

Liftcrane Boom Capacities

Boom No. 111 With Open Throat Top
19 960 kg Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

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LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*). Retracted crawler capacities are not shown for boom positions which, without load, provide less than required ANSI B30.5 backward stability.

Upper boom point capacity for liftcrane service with single part whip line is 9 070 kg. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of main boom 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 in a level position on a firm uniformly supporting surface with gantry up. Refer to boom rigging **No. 911959** or **No. 912877** and Wire Rope Specification chart **No. 9144-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 operators manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface and boom within boom angle

range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9142-A**.

OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block. Boom angle 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 5 893 mm extendible crawlers, 902 mm treads, 4 724 mm retractable gantry, 10 part boom hoist reeving, two 32 mm boom pendants, 1st counterweight = 12 930 kg and 2nd counterweight = 7 030 kg.

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 111
9.1m	730 kg
12.2m	910 kg
15.2m	1 130 kg
18.3m	1 360 kg

Maximum Boom and Jib Lengths Lifted Unassisted					
Over Front of Blocked Crawlers		Over Side of Extended Crawlers		Over Side of Retracted Crawlers	
Boom Length	Jib No. 111	Boom Length	Jib No. 111	Boom Length	Jib No. 111
57.9m	—	54.9m	—	48.8m	—
54.9m	9.1m	51.8m	—	45.7m	—
51.8m	15.2m	48.8m	12.2m	42.7m	9.1m
48.8m	18.3m	45.7m	18.3m	39.6m	18.3m
Load block, hook and weight ball on ground at start.					

Consult jib chart for jib capacities. Upper boom point cannot be used when jib is attached.

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12.2m (40 Ft.) Boom				
3.0	81.4	13.7		72 500 *
3.5	79.2	13.6		67 400 *
4.0	76.8	13.5		67 800
4.5	74.3	13.4		59 300
5.0	71.9	13.2		48 500
5.5	69.4	13.0		41 300
6.0	66.8	12.8		35 900
7.0	61.5	12.3		28 400
8.0	56.0	11.7		23 400
9.0	50.0	10.9		19 900
10.0	43.4	9.9		17 300
11.0	35.8	8.6		15 200
12.0	26.4	6.9		13 600
15.2m (50 Ft.) Boom				
3.4	81.9	16.8		68 000 *
3.5	81.4	16.7		68 000 *
4.0	79.5	16.7		67 600
4.5	77.5	16.5		59 300
5.0	75.6	16.4		48 500
5.5	73.6	16.3		41 300
6.0	71.7	16.1		35 900
7.0	67.6	15.7		28 400
8.0	63.5	15.2		23 400
9.0	59.1	14.7		19 900
10.0	54.6	14.0		17 200
11.0	49.8	13.2		15 100
12.0	44.6	12.2		13 500
14.0	32.2	9.6		11 000
18.3m (60 Ft.) Boom				
4.0	81.4	19.8		68 000 *
4.5	79.7	19.7		59 300
5.0	78.1	19.6		48 500
5.5	76.4	19.4		41 300
6.0	74.8	19.3		35 900
7.0	71.5	19.0		28 300
8.0	68.2	18.6		23 400
9.0	64.7	18.1		19 800
10.0	61.2	17.6		17 100
11.0	57.5	17.0		15 100
12.0	53.7	16.3		13 400
14.0	45.3	14.5	8 200	10 900
16.0	35.5	12.1	6 900	9 100
18.0	22.1	8.4	5 900	7 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Crawlers Retracted Kilograms	Boom Capacity Crawlers Extended Kilograms
21.3m (70 Ft.) Boom				
4.3	81.8	22.8		64 900
4.5	81.1	22.8		58 800
5.0	79.8	22.7		48 500
5.5	78.4	22.6		41 200
6.0	77.0	22.4		35 800
7.0	74.3	22.2		28 300
8.0	71.4	21.9		23 300
9.0	68.6	21.5		19 700
10.0	65.6	21.0		17 100
11.0	62.6	20.5		15 000
12.0	59.5	20.0		13 400
14.0	53.0	18.6	8 200	10 900
16.0	45.9	16.9	6 800	9 100
18.0	37.7	14.6	5 800	7 800
20.0	27.5	11.4	5 100	6 800
24.4m (80 Ft.) Boom				
4.9	81.4	25.8		50 600
5.0	81.1	25.8		48 600
5.5	79.9	25.7		41 200
6.0	78.7	25.6		35 800
7.0	76.3	25.3		28 200
8.0	73.8	25.1		23 300
9.0	71.4	24.7		19 600
10.0	68.9	24.4		17 000
11.0	66.3	23.9	11 100	15 000
12.0	63.7	23.5	9 900	13 300
14.0	58.3	22.3	8 100	10 800
16.0	52.5	20.9	6 700	9 000
18.0	46.3	19.2	5 700	7 700
20.0	39.3	17.0	5 000	6 700
22.0	31.0	14.1	4 300	5 800
24.0	19.8	9.7	3 800	5 200

