

Liftcrane Boom Capacities

888 SERIES 1

Boom No. 22EL
109,100 Lb. Counterweight
28 Ft. 2 in. Crawlers Extended
Rating Over Front Of Blocked Crawlers
No Travel - Limited Swing

Meets
ANSI B30.5
Requirements

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 over front of machine with crawlers extended and blocked. Capacities based on structural competence are denoted by an asterisk (*). Capacities indicated by (b) require 12,500 Lb. minimum weight.

Upper boom point capacity for liftcrane service with single part whip line is 29,500 Lbs. or 59,000 Lbs. with two part whip line. When boom butt mounted auxiliary drum 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 all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom 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, crawlers fully extended, and front tumbler properly blocked so that centerline of idler tumbler becomes tipping

fulcrum. Drive motors must be to rear of machine. Swing is limited to that sector shown on Operating Range Diagram **No. 7770-A**. Refer to boom rigging **No. 177156** or **No. 177353** and Wire Rope Specification chart **No. 7810-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

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 28 Ft. 2 in. extendible crawlers, 48 in. treads, 10 Ft. 3 in. retractable gantry, 30 Ft. live mast, 20 part boom hoist reeving, four 1-3/8 in. boom pendants and 109,100 Lb. counterweight.

Maximum Boom Length Lifted Unassisted Over Front of Blocked Crawlers
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Boom Length

210 Ft.

Load block, hook and weight ball on ground at start.



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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	380,800 *b
17	82.0	77.1	359,700 *b
18	81.1	76.9	340,700 *b
19	80.3	76.7	323,500 *b
20	79.5	76.5	307,900 *b
22	77.8	76.0	280,700 *b
24	76.1	75.5	257,600 *b
26	74.4	74.9	237,800 *
28	72.7	74.2	220,700 *
30	70.9	73.5	205,700 *
32	69.2	72.7	191,400
34	67.4	71.8	172,500
36	65.6	70.9	156,800
38	63.7	69.8	143,500
40	61.9	68.7	132,100
42	60.0	67.5	122,200
44	58.0	66.2	113,600
46	56.0	64.9	106,000
48	54.0	63.4	99,300
50	51.9	61.7	93,300
55	46.3	57.1	80,600
60	40.1	51.4	70,600
65	32.9	44.2	62,400
70	23.7	34.1	55,500
80 Ft. BOOM			
17	83.0	87.2	358,900 *b
18	82.3	87.0	339,900 *b
19	81.5	86.9	322,800 *b
20	80.8	86.7	307,200 *b
22	79.3	86.3	279,900 *b
24	77.9	85.8	256,800 *b
26	76.4	85.3	237,100 *
28	74.9	84.7	220,000 *
30	73.4	84.1	205,000 *
32	71.9	83.4	191,800 *
34	70.4	82.7	173,000
36	68.8	81.9	157,200
38	67.3	81.0	143,800
40	65.7	80.0	132,400
42	64.1	79.0	122,500
44	62.4	78.0	113,800
46	60.8	76.8	106,200
48	59.1	75.6	99,500
50	57.4	74.3	93,400
55	52.9	70.6	80,700
60	48.2	66.2	70,700
65	43.0	61.0	62,500
70	37.3	54.8	55,700
75	30.6	46.9	50,000
80	22.0	36.0	45,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	322,300 *b
20	81.8	96.8	306,700 *b
22	80.5	96.5	279,400 *b
24	79.2	96.1	256,400 *b
26	77.9	95.6	236,600 *
28	76.6	95.1	219,500 *
30	75.3	94.6	204,500 *
32	74.0	94.0	191,300 *
34	72.6	93.3	173,400
36	71.3	92.6	157,500
38	69.9	91.8	144,100
40	68.6	91.0	132,700
42	67.2	90.1	122,700
44	65.8	89.2	114,100
46	64.3	88.2	106,400
48	62.9	87.2	99,600
50	61.4	86.0	93,600
55	57.7	82.9	80,900
60	53.8	79.3	70,800
65	49.6	75.2	62,600
70	45.2	70.4	55,900
75	40.4	64.7	50,200
80	35.0	57.9	45,300
85	28.7	49.4	41,000
90	20.7	37.7	37,200
100 Ft. BOOM			
20	82.7	107.0	306,400 *b
22	81.5	106.6	279,100 *b
24	80.3	106.3	256,100 *b
26	79.2	105.9	236,300 *
28	78.0	105.4	219,200 *
30	76.8	104.9	204,300 *
32	75.6	104.4	191,100 *
34	74.4	103.8	173,700
36	73.2	103.2	157,800
38	72.0	102.5	144,400
40	70.8	101.8	132,900
42	69.6	101.0	122,900
44	68.3	100.2	114,300
46	67.1	99.3	106,600
48	65.8	98.4	99,800

