,4	100,1	42 800
32,0	73,2	99,5	40 900
34,0	72,0	98,9	39 200
36,0	70,9	98,2	37 700
38,0	69,7	97,4	36 200
40,0	68,4	96,6	33 400
42,0	67,2	95,8	30 500
44,0	66,0	94,9	28 000
46,0	64,8	94,0	25 700
48,0	63,5	93,0	23 500
50,0	62,2	91,9	21 600
52,0	60,9	90,8	19 800
54,0	59,6	89,6	18 100
56,0	58,3	88,4	16 600
58,0	57,0	87,1	15 100
60,0	55,6	85,7	13 800
62,0	54,2	84,3	12 500
64,0	52,8	82,8	11 300
66,0	51,4	81,2	10 200
68,0	49,9	79,5	9 100
70,0	48,4	77,8	8 200
72,0	46,9	75,9	7 200
74,0	45,3	73,9	6 300
76,0	43,7	71,9	5 500