


Liftcrane Boom Capacities

Boom No. B10:500
with 180 200 kg Fixed Position Counterweight
at 4,1 m Position
360 Degree Rating

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 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.

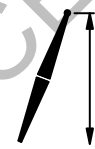
Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 81023380**, Wire Rope Specifications chart **No. 9341-A**, Counterweight Arrangements **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, 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. 9598-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 (°) 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 180 200 kg Fixed Position Counterweight.

Consult chart **No. 9605-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

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. Raising is not permitted in shaded areas of table.

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

Table 1a: With Luffing Jib Backstays

Over End or Side of 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	3 700
66,0	3 700
72,0	#
78,0	#
84,0	Raising Not Permitted

Table 1b: 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	3 700
66,0	3 700
72,0	#
78,0	#
84,0	Raising Not Permitted

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. Crane tipping or structural damage can occur.

Table 2a: Without Luffing Jib Backstays

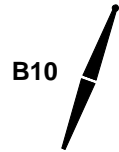
Over End or Side of Crawlers	
Boom Length (m)	Block Weight (kg)
30,0	10 300
36,0	10 300
42,0	10 300
48,0	10 300
54,0	10 300
60,0	7 100
66,0	3 700
72,0	3 700
78,0	#
84,0	Raising Not Permitted

Table 2b: 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	7 100
66,0	3 700
72,0	3 700
78,0	#
84,0	#

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. Crane tipping or structural damage can occur.

Explanation of Symbols



Boom No. B10:500



Fixed Position Counterweight



360 Degree Rating



Boom Length



Operating Radius
(see page 1)



Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)

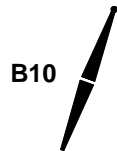


Lifting Capacities
(see page 1)

REFERENCE ONLY!

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ASME B30.5



30,0 m

m	°	m	kg
11,0	73,7	30,7	170 600
12,0	71,6	30,3	148 700
13,0	69,6	29,9	132 500
14,0	67,5	29,5	118 300
15,0	65,4	29,0	106 900
16,0	63,2	28,5	97 400
17,0	61,0	27,9	89 100
18,0	58,8	27,3	82 100
19,0	56,5	26,6	76 000
20,0	54,1	25,8	70 500
22,0	49,0	24,1	61 500
24,0	43,6	22,1	54 200
26,0	37,4	19,5	48 100
28,0	30,2	16,3	43 100
30,0	20,5	11,7	38 600

36,0 m

m	°	m	kg
9,8	78,5	37,2	206 500
10,0	78,1	37,2	198 700
11,0	76,5	36,9	170 200
12,0	74,8	36,6	148 900
13,0	73,1	36,3	132 700
14,0	71,5	36,0	118 400
15,0	69,7	35,6	106 900
16,0	68,0	35,2	97 500
17,0	66,3	34,7	89 100
18,0	64,5	34,2	82 100
19,0	62,7	33,7	76 000
20,0	60,9	33,1	70 500
22,0	57,1	31,8	61 500
24,0	53,1	30,3	54 200
26,0	48,9	28,6	48 200
28,0	44,4	26,6	43 200
30,0	39,5	24,2	38 900
32,0	33,9	21,4	35 100
34,0	27,3	17,7	31 900

42,0 m

m	°	m	kg
9,1	81,0	43,5	218 600
10,0	79,8	43,3	198 800
11,0	78,4	43,1	170 300
12,0	77,0	42,9	148 900
13,0	75,6	42,6	132 600
14,0	74,2	42,3	118 300
15,0	72,8	42,0	106 800
16,0	71,3	41,6	97 400
17,0	69,9	41,2	89 000
18,0	68,4	40,8	82 000
19,0	66,9	40,4	75 900
20,0	65,4	39,9	70 300
22,0	62,3	38,9	61 400
24,0	59,1	37,7	54 000
26,0	55,8	36,3	48 000
28,0	52,4	34,8	43 000
30,0	48,8	33,1	38 700
32,0	45,0	31,1	35 000
34,0	40,9	28,8	31 800
36,0	36,3	26,2	29 000
38,0	31,2	23,0	26 400
40,0	25,2	19,1	24 200

