

Liftcrane Boom Capacities

Boom No. 84
32 430 kg Counterweight
360 Degree Rating

European Standards
14 m/s Maximum Wind thru 45.7m Boom
10 m/s with 48.8m thru 64.0m Boom
Conditions include jib when attached.

555 SERIES 1

LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and are calculated to comply with prEN 13000, ISO 4305 and include factors based on a 4.0 degree tipping angle. Capacities based on structural competence are denoted by an asterisk (*). Capacities indicated by (b) require 4 540 kg minimum weight. *To maintain boom and mast stability at high boom angles, a minimum of 4 parts hoist line is required when using rear drum on 15.2m thru 21.3m boom lengths.*

Upper boom point capacity for liftcrane service with single part whip line is 13 610 kg or 27 220 kg with two part whip line. When boom butt mounted auxiliary drum equipped for 26 mm wire rope is used, capacity with single part whip line is 9 070 kg or 18 140 kg with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of upper boom point, jib, all load blocks, hooks, weight ball, slings, etc., beneath boom and jib point sheaves, is considered part of main boom load. Reeved hoist line included in boom weight. 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. Refer to boom rigging **No. A00952** and Wire Rope Specification chart **No. 8444-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.

WIND CONDITIONS: Machine may be operated in winds stated in maximum wind speed table provided crane operator judgment is used to allow for wind effect on lifted load and other considerations noted on capacity chart are followed. Wind will have a considerable effect on load. Loads must be compensated for accordingly by reducing load ratings, reducing operating speeds, or by a combination of both. Recommend stopping operation and lowering boom and jib to 68 degree boom angle when wind exceeds conditions stated in column A. Lower boom and jib to ground when wind is above 22 m/s (column B).

MACHINE TRAVEL: Machine to travel on a firm, level [up to 1 percent (0.5 degrees) grade] and uniformly supporting surface. *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 1.4 km/hr. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8446-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 7 264 mm crawlers, 1 219 mm treads, 7 010 mm live mast, 16 part boom hoist reeving, boom support straps, rotating bed No. A01066¹ or No. A03188 (refer to I.D. plate at front of rotating bed) and 32 430 kg crane counterweight.

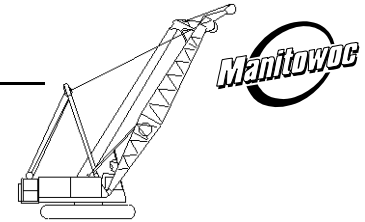
¹**WARNING:** 570 kg front counterweight is required for cranes with rotating bed No. A01066 that do not have free-fall option. Counterweight can be removed only if crane has free-fall option on both front and rear drums.

Maximum Wind Speeds		
Boom Lengths	A Working Wind	B Lower To Ground
15.2m - 45.7m	14 m/s	22 m/s
48.8m - 64.0m	10 m/s	22 m/s
Jib included when attached.		



32 430 kg Crane Counterweight
4 Side Boxes

Consult jib chart for jib capacities. Upper boom point and upper wire rope guide (No. A04352) for third line must be removed when jib is attached.



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Maximum Boom and Jib Lengths Lifted Unassisted			
Over End of Blocked Crawlers		Over Side of Crawlers	
Boom Length	Jib No. 134	Boom Length	Jib No. 134
(a,b) 64.0m	—	54.9m	—
(b) 61.0m	—	51.8m	—
57.9m	—	48.8m	12.2m
54.9m	12.2m	45.7m	18.3m
51.8m	18.3m	42.7m	24.4m
48.8m	24.4m		
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be attached on 64.0m boom. (b) Upper wire rope guide (No. A04352) for third line cannot be attached on 61.0m and 64.0m booms.			

Upper Boom Point Deduct

Deduct 500 kg from capacities when upper boom point is attached.

Wire Rope Guide Deduct (For Third Line)

Deduct 270 kg from boom capacities when upper wire rope guide (No. A04352) for third line is attached.

