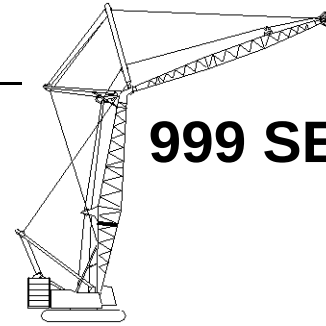




Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

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 for boom and luffing jib length combinations thru 250 Ft. and New York City criteria of 1.4 factor applied to total machine moment for boom and luffing jib length combinations 260 Ft. and up. Capacities based on structural competence are denoted by an asterisk (*).

190 Ft. boom length requires only the middle two sheaves in lower boom point. All other sheaves must be removed from lower boom point.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of main boom load. Weight of luffing jib and 2,825 Lbs. suspended beneath luffing jib point sheaves have been included in capacity determination. 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. During operation, luffing jib must be maintained at proper boom to luffing jib angle shown in table. Refer to luffing jib assembly **No. 196199** (Boom No. 22EL) or **No. 196200** (Boom No. 82), Wire Rope Specification chart **No. 8250-A** and Luffing Jib Raising Procedure chart **No. 8248-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.

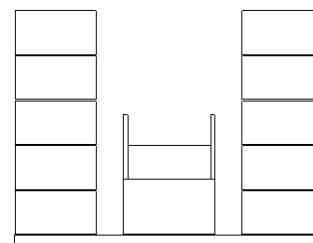
MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface with boom and luffing jib within angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8249-A**.

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.

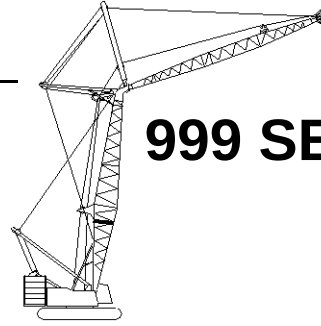
MACHINE EQUIPMENT: Machine equipped with 28 Ft. 2 in. crawlers, 48 in. treads, 10 Ft. 3 in. retractable gantry, 30 Ft. live mast, 20 part boom hoist reeving, boom support straps or four 1-3/8 in. boom pendants, 8 part luffing jib hoist reeving, two 1-1/2 in. luffing jib pendants and backstays, 219,600 Lb. crane counterweight, two 22,000 Lb. and two 18,000 Lb. carbody counterweights.

Luffing Jib Position During Operation	
Luffing Jib Length - Feet	Boom To Luffing Jib Angle
70	140 Degrees
80 - 90	150 Degrees
100 - 120	160 Degrees
130 - 170	168 Degrees



219,600 Lb. Crane Counterweight
10 Side Boxes - 1 Center Box

Consult Chart **No. 8272-A** for luffing jib capacities.



Liftcrane Boom Capacities With Luffing Jib Attached

999 SERIES 3

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

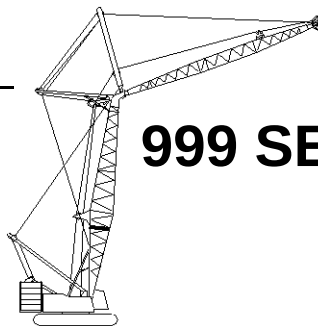
Meets
ANSI B30.5
Requirements

70 Ft. Luffing Jib, Attached At 140 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	394,000 *
17	82.0	77.1	385,300 *
18	81.1	76.9	382,100 *
19	80.3	76.7	378,800 *
20	79.5	76.5	369,700 *
22	77.8	76.0	335,900 *
24	76.1	75.5	307,300 *
26	74.4	74.9	282,700 *
28	72.7	74.2	261,400 *
30	70.9	73.5	242,800 *
80 Ft. BOOM			
17	83.0	87.2	371,200 *
18	82.3	87.0	366,700 *
19	81.5	86.9	362,300 *
20	80.8	86.7	358,300 *
22	79.3	86.3	335,600 *
24	77.9	85.8	307,000 *
26	76.4	85.3	282,400 *
28	74.9	84.7	261,200 *
30	73.4	84.1	242,600 *
32	71.9	83.4	226,200 *
34	70.4	82.7	211,600 *
90 Ft. BOOM			
19	82.5	97.0	332,300 *
20	81.8	96.8	328,800 *
22	80.5	96.5	321,300 *
24	79.2	96.1	306,500 *
26	77.9	95.6	282,000 *
28	76.6	95.1	260,700 *
30	75.3	94.6	242,200 *
32	74.0	94.0	225,800 *
34	72.6	93.3	211,200 *
36	71.3	92.6	194,900 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
100 Ft. BOOM			
20	82.7	107.0	318,000 *
22	81.5	106.6	311,100 *
24	80.3	106.3	304,900 *
26	79.2	105.9	282,400 *
28	78.0	105.4	261,200 *
30	76.8	104.9	242,600 *
32	75.6	104.4	226,200 *
34	74.4	103.8	211,600 *
36	73.2	103.2	195,700 *
38	72.0	102.5	179,200 *
40	70.8	101.8	164,800 *
110 Ft. BOOM			
22	82.3	116.8	289,700 *
24	81.2	116.4	283,900 *
26	80.2	116.1	278,100 *
28	79.1	115.7	260,500 *
30	78.0	115.2	242,000 *
32	77.0	114.7	225,600 *
34	75.9	114.2	211,000 *
36	74.8	113.6	195,800 *
38	73.7	113.0	179,300 *
40	72.6	112.4	164,900 *
42	71.5	111.7	152,300 *
44	70.4	110.9	141,200 *
120 Ft. BOOM			
22	82.9	126.9	281,200 *
24	82.0	126.6	275,800 *
26	81.0	126.2	270,600 *
28	80.0	125.9	260,700 *
30	79.1	125.5	242,100 *
32	78.1	125.0	225,700 *
34	77.1	124.5	211,200 *
36	76.1	124.0	196,300 *
38	75.1	123.5	179,700 *
40	74.1	122.9	165,300 *
42	73.1	122.2	152,700 *
44	72.1	121.6	141,600 *
46	71.1	120.9	131,700 *
48	70.1	120.1	122,900 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	253,500 *
26	81.7	136.4	246,300 *
28	80.8	136.0	239,300 *
30	79.9	135.7	232,600 *
32	79.0	135.3	225,400 *
34	78.1	134.8	210,800 *
36	77.2	134.3	196,500 *
38	76.3	133.8	179,800 *
40	75.4	133.3	165,400 *
42	74.5	132.7	152,800 *
44	73.5	132.1	141,700 *
46	72.6	131.5	131,800 *
48	71.7	130.8	122,900 *
50	70.7	130.1	114,900 *
140 Ft. BOOM			
26	82.3	146.5	239,900 *
28	81.5	146.2	233,000 *
30	80.6	145.8	226,400 *
32	79.8	145.5	220,100 *
34	79.0	145.1	210,900 *
36	78.1	144.6	196,800 *
38	77.3	144.1	180,100 *
40	76.4	143.6	165,700 *
42	75.6	143.1	153,000 *
44	74.7	142.5	141,900 *
46	73.9	141.9	132,000 *
48	73.0	141.3	123,100 *
50	72.2	140.7	115,200 *
150 Ft. BOOM			
26	82.8	156.6	215,700 *
28	82.0	156.3	210,100 *
30	81.3	156.0	204,700 *
32	80.5	155.6	199,600 *
34	79.7	155.3	194,500 *
36	78.9	154.8	189,500 *
38	78.2	154.4	180,000 *
40	77.4	153.9	165,500 *
42	76.6	153.5	152,900 *
44	75.8	152.9	141,700 *
46	75.0	152.4	131,800 *
48	74.2	151.8	122,900 *
50	73.4	151.2	114,900 *
55	71.4	149.5	98,000 *



