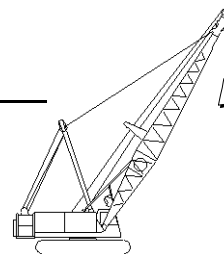




# Liftcrane Boom Capacities

**Boom No. 84 With Open Throat Top**  
**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 60 Ft. thru 80 Ft. boom lengths.*

Upper boom point capacity for liftcrane service with single part whip line is 30,000 Lbs. When boom butt mounted auxiliary drum equipped for 26 mm wire rope is used, capacity with single part whip line is 20,000 Lbs. 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. A03931** and Wire Rope Specification chart **No. 8482-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. 8483-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. A01066<sup>1</sup> or No. A03188 (refer to I.D. plate at front of rotating bed) and 71,500 Lb. crane counterweight.

<sup>1</sup>**WARNING:** 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) 210 Ft.	—	180 Ft.	—
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.		

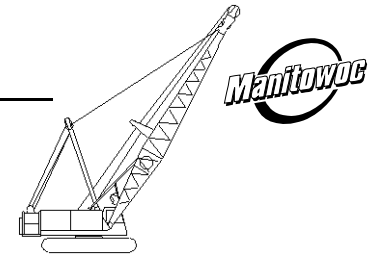
Load block, hook and weight ball on ground at start.  
(a) Upper boom point cannot be attached on 210 Ft. boom.

Upper Boom Point Deduct
Deduct 1,300 Lbs. from capacities when upper boom point is attached.

Load Sensor Deduct
Deduct 625 Lbs. from boom capacities when load sensor sheaves and 3 load lines are 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, third load line and load sensor sheaves for third load line must be removed when jib is attached.