REFER TO THE MANUAL

MLC300 S-2

ASME B30.5



48,0 m

m	°	m	kg
7,9	83,6	49,8	236 700
8,0	83,5	49,8	235 100
8,5	82,9	49,7	224 500
9,0	82,3	49,6	214 800
10,0	81,1	49,4	195 600
11,0	79,9	49,3	170 200
12,0	78,7	49,0	148 700
13,0	77,5	48,8	132 400
14,0	76,2	48,5	118 000
15,0	75,0	48,3	106 600
16,0	73,7	48,0	97 100
17,0	72,5	47,6	88 600
18,0	71,2	47,3	81 600
19,0	69,9	46,9	75 500
20,0	68,7	46,5	70 000
22,0	66,1	45,6	61 000
24,0	63,4	44,6	53 600
26,0	60,6	43,5	47 600
28,0	57,8	42,2	42 600
30,0	54,9	40,8	38 300
32,0	51,9	39,3	34 600
34,0	48,7	37,5	31 400
36,0	45,4	35,6	28 600
38,0	41,9	33,4	26 000
40,0	38,0	30,9	23 800
42,0	33,8	28,0	21 800
44,0	29,1	24,6	20 000
46,0	23,4	20,3	18 300

54,0 m

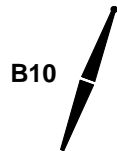
m	°	m	kg
7,3	85,0	55,9	222 700
7,5	84,8	55,9	222 100
8,0	84,3	55,8	220 200
8,5	83,7	55,7	216 400
9,0	83,2	55,7	207 800
10,0	82,1	55,5	191 500
11,0	81,0	55,4	170 300
12,0	80,0	55,2	148 800
13,0	78,9	55,0	132 500
14,0	77,8	54,7	118 100
15,0	76,7	54,5	106 600
16,0	75,6	54,2	97 100
17,0	74,5	53,9	88 600
18,0	73,4	53,6	81 600
19,0	72,3	53,3	75 500
20,0	71,1	52,9	69 900
22,0	68,9	52,2	60 900
24,0	66,6	51,3	53 600
26,0	64,2	50,3	47 500
28,0	61,8	49,3	42 500
30,0	59,3	48,1	38 200
32,0	56,8	46,8	34 500
34,0	54,2	45,3	31 300
36,0	51,5	43,8	28 500
38,0	48,7	42,0	26 000
40,0	45,7	40,1	23 800
42,0	42,6	38,0	21 800
44,0	39,3	35,6	20 000
46,0	35,7	32,8	18 300
48,0	31,8	29,7	16 800
50,0	27,3	26,0	15 400
52,0	22,0	21,4	14 100

60,0 m

m	°	m	kg
7,9	84,9	61,8	192 300
8,0	84,8	61,9	192 100
8,5	84,4	61,8	190 900
9,0	83,9	61,7	187 400
10,0	82,9	61,6	179 200
11,0	82,0	61,5	170 100
12,0	81,0	61,3	148 500
13,0	80,0	61,1	132 100
14,0	79,0	60,9	117 700
15,0	78,1	60,7	106 100
16,0	77,1	60,4	96 600
17,0	76,1	60,2	88 100
18,0	75,1	59,9	81 100
19,0	74,1	59,6	74 900
20,0	73,1	59,3	69 400
22,0	71,1	58,6	60 300
24,0	69,0	57,8	53 000
26,0	67,0	57,0	46 900
28,0	64,9	56,0	41 900
30,0	62,7	55,0	37 600
32,0	60,5	53,9	33 900
34,0	58,3	52,7	30 700
36,0	56,0	51,3	27 900
38,0	53,6	49,8	25 300
40,0	51,2	48,2	23 100
42,0	48,6	46,5	21 100
44,0	46,0	44,6	19 300
46,0	43,2	42,5	17 700
48,0	40,3	40,2	16 200
50,0	37,2	37,6	14 800
52,0	33,8	34,7	13 600
54,0	30,1	31,3	12 400
56,0	25,9	27,4	11 300
58,0	20,8	22,5	10 300

MLC300 S-2

ASME B30.5



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	160 500
11,0	82,7	67,5	154 000
12,0	81,8	67,3	146 500
13,0	80,9	67,2	132 100
14,0	80,0	67,0	117 600
15,0	79,2	66,8	106 100
16,0	78,3	66,6	96 500
17,0	77,4	66,3	88 000
18,0	76,5	66,1	80 900
19,0	75,6	65,8	74 800
20,0	74,7	65,5	69 200
22,0	72,9	64,9	60 200
24,0	71,0	64,2	52 800
26,0	69,2	63,5	46 700
28,0	67,3	62,6	41 700
30,0	65,4	61,7	37 400
32,0	63,4	60,7	33 700
34,0	61,5	59,6	30 500
36,0	59,4	58,5	27 700
38,0	57,4	57,2	25 100
40,0	55,3	55,8	22 900
42,0	53,1	54,3	20 900
44,0	50,9	52,7	19 100
46,0	48,6	50,9	17 500
48,0	46,2	49,0	16 000
50,0	43,7	47,0	14 600
52,0	41,0	44,7	13 400
54,0	38,3	42,2	12 200
56,0	35,3	39,4	11 100
58,0	32,1	36,3	10 100
60,0	28,6	32,8	9 200
62,0	24,5	28,6	8 300
64,0	19,7	23,4	7 500