999 SERIES 3

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

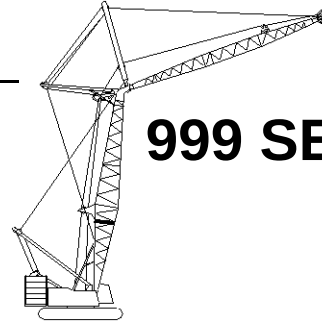
360 Degree Rating

Meets
ANSI B30.5
Requirements

70 Ft. Luffing Jib, Attached At 140 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
28	82.5	166.4	201,700 *
30	81.8	166.1	196,500 *
32	81.1	165.8	191,500 *
34	80.4	165.4	186,600 *
36	79.6	165.1	181,700 *
38	78.9	164.6	177,100 *
40	78.2	164.2	165,600
42	77.4	163.7	152,900
44	76.7	163.3	141,800
46	76.0	162.7	131,800
48	75.2	162.2	122,900
50	74.5	161.6	114,900
55	72.6	160.1	98,000
60	70.7	158.3	84,500
170 Ft. BOOM			
28	83.0	176.5	187,900 *
30	82.3	176.2	183,600 *
32	81.6	175.9	179,400 *
34	80.9	175.6	175,300 *
36	80.3	175.2	171,200 *
38	79.6	174.9	167,200 *
40	78.9	174.4	163,400 *
42	78.2	174.0	152,900
44	77.5	173.6	141,700
46	76.8	173.1	131,700
48	76.1	172.6	122,800
50	75.4	172.0	114,800
55	73.7	170.6	97,800
60	71.9	168.9	84,300
65	70.1	167.1	73,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	174,900 *
32	82.1	186.0	170,800 *
34	81.4	185.7	166,900 *
36	80.8	185.4	162,900 *
38	80.2	185.0	159,100 *
40	79.5	184.6	155,400 *
42	78.9	184.2	151,700 *
44	78.2	183.8	141,600
46	77.6	183.4	131,600
48	76.9	182.9	122,700
50	76.2	182.4	114,700
55	74.6	181.0	97,800
60	72.9	179.5	84,200
65	71.2	177.8	73,100
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	118,000 *
46	78.2	193.6	110,800
48	77.6	193.2	102,300
50	77.0	192.7	94,700
55	75.4	191.4	78,600
60	73.9	189.9	65,700
65	72.3	188.4	55,200
70	70.7	186.6	46,400



Liftcrane Boom Capacities With Luffing Jib Attached

999 SERIES 3

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

80 Ft. Luffing Jib, Attached At 150 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	394,200 *
17	82.0	77.1	384,600 *
18	81.1	76.9	381,600 *
19	80.3	76.7	378,200 *
20	79.5	76.5	369,500 *
22	77.8	76.0	335,400 *
24	76.1	75.5	306,600 *
26	74.4	74.9	282,000 *
28	72.7	74.2	260,600 *
30	70.9	73.5	241,900 *
32	69.2	72.7	225,400 *
34	67.4	71.8	210,700 *
36	65.6	70.9	192,400
80 Ft. BOOM			
17	83.0	87.2	371,100 *
18	82.3	87.0	366,500 *
19	81.5	86.9	362,100 *
20	80.8	86.7	358,000 *
22	79.3	86.3	335,200 *
24	77.9	85.8	306,500 *
26	76.4	85.3	281,900 *
28	74.9	84.7	260,500 *
30	73.4	84.1	241,800 *
32	71.9	83.4	225,300 *
34	70.4	82.7	210,700 *
36	68.8	81.9	193,300
38	67.3	81.0	176,800
40	65.7	80.0	162,400
42	64.1	79.0	149,900
90 Ft. BOOM			
19	82.5	97.0	332,000 *
20	81.8	96.8	328,500 *
22	80.5	96.5	320,900 *
24	79.2	96.1	306,100 *
26	77.9	95.6	281,500 *
28	76.6	95.1	260,200 *
30	75.3	94.6	241,500 *
32	74.0	94.0	225,000 *
34	72.6	93.3	210,400 *
36	71.3	92.6	193,900
38	69.9	91.8	177,300
40	68.6	91.0	162,900
42	67.2	90.1	150,300
44	65.8	89.2	139,200
46	64.3	88.2	129,400