Deduct From Capacities When Jib Is Attached

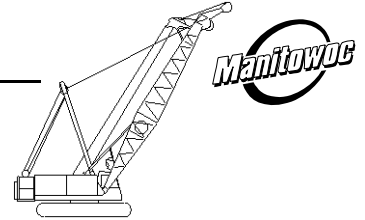
Jib Length	Jib No. 134
9.1m	1 770 kg
12.2m	2 130 kg
15.2m	2 540 kg
18.3m	2 990 kg
21.3m	3 450 kg
24.4m	3 950 kg

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
15.2m (50 Ft.) Boom			
4.6	80.6	16.8	118 900 b
5.0	78.9	16.7	104 600 b
5.5	77.0	16.6	91 700 b
6.0	75.0	16.4	81 500 b
7.0	71.1	16.1	66 300 b
8.0	67.0	15.7	55 500
9.0	62.7	15.1	46 100
10.0	58.3	14.5	39 300
11.0	53.7	13.8	34 000
12.0	48.7	12.9	29 900
13.0	43.3	11.9	26 500
14.0	37.2	10.6	23 700
15.0	30.0	9.0	21 400

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
18.3m (60 Ft.) Boom			
4.6	82.2	19.9	111 500 b
5.0	80.8	19.8	98 800 b
5.5	79.2	19.7	87 100 b
6.0	77.6	19.6	77 800 b
7.0	74.3	19.3	63 800 b
8.0	71.0	19.0	53 900
9.0	67.6	18.5	46 200
10.0	64.2	18.1	39 400
11.0	60.6	17.5	34 200
12.0	56.8	16.8	30 000
13.0	52.9	16.1	26 600
14.0	48.8	15.2	23 900
15.0	44.3	14.2	21 500
16.0	39.5	13.0	19 500
18.0	27.5	9.8	16 300

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
21.3m (70 Ft.) Boom			
4.9	82.5	22.9	96 500 b
5.0	82.1	22.9	93 600 b
5.5	80.8	22.8	82 900 b
6.0	79.4	22.7	74 300 b
7.0	76.6	22.5	61 300 b
8.0	73.8	22.2	52 000
9.0	71.0	21.8	44 900
10.0	68.1	21.4	39 300
11.0	65.1	21.0	34 100
12.0	62.1	20.4	30 000
13.0	59.0	19.8	26 600
14.0	55.7	19.2	23 800
15.0	52.3	18.4	21 500
16.0	48.8	17.5	19 500
18.0	41.0	15.4	16 300
20.0	31.5	12.5	13 800