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
100 Ft. BOOM			
50	64.6	97.4	93,700
55	61.3	94.7	81,000
60	57.9	91.6	70,900
65	54.4	88.1	62,800
70	50.8	84.1	56,000
75	46.9	79.5	50,300
80	42.7	74.3	45,400
85	38.2	68.1	41,200
90	33.1	60.8	37,500
95	27.2	51.7	34,200
100	19.5	39.4	31,300
110 Ft. BOOM			
22	82.3	116.8	278,500 *
24	81.2	116.4	255,400 *
26	80.2	116.1	235,700 *
28	79.1	115.7	218,600 *
30	78.0	115.2	203,600 *
32	77.0	114.7	190,500 *
34	75.9	114.2	173,900
36	74.8	113.6	157,900
38	73.7	113.0	144,500
40	72.6	112.4	133,000
42	71.5	111.7	123,000
44	70.4	110.9	114,300
46	69.3	110.2	106,600
48	68.2	109.3	99,800
50	67.0	108.5	93,700
55	64.1	106.1	80,900
60	61.2	103.4	70,800
65	58.1	100.3	62,600
70	55.0	96.8	55,900
75	51.7	93.0	50,200
80	48.2	88.6	45,300
85	44.5	83.6	41,100
90	40.6	77.9	37,400
95	36.3	71.4	34,100
100	31.5	63.6	31,200
105	25.8	54.0	28,600
110	18.6	40.9	26,200

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Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
120 Ft. BOOM			
22	82.9	126.9	278,000 *
24	82.0	126.6	255,000 *
26	81.0	126.2	235,200 *
28	80.0	125.9	218,200 *
30	79.1	125.5	203,200 *
32	78.1	125.0	190,000 *
34	77.1	124.5	174,000
36	76.1	124.0	158,000
38	75.1	123.5	144,500
40	74.1	122.9	133,000
42	73.1	122.2	123,000
44	72.1	121.6	114,300
46	71.1	120.9	106,600
48	70.1	120.1	99,700
50	69.1	119.3	93,600
55	66.5	117.2	80,900
60	63.8	114.7	70,800
65	61.1	112.0	62,600
70	58.3	109.0	55,800
75	55.4	105.6	50,100
80	52.4	101.8	45,200
85	49.3	97.5	41,000
90	46.0	92.8	37,300
95	42.5	87.5	34,100
100	38.7	81.4	31,200
105	34.6	74.4	28,600
110	30.0	66.2	26,300
115	24.7	56.1	24,100
120	17.7	42.4	22,100
130 Ft. BOOM			
24	82.6	136.7	254,700 *
26	81.7	136.4	235,000 *
28	80.8	136.0	217,900 *
30	79.9	135.7	202,900 *
32	79.0	135.3	189,800 *
34	78.1	134.8	174,200
36	77.2	134.3	158,200
38	76.3	133.8	144,700
40	75.4	133.3	133,100
42	74.5	132.7	123,100
44	73.5	132.1	114,400
46	72.6	131.5	106,700
48	71.7	130.8	99,800
50	70.7	130.1	93,700
55	68.4	128.1	80,900
60	66.0	125.9	70,800
65	63.5	123.4	62,600
70	61.0	120.7	55,800
75	58.4	117.6	50,100
80	55.8	114.3	45,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
85	53.0	110.6	41,000
90	50.2	106.5	37,300
95	47.2	101.9	34,100
100	44.0	96.8	31,200
105	40.7	91.2	28,700
110	37.1	84.8	26,300
115	33.2	77.4	24,200
120	28.8	68.7	22,300
125	23.6	58.1	20,500
130	17.0	43.8	18,900
140 Ft. BOOM			
26	82.3	146.5	234,400 *
28	81.5	146.2	217,400 *
30	80.6	145.8	202,400 *
32	79.8	145.5	189,200 *
34	79.0	145.1	174,200
36	78.1	144.6	158,200
38	77.3	144.1	144,600
40	76.4	143.6	133,000
42	75.6	143.1	123,000
44	74.7	142.5	114,300
46	73.9	141.9	106,500
48	73.0	141.3	99,700
50	72.2	140.7	93,600
55	70.0	138.9	80,800
60	67.8	136.8	70,600
65	65.5	134.6	62,400
70	63.3	132.1	55,600
75	60.9	129.3	49,900
80	58.5	126.3	45,000
85	56.1	123.0	40,800
90	53.5	119.3	37,200
95	50.9	115.3	33,900
100	48.2	110.9	31,000
105	45.3	106.1	28,500
110	42.3	100.7	26,200
115	39.1	94.7	24,100
120	35.7	87.9	22,200
125	31.9	80.2	20,400
130	27.7	71.2	18,800
135	22.7	60.1	17,300
140	16.3	45.2	15,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	233,700 *
28	82.0	156.3	216,600 *
30	81.3	156.0	201,700 *
32	80.5	155.6	188,500 *
34	79.7	155.3	174,300
36	78.9	154.8	158,200
38	78.2	154.4	144,600
40	77.4	153.9	133,000
42	76.6	153.5	122,900
44	75.8	152.9	114,200
46	75.0	152.4	106,400
48	74.2	151.8	99,500
50	73.4	151.2	93,400
55	71.4	149.5	80,500
60	69.4	147.6	70,400
65	67.3	145.6	62,100
70	65.2	143.3	55,300
75	63.0	140.8	49,600
80	60.9	138.0	44,700
85	58.6	135.0	40,500
90	56.3	131.7	36,800
95	54.0	128.1	33,600
100	51.6	124.2	30,700
105	49.1	119.9	28,100
110	46.4	115.2	25,800
115	43.7	110.1	23,700
120	40.8	104.4	21,800
125	37.7	98.1	20,100
130	34.4	91.0	18,500
135	30.8	82.9	17,000
140	26.7	73.5	15,600
145	21.9	62.0	14,300
150	15.7	46.5	13,100