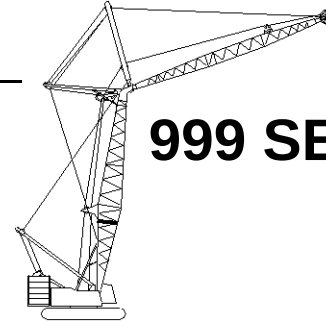
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
100 Ft. BOOM			
20	82.7	107.0	317,700 *
22	81.5	106.6	310,700 *
24	80.3	106.3	304,400 *
26	79.2	105.9	282,000 *
28	78.0	105.4	260,700 *
30	76.8	104.9	242,000 *
32	75.6	104.4	225,600 *
34	74.4	103.8	210,900 *
36	73.2	103.2	194,900
38	72.0	102.5	178,300
40	70.8	101.8	163,900
42	69.6	101.0	151,300
44	68.3	100.2	140,100
46	67.1	99.3	130,200
48	65.8	98.4	121,400
50	64.6	97.4	113,400
110 Ft. BOOM			
22	82.3	116.8	289,400 *
24	81.2	116.4	283,500 *
26	80.2	116.1	277,600 *
28	79.1	115.7	260,100 *
30	78.0	115.2	241,500 *
32	77.0	114.7	225,000 *
34	75.9	114.2	210,400 *
36	74.8	113.6	195,100
38	73.7	113.0	178,500
40	72.6	112.4	164,000
42	71.5	111.7	151,400
44	70.4	110.9	140,200
46	69.3	110.2	130,300
48	68.2	109.3	121,500
50	67.0	108.5	113,500
55	64.1	106.1	96,600
120 Ft. BOOM			
22	82.9	126.9	280,900 *
24	82.0	126.6	275,400 *
26	81.0	126.2	270,100 *
28	80.0	125.9	260,300 *
30	79.1	125.5	241,700 *
32	78.1	125.0	225,200 *
34	77.1	124.5	210,600 *
36	76.1	124.0	195,700
38	75.1	123.5	179,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
120 Ft. BOOM			
40	74.1	122.9	164,500
42	73.1	122.2	151,900
44	72.1	121.6	140,700
46	71.1	120.9	130,800
48	70.1	120.1	121,900
50	69.1	119.3	113,900
55	66.5	117.2	97,000
130 Ft. BOOM			
24	82.6	136.7	253,200 *
26	81.7	136.4	245,900 *
28	80.8	136.0	238,900 *
30	79.9	135.7	232,100 *
32	79.0	135.3	224,900 *
34	78.1	134.8	210,300 *
36	77.2	134.3	195,900
38	76.3	133.8	179,200
40	75.4	133.3	164,800
42	74.5	132.7	152,100
44	73.5	132.1	140,900
46	72.6	131.5	131,000
48	71.7	130.8	122,100
50	70.7	130.1	114,100
55	68.4	128.1	97,200
60	66.0	125.9	83,600
140 Ft. BOOM			
26	82.3	146.5	239,500 *
28	81.5	146.2	232,600 *
30	80.6	145.8	226,000 *
32	79.8	145.5	219,600 *
34	79.0	145.1	210,400 *
36	78.1	144.6	196,300
38	77.3	144.1	179,600
40	76.4	143.6	165,100
42	75.6	143.1	152,400
44	74.7	142.5	141,200
46	73.9	141.9	131,300
48	73.0	141.3	122,400
50	72.2	140.7	114,300
55	70.0	138.9	97,400
60	67.8	136.8	83,900
65	65.5	134.6	72,800

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

80 Ft. Luffing Jib, Attached At 150 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	215,300 *
28	82.0	156.3	209,700 *
30	81.3	156.0	204,300 *
32	80.5	155.6	199,100 *
34	79.7	155.3	194,000 *
36	78.9	154.8	189,000 *
38	78.2	154.4	179,500
40	77.4	153.9	165,000
42	76.6	153.5	152,300
44	75.8	152.9	141,100
46	75.0	152.4	131,100
48	74.2	151.8	122,200
50	73.4	151.2	114,100
55	71.4	149.5	97,200
60	69.4	147.6	83,600
65	67.3	145.6	72,500
70	65.2	143.3	63,300
160 Ft. BOOM			
28	82.5	166.4	201,300 *
30	81.8	166.1	196,100 *
32	81.1	165.8	191,000 *
34	80.4	165.4	186,100 *
36	79.6	165.1	181,300 *
38	78.9	164.6	176,600 *
40	78.2	164.2	165,100
42	77.4	163.7	152,400
44	76.7	163.3	141,200
46	76.0	162.7	131,200
48	75.2	162.2	122,200
50	74.5	161.6	114,200
55	72.6	160.1	97,200
60	70.7	158.3	83,600
65	68.8	156.4	72,500
70	66.8	154.3	63,300
75	64.9	152.0	55,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
170 Ft. BOOM			
28	83.0	176.5	187,600 *
30	82.3	176.2	183,200 *
32	81.6	175.9	178,900 *
34	80.9	175.6	174,800 *
36	80.3	175.2	170,700 *
38	79.6	174.9	166,700 *
40	78.9	174.4	162,900 *
42	78.2	174.0	152,400
44	77.5	173.6	141,100
46	76.8	173.1	131,100
48	76.1	172.6	122,200
50	75.4	172.0	114,100
55	73.7	170.6	97,100
60	71.9	168.9	83,500
65	70.1	167.1	72,400
70	68.3	165.2	63,100
75	66.4	163.0	55,200
80	64.6	160.6	48,500
180 Ft. BOOM			
30	82.7	186.3	174,500 *
32	82.1	186.0	170,400 *
34	81.4	185.7	166,400 *
36	80.8	185.4	162,400 *
38	80.2	185.0	155,700
40	79.5	184.6	141,900
42	78.9	184.2	129,800
44	78.2	183.8	119,100
46	77.6	183.4	109,600
48	76.9	182.9	101,100
50	76.2	182.4	93,400
55	74.6	181.0	77,300
60	72.9	179.5	64,400
65	71.2	177.8	53,800
70	69.5	175.9	45,000
75	67.8	173.9	37,500
80	66.1	171.7	31,100
85	64.3	169.3	25,600

