

Liftcrane Boom Capacities

Boom No. 82 or 22EL
114,600 Lb. Counterweight
Rating Over End of Blocked Crawlers
No Travel - Limited Swing

Meets
ANSI B30.5
Requirements

999 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 over end of machine with crawlers 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.

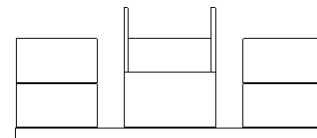
OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Drive and idler tumblers must be properly blocked so that centerline of tumblers becomes tipping fulcrum. Swing is limited to that sector shown on Operating Range Diagram No. 8224-A. Refer to boom rigging No. 195459 (No. 82) or No. 195890 (No. 22EL) and Wire Rope Specification chart No. 8223-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. crawlers, 48 in. treads, 10 Ft. 3 in. retractable gantry, 30 Ft. live mast, 20 part boom hoist reeving, boom support straps or four 1-3/8 in. boom pendants and 114,600 Lb. counterweight.

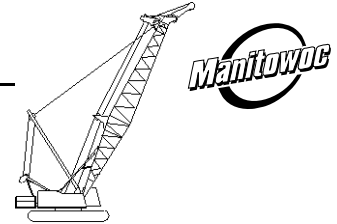


114,600 Lb. Crane Counterweight
4 Side Boxes - 1 Center Box

Maximum Boom Length Lifted Unassisted Over End of Blocked Crawlers
Boom Length
210 Ft.
Load block, hook and weight ball on ground at start.

Jib is not to be used with this chart.

Boom Catwalks Deduct
Deduct 600 Lbs. from capacities when boom catwalks are attached.



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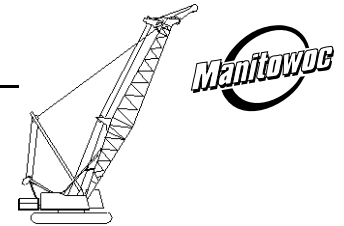
Boom No. 82 or 22EL
114,600 Lb. Counterweight
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999 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	432,200 *b
17	82.0	77.1	408,700 *b
18	81.1	76.9	387,600 *b
19	80.3	76.7	368,400 *b
20	79.5	76.5	351,000 *b
22	77.8	76.0	320,600 *b
24	76.1	75.5	294,900 *b
26	74.4	74.9	272,800 *
28	72.7	74.2	244,200
30	70.9	73.5	215,100
32	69.2	72.7	191,800
34	67.4	71.8	172,900
36	65.6	70.9	157,100
38	63.7	69.8	143,800
40	61.9	68.7	132,400
42	60.0	67.5	122,500
44	58.0	66.2	113,800
46	56.0	64.8	106,200
48	54.0	63.4	99,400
50	51.9	61.7	93,400
55	46.3	57.1	80,700
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	408,000 *b
18	82.3	87.0	386,900 *b
19	81.5	86.9	367,700 *b
20	80.8	86.7	350,400 *b
22	79.3	86.3	320,000 *b
24	77.9	85.8	294,200 *b
26	76.4	85.3	272,200 *
28	74.9	84.7	244,800
30	73.4	84.1	215,600
32	71.9	83.4	192,200
34	70.4	82.7	173,200
36	68.8	81.9	157,400
38	67.3	81.0	144,000
40	65.7	80.0	132,500
42	64.1	79.0	122,600
44	62.4	78.0	114,000
46	60.8	76.8	106,300
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	70,600
65	43.0	61.0	62,400
70	37.3	54.8	55,600
75	30.6	46.9	49,900
80	22.0	36.0	44,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	367,300 *b
20	81.8	96.8	349,900 *b
22	80.5	96.5	319,500 *b
24	79.2	96.1	293,800 *b
26	77.9	95.6	271,700 *
28	76.6	95.1	245,300
30	75.3	94.6	216,000
32	74.0	94.0	192,600
34	72.6	93.3	173,500
36	71.3	92.6	157,600
38	69.9	91.8	144,200
40	68.6	91.0	132,700
42	67.2	90.1	122,800
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	93,500
55	57.7	82.9	80,800
60	53.8	79.3	70,700
65	49.6	75.2	62,500
70	45.2	70.4	55,700
75	40.4	64.7	50,000
80	35.0	57.9	45,100
85	28.7	49.4	40,800
90	20.7	37.7	37,000
100 Ft. BOOM			
20	82.7	107.0	349,700 *b
22	81.5	106.6	319,300 *b
24	80.3	106.3	293,600 *b
26	79.2	105.9	271,500 *
28	78.0	105.4	245,800
30	76.8	104.9	216,400
32	75.6	104.4	192,900
34	74.4	103.8	173,800
36	73.2	103.2	157,900
38	72.0	102.5	144,500
40	70.8	101.8	133,000
42	69.6	101.0	123,000
44	68.3	100.2	114,300
46	67.1	99.3	106,600
48	65.8	98.4	99,800
50	64.6	97.4	93,700
55	61.3	94.7	80,900
60	57.9	91.6	70,800
65	54.4	88.1	62,600
70	50.8	84.1	55,800
75	46.9	79.5	50,100
80	42.7	74.3	45,200
85	38.2	68.1	41,000
90	33.1	60.8	37,300
95	27.2	51.7	34,000
100	19.5	39.4	31,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	318,700 *
24	81.2	116.4	293,000 *
26	80.2	116.1	271,000 *
28	79.1	115.7	246,100
30	78.0	115.2	216,600
32	77.0	114.7	193,100
34	75.9	114.2	173,900
36	74.8	113.6	158,000
38	73.7	113.0	144,500
40	72.6	112.4	132,900
42	71.5	111.7	123,000
44	70.4	110.9	114,200
46	69.3	110.2	106,500
48	68.2	109.3	99,700
50	67.0	108.5	93,600
55	64.1	106.1	80,800
60	61.2	103.4	70,700
65	58.1	100.3	62,500
70	55.0	96.8	55,700
75	51.7	93.0	49,900
80	48.2	88.6	45,000
85	44.5	83.6	40,800
90	40.6	77.9	37,100
95	36.3	71.4	33,800
100	31.5	63.6	30,900
105	25.8	54.0	28,300
110	18.6	40.9	25,900



