

Liftcrane Boom Capacities

**New York City Code
Boom No. 84
71,500 Lb. Counterweight
360 Degree Rating**

**Meets
ANSI B30.5
Requirements**

555 SERIES 1

LIFTING CAPACITIES: Lifting 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 (*). Capacities indicated by (b) require 10,000 Lb. 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 50 Ft. thru 70 Ft. boom lengths.*

Upper boom point capacity for liftcrane service with single part whip line is 30,000 Lbs. or 60,000 Lbs. 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 20,000 Lbs. or 40,000 Lbs. 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, 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. Refer to boom rigging **No. A00952** and Wire Rope Specification chart **No. 8443-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 Specification chart **No. 8445-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 23 Ft. 10 in. crawlers, 48 in. treads, 23 Ft. 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 71,500 Lb. crane counterweight.

¹WARNING: 1,250 Lb. 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.



71,500 Lb. Crane Counterweight
4 Side Boxes

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) 210 Ft.	—	180 Ft.	—
(b) 200 Ft.	—	170 Ft.	—
190 Ft.	—	160 Ft.	40 Ft.
180 Ft.	40 Ft.	150 Ft.	60 Ft.
170 Ft.	60 Ft.	140 Ft.	80 Ft.
160 Ft.	80 Ft.		
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be attached on 210 Ft. boom. (b) Upper wire rope guide (No. A04352) for third line cannot be attached on 200 Ft. and 210 Ft. booms.			

Upper Boom Point Deduct

Deduct 1,100 Lbs. from capacities when upper boom point is attached.

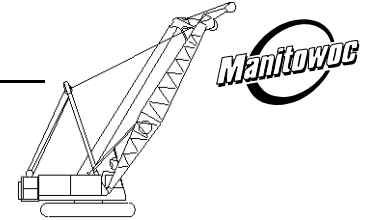
Wire Rope Guide Deduct (For Third Line)

Deduct 600 Lbs. 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
30 Ft.	3,900 Lbs.
40 Ft.	4,700 Lbs.
50 Ft.	5,600 Lbs.
60 Ft.	6,600 Lbs.
70 Ft.	7,600 Lbs.
80 Ft.	8,700 Lbs.