Capacities based on structural competence are denoted by an asterisk (*).
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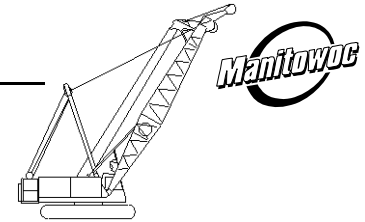
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Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
24.4m (80 Ft.) Boom			
5.2	82.7	26.0	85 000 b
5.5	81.9	25.9	79 000 b
6.0	80.7	25.8	71 200 b
7.0	78.3	25.6	59 100 b
8.0	75.9	25.4	50 400
9.0	73.5	25.1	43 700
10.0	71.0	24.7	38 400
11.0	68.5	24.3	34 200
12.0	65.9	23.9	30 000
13.0	63.2	23.4	26 700
14.0	60.5	22.8	23 900
15.0	57.8	22.2	21 500
16.0	54.9	21.5	19 500
18.0	48.8	19.8	16 300
20.0	42.1	17.8	13 800
22.0	34.2	15.1	11 900
24.0	24.2	11.3	10 400
27.4m (90 Ft.) Boom			
5.5	82.9	29.0	75 500 b
6.0	81.8	28.9	68 000 b
7.0	79.7	28.7	56 800 b
8.0	77.5	28.5	48 500
9.0	75.4	28.2	42 200
10.0	73.2	27.9	37 100
11.0	71.0	27.6	33 100
12.0	68.7	27.2	29 700
13.0	66.4	26.8	26 600
14.0	64.1	26.3	23 600
15.0	61.8	25.7	21 300
16.0	59.3	25.2	19 300
18.0	54.3	23.8	16 100
20.0	48.8	22.1	13 700
22.0	42.9	20.1	11 700
24.0	36.2	17.6	10 100
26.0	28.0	14.2	8 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
30.5m (100 Ft.) Boom			
5.8	83.0	32.0	68 000 b
6.0	82.6	32.0	65 400 b
7.0	80.7	31.8	54 900 b
8.0	78.8	31.6	47 100
9.0	76.9	31.4	41 000
10.0	74.9	31.1	36 200
11.0	72.9	30.8	32 300
12.0	71.0	30.5	29 100
13.0	68.9	30.1	26 300
14.0	66.9	29.7	23 800
15.0	64.8	29.2	21 400
16.0	62.7	28.7	19 400
18.0	58.3	27.5	16 200
20.0	53.7	26.1	13 700
22.0	48.9	24.4	11 700
24.0	43.6	22.4	10 200
26.0	37.6	20.0	8 800
28.0	30.8	17.0	7 700
30.0	22.0	12.7	6 900
33.5m (110 Ft.) Boom			
6.7	82.1	35.0	55 500
7.0	81.6	34.9	53 000
8.0	79.8	34.7	45 500
9.0	78.1	34.5	39 700
10.0	76.3	34.3	35 100
11.0	74.5	34.0	31 400
12.0	72.8	33.7	28 200
13.0	70.9	33.4	25 600
14.0	69.1	33.0	23 300
15.0	67.3	32.6	21 200
16.0	65.4	32.1	19 200
18.0	61.5	31.1	16 000
20.0	57.5	29.8	13 500
22.0	53.3	28.4	11 500
24.0	48.9	26.7	9 900
26.0	44.1	24.8	8 600
28.0	38.8	22.4	7 500
30.0	32.8	19.6	6 600
32.0	25.6	15.8	5 800

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
36.6m (120 Ft.) Boom			
6.7	82.7	38.1	53 500
7.0	82.3	38.0	51 200
8.0	80.7	37.8	44 100
9.0	79.1	37.7	38 600
10.0	77.5	37.4	34 200
11.0	75.9	37.2	30 600
12.0	74.2	36.9	27 600
13.0	72.6	36.6	25 000
14.0	70.9	36.2	22 800
15.0	69.3	35.9	20 900
16.0	67.6	35.4	19 100
18.0	64.1	34.5	16 000
20.0	60.5	33.4	13 400
22.0	56.8	32.2	11 500
24.0	53.0	30.7	9 900
26.0	48.9	29.0	8 600
28.0	44.5	27.1	7 500
30.0	39.8	24.8	6 500
32.0	34.5	22.1	5 700
34.0	28.3	18.7	5 000
36.0	20.4	14.1	4 500
39.6m (130 Ft.) Boom			
7.3	82.4	41.0	47 000
8.0	81.4	40.9	42 600
9.0	79.9	40.8	37 400
10.0	78.5	40.6	33 200
11.0	77.0	40.3	29 700
12.0	75.5	40.1	26 800
13.0	74.0	39.8	24 300
14.0	72.5	39.5	22 100
15.0	70.9	39.1	20 300
16.0	69.4	38.7	18 600
18.0	66.2	37.9	15 700
20.0	63.0	36.9	13 300
22.0	59.7	35.8	11 300
24.0	56.3	34.5	9 600
26.0	52.7	33.0	8 300
28.0	48.9	31.3	7 200
30.0	44.9	29.4	6 200
32.0	40.5	27.2	5 400
34.0	35.8	24.6	4 700
36.0	30.4	21.4	4 200
38.0	23.8	17.3	3 600