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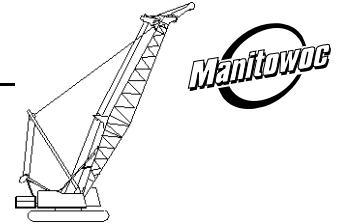
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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
120 Ft. BOOM			
22	82.9	126.9	318,400 *
24	82.0	126.6	292,700 *
26	81.0	126.2	270,700 *
28	80.0	125.9	246,400
30	79.1	125.5	216,800
32	78.1	125.0	193,300
34	77.1	124.5	174,000
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	114,200
46	71.1	120.9	106,500
48	70.1	120.1	99,700
50	69.1	119.3	93,500
55	66.5	117.2	80,700
60	63.8	114.7	70,600
65	61.1	112.0	62,400
70	58.3	109.0	55,600
75	55.4	105.6	49,800
80	52.4	101.8	45,000
85	49.3	97.5	40,700
90	46.0	92.8	37,000
95	42.5	87.5	33,800
100	38.7	81.4	30,900
105	34.6	74.4	28,300
110	30.0	66.2	25,900
115	24.7	56.1	23,800
120	17.7	42.4	21,800
130 Ft. BOOM			
24	82.6	136.7	292,400 *
26	81.7	136.4	270,400 *
28	80.8	136.0	246,700
30	79.9	135.7	217,100
32	79.0	135.3	193,400
34	78.1	134.8	174,200
36	77.2	134.3	158,200
38	76.3	133.8	144,600
40	75.4	133.3	133,000
42	74.5	132.7	123,000
44	73.5	132.1	114,300
46	72.6	131.5	106,500
48	71.7	130.8	99,700
50	70.7	130.1	93,500
55	68.4	128.1	80,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
60	66.0	125.9	70,600
65	63.5	123.4	62,300
70	61.0	120.7	55,500
75	58.4	117.6	49,800
80	55.8	114.3	44,900
85	53.0	110.6	40,700
90	50.2	106.5	37,000
95	47.2	101.9	33,700
100	44.0	96.8	30,800
105	40.7	91.2	28,300
110	37.1	84.8	25,900
115	33.2	77.4	23,800
120	28.8	68.7	21,900
125	23.6	58.1	20,100
130	17.0	43.8	18,400
140 Ft. BOOM			
26	82.3	146.5	270,000 *
28	81.5	146.2	246,800
30	80.6	145.8	217,100
32	79.8	145.5	193,500
34	79.0	145.1	174,200
36	78.1	144.6	158,100
38	77.3	144.1	144,600
40	76.4	143.6	133,000
42	75.6	143.1	122,900
44	74.7	142.5	114,200
46	73.9	141.9	106,400
48	73.0	141.3	99,600
50	72.2	140.7	93,400
55	70.0	138.9	80,600
60	67.8	136.8	70,400
65	65.5	134.6	62,200
70	63.3	132.1	55,300
75	60.9	129.3	49,600
80	58.5	126.3	44,700
85	56.1	123.0	40,500
90	53.5	119.3	36,800
95	50.9	115.3	33,500
100	48.2	110.9	30,700
105	45.3	106.1	28,100