# Liftcrane Boom Capacities

**Boom No. 84 With Open Throat Top**  
**71,500 Lb. Counterweight**  
**360 Degree Rating**

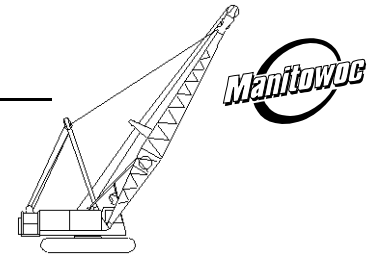
**Meets  
ANSI B30.5  
Requirements**

## 555 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>60 Ft. Boom</b>			
14	81.4	65.4	298,300 *b
15	80.4	65.2	279,500 *b
16	79.4	65.0	262,900 *b
17	78.5	64.8	246,700 b
18	77.5	64.6	221,000 b
19	76.5	64.4	200,000 b
20	75.5	64.2	182,600 b
22	73.5	63.6	155,200 b
24	71.5	63.0	134,700 b
26	69.5	62.3	118,800 b
28	67.5	61.5	106,000
30	65.4	60.6	95,600
32	63.3	59.6	86,900
34	61.1	58.6	79,600
36	58.9	57.4	73,300
38	56.6	56.2	67,800
40	54.3	54.8	63,000
45	48.2	50.8	53,300
50	41.4	45.7	45,900
55	33.6	39.2	40,000
60	23.6	30.0	35,200
<b>70 Ft. Boom</b>			
15	81.8	75.3	279,200 *b
16	81.0	75.2	262,600 *b
17	80.1	75.0	247,200 b
18	79.3	74.8	221,500 b
19	78.5	74.6	200,500 b
20	77.6	74.4	183,000 b
22	75.9	74.0	155,600 b
24	74.3	73.4	135,000 b
26	72.5	72.8	119,000 b
28	70.8	72.2	106,300
30	69.1	71.4	95,800
32	67.3	70.6	87,100
34	65.5	69.8	79,800
36	63.7	68.8	73,400
38	61.9	67.8	68,000
40	60.0	66.7	63,200
45	55.2	63.5	53,500
50	50.0	59.7	46,100
55	44.4	55.0	40,200
60	38.2	49.3	35,500
65	31.0	42.1	31,500
70	21.8	32.0	28,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>80 Ft. Boom</b>			
17	81.4	85.2	247,400 *b
18	80.6	85.0	221,800 b
19	79.9	84.8	200,800 b
20	79.2	84.6	183,200 b
22	77.7	84.2	155,700 b
24	76.3	83.8	135,100 b
26	74.8	83.2	119,100 b
28	73.3	82.7	106,300
30	71.8	82.1	95,900
32	70.3	81.4	87,200
34	68.7	80.6	79,800
36	67.2	79.8	73,500
38	65.6	78.9	68,000
40	64.1	78.0	63,200
45	60.0	75.3	53,500
50	55.8	72.2	46,100
55	51.3	68.5	40,200
60	46.6	64.2	35,500
65	41.4	59.0	31,600
70	35.7	52.7	28,300
75	29.0	44.8	25,400
80	20.4	33.9	22,900
<b>90 Ft. Boom</b>			
18	81.7	95.1	221,900 b
19	81.1	95.0	200,800 b
20	80.4	94.8	183,200 b
22	79.1	94.4	155,700 b
24	77.8	94.0	135,100 b
26	76.5	93.6	119,100
28	75.2	93.1	106,300
30	73.9	92.5	95,800
32	72.5	91.9	87,100
34	71.2	91.2	79,700
36	69.9	90.5	73,400
38	68.5	89.8	67,900
40	67.1	89.0	63,100
45	63.6	86.7	53,400
50	60.0	84.0	46,000
55	56.3	80.9	40,200
60	52.3	77.3	35,400
65	48.2	73.1	31,500
70	43.8	68.3	28,200
75	38.9	62.6	25,400
80	33.6	55.8	23,000
85	27.3	47.3	20,900
90	19.2	35.6	19,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>100 Ft. Boom</b>			
19	82.0	105.1	200,900 b
20	81.4	104.9	183,300 b
22	80.2	104.6	155,700 b
24	79.0	104.2	135,100 b
26	77.9	103.8	119,000
28	76.7	103.4	106,200
30	75.5	102.9	95,700
32	74.3	102.3	87,000
34	73.1	101.7	79,600
36	71.9	101.1	73,300
38	70.7	100.4	67,800
40	69.5	99.7	63,000
45	66.4	97.7	53,300
50	63.3	95.3	45,800
55	60.0	92.7	40,000
60	56.6	89.6	35,300
65	53.1	86.1	31,400
70	49.5	82.1	28,100
75	45.6	77.5	25,300
80	41.4	72.2	22,900
85	36.9	66.1	20,800
90	31.8	58.7	18,900
95	25.8	49.6	17,200
100	18.2	37.3	15,700
<b>110 Ft. Boom</b>			
22	81.1	114.7	155,800 b
24	80.1	114.4	135,100 b
26	79.0	114.0	119,100
28	77.9	113.6	106,200
30	76.9	113.2	95,800
32	75.8	112.7	87,000
34	74.7	112.2	79,600
36	73.6	111.6	73,300
38	72.5	111.0	67,800
40	71.4	110.3	63,000
45	68.7	108.5	53,300
50	65.9	106.4	45,900
55	63.0	104.0	40,000
60	60.0	101.3	35,300
65	56.9	98.2	31,400
70	53.8	94.8	28,100
75	50.5	90.9	25,300
80	47.0	86.5	22,900
85	43.3	81.6	20,800
90	39.4	75.9	19,000
95	35.1	69.3	17,300
100	30.3	61.5	15,800
105	24.6	51.9	14,500
110	17.3	38.8	13,300