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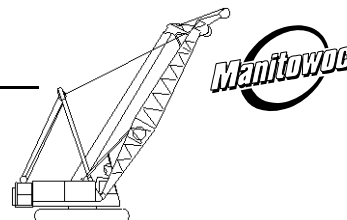
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Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
42.7m (140 Ft.) Boom			
7.3	83.0	44.1	45 500
8.0	82.0	44.0	41 400
9.0	80.7	43.9	36 400
10.0	79.3	43.7	32 400
11.0	77.9	43.5	29 000
12.0	76.5	43.2	26 200
13.0	75.2	42.9	23 800
14.0	73.8	42.7	21 700
15.0	72.3	42.3	19 900
16.0	70.9	42.0	18 300
18.0	68.0	41.2	15 600
20.0	65.1	40.3	13 300
22.0	62.1	39.3	11 300
24.0	59.0	38.1	9 600
26.0	55.8	36.8	8 300
28.0	52.4	35.3	7 200
30.0	48.9	33.6	6 200
32.0	45.2	31.7	5 400
34.0	41.2	29.5	4 700
36.0	36.9	27.0	4 100
38.0	32.0	24.0	3 600
40.0	26.4	20.3	3 100
42.0	19.2	15.4	2 700
45.7m (150 Ft.) Boom			
7.9	82.7	47.1	40 500
8.0	82.6	47.1	40 100
9.0	81.3	47.0	35 300
10.0	80.0	46.8	31 400
11.0	78.7	46.6	28 200
12.0	77.5	46.4	25 400
13.0	76.2	46.1	23 100
14.0	74.9	45.8	21 000
15.0	73.6	45.5	19 300
16.0	72.2	45.2	17 700
18.0	69.6	44.5	15 100
20.0	66.9	43.7	13 000
22.0	64.1	42.7	11 000
24.0	61.3	41.7	9 400
26.0	58.3	40.5	8 100
28.0	55.3	39.1	6 900
30.0	52.2	37.6	6 000

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
45.7m (150 Ft.) Boom			
32.0	48.9	35.9	5 200
34.0	45.4	34.0	4 500
36.0	41.8	31.9	3 800
38.0	37.8	29.4	3 300
40.0	33.4	26.5	2 800
42.0	28.4	23.1	2 400
44.0	22.4	18.8	2 100
48.8m (160 Ft.) Boom			
8.5	82.4	50.1	36 400
9.0	81.8	50.0	34 400
10.0	80.6	49.9	30 600
11.0	79.5	49.7	27 500
12.0	78.3	49.5	24 900
13.0	77.0	49.2	22 600
14.0	75.8	49.0	20 600
15.0	74.6	48.7	18 900
16.0	73.4	48.4	17 400
18.0	70.9	47.8	14 800
20.0	68.4	47.0	12 700
22.0	65.8	46.1	11 000
24.0	63.2	45.1	9 400
26.0	60.5	44.0	8 100
28.0	57.8	42.8	6 900
30.0	54.9	41.4	6 000
32.0	52.0	39.9	5 100
34.0	48.9	38.2	4 400
36.0	45.7	36.3	3 800
38.0	42.2	34.2	3 200
40.0	38.6	31.8	2 700
42.0	34.6	29.1	2 300
44.0	30.1	25.8	1 900

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
51.8m (170 Ft.) Boom			
8.5	82.8	53.2	35 200
9.0	82.3	53.1	33 300
10.0	81.2	53.0	29 700
11.0	80.1	52.8	26 700
12.0	79.0	52.6	24 100
13.0	77.8	52.4	21 900
14.0	76.7	52.1	20 000
15.0	75.5	51.9	18 300
16.0	74.4	51.6	16 800
18.0	72.1	51.0	14 300
20.0	69.7	50.3	12 300
22.0	67.3	49.4	10 600
24.0	64.9	48.5	9 200
26.0	62.4	47.5	7 800
28.0	59.9	46.4	6 700
30.0	57.3	45.1	5 700
32.0	54.6	43.8	4 900
34.0	51.8	42.2	4 200
36.0	48.9	40.5	3 600
38.0	45.9	38.7	3 000
40.0	42.7	36.6	2 500
42.0	39.3	34.2	2 000