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
140 Ft. BOOM			
110	42.3	100.7	25,800
115	39.1	94.7	23,600
120	35.7	87.9	21,700
125	31.9	80.2	20,000
130	27.7	71.2	18,400
135	22.7	60.1	16,800
140	16.3	45.2	15,400
150 Ft. BOOM			
26	82.8	156.6	265,500 *
28	82.0	156.3	247,000
30	81.3	156.0	217,300
32	80.5	155.6	193,500
34	79.7	155.3	174,200
36	78.9	154.8	158,100
38	78.2	154.4	144,500
40	77.4	153.9	132,900
42	76.6	153.5	122,800
44	75.8	152.9	114,000
46	75.0	152.4	106,200
48	74.2	151.8	99,300
50	73.4	151.2	93,200
55	71.4	149.5	80,300
60	69.4	147.6	70,100
65	67.3	145.6	61,800
70	65.2	143.3	55,000
75	63.0	140.8	49,300
80	60.9	138.0	44,300
85	58.6	135.0	40,100
90	56.3	131.7	36,400
95	54.0	128.1	33,200
100	51.6	124.2	30,300
105	49.1	119.9	27,700
110	46.4	115.2	25,400
115	43.7	110.1	23,300
120	40.8	104.4	21,400
125	37.7	98.1	19,600
130	34.4	91.0	18,000
135	30.8	82.9	16,500
140	26.7	73.5	15,100
145	21.9	62.0	13,800
150	15.7	46.5	12,600



Liftcrane Boom Capacities

Meets
ANSI B30.5
Requirements

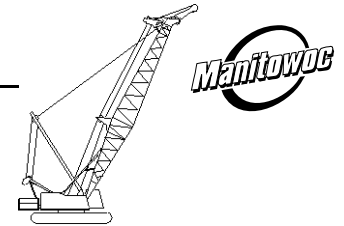
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114,600 Lb. Counterweight
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No Travel - Limited Swing

999 SERIES 1

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
28	82.5	166.4	236,000 *
30	81.8	166.1	217,300
32	81.1	165.8	193,500
34	80.4	165.4	174,100
36	79.6	165.1	158,000
38	78.9	164.6	144,400
40	78.2	164.2	132,700
42	77.4	163.7	122,600
44	76.7	163.3	113,800
46	76.0	162.7	106,000
48	75.2	162.2	99,100
50	74.5	161.6	93,000
55	72.6	160.1	80,100
60	70.7	158.3	69,900
65	68.8	156.4	61,600
70	66.8	154.3	54,700
75	64.9	152.0	49,000
80	62.9	149.4	44,100
85	60.8	146.7	39,800
90	58.7	143.6	36,100
95	56.6	140.4	32,900
100	54.4	136.8	30,000
105	52.1	133.0	27,400
110	49.8	128.8	25,100
115	47.4	124.3	23,000
120	44.9	119.3	21,100
125	42.2	113.9	19,300
130	39.4	108.0	17,700
135	36.5	101.4	16,300
140	33.3	94.0	14,900
145	29.8	85.6	13,600
150	25.8	75.7	12,400
155	21.2	63.8	11,300
160	15.2	47.8	10,200
170 Ft. BOOM			
28	83.0	176.5	232,700 *
30	82.3	176.2	217,300
32	81.6	175.9	193,500
34	80.9	175.6	174,100
36	80.3	175.2	158,000
38	79.6	174.9	144,300
40	78.9	174.4	132,600
42	78.2	174.0	122,500
44	77.5	173.6	113,700
46	76.8	173.1	105,900
48	76.1	172.6	99,000
50	75.4	172.0	92,800
55	73.7	170.6	79,900
60	71.9	168.9	69,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
170 Ft. BOOM			
65	70.1	167.1	61,400
70	68.3	165.2	54,500
75	66.4	163.0	48,800
80	64.6	160.6	43,900
85	62.7	158.1	39,600
90	60.8	155.3	35,900
95	58.8	152.3	32,700
100	56.8	149.1	29,800
105	54.7	145.6	27,200
110	52.6	141.8	24,900
115	50.4	137.7	22,800
120	48.2	133.3	20,900
125	45.9	128.5	19,100
130	43.4	123.3	17,500
135	40.9	117.6	16,000
140	38.2	111.4	14,700
145	35.3	104.5	13,400
150	32.2	96.8	12,200
155	28.8	88.1	11,100
160	25.0	77.9	10,100
165	20.5	65.6	9,100
180 Ft. BOOM			
30	82.7	186.3	206,500 *
32	82.1	186.0	193,500
34	81.4	185.7	174,000
36	80.8	185.4	157,800
38	80.2	185.0	144,200
40	79.5	184.6	132,500
42	78.9	184.2	122,400
44	78.2	183.8	113,500
46	77.6	183.4	105,700
48	76.9	182.9	98,800
50	76.2	182.4	92,600
55	74.6	181.0	79,600
60	72.9	179.5	69,400
65	71.2	177.8	61,100
70	69.5	175.9	54,200
75	67.8	173.9	48,500
80	66.1	171.7	43,500
85	64.3	169.3	39,300
90	62.5	166.8	35,600
95	60.7	164.0	32,300
100	58.9	161.0	29,400
105	57.0	157.8	26,900
110	55.0	154.3	24,500
115	53.0	150.6	22,400
120	51.0	146.6	20,500
125	48.9	142.3	18,800