# Liftcrane Boom Capacities

**Boom No. 84 With Open Throat Top**  
**71,500 Lb. Counterweight**  
**360 Degree Rating**

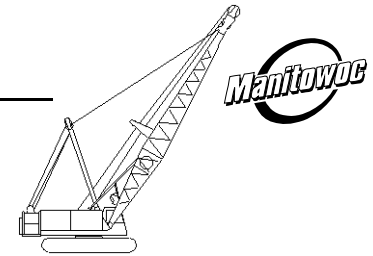
**Meets  
ANSI B30.5  
Requirements**

## 555 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>120 Ft. Boom</b>			
22	81.9	124.8	155,800
24	80.9	124.5	135,100
26	79.9	124.2	119,000
28	78.9	123.8	106,100
30	78.0	123.4	95,600
32	77.0	123.0	86,900
34	76.0	122.5	79,500
36	75.0	122.0	73,100
38	74.0	121.4	67,600
40	73.0	120.8	62,800
45	70.5	119.2	53,100
50	68.0	117.3	45,600
55	65.4	115.1	39,800
60	62.7	112.7	35,100
65	60.0	110.0	31,200
70	57.2	106.9	27,900
75	54.3	103.5	25,100
80	51.3	99.7	22,700
85	48.2	95.5	20,600
90	44.9	90.8	18,700
95	41.4	85.4	17,100
100	37.7	79.4	15,600
105	33.6	72.4	14,300
110	29.0	64.2	13,100
115	23.6	54.0	12,000
120	16.6	40.3	11,000
<b>130 Ft. Boom</b>			
24	81.6	134.7	135,000
26	80.7	134.3	118,900
28	79.8	134.0	106,000
30	78.9	133.6	95,500
32	78.0	133.2	86,700
34	77.1	132.8	79,300
36	76.2	132.3	73,000
38	75.3	131.8	67,500
40	74.4	131.2	62,600
45	72.1	129.7	52,900
50	69.7	128.0	45,500
55	67.4	126.1	39,600
60	65.0	123.8	34,900
65	62.5	121.4	31,000
70	60.0	118.6	27,700
75	57.4	115.6	24,900
80	54.8	112.2	22,500
85	52.0	108.5	20,400
90	49.2	104.4	18,600
95	46.2	99.9	16,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>130 Ft. Boom</b>			
100	43.0	94.8	15,500
105	39.7	89.1	14,100
110	36.1	82.7	12,900
115	32.2	75.3	11,900
120	27.8	66.7	10,900
125	22.6	56.0	9,900
130	15.9	41.8	9,100
<b>140 Ft. Boom</b>			
26	81.4	144.5	118,600
28	80.5	144.1	105,800
30	79.7	143.8	95,200
32	78.9	143.4	86,400
34	78.0	143.0	79,000
36	77.2	142.6	72,700
38	76.4	142.1	67,200
40	75.5	141.6	62,300
45	73.4	140.2	52,600
50	71.3	138.6	45,100
55	69.1	136.8	39,300
60	66.9	134.8	34,500
65	64.6	132.5	30,600
70	62.3	130.1	27,400
75	60.0	127.3	24,600
80	57.6	124.3	22,200
85	55.2	120.9	20,100
90	52.6	117.3	18,200
95	50.0	113.3	16,600
100	47.3	108.9	15,100
105	44.4	104.0	13,800
110	41.4	98.7	12,600
115	38.2	92.7	11,600
120	34.8	85.9	10,600
125	31.0	78.2	9,700
130	26.8	69.1	8,800
135	21.8	58.0	8,000
140	15.4	43.1	7,300
<b>150 Ft. Boom</b>			
26	82.0	154.6	118,500
28	81.2	154.3	105,600
30	80.4	153.9	95,100
32	79.6	153.6	86,300
34	78.9	153.2	78,900
36	78.1	152.8	72,500
38	77.3	152.4	67,000
40	76.5	151.9	62,200
45	74.5	150.6	52,400
50	72.5	149.1	45,000
55	70.5	147.5	39,100
60	68.5	145.6	34,400
65	66.4	143.5	30,500
70	64.3	141.2	27,200
75	62.2	138.7	24,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>150 Ft. Boom</b>			
80	60.0	136.0	22,000
85	57.8	132.9	19,900
90	55.5	129.6	18,100
95	53.1	126.1	16,500
100	50.7	122.1	15,000
105	48.2	117.9	13,700
110	45.6	113.2	12,500
115	42.8	108.0	11,500
120	39.9	102.4	10,500
125	36.9	96.1	9,600
130	33.6	89.0	8,700
135	29.9	80.9	8,000
140	25.8	71.4	7,300
145	21.0	59.9	6,600
<b>160 Ft. Boom</b>			
28	81.7	164.4	105,500
30	81.0	164.1	94,900
32	80.3	163.8	86,100
34	79.6	163.4	78,700
36	78.8	163.0	72,300
38	78.1	162.6	66,800
40	77.4	162.2	62,000
45	75.5	161.0	52,200
50	73.7	159.6	44,700
55	71.8	158.0	38,900
60	69.9	156.3	34,100
65	68.0	154.4	30,200
70	66.0	152.2	26,900
75	64.1	149.9	24,100
80	62.0	147.4	21,700
85	60.0	144.6	19,600
90	57.9	141.6	17,800
95	55.8	138.3	16,200
100	53.6	134.8	14,700
105	51.3	130.9	13,400
110	49.0	126.8	12,200
115	46.6	122.2	11,100
120	44.0	117.3	10,200
125	41.4	111.9	9,300
130	38.6	105.9	8,400
135	35.7	99.3	7,700
140	32.5	91.9	7,000
145	29.0	83.5	6,300
150	25.0	73.7	5,700
155	20.4	61.7	5,100