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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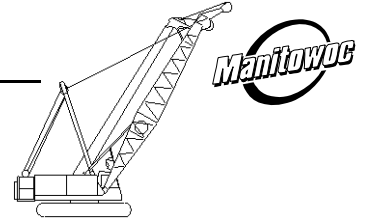
New York City Code
Boom No. 84
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555 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
50 Ft. Boom			
15	80.6	55.1	279,900 *b
16	79.4	54.9	263,300 *b
17	78.2	54.6	246,700 b
18	77.0	54.4	220,900 b
19	75.9	54.1	199,900 b
20	74.7	53.8	182,400 b
22	72.2	53.1	154,900 b
24	69.8	52.3	134,200 b
26	67.3	51.5	118,200
28	64.7	50.5	105,400
30	62.1	49.4	94,900
32	59.4	48.2	86,200
34	56.7	46.8	78,800
36	53.8	45.3	72,400
38	50.8	43.7	66,900
40	47.7	41.8	62,100
45	39.0	36.1	52,300
50	28.0	27.9	44,700
60 Ft. Boom			
15	82.2	65.2	279,800 *b
16	81.2	65.1	263,200 *b
17	80.2	64.9	247,600 b
18	79.2	64.7	221,800 b
19	78.3	64.4	200,700 b
20	77.3	64.2	183,100 b
22	75.3	63.6	155,500 b
24	73.3	63.0	134,900 b
26	71.3	62.3	118,800
28	69.2	61.5	106,000
30	67.1	60.6	95,500
32	65.0	59.7	86,700
34	62.9	58.6	79,300
36	60.7	57.5	73,000
38	58.4	56.2	67,500
40	56.1	54.8	62,600
45	50.0	50.8	52,800
50	43.2	45.8	45,300
55	35.3	39.3	39,400
60	25.4	30.1	34,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. Boom			
16	82.5	75.2	262,800 *b
17	81.6	75.0	248,000 *b
18	80.8	74.9	222,300 b
19	80.0	74.7	201,200 b
20	79.1	74.5	183,500 b
22	77.4	74.0	155,900 b
24	75.8	73.5	135,200 b
26	74.0	72.9	119,100
28	72.3	72.2	106,200
30	70.6	71.5	95,700
32	68.8	70.7	87,000
34	67.0	69.8	79,500
36	65.2	68.8	73,200
38	63.4	67.8	67,700
40	61.5	66.7	62,800
45	56.7	63.5	53,000
50	51.5	59.7	45,600
55	45.9	55.1	39,700
60	39.7	49.4	34,900
65	32.5	42.2	30,900
70	23.3	32.1	27,500
80 Ft. Boom			
17	82.7	85.2	247,800 *b
18	82.0	85.0	222,700 b
19	81.2	84.8	201,500 b
20	80.5	84.7	183,900 b
22	79.0	84.3	156,200 b
24	77.6	83.8	135,500 b
26	76.1	83.3	119,300
28	74.6	82.7	106,500
30	73.1	82.1	95,900
32	71.6	81.4	87,200
34	70.1	80.6	79,700
36	68.5	79.8	73,400
38	67.0	79.0	67,900
40	65.4	78.0	63,000
45	61.3	75.4	53,200
50	57.1	72.2	45,800
55	52.6	68.5	39,900
60	47.9	64.2	35,100
65	42.7	59.0	31,100
70	37.0	52.7	27,800
75	30.3	44.8	24,900
80	21.7	34.0	22,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. Boom			
18	82.9	95.1	222,800 b
19	82.2	95.0	201,600 b
20	81.6	94.8	183,900 b
22	80.3	94.5	156,200 b
24	79.0	94.0	135,400 b
26	77.7	93.6	119,300
28	76.4	93.1	106,400
30	75.0	92.5	95,800
32	73.7	91.9	87,000
34	72.4	91.3	79,600
36	71.0	90.6	73,200
38	69.7	89.8	67,700
40	68.3	89.0	62,900
45	64.8	86.7	53,100
50	61.2	84.0	45,600
55	57.4	80.9	39,700
60	53.5	77.3	35,000
65	49.4	73.2	31,000
70	44.9	68.3	27,700
75	40.1	62.7	24,900
80	34.7	55.8	22,400
85	28.5	47.3	20,200
90	20.4	35.7	18,300
100 Ft. Boom			
19	83.0	105.1	201,800 b
20	82.4	104.9	184,100 b
22	81.3	104.6	156,300 b
24	80.1	104.3	135,500 b
26	78.9	103.8	119,400
28	77.8	103.4	106,500
30	76.6	102.9	95,900
32	75.4	102.4	87,200
34	74.2	101.8	79,700
36	73.0	101.1	73,400
38	71.8	100.5	67,800
40	70.6	99.7	63,000
45	67.5	97.7	53,200
50	64.3	95.4	45,700
55	61.1	92.7	39,800
60	57.7	89.6	35,100
65	54.2	86.1	31,200
70	50.5	82.1	27,900
75	46.6	77.5	25,000
80	42.5	72.2	22,600
85	37.9	66.1	20,500
90	32.9	58.8	18,600
95	26.9	49.7	16,900
100	19.3	37.3	15,400