72,0 m

m	°	m	kg
9,1	84,8	73,8	140 100
10,0	84,1	73,7	139 300
11,0	83,3	73,6	137 200
12,0	82,5	73,4	132 000
13,0	81,7	73,3	125 400
14,0	80,9	73,1	117 100
15,0	80,1	72,9	105 500
16,0	79,3	72,7	95 900
17,0	78,4	72,5	87 400
18,0	77,6	72,3	80 300
19,0	76,8	72,0	74 100
20,0	76,0	71,8	68 600
22,0	74,3	71,2	59 500
24,0	72,7	70,6	52 100
26,0	71,0	69,9	46 000
28,0	69,3	69,1	41 000
30,0	67,6	68,3	36 600
32,0	65,8	67,4	32 900
34,0	64,1	66,4	29 700
36,0	62,3	65,4	26 900
38,0	60,4	64,3	24 400
40,0	58,6	63,0	22 200
42,0	56,7	61,7	20 200
44,0	54,7	60,3	18 400
46,0	52,7	58,8	16 700
48,0	50,7	57,2	15 200
50,0	48,5	55,4	13 900
52,0	46,4	53,5	12 600
54,0	44,1	51,5	11 500
56,0	41,7	49,3	10 400
58,0	39,2	46,8	9 400
60,0	36,6	44,2	8 500
62,0	33,7	41,3	7 600
64,0	30,7	38,0	6 800
66,0	27,3	34,2	5 900
68,0	23,5	29,8	5 000
70,0	18,9	24,4	4 200

78,0 m

m	°	m	kg
9,8	84,7	79,7	116 300
10,0	84,6	79,7	116 100
11,0	83,8	79,6	115 300
12,0	83,1	79,5	114 600
13,0	82,3	79,3	113 800
14,0	81,6	79,2	111 300
15,0	80,8	79,0	104 300
16,0	80,1	78,8	95 800
17,0	79,4	78,6	87 200
18,0	78,6	78,4	80 100
19,0	77,8	78,2	73 900
20,0	77,1	78,0	68 300
22,0	75,6	77,4	59 200
24,0	74,0	76,9	51 800
26,0	72,5	76,2	45 700
28,0	71,0	75,6	40 700
30,0	69,4	74,8	36 300
32,0	67,8	74,0	32 600
34,0	66,2	73,1	29 400
36,0	64,6	72,2	26 600
38,0	62,9	71,1	24 100
40,0	61,2	70,0	21 800
42,0	59,5	68,9	19 800
44,0	57,8	67,6	18 000
46,0	56,0	66,3	16 400
48,0	54,2	64,8	14 900
50,0	52,4	63,3	13 500
52,0	50,5	61,7	12 300
54,0	48,5	59,9	11 100
56,0	46,5	58,0	10 000
58,0	44,4	56,0	9 100
60,0	42,2	53,8	8 100
62,0	40,0	51,4	7 300
64,0	37,6	48,9	6 300
66,0	35,0	46,1	5 400
68,0	32,3	43,0	4 600

MLC300 S-2

ASME B30.5



 m	 α	 m	 kg
10,4	84,7	85,7	98 000
11,0	84,3	85,7	97 500
12,0	83,6	85,5	96 800
13,0	82,9	85,4	96 200
14,0	82,2	85,3	95 500
15,0	81,5	85,1	94 900
16,0	80,8	84,9	91 500
17,0	80,1	84,8	86 600
18,0	79,4	84,6	79 500
19,0	78,7	84,3	73 300
20,0	78,0	84,1	67 700
22,0	76,6	83,7	58 600
24,0	75,2	83,1	51 100
26,0	73,8	82,5	45 000
28,0	72,4	81,9	39 900
30,0	70,9	81,2	35 600
32,0	69,5	80,5	31 800
34,0	68,0	79,7	28 600
36,0	66,5	78,8	25 800
38,0	65,0	77,9	23 300
40,0	63,5	76,9	21 000
42,0	61,9	75,8	19 000
44,0	60,4	74,7	17 200
46,0	58,8	73,4	15 600
48,0	57,2	72,2	14 100
50,0	55,5	70,8	12 700
52,0	53,8	69,3	11 500
54,0	52,1	67,8	10 300
56,0	50,3	66,1	9 200
58,0	48,5	64,4	8 200
60,0	46,6	62,5	7 200
62,0	44,7	60,5	6 100
64,0	42,7	58,3	5 200
66,0	40,6	56,0	4 300

REFERENCE ONLY!