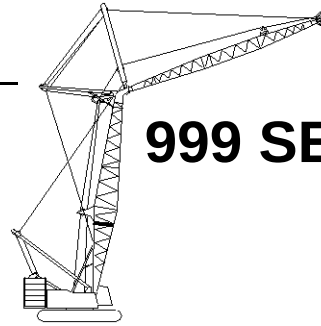
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	118,000 *
46	78.2	193.6	110,100
48	77.6	193.2	101,600
50	77.0	192.7	93,900
55	75.4	191.4	77,700
60	73.9	189.9	64,800
65	72.3	188.4	54,200
70	70.7	186.6	45,300
75	69.1	184.7	37,900
80	67.4	182.7	31,500
85	65.8	180.4	25,900
90	64.1	178.0	21,000



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

90 Ft. Luffing Jib, Attached At 150 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	389,800 *
17	82.0	77.1	382,100 *
18	81.1	76.9	378,700 *
19	80.3	76.7	375,400 *
20	79.5	76.5	366,500 *
22	77.8	76.0	332,600 *
24	76.1	75.5	303,900 *
26	74.4	74.9	279,400 *
28	72.7	74.2	258,100 *
30	70.9	73.5	239,400 *
32	69.2	72.7	223,000 *
34	67.4	71.8	208,300
36	65.6	70.9	189,300
80 Ft. BOOM			
17	83.0	87.2	368,200 *
18	82.3	87.0	363,700 *
19	81.5	86.9	359,200 *
20	80.8	86.7	355,100 *
22	79.3	86.3	332,500 *
24	77.9	85.8	303,900 *
26	76.4	85.3	279,300 *
28	74.9	84.7	258,000 *
30	73.4	84.1	239,400 *
32	71.9	83.4	223,000 *
34	70.4	82.7	208,400 *
36	68.8	81.9	190,300
38	67.3	81.0	173,900
40	65.7	80.0	159,700
42	64.1	79.0	147,200
90 Ft. BOOM			
19	82.5	97.0	329,800 *
20	81.8	96.8	325,900 *
22	80.5	96.5	318,300 *
24	79.2	96.1	303,600 *
26	77.9	95.6	279,000 *
28	76.6	95.1	257,800 *
30	75.3	94.6	239,200 *
32	74.0	94.0	222,800 *
34	72.6	93.3	208,200 *
36	71.3	92.6	191,000
38	69.9	91.8	174,500
40	68.6	91.0	160,300
42	67.2	90.1	147,800
44	65.8	89.2	136,800
46	64.3	88.2	127,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
100 Ft. BOOM			
20	82.7	107.0	315,200 *
22	81.5	106.6	308,500 *
24	80.3	106.3	301,900 *
26	79.2	105.9	279,600 *
28	78.0	105.4	258,300 *
30	76.8	104.9	239,800 *
32	75.6	104.4	223,400 *
34	74.4	103.8	208,800 *
36	73.2	103.2	192,000
38	72.0	102.5	175,600
40	70.8	101.8	161,300
42	69.6	101.0	148,800
44	68.3	100.2	137,700
46	67.1	99.3	127,900
48	65.8	98.4	119,100
50	64.6	97.4	111,200
110 Ft. BOOM			
22	82.3	116.8	287,100 *
24	81.2	116.4	281,300 *
26	80.2	116.1	275,400 *
28	79.1	115.7	257,800 *
30	78.0	115.2	239,300 *
32	77.0	114.7	222,900 *
34	75.9	114.2	208,300 *
36	74.8	113.6	192,400
38	73.7	113.0	175,800
40	72.6	112.4	161,500
42	71.5	111.7	149,000
44	70.4	110.9	137,900
46	69.3	110.2	128,100
48	68.2	109.3	119,300
50	67.0	108.5	111,300
55	64.1	106.1	94,600
120 Ft. BOOM			
22	82.9	126.9	278,900 *
24	82.0	126.6	273,400 *
26	81.0	126.2	268,100 *
28	80.0	125.9	258,100 *
30	79.1	125.5	239,500 *
32	78.1	125.0	223,100 *
34	77.1	124.5	208,600 *
36	76.1	124.0	193,000
38	75.1	123.5	176,400