Liftcrane Boom Capacities

Meets
ANSI B30.5
Requirements

888 SERIES 1

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109,100 Lb. Counterweight
28 Ft. 2 in. Crawlers Extended
Rating Over Front Of Blocked Crawlers
No Travel - Limited Swing

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
28	82.5	166.4	216,100 *
30	81.8	166.1	201,100 *
32	81.1	165.8	187,900 *
34	80.4	165.4	174,200
36	79.6	165.1	158,100
38	78.9	164.6	144,500
40	78.2	164.2	132,800
42	77.4	163.7	122,800
44	76.7	163.3	114,000
46	76.0	162.7	106,200
48	75.2	162.2	99,300
50	74.5	161.6	93,200
55	72.6	160.1	80,300
60	70.7	158.3	70,100
65	68.8	156.4	61,900
70	66.8	154.3	55,100
75	64.9	152.0	49,300
80	62.9	149.4	44,400
85	60.8	146.7	40,200
90	58.7	143.6	36,500
95	56.6	140.4	33,300
100	54.4	136.8	30,400
105	52.1	133.0	27,800
110	49.8	128.8	25,500
115	47.4	124.3	23,400
120	44.9	119.3	21,500
125	42.2	113.9	19,800
130	39.4	108.0	18,200
135	36.5	101.4	16,700
140	33.3	94.0	15,400
145	29.8	85.6	14,100
150	25.8	75.7	12,900
155	21.2	63.8	11,800
160	15.2	47.8	10,700
170 Ft. BOOM			
28	83.0	176.5	213,500 *
30	82.3	176.2	200,700 *
32	81.6	175.9	187,600 *
34	80.9	175.6	174,200
36	80.3	175.2	158,100
38	79.6	174.9	144,400
40	78.9	174.4	132,800
42	78.2	174.0	122,700
44	77.5	173.6	113,900
46	76.8	173.1	106,100
48	76.1	172.6	99,200
50	75.4	172.0	93,100
55	73.7	170.6	80,200
60	71.9	168.9	70,000
65	70.1	167.1	61,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
170 Ft. BOOM			
70	68.3	165.2	54,900
75	66.4	163.0	49,200
80	64.6	160.6	44,300
85	62.7	158.1	40,100
90	60.8	155.3	36,400
95	58.8	152.3	33,100
100	56.8	149.1	30,300
105	54.7	145.6	27,700
110	52.6	141.8	25,400
115	50.4	137.7	23,300
120	48.2	133.3	21,400
125	45.9	128.5	19,700
130	43.4	123.3	18,100
135	40.9	117.6	16,600
140	38.2	111.4	15,200
145	35.3	104.5	14,000
150	32.2	96.8	12,800
155	28.8	88.1	11,700
160	25.0	77.9	10,700
165	20.5	65.6	9,700
180 Ft. BOOM			
30	82.7	186.3	199,200 *
32	82.1	186.0	187,000 *
34	81.4	185.7	174,100
36	80.8	185.4	157,900
38	80.2	185.0	144,300
40	79.5	184.6	132,600
42	78.9	184.2	122,500
44	78.2	183.8	113,700
46	77.6	183.4	105,900
48	76.9	182.9	99,000
50	76.2	182.4	92,800
55	74.6	181.0	79,900
60	72.9	179.5	69,700
65	71.2	177.8	61,500
70	69.5	175.9	54,600
75	67.8	173.9	48,900
80	66.1	171.7	44,000
85	64.3	169.3	39,700
90	62.5	166.8	36,100
95	60.7	164.0	32,800
100	58.9	161.0	29,900
105	57.0	157.8	27,400
110	55.0	154.3	25,100
115	53.0	150.6	23,000
120	51.0	146.6	21,100
125	48.9	142.3	19,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
130	46.7	137.6	17,700
135	44.5	132.6	16,300
140	42.1	127.1	14,900
145	39.7	121.2	13,700
150	37.1	114.7	12,500
155	34.3	107.6	11,400
160	31.3	99.6	10,400
165	28.0	90.6	9,400
170	24.3	80.0	8,500
175	19.9	67.3	7,700
190 Ft. BOOM			
32	82.5	196.2	181,000 *
34	81.9	195.9	174,200
36	81.3	195.5	158,000
38	80.7	195.2	144,300
40	80.1	194.8	132,500
42	79.4	194.4	122,400
44	78.8	194.0	113,600
46	78.2	193.6	105,800
48	77.6	193.2	98,800
50	77.0	192.7	92,600
55	75.4	191.4	79,700
60	73.9	189.9	69,500
65	72.3	188.4	61,200
70	70.7	186.6	54,300
75	69.1	184.7	48,500
80	67.4	182.7	43,600
85	65.8	180.4	39,400
90	64.1	178.0	35,700
95	62.4	175.4	32,400
100	60.7	172.6	29,500
105	58.9	169.6	27,000
110	57.1	166.4	24,600
115	55.3	163.0	22,500
120	53.4	159.3	20,600
125	51.5	155.4	18,900
130	49.5	151.2	17,300
135	47.5	146.7	15,900
140	45.4	141.8	14,500
145	43.2	136.5	13,300
150	40.9	130.9	12,100
155	38.5	124.7	11,000
160	36.0	118.0	10,000
165	33.3	110.6	9,000
170	30.4	102.3	8,100
175	27.2	93.0	7,300
180	23.6	82.1	6,500
185	19.4	68.9	5,700