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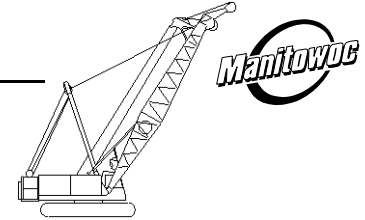
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555 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. Boom			
22	82.1	114.8	156,400
24	81.0	114.4	135,600
26	80.0	114.0	119,400
28	78.9	113.6	106,400
30	77.8	113.2	95,900
32	76.7	112.7	87,100
34	75.7	112.2	79,600
36	74.6	111.6	73,200
38	73.5	111.0	67,700
40	72.4	110.4	62,900
45	69.6	108.5	53,000
50	66.8	106.4	45,600
55	63.9	104.1	39,700
60	61.0	101.3	34,900
65	57.9	98.3	31,000
70	54.7	94.8	27,700
75	51.4	90.9	24,900
80	48.0	86.5	22,400
85	44.3	81.6	20,300
90	40.4	75.9	18,400
95	36.1	69.3	16,800
100	31.2	61.5	15,300
105	25.6	51.9	13,900
110	18.3	38.9	12,700
120 Ft. Boom			
22	82.7	124.9	156,400
24	81.8	124.6	135,500
26	80.8	124.2	119,300
28	79.8	123.8	106,400
30	78.9	123.4	95,800
32	77.9	123.0	87,000
34	76.9	122.5	79,500
36	75.9	122.0	73,100
38	74.9	121.4	67,600
40	73.9	120.9	62,800
45	71.4	119.2	52,900
50	68.9	117.3	45,400
55	66.3	115.2	39,600
60	63.6	112.7	34,800
65	60.9	110.0	30,900
70	58.1	106.9	27,600
75	55.2	103.5	24,700
80	52.2	99.7	22,300
85	49.1	95.5	20,200
90	45.8	90.8	18,300
95	42.3	85.5	16,700
100	38.5	79.4	15,200
105	34.4	72.4	13,800
110	29.8	64.2	12,600
115	24.4	54.1	11,500
120	17.5	40.4	10,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. Boom			
24	82.4	134.7	135,500
26	81.5	134.4	119,300
28	80.6	134.0	106,300
30	79.7	133.6	95,700
32	78.8	133.2	86,800
34	77.9	132.8	79,400
36	77.0	132.3	73,000
38	76.1	131.8	67,400
40	75.2	131.3	62,600
45	72.9	129.8	52,700
50	70.6	128.0	45,200
55	68.2	126.1	39,300
60	65.8	123.9	34,500
65	63.3	121.4	30,600
70	60.8	118.7	27,300
75	58.2	115.6	24,500
80	55.6	112.3	22,100
85	52.8	108.5	19,900
90	50.0	104.4	18,100
95	47.0	99.9	16,400
100	43.9	94.8	14,900
105	40.5	89.1	13,600
110	36.9	82.7	12,400
115	33.0	75.4	11,300
120	28.6	66.7	10,300
125	23.4	56.1	9,400
130	16.8	41.8	8,500
140 Ft. Boom			
24	83.0	144.8	135,400
26	82.1	144.5	119,100
28	81.3	144.2	106,100
30	80.5	143.8	95,500
32	79.6	143.4	86,700
34	78.8	143.0	79,200
36	78.0	142.6	72,800
38	77.1	142.1	67,300
40	76.3	141.6	62,400
45	74.2	140.2	52,600
50	72.0	138.6	45,100
55	69.8	136.8	39,200
60	67.6	134.8	34,400
65	65.4	132.6	30,500
70	63.1	130.1	27,200
75	60.8	127.3	24,400
80	58.4	124.3	21,900
85	55.9	121.0	19,800
90	53.4	117.3	18,000
95	50.7	113.3	16,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
140 Ft. Boom			
100	48.0	108.9	14,900
105	45.2	104.1	13,500
110	42.2	98.7	12,300
115	39.0	92.7	11,200
120	35.5	85.9	10,200
125	31.8	78.2	9,300
130	27.5	69.1	8,500
135	22.5	58.1	7,700
140	16.1	43.2	6,900
150 Ft. Boom			
26	82.7	154.6	119,000
28	81.9	154.3	106,000
30	81.1	154.0	95,400
32	80.3	153.6	86,500
34	79.6	153.2	79,000
36	78.8	152.8	72,600
38	78.0	152.4	67,100
40	77.2	151.9	62,200
45	75.2	150.6	52,400
50	73.2	149.2	44,800
55	71.2	147.5	38,900
60	69.2	145.6	34,200
65	67.1	143.5	30,200
70	65.0	141.3	26,900
75	62.9	138.7	24,100
80	60.7	136.0	21,700
85	58.5	133.0	19,600
90	56.2	129.7	17,700
95	53.8	126.1	16,000
100	51.4	122.2	14,600
105	48.9	117.9	13,200
110	46.3	113.2	12,100
115	43.5	108.1	11,000
120	40.6	102.4	10,000
125	37.6	96.1	9,100
130	34.3	89.0	8,200
135	30.6	80.9	7,400
140	26.6	71.5	6,700
145	21.8	59.9	6,000
150	15.6	44.5	5,400