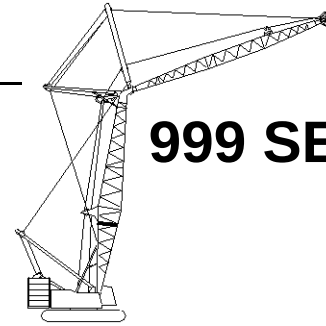
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
120 Ft. BOOM			
40	74.1	122.9	162,100
42	73.1	122.2	149,500
44	72.1	121.6	138,400
46	71.1	120.9	128,600
48	70.1	120.1	119,800
50	69.1	119.3	111,800
55	66.5	117.2	95,100
130 Ft. BOOM			
24	82.6	136.7	251,800 *
26	81.7	136.4	244,400 *
28	80.8	136.0	237,400 *
30	79.9	135.7	230,700 *
32	79.0	135.3	222,900 *
34	78.1	134.8	208,300 *
36	77.2	134.3	193,300
38	76.3	133.8	176,700
40	75.4	133.3	162,300
42	74.5	132.7	149,700
44	73.5	132.1	138,600
46	72.6	131.5	128,800
48	71.7	130.8	119,900
50	70.7	130.1	112,000
55	68.4	128.1	95,200
60	66.0	125.9	81,800
140 Ft. BOOM			
26	82.3	146.5	238,100 *
28	81.5	146.2	231,200 *
30	80.6	145.8	224,500 *
32	79.8	145.5	218,100 *
34	79.0	145.1	208,400 *
36	78.1	144.6	193,700
38	77.3	144.1	177,100
40	76.4	143.6	162,700
42	75.6	143.1	150,100
44	74.7	142.5	139,000
46	73.9	141.9	129,100
48	73.0	141.3	120,300
50	72.2	140.7	112,300
55	70.0	138.9	95,500
60	67.8	136.8	82,100
65	65.5	134.6	71,100



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

90 Ft. Luffing Jib, Attached At 150 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	213,900 *
28	82.0	156.3	208,300 *
30	81.3	156.0	202,900 *
32	80.5	155.6	197,700 *
34	79.7	155.3	192,700 *
36	78.9	154.8	187,700 *
38	78.2	154.4	177,100
40	77.4	153.9	162,700
42	76.6	153.5	150,000
44	75.8	152.9	138,900
46	75.0	152.4	129,000
48	74.2	151.8	120,100
50	73.4	151.2	112,200
55	71.4	149.5	95,300
60	69.4	147.6	81,900
65	67.3	145.6	70,800
70	65.2	143.3	61,700
160 Ft. BOOM			
28	82.5	166.4	199,900 *
30	81.8	166.1	194,700 *
32	81.1	165.8	189,600 *
34	80.4	165.4	184,700 *
36	79.6	165.1	179,900 *
38	78.9	164.6	175,000 *
40	78.2	164.2	162,800
42	77.4	163.7	150,200
44	76.7	163.3	139,000
46	76.0	162.7	129,100
48	75.2	162.2	120,200
50	74.5	161.6	112,300
55	72.6	160.1	95,400
60	70.7	158.3	81,900
65	68.8	156.4	70,900
70	66.8	154.3	61,700
75	64.9	152.0	53,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
170 Ft. BOOM			
28	83.0	176.5	186,200 *
30	82.3	176.2	181,800 *
32	81.6	175.9	177,600 *
34	80.9	175.6	173,500 *
36	80.3	175.2	168,500
38	79.6	174.9	152,700
40	78.9	174.4	139,000
42	78.2	174.0	127,000
44	77.5	173.6	116,400
46	76.8	173.1	107,000
48	76.1	172.6	98,600
50	75.4	172.0	91,000
55	73.7	170.6	75,000
60	71.9	168.9	62,300
65	70.1	167.1	51,800
70	68.3	165.2	43,100
75	66.4	163.0	35,700
80	64.6	160.6	29,400
180 Ft. BOOM			
30	82.7	186.3	173,100 *
32	82.1	186.0	169,100 *
34	81.4	185.7	165,100 *
36	80.8	185.4	161,100 *
38	80.2	185.0	152,700
40	79.5	184.6	139,000
42	78.9	184.2	127,000
44	78.2	183.8	116,400
46	77.6	183.4	107,000
48	76.9	182.9	98,500
50	76.2	182.4	91,000
55	74.6	181.0	75,000
60	72.9	179.5	62,200
65	71.2	177.8	51,700
70	69.5	175.9	43,000
75	67.8	173.9	35,600
80	66.1	171.7	29,300
85	64.3	169.3	23,800

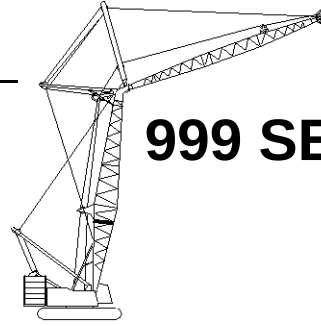
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	116,900
46	78.2	193.6	107,500
48	77.6	193.2	99,100
50	77.0	192.7	91,500
55	75.4	191.4	75,400
60	73.9	189.9	62,600
65	72.3	188.4	52,100
70	70.7	186.6	43,400
75	69.1	184.7	36,000
80	67.4	182.7	29,600
85	65.8	180.4	24,100
90	64.1	178.0	19,300