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27.4m (90 Ft.) Boom				
5.2	81.7	28.8		45 500
5.5	81.0	28.8		41 100
6.0	80.0	28.7		35 700
7.0	77.8	28.5		28 200
8.0	75.7	28.2		23 200
9.0	73.5	27.9		19 600
10.0	71.3	27.6		17 000
11.0	69.1	27.2	11 000	14 900
12.0	66.8	26.8	9 800	13 200
14.0	62.2	25.9	8 000	10 700
16.0	57.3	24.7	6 700	9 000
18.0	52.1	23.2	5 700	7 600
20.0	46.6	21.5	4 900	6 600
22.0	40.5	19.3	4 300	5 800
24.0	33.4	16.6	3 800	5 100
26.0	24.7	12.9	3 300	4 600
30.5m (100 Ft.) Boom				
5.5	81.9	31.9		41 300
6.0	81.0	31.8		35 700
7.0	79.1	31.6		28 100
8.0	77.1	31.4		23 100
9.0	75.2	31.1		19 500
10.0	73.2	30.8	12 500	16 900
11.0	71.3	30.5	11 000	14 800
12.0	69.3	30.1	9 800	13 100
14.0	65.2	29.3	7 900	10 700
16.0	60.9	28.2	6 600	8 900
18.0	56.5	27.0	5 600	7 600
20.0	51.8	25.5	4 800	6 500
22.0	46.8	23.8	4 200	5 700
24.0	41.4	21.7	3 700	5 000
26.0	35.3	19.1	3 200	4 500
28.0	28.0	15.8	2 800	4 000
30.0	18.2	11.0	2 600	3 600

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Crawlers Retracted Kilograms	Boom Capacity Crawlers Extended Kilograms
33.5m (110 Ft.) Boom				
6.1	81.6	34.8		34 700
7.0	80.1	34.7		28 000
8.0	78.3	34.5		23 000
9.0	76.6	34.3	14 200	19 400
10.0	74.8	34.0	12 400	16 800
11.0	73.0	33.7	10 800	14 700
12.0	71.2	33.4	9 600	13 100
14.0	67.6	32.6	7 800	10 600
16.0	63.8	31.7	6 500	8 800
18.0	59.9	30.6	5 500	7 500
20.0	55.8	29.3	4 700	6 400
22.0	51.6	27.8	4 100	5 600
24.0	47.0	26.1	3 600	4 900
26.0	42.1	24.0	3 100	4 400
28.0	36.7	21.5	2 800	3 900
30.0	30.4	18.5	2 400	3 500
32.0	22.7	14.4	2 100	3 100
36.6m (120 Ft.) Boom				
6.7	81.4	37.8		29 900
7.0	80.9	37.8		28 100
8.0	79.3	37.6		23 000
9.0	77.7	37.4	14 100	19 400
10.0	76.1	37.2	12 300	16 800
11.0	74.5	36.9	10 800	14 700
12.0	72.8	36.6	9 600	13 000
14.0	69.5	35.9	7 700	10 500
16.0	66.1	35.1	6 400	8 700
18.0	62.6	34.1	5 500	7 400
20.0	59.0	32.9	4 700	6 400
22.0	55.3	31.6	4 000	5 500
24.0	51.4	30.1	3 500	4 900
26.0	47.2	28.4	3 100	4 300
28.0	42.7	26.4	2 700	3 800
30.0	37.9	24.0	2 400	3 400
32.0	32.4	21.1	2 100	3 000
34.0	25.8	17.4	1 800	2 700
36.0	17.1	12.2	1 600	2 500