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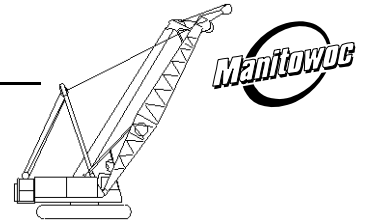
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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. Boom			
28	82.4	164.4	105,900
30	81.7	164.1	95,200
32	80.9	163.8	86,400
34	80.2	163.4	78,900
36	79.5	163.0	72,500
38	78.8	162.6	66,900
40	78.0	162.2	62,000
45	76.2	161.0	52,200
50	74.3	159.6	44,600
55	72.4	158.1	38,700
60	70.6	156.3	33,900
65	68.6	154.4	30,000
70	66.7	152.3	26,700
75	64.7	149.9	23,900
80	62.7	147.4	21,400
85	60.7	144.6	19,300
90	58.6	141.6	17,500
95	56.4	138.4	15,800
100	54.2	134.8	14,300
105	52.0	131.0	13,000
110	49.6	126.8	11,800
115	47.2	122.3	10,700
120	44.7	117.3	9,800
125	42.1	111.9	8,800
130	39.3	105.9	8,000
135	36.3	99.3	7,200
140	33.1	92.0	6,500
145	29.6	83.5	5,800
150	25.7	73.7	5,200
155	21.0	61.8	4,600
160	15.0	45.8	4,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
170 Ft. Boom			
28	82.8	174.5	105,700
30	82.2	174.2	95,100
32	81.5	173.9	86,200
34	80.8	173.6	78,700
36	80.1	173.2	72,200
38	79.4	172.8	66,700
40	78.7	172.4	61,800
45	77.0	171.3	51,900
50	75.3	170.0	44,400
55	73.5	168.5	38,400
60	71.7	166.9	33,600
65	70.0	165.1	29,700
70	68.1	163.2	26,400
75	66.3	161.0	23,600
80	64.4	158.6	21,100
85	62.5	156.1	19,000
90	60.6	153.3	17,200
95	58.7	150.3	15,500
100	56.6	147.0	14,000
105	54.6	143.5	12,700
110	52.5	139.8	11,500
115	50.3	135.7	10,400
120	48.1	131.3	9,400
125	45.7	126.5	8,500
130	43.3	121.3	7,700
135	40.7	115.6	6,900
140	38.1	109.4	6,200
145	35.2	102.5	5,500
150	32.1	94.8	4,900
155	28.7	86.1	4,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. Boom			
30	82.6	184.3	94,900
32	82.0	184.0	86,000
34	81.3	183.7	78,500
36	80.7	183.4	72,100
38	80.0	183.0	66,500
40	79.4	182.6	61,600
45	77.7	181.6	51,700
50	76.1	180.4	44,200
55	74.5	179.0	38,300
60	72.8	177.5	33,500
65	71.1	175.8	29,500
70	69.4	173.9	26,200
75	67.7	171.9	23,400
80	66.0	169.7	21,000
85	64.2	167.3	18,800
90	62.4	164.7	17,000
95	60.6	162.0	15,300
100	58.7	159.0	13,900
105	56.8	155.7	12,500
110	54.9	152.3	11,300
115	52.9	148.5	10,300
120	50.9	144.5	9,300
125	48.8	140.2	8,400
130	46.6	135.6	7,500
135	44.3	130.6	6,800
140	42.0	125.1	6,100
145	39.5	119.2	5,400
150	36.9	112.7	4,800
155	34.1	105.6	4,200



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190 Ft. Boom			
32	82.4	194.1	85,800
34	81.8	193.8	78,300
36	81.2	193.5	71,900
38	80.6	193.2	66,300
40	79.9	192.8	61,400
45	78.4	191.8	51,500
50	76.9	190.7	43,900
55	75.3	189.4	38,000
60	73.7	187.9	33,200
65	72.1	186.3	29,200
70	70.5	184.6	25,900
75	68.9	182.7	23,100
80	67.3	180.6	20,600
85	65.7	178.4	18,500
90	64.0	176.0	16,700
95	62.3	173.4	15,000
100	60.6	170.6	13,500
105	58.8	167.6	12,200
110	57.0	164.4	11,000
115	55.2	161.0	9,900
120	53.3	157.3	9,000
125	51.4	153.4	8,000
130	49.4	149.2	7,200
135	47.4	144.6	6,400
140	45.3	139.8	5,700
145	43.1	134.5	5,100
150	40.8	128.9	4,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
200 Ft. Boom			
34	82.2	204.0	78,100
36	81.6	203.6	71,600
38	81.0	203.3	66,000
40	80.4	203.0	61,200
45	79.0	202.0	51,200
50	77.5	200.9	43,700
55	76.0	199.7	37,700
60	74.6	198.4	32,900
65	73.1	196.9	29,000
70	71.6	195.2	25,600
75	70.0	193.4	22,800
80	68.5	191.5	20,400
85	66.9	189.4	18,300
90	65.4	187.1	16,400
95	63.8	184.7	14,700
100	62.2	182.1	13,300
105	60.5	179.3	11,900
110	58.9	176.3	10,700
115	57.2	173.1	9,700
120	55.4	169.7	8,700
125	53.7	166.1	7,800
130	51.8	162.2	6,900
135	50.0	158.1	6,200
140	48.1	153.6	5,500
145	46.1	148.9	4,800
150	44.1	143.8	4,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
210 Ft. Boom			
36	82.0	213.8	71,400
38	81.5	213.5	65,800
40	80.9	213.1	60,900
45	79.5	212.2	51,000
50	78.1	211.2	43,400
55	76.7	210.0	37,400
60	75.3	208.7	32,600
65	73.9	207.3	28,700
70	72.5	205.8	25,300
75	71.0	204.1	22,500
80	69.6	202.2	20,000
85	68.1	200.2	17,900
90	66.6	198.1	16,100
95	65.1	195.8	14,400
100	63.6	193.3	12,900
105	62.1	190.7	11,600
110	60.5	187.9	10,400
115	58.9	185.0	9,300
120	57.3	181.8	8,300
125	55.7	178.4	7,400
130	54.0	174.8	6,600
135	52.3	171.0	5,800
140	50.5	166.9	5,100
145	48.7	162.6	4,500