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

100 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	393,000 *
17	82.0	77.1	383,100 *
18	81.1	76.9	380,100 *
19	80.3	76.7	376,600 *
20	79.5	76.5	368,000 *
22	77.8	76.0	333,800 *
24	76.1	75.5	304,800 *
26	74.4	74.9	279,900 *
28	72.7	74.2	258,400 *
30	70.9	73.5	239,600 *
32	69.2	72.7	223,000 *
34	67.4	71.8	208,200 *
36	65.6	70.9	189,100
38	63.7	69.8	172,500
40	61.9	68.7	158,100
42	60.0	67.5	145,600
44	58.0	66.2	134,500
80 Ft. BOOM			
17	83.0	87.2	370,100 *
18	82.3	87.0	365,400 *
19	81.5	86.9	360,900 *
20	80.8	86.7	356,700 *
22	79.3	86.3	333,800 *
24	77.9	85.8	304,900 *
26	76.4	85.3	280,100 *
28	74.9	84.7	258,600 *
30	73.4	84.1	239,800 *
32	71.9	83.4	223,200 *
34	70.4	82.7	208,400 *
36	68.8	81.9	190,400
38	67.3	81.0	173,800
40	65.7	80.0	159,400
42	64.1	79.0	146,800
44	62.4	78.0	135,700
46	60.8	76.8	125,800
48	59.1	75.6	117,000
50	57.4	74.3	109,000

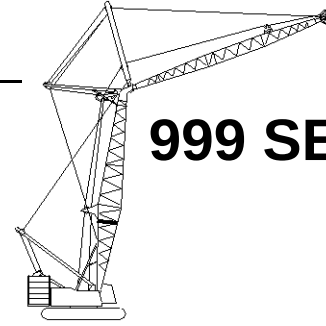
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	331,400 *
20	81.8	96.8	327,400 *
22	80.5	96.5	319,500 *
24	79.2	96.1	304,700 *
26	77.9	95.6	279,900 *
28	76.6	95.1	258,500 *
30	75.3	94.6	239,700 *
32	74.0	94.0	223,100 *
34	72.6	93.3	208,400 *
36	71.3	92.6	191,400
38	69.9	91.8	174,700
40	68.6	91.0	160,300
42	67.2	90.1	147,600
44	65.8	89.2	136,500
46	64.3	88.2	126,600
48	62.9	87.2	117,700
50	61.4	86.0	109,700
55	57.7	82.9	92,800
100 Ft. BOOM			
20	82.7	107.0	316,600 *
22	81.5	106.6	309,800 *
24	80.3	106.3	303,000 *
26	79.2	105.9	280,600 *
28	78.0	105.4	259,100 *
30	76.8	104.9	240,400 *
32	75.6	104.4	223,800 *
34	74.4	103.8	209,100 *
36	73.2	103.2	192,600
38	72.0	102.5	175,900
40	70.8	101.8	161,500
42	69.6	101.0	148,800
44	68.3	100.2	137,600
46	67.1	99.3	127,700
48	65.8	98.4	118,800
50	64.6	97.4	110,800
55	61.3	94.7	93,900
60	57.9	91.6	80,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	288,300 *
24	81.2	116.4	282,300 *
26	80.2	116.1	276,300 *
28	79.1	115.7	258,700 *
30	78.0	115.2	240,000 *
32	77.0	114.7	223,400 *
34	75.9	114.2	208,700 *
36	74.8	113.6	193,100
38	73.7	113.0	176,400
40	72.6	112.4	161,900
42	71.5	111.7	149,200
44	70.4	110.9	138,000
46	69.3	110.2	128,000
48	68.2	109.3	119,100
50	67.0	108.5	111,100
55	64.1	106.1	94,100
60	61.2	103.4	80,600
65	58.1	100.3	69,500
120 Ft. BOOM			
22	82.9	126.9	279,800 *
24	82.0	126.6	274,200 *
26	81.0	126.2	268,900 *
28	80.0	125.9	259,000 *
30	79.1	125.5	240,300 *
32	78.1	125.0	223,800 *
34	77.1	124.5	209,100 *
36	76.1	124.0	193,800
38	75.1	123.5	177,100
40	74.1	122.9	162,500
42	73.1	122.2	149,800
44	72.1	121.6	138,600
46	71.1	120.9	128,600
48	70.1	120.1	119,700
50	69.1	119.3	111,700
55	66.5	117.2	94,700
60	63.8	114.7	81,200
65	61.1	112.0	70,100
70	58.3	109.0	60,800

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

100 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	252,300 *
26	81.7	136.4	244,900 *
28	80.8	136.0	237,800 *
30	79.9	135.7	231,000 *
32	79.0	135.3	223,600 *
34	78.1	134.8	208,900 *
36	77.2	134.3	194,200
38	76.3	133.8	177,400
40	75.4	133.3	162,900
42	74.5	132.7	150,200
44	73.5	132.1	138,900
46	72.6	131.5	129,000
48	71.7	130.8	120,000
50	70.7	130.1	112,000
55	68.4	128.1	95,000
60	66.0	125.9	81,400
65	63.5	123.4	70,300
70	61.0	120.7	61,000
75	58.4	117.6	53,200
140 Ft. BOOM			
26	82.3	146.5	238,500 *
28	81.5	146.2	231,600 *
30	80.6	145.8	224,900 *
32	79.8	145.5	218,500 *
34	79.0	145.1	209,100 *
36	78.1	144.6	194,700
38	77.3	144.1	177,900
40	76.4	143.6	163,400
42	75.6	143.1	150,600
44	74.7	142.5	139,400
46	73.9	141.9	129,400
48	73.0	141.3	120,500
50	72.2	140.7	112,400
55	70.0	138.9	95,400
60	67.8	136.8	81,800
65	65.5	134.6	70,700
70	63.3	132.1	61,400
75	60.9	129.3	53,600
80	58.5	126.3	46,800