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Meets ANSI B30.5 Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
200 Ft. BOOM			
32	82.9	206.3	171,000 *
34	82.3	206.0	168,200 *
36	81.7	205.7	157,800
38	81.1	205.3	144,000
40	80.6	205.0	132,300
42	80.0	204.6	122,200
44	79.4	204.2	113,300
46	78.8	203.8	105,500
48	78.2	203.4	98,500
50	77.6	203.0	92,300
55	76.2	201.7	79,400
60	74.7	200.4	69,100
65	73.2	198.9	60,800
70	71.7	197.2	54,000
75	70.2	195.4	48,200
80	68.6	193.5	43,300
85	67.1	191.4	39,000
90	65.5	189.1	35,300
95	63.9	186.7	32,100
100	62.3	184.1	29,200
105	60.6	181.3	26,600
110	59.0	178.3	24,300
115	57.3	175.1	22,200
120	55.5	171.7	20,300
125	53.8	168.1	18,500
130	52.0	164.2	17,000
135	50.1	160.1	15,500
140	48.2	155.6	14,100
145	46.2	150.9	12,900
150	44.2	145.8	11,700
155	42.1	140.4	10,600
160	39.8	134.5	9,600
165	37.5	128.1	8,700
170	35.1	121.1	7,800
175	32.4	113.4	6,900
180	29.6	104.9	6,100
185	26.5	95.3	5,400
190	23.0	84.1	4,700
195	18.9	70.6	4,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
210 Ft. BOOM			
34	82.7	216.1	158,700 *
36	82.1	215.8	156,400 *
38	81.6	215.5	143,900
40	81.0	215.1	132,200
42	80.5	214.8	122,000
44	79.9	214.4	113,100
46	79.4	214.0	105,300
48	78.8	213.6	98,400
50	78.2	213.2	92,100
55	76.8	212.0	79,200
60	75.4	210.8	68,900
65	74.0	209.3	60,600
70	72.6	207.8	53,700
75	71.1	206.1	47,900
80	69.7	204.2	43,000
85	68.2	202.2	38,800
90	66.7	200.1	35,100
95	65.2	197.8	31,800
100	63.7	195.4	28,900
105	62.2	192.7	26,300
110	60.6	189.9	24,000
115	59.0	187.0	21,900
120	57.4	183.8	20,000
125	55.8	180.4	18,300
130	54.1	176.8	16,700
135	52.4	173.0	15,200
140	50.6	168.9	13,900
145	48.8	164.6	12,600
150	46.9	160.0	11,500
155	45.0	155.1	10,400
160	43.0	149.8	9,400
165	41.0	144.1	8,400
170	38.8	138.0	7,500
175	36.6	131.4	6,700
180	34.2	124.2	5,900
185	31.6	116.3	5,200
190	28.9	107.5	4,400