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39.6m (130 Ft.) Boom				
7.3	81.1	40.8		26 200
8.0	80.1	40.7	16 400	22 900
9.0	78.7	40.5	14 000	19 300
10.0	77.2	40.3	12 200	16 700
11.0	75.7	40.0	10 700	14 600
12.0	74.2	39.8	9 500	12 900
14.0	71.2	39.1	7 700	10 400
16.0	68.1	38.4	6 300	8 600
18.0	64.9	37.5	5 400	7 300
20.0	61.7	36.5	4 600	6 300
22.0	58.3	35.3	3 900	5 500
24.0	54.8	34.0	3 400	4 800
26.0	51.2	32.4	3 000	4 200
28.0	47.3	30.7	2 600	3 700
30.0	43.3	28.7	2 300	3 300
32.0	38.8	26.4	2 000	3 000
34.0	33.9	23.6	1 800	2 600
36.0	28.2	20.2	1 500	2 400
38.0	21.2	15.8	1 300	2 100
42.7m (140 Ft.) Boom				
7.3	81.8	43.9	18 500	26 100
8.0	80.9	43.8	16 300	22 900
9.0	79.5	43.6	13 900	19 200
10.0	78.1	43.4	12 100	16 600
11.0	76.7	43.2	10 600	14 500
12.0	75.4	42.9	9 400	12 800
14.0	72.6	42.3	7 500	10 300
16.0	69.7	41.7	6 200	8 500
18.0	66.8	40.8	5 300	7 200
20.0	63.8	39.9	4 500	6 200
22.0	60.8	38.8	3 800	5 400
24.0	57.7	37.6	3 300	4 700
26.0	54.4	36.3	2 900	4 100
28.0	51.0	34.7	2 500	3 600
30.0	47.5	33.0	2 100	3 200
32.0	43.7	31.0	1 900	2 900
34.0	39.6	28.7	1 600	2 600
36.0	35.2	26.1	1 400	2 300
38.0	30.1	22.9		2 000
40.0	24.2	19.0		1 800
42.0	16.3	13.4		1 600

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Crawlers Retracted Kilograms	Boom Capacity Crawlers Extended Kilograms
45.7m (150 Ft.) Boom				
7.9	81.6	46.9	16 500	23 100
8.0	81.5	46.9	16 300	22 800
9.0	80.2	46.7	13 800	19 100
10.0	78.9	46.5	12 000	16 500
11.0	77.6	46.3	10 500	14 400
12.0	76.4	46.1	9 300	12 700
14.0	73.8	45.5	7 400	10 200
16.0	71.1	44.9	6 100	8 400
18.0	68.4	44.1	5 200	7 200
20.0	65.7	43.3	4 400	6 100
22.0	62.9	42.3	3 700	5 300
24.0	60.1	41.2	3 200	4 600
26.0	57.1	40.0	2 800	4 100
28.0	54.1	38.6	2 400	3 500
30.0	50.9	37.0	2 100	3 100
32.0	47.6	35.3	1 800	2 800
34.0	44.1	33.3	1 600	2 500
36.0	40.3	31.1		2 200
38.0	36.2	28.5		2 000
40.0	31.7	25.5		1 700
42.0	26.5	21.9		1 600
44.0	20.1	17.2		1 400
48.8m (160 Ft.) Boom				
8.5	81.4	49.9	14 700	20 600
9.0	80.8	49.8	13 700	19 100
10.0	79.6	49.6	11 900	16 500
11.0	78.4	49.4	10 400	14 300
12.0	77.2	49.2	9 200	12 600
14.0	74.8	48.7	7 300	10 100
16.0	72.3	48.1	6 100	8 400
18.0	69.9	47.4	5 100	7 100
20.0	67.3	46.6	4 300	6 000
22.0	64.7	45.7	3 600	5 200
24.0	62.1	44.7	3 100	4 500
26.0	59.4	43.6	2 700	4 000
28.0	56.6	42.3	2 300	3 400
30.0	53.8	40.9	2 000	3 000
32.0	50.8	39.3	1 700	2 700
34.0	47.7	37.6	1 400	2 400
36.0	44.4	35.6		2 100
38.0	40.9	33.4		1 900
40.0	37.1	30.9		1 600
42.0	33.0	28.1		1 500