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54.9m (180 Ft.) Boom			
9.1	82.6	56.2	31 800
10.0	81.7	56.1	28 900
11.0	80.6	55.9	26 000
12.0	79.6	55.7	23 500
13.0	78.5	55.5	21 300
14.0	77.4	55.3	19 400
15.0	76.4	55.0	17 800
16.0	75.3	54.8	16 400
18.0	73.1	54.2	13 900
20.0	70.9	53.5	11 900
22.0	68.7	52.7	10 300
24.0	66.4	51.9	8 900
26.0	64.1	51.0	7 700
28.0	61.7	49.9	6 500
30.0	59.3	48.7	5 600
32.0	56.8	47.5	4 800
34.0	54.3	46.1	4 000
36.0	51.7	44.5	3 400
38.0	48.9	42.8	2 800
40.0	46.1	41.0	2 400
42.0	43.0	38.9	1 900
57.9m (190 Ft.) Boom			
9.8	82.4	59.2	28 900
10.0	82.1	59.1	28 200
11.0	81.1	59.0	25 400
12.0	80.1	58.8	23 000
13.0	79.1	58.6	20 900
14.0	78.1	58.4	19 100
15.0	77.1	58.2	17 500
16.0	76.1	57.9	16 100
18.0	74.0	57.4	13 700
20.0	71.9	56.7	11 700

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
57.9m (190 Ft.) Boom			
22.0	69.8	56.0	10 100
24.0	67.7	55.2	8 700
26.0	65.6	54.3	7 500
28.0	63.3	53.4	6 500
30.0	61.1	52.3	5 600
32.0	58.8	51.1	4 700
34.0	56.4	49.8	4 000
36.0	54.0	48.4	3 300
38.0	51.5	46.8	2 800
40.0	48.9	45.1	2 300
61.0m (200 Ft.) Boom			
10.4	82.2	62.2	26 300
11.0	81.6	62.1	24 600
12.0	80.6	61.9	22 300
13.0	79.7	61.7	20 300
14.0	78.7	61.5	18 500
15.0	77.8	61.3	16 900
16.0	76.8	61.1	15 600
18.0	74.8	60.5	13 200
20.0	72.9	59.9	11 300
22.0	70.9	59.3	9 700
24.0	68.9	58.5	8 400
26.0	66.9	57.7	7 200
28.0	64.8	56.8	6 200
30.0	62.7	55.7	5 300
32.0	60.5	54.6	4 500
34.0	58.3	53.4	3 800
36.0	56.1	52.1	3 200
38.0	53.8	50.7	2 600
40.0	51.4	49.1	2 100

Oper. Rad. Meters	Boom Ang. Deg.	Boom Point Elev. Meters	Boom Capacity Kilograms
64.0m (210 Ft.) Boom			
11.0	82.0	65.2	23 900
12.0	81.1	65.0	21 600
13.0	80.2	64.8	19 600
14.0	79.3	64.6	17 900
15.0	78.3	64.4	16 400
16.0	77.4	64.2	15 100
18.0	75.6	63.7	12 800
20.0	73.7	63.1	10 900
22.0	71.8	62.5	9 300
24.0	69.9	61.8	8 000
26.0	68.0	61.0	6 800
28.0	66.1	60.1	5 900
30.0	64.1	59.2	5 000
32.0	62.1	58.1	4 200
34.0	60.0	57.0	3 600
36.0	57.9	55.8	2 900
38.0	55.8	54.4	2 300

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