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
130	46.7	137.6	17,200
135	44.5	132.6	15,700
140	42.1	127.1	14,400
145	39.7	121.2	13,100
150	37.1	114.7	11,900
155	34.3	107.6	10,800
160	31.3	99.6	9,800
165	28.0	90.6	8,900
170	24.3	80.0	7,900
175	19.9	67.3	7,100
190 Ft. BOOM			
32	82.5	196.2	193,600
34	81.9	195.9	174,000
36	81.3	195.5	157,800
38	80.7	195.2	144,100
40	80.1	194.8	132,400
42	79.4	194.4	122,200
44	78.8	194.0	113,300
46	78.2	193.6	105,500
48	77.6	193.2	98,600
50	77.0	192.7	92,400
55	75.4	191.4	79,400
60	73.9	189.9	69,100
65	72.3	188.4	60,800
70	70.7	186.6	53,900
75	69.1	184.7	48,100
80	67.4	182.7	43,200
85	65.8	180.4	38,900
90	64.1	178.0	35,200
95	62.4	175.4	31,900
100	60.7	172.6	29,000
105	58.9	169.6	26,400
110	57.1	166.4	24,100
115	55.3	163.0	22,000
120	53.4	159.3	20,100
125	51.5	155.4	18,400
130	49.5	151.2	16,800
135	47.5	146.7	15,300
140	45.4	141.8	13,900
145	43.2	136.5	12,700
150	40.9	130.9	11,500
155	38.5	124.7	10,400
160	36.0	118.0	9,400
165	33.3	110.6	8,400
170	30.4	102.3	7,500
175	27.2	93.0	6,700
180	23.6	82.1	5,900
185	19.4	68.9	5,100



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ANSI B30.5
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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
200 Ft. BOOM			
32	82.9	206.3	177,000 *
34	82.3	206.0	173,900
36	81.7	205.7	157,600
38	81.1	205.3	143,900
40	80.6	205.0	132,200
42	80.0	204.6	122,000
44	79.4	204.2	113,100
46	78.8	203.8	105,300
48	78.2	203.4	98,300
50	77.6	203.0	92,100
55	76.2	201.7	79,100
60	74.7	200.4	68,800
65	73.2	198.9	60,500
70	71.7	197.2	53,600
75	70.2	195.4	47,800
80	68.6	193.5	42,800
85	67.1	191.4	38,600
90	65.5	189.1	34,800
95	63.9	186.7	31,600
100	62.3	184.1	28,700
105	60.6	181.3	26,100
110	59.0	178.3	23,700
115	57.3	175.1	21,600
120	55.5	171.7	19,700
125	53.8	168.1	18,000
130	52.0	164.2	16,400
135	50.1	160.1	14,900
140	48.2	155.6	13,600
145	46.2	150.9	12,300
150	44.2	145.8	11,100
155	42.1	140.4	10,100
160	39.8	134.5	9,000
165	37.5	128.1	8,100
170	35.1	121.1	7,200
175	32.4	113.4	6,300
180	29.6	104.9	5,500
185	26.5	95.3	4,800
190	23.0	84.1	4,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
210 Ft. BOOM			
34	82.7	216.1	171,300 *
36	82.1	215.8	157,500
38	81.6	215.5	143,800
40	81.0	215.1	132,000
42	80.5	214.8	121,800
44	79.9	214.4	112,900
46	79.4	214.0	105,100
48	78.8	213.6	98,100
50	78.2	213.2	91,900
55	76.8	212.0	78,800
60	75.4	210.8	68,500
65	74.0	209.3	60,200
70	72.6	207.8	53,300
75	71.1	206.1	47,500
80	69.7	204.2	42,500
85	68.2	202.2	38,300
90	66.7	200.1	34,500
95	65.2	197.8	31,300
100	63.7	195.4	28,400
105	62.2	192.7	25,800
110	60.6	189.9	23,400
115	59.0	187.0	21,300
120	57.4	183.8	19,400
125	55.8	180.4	17,700
130	54.1	176.8	16,100
135	52.4	173.0	14,600
140	50.6	168.9	13,200
145	48.8	164.6	12,000
150	46.9	160.0	10,800
155	45.0	155.1	9,700
160	43.0	149.8	8,700
165	41.0	144.1	7,800
170	38.8	138.0	6,900
175	36.6	131.4	6,000
180	34.2	124.2	5,200
185	31.6	116.3	4,500