# Liftcrane Boom Capacities

**Boom No. 84 With Open Throat Top**  
**71,500 Lb. Counterweight**  
**360 Degree Rating**

**Meets  
ANSI B30.5  
Requirements**

## 555 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>170 Ft. Boom</b>			
30	81.5	174.2	94,700
32	80.9	173.9	85,900
34	80.2	173.6	78,500
36	79.5	173.2	72,100
38	78.8	172.8	66,600
40	78.1	172.4	61,700
45	76.4	171.3	51,900
50	74.7	170.0	44,500
55	72.9	168.5	38,600
60	71.1	166.9	33,900
65	69.3	165.1	30,000
70	67.5	163.1	26,700
75	65.7	161.0	23,900
80	63.8	158.6	21,500
85	61.9	156.1	19,400
90	60.0	153.3	17,500
95	58.0	150.3	15,900
100	56.0	147.0	14,400
105	54.0	143.5	13,100
110	51.9	139.7	12,000
115	49.7	135.7	10,900
120	47.4	131.2	9,900
125	45.1	126.5	9,000
130	42.7	121.3	8,200
135	40.1	115.6	7,400
140	37.4	109.4	6,700
145	34.6	102.5	6,100
150	31.5	94.8	5,400
155	28.1	86.1	4,900
160	24.2	75.9	4,300
<b>180 Ft. Boom</b>			
30	82.0	184.3	94,500
32	81.4	184.0	85,700
34	80.7	183.7	78,200
36	80.1	183.4	71,900
38	79.4	183.0	66,300
40	78.8	182.6	61,500
45	77.2	181.6	51,700
50	75.5	180.3	44,200
55	73.9	179.0	38,300
60	72.2	177.4	33,600
65	70.5	175.8	29,600
70	68.8	173.9	26,300
75	67.1	171.9	23,600
80	65.4	169.7	21,100
85	63.6	167.3	19,000
90	61.8	164.7	17,200
95	60.0	161.9	15,600
100	58.1	158.9	14,100
105	56.3	155.7	12,800
110	54.3	152.2	11,600

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>180 Ft. Boom</b>			
115	52.3	148.5	10,500
120	50.3	144.5	9,600
125	48.2	140.2	8,700
130	46.0	135.6	7,800
135	43.8	130.6	7,100
140	41.4	125.1	6,400
145	38.9	119.2	5,700
150	36.3	112.7	5,100
155	33.6	105.6	4,500
160	30.6	97.6	4,000
<b>190 Ft. Boom</b>			
32	81.8	194.1	85,500
34	81.2	193.8	78,000
36	80.6	193.5	71,600
38	80.0	193.2	66,100
40	79.4	192.8	61,300
45	77.8	191.8	51,500
50	76.3	190.6	44,000
55	74.7	189.4	38,100
60	73.2	187.9	33,300
65	71.6	186.3	29,400
70	70.0	184.6	26,100
75	68.4	182.7	23,300
80	66.8	180.6	20,900
85	65.1	178.4	18,800
90	63.4	176.0	17,000
95	61.7	173.4	15,400
100	60.0	170.6	13,900
105	58.2	167.6	12,600
110	56.5	164.4	11,400
115	54.6	161.0	10,300
120	52.8	157.3	9,400
125	50.8	153.4	8,500
130	48.9	149.1	7,700
135	46.8	144.6	6,900
140	44.7	139.7	6,200
145	42.5	134.5	5,500
150	40.3	128.8	4,900
155	37.9	122.7	4,400
<b>200 Ft. Boom</b>			
34	81.7	203.9	77,800
36	81.1	203.6	71,400
38	80.5	203.3	65,900
40	79.9	203.0	61,000
45	78.5	202.0	51,200
50	77.0	200.9	43,700
55	75.5	199.7	37,800
60	74.0	198.3	33,000
65	72.5	196.8	29,100
70	71.0	195.2	25,800

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
<b>200 Ft. Boom</b>			
75	69.5	193.4	23,000
80	68.0	191.5	20,600
85	66.4	189.4	18,500
90	64.8	187.1	16,700
95	63.3	184.7	15,000
100	61.6	182.1	13,600
105	60.0	179.3	12,300
110	58.3	176.3	11,100
115	56.6	173.1	10,000
120	54.9	169.7	9,000
125	53.1	166.1	8,100
130	51.3	162.2	7,300
135	49.5	158.0	6,600
140	47.5	153.6	5,900
145	45.6	148.9	5,200
150	43.5	143.8	4,600
155	41.4	138.3	4,000
<b>210 Ft. Boom</b>			
36	81.5	213.7	71,200
38	81.0	213.4	65,600
40	80.4	213.1	60,700
45	79.0	212.2	50,900
50	77.6	211.2	43,400
55	76.2	210.0	37,500
60	74.8	208.7	32,800
65	73.4	207.3	28,800
70	72.0	205.7	25,500
75	70.5	204.0	22,700
80	69.1	202.2	20,300
85	67.6	200.2	18,200
90	66.1	198.1	16,400
95	64.6	195.8	14,700
100	63.1	193.3	13,300
105	61.6	190.7	12,000
110	60.0	187.9	10,800
115	58.4	184.9	9,700
120	56.8	181.8	8,700
125	55.2	178.4	7,800
130	53.5	174.8	7,000
135	51.8	171.0	6,300
140	50.0	166.9	5,600
145	48.2	162.6	4,900
150	46.3	158.0	4,300