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51.8m (170 Ft.) Boom				
8.5	81.9	53.0	14 600	18 500 *
9.0	81.4	52.9	13 600	18 300 *
10.0	80.2	52.7	11 800	16 400
11.0	79.1	52.6	10 300	14 200
12.0	78.0	52.3	9 100	12 600
14.0	75.7	51.9	7 300	10 000
16.0	73.4	51.3	5 900	8 200
18.0	71.1	50.7	5 000	7 000
20.0	68.7	49.9	4 200	5 900
22.0	66.3	49.1	3 600	5 100
24.0	63.9	48.1	3 000	4 400
26.0	61.4	47.1	2 600	3 800
28.0	58.8	45.9	2 200	3 400
30.0	56.2	44.6	1 900	3 000
32.0	53.5	43.2	1 600	2 600
34.0	50.7	41.6		2 300
36.0	47.7	39.9		2 000
38.0	44.7	38.0		1 700
40.0	41.4	35.8		1 500
54.9m (180 Ft.) Boom				
9.1	81.7	56.0	13 300	15 800 *
10.0	80.8	55.8	11 700	15 600
11.0	79.7	55.7	10 200	14 100
12.0	78.7	55.5	9 000	12 500
14.0	76.5	55.0	7 200	9 900
16.0	74.4	54.5	5 900	8 200
18.0	72.2	53.9	4 900	6 900
20.0	70.0	53.2	4 100	5 800
22.0	67.7	52.4	3 500	5 000
24.0	65.4	51.5	2 900	4 300
26.0	63.1	50.5	2 500	3 700
28.0	60.7	49.5	2 100	3 300
30.0	58.3	48.3	1 800	2 900
32.0	55.8	47.0	1 500	2 500
34.0	53.2	45.5		2 200
36.0	50.6	43.9		1 900
38.0	47.8	42.2		1 700
40.0	44.9	40.3		1 500

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Crawlers Retracted Kilograms	Boom Capacity Crawlers Extended Kilograms
57.9m (190 Ft.) Boom				
9.8	81.5	59.0	12 100	13 600 *
10.0	81.3	58.9	11 700	13 500 *
11.0	80.3	58.8	10 100	13 100
12.0	79.3	58.6	8 900	12 500
14.0	77.2	58.1	7 100	9 900
16.0	75.2	57.6	5 800	8 200
18.0	73.1	57.1	4 800	6 800
20.0	71.1	56.4	4 000	5 800
22.0	69.0	55.7	3 400	4 900
24.0	66.8	54.8	2 800	4 200
26.0	64.6	53.9	2 400	3 600
28.0	62.4	52.9	2 000	3 200
30.0	60.2	51.8	1 700	2 800
32.0	57.8	50.6	1 400	2 400
34.0	55.5	49.3		2 100
36.0	53.0	47.8		1 800
38.0	50.5	46.2		1 600