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	214,400 *
28	82.0	156.3	208,700 *
30	81.3	156.0	203,300 *
32	80.5	155.6	198,000 *
34	79.7	155.3	192,900 *
36	78.9	154.8	187,900 *
38	78.2	154.4	178,000
40	77.4	153.9	163,400
42	76.6	153.5	150,600
44	75.8	152.9	139,400
46	75.0	152.4	129,300
48	74.2	151.8	120,400
50	73.4	151.2	112,300
55	71.4	149.5	95,300
60	69.4	147.6	81,600
65	67.3	145.6	70,500
70	65.2	143.3	61,200
75	63.0	140.8	53,300
80	60.9	138.0	46,600
85	58.6	135.0	40,700
160 Ft. BOOM			
28	82.5	166.4	200,300 *
30	81.8	166.1	195,000 *
32	81.1	165.8	190,000 *
34	80.4	165.4	185,000 *
36	79.6	165.1	170,000
38	78.9	164.6	154,000
40	78.2	164.2	140,100
42	77.4	163.7	127,900
44	76.7	163.3	117,200
46	76.0	162.7	107,700
48	75.2	162.2	99,100
50	74.5	161.6	91,400
55	72.6	160.1	75,200

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
60	70.7	158.3	62,300
65	68.8	156.4	51,700
70	66.8	154.3	42,800
75	64.9	152.0	35,300
80	62.9	149.4	28,900
85	60.8	146.7	23,400
90	58.7	143.6	18,500
170 Ft. BOOM			
28	83.0	176.5	186,600 *
30	82.3	176.2	182,200 *
32	81.6	175.9	177,900 *
34	80.9	175.6	173,700 *
36	80.3	175.2	169,600 *
38	79.6	174.9	153,900
40	78.9	174.4	140,000
42	78.2	174.0	127,900
44	77.5	173.6	117,100
46	76.8	173.1	107,600
48	76.1	172.6	99,000
50	75.4	172.0	91,300
55	73.7	170.6	75,100
60	71.9	168.9	62,100
65	70.1	167.1	51,500
70	68.3	165.2	42,600
75	66.4	163.0	35,100
80	64.6	160.6	28,700
85	62.7	158.1	23,100
90	60.8	155.3	18,300
95	58.8	152.3	14,000



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

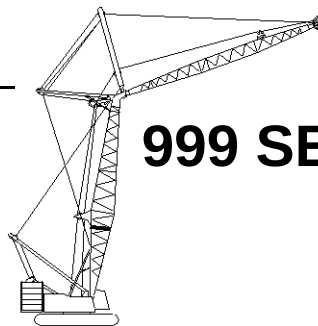
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

100 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	173,400 *
32	82.1	186.0	169,300 *
34	81.4	185.7	165,300 *
36	80.8	185.4	161,300 *
38	80.2	185.0	154,000
40	79.5	184.6	140,100
42	78.9	184.2	127,900
44	78.2	183.8	117,200
46	77.6	183.4	107,600
48	76.9	182.9	99,100
50	76.2	182.4	91,400
55	74.6	181.0	75,100
60	72.9	179.5	62,100
65	71.2	177.8	51,500
70	69.5	175.9	42,600
75	67.8	173.9	35,100
80	66.1	171.7	28,700
85	64.3	169.3	23,100
90	62.5	166.8	18,200
95	60.7	164.0	13,900
100	58.9	161.0	10,100

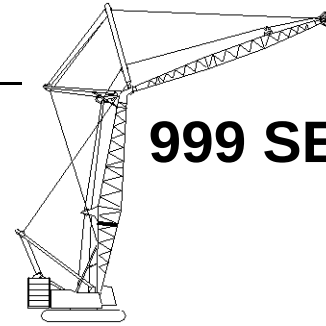
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	117,800
46	78.2	193.6	108,200
48	77.6	193.2	99,600
50	77.0	192.7	91,900
55	75.4	191.4	75,600
60	73.9	189.9	62,600
65	72.3	188.4	51,900
70	70.7	186.6	43,000
75	69.1	184.7	35,500
80	67.4	182.7	29,100
85	65.8	180.4	23,500
90	64.1	178.0	18,600
95	62.4	175.4	14,300
100	60.7	172.6	10,400



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

110 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	390,100 *
17	82.0	77.1	381,000 *
18	81.1	76.9	377,700 *
19	80.3	76.7	374,100 *
20	79.5	76.5	366,000 *
22	77.8	76.0	331,800 *
24	76.1	75.5	302,900 *
26	74.4	74.9	278,200 *
28	72.7	74.2	256,700 *
30	70.9	73.5	237,900 *
32	69.2	72.7	221,300 *
34	67.4	71.8	206,000
36	65.6	70.9	186,800
38	63.7	69.8	170,300
40	61.9	68.7	156,000
42	60.0	67.5	143,600
44	58.0	66.2	132,500
80 Ft. BOOM			
17	83.0	87.2	367,700 *
18	82.3	87.0	363,000 *
19	81.5	86.9	358,400 *
20	80.8	86.7	354,200 *
22	79.3	86.3	332,000 *
24	77.9	85.8	303,100 *
26	76.4	85.3	278,400 *
28	74.9	84.7	256,900 *
30	73.4	84.1	238,200 *
32	71.9	83.4	221,600 *
34	70.4	82.7	206,900 *
36	68.8	81.9	188,300
38	67.3	81.0	171,800
40	65.7	80.0	157,500
42	64.1	79.0	144,900
44	62.4	78.0	133,900
46	60.8	76.8	124,000
48	59.1	75.6	115,200
50	57.4	74.3	107,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	329,200 *
20	81.8	96.8	325,200 *
22	80.5	96.5	317,300 *
24	79.2	96.1	303,000 *
26	77.9	95.6	278,300 *
28	76.6	95.1	256,900 *
30	75.3	94.6	238,100 *
32	74.0	94.0	221,600 *
34	72.6	93.3	206,900 *
36	71.3	92.6	189,300
38	69.9	91.8	172,800
40	68.6	91.0	158,400
42	67.2	90.1	145,800
44	65.8	89.2	134,700
46	64.3	88.2	124,900
48	62.9	87.2	116,000
50	61.4	86.0	108,100
55	57.7	82.9	91,300
100 Ft. BOOM			
20	82.7	107.0	314,500 *
22	81.5	106.6	307,600 *
24	80.3	106.3	300,900 *
26	79.2	105.9	279,000 *
28	78.0	105.4	257,600 *
30	76.8	104.9	238,900 *
32	75.6	104.4	222,400 *
34	74.4	103.8	207,700 *
36	73.2	103.2	190,600
38	72.0	102.5	174,000
40	70.8	101.8	159,700
42	69.6	101.0	147,100
44	68.3	100.2	136,000
46	67.1	99.3	126,100
48	65.8	98.4	117,300
50	64.6	97.4	109,300
55	61.3	94.7	92,500
60	57.9	91.6	79,100

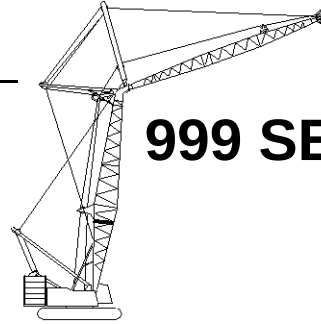
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	286,300 *
24	81.2	116.4	280,400 *
26	80.2	116.1	274,300 *
28	79.1	115.7	257,200 *
30	78.0	115.2	238,500 *
32	77.0	114.7	222,000 *
34	75.9	114.2	207,400 *
36	74.8	113.6	191,200
38	73.7	113.0	174,500
40	72.6	112.4	160,100
42	71.5	111.7	147,500
44	70.4	110.9	136,400
46	69.3	110.2	126,500
48	68.2	109.3	117,600
50	67.0	108.5	109,600
55	64.1	106.1	92,800
60	61.2	103.4	79,300
65	58.1	100.3	68,300
120 Ft. BOOM			
22	82.9	126.9	278,000 *
24	82.0	126.6	272,400 *
26	81.0	126.2	267,100 *
28	80.0	125.9	257,600 *
30	79.1	125.5	238,900 *
32	78.1	125.0	222,400 *
34	77.1	124.5	207,700 *
36	76.1	124.0	192,000
38	75.1	123.5	175,300
40	74.1	122.9	160,900
42	73.1	122.2	148,200
44	72.1	121.6	137,100
46	71.1	120.9	127,100
48	70.1	120.1	118,300
50	69.1	119.3	110,300
55	66.5	117.2	93,400
60	63.8	114.7	79,900
65	61.1	112.0	68,900
70	58.3	109.0	59,700



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

110 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	251,000 *
26	81.7	136.4	243,600 *
28	80.8	136.0	236,500 *
30	79.9	135.7	229,700 *
32	79.0	135.3	222,200 *
34	78.1	134.8	207,600 *
36	77.2	134.3	192,400
38	76.3	133.8	175,700
40	75.4	133.3	161,300
42	74.5	132.7	148,600
44	73.5	132.1	137,400
46	72.6	131.5	127,500
48	71.7	130.8	118,600
50	70.7	130.1	110,600
55	68.4	128.1	93,700
60	66.0	125.9	80,200
65	63.5	123.4	69,200
70	61.0	120.7	60,000
75	58.4	117.6	52,100
140 Ft. BOOM			
26	82.3	146.5	237,200 *
28	81.5	146.2	230,300 *
30	80.6	145.8	223,600 *
32	79.8	145.5	217,200 *
34	79.0	145.1	207,800 *
36	78.1	144.6	193,000
38	77.3	144.1	176,200
40	76.4	143.6	161,800
42	75.6	143.1	149,100
44	74.7	142.5	137,900
46	73.9	141.9	128,000
48	73.0	141.3	119,100
50	72.2	140.7	111,100
55	70.0	138.9	94,200
60	67.8	136.8	80,700
65	65.5	134.6	69,600
70	63.3	132.1	60,400
75	60.9	129.3	52,600
80	58.5	126.3	45,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	213,100 *
28	82.0	156.3	207,500 *
30	81.3	156.0	202,100 *
32	80.5	155.6	196,800 *
34	79.7	155.3	186,100
36	78.9	154.8	167,500
38	78.2	154.4	151,600
40	77.4	153.9	137,900
42	76.6	153.5	125,800
44	75.8	152.9	115,200
46	75.0	152.4	105,700
48	74.2	151.8	97,200
50	73.4	151.2	89,600
55	71.4	149.5	73,600
60	69.4	147.6	60,700
65	67.3	145.6	50,200
70	65.2	143.3	41,400
75	63.0	140.8	34,000
80	60.9	138.0	27,600
85	58.6	135.0	22,100
160 Ft. BOOM			
28	82.5	166.4	199,100 *
30	81.8	166.1	193,800 *
32	81.1	165.8	188,700 *
34	80.4	165.4	183,800 *
36	79.6	165.1	167,800
38	78.9	164.6	151,900
40	78.2	164.2	138,100
42	77.4	163.7	126,000
44	76.7	163.3	115,400
46	76.0	162.7	105,900
48	75.2	162.2	97,400
50	74.5	161.6	89,800
55	72.6	160.1	73,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
60	70.7	158.3	60,800
65	68.8	156.4	50,300
70	66.8	154.3	41,500
75	64.9	152.0	34,100
80	62.9	149.4	27,700
85	60.8	146.7	22,200
90	58.7	143.6	17,400
170 Ft. BOOM			
28	83.0	176.5	185,400 *
30	82.3	176.2	181,000 *
32	81.6	175.9	176,700 *
34	80.9	175.6	172,600 *
36	80.3	175.2	167,900
38	79.6	174.9	151,900
40	78.9	174.4	138,100
42	78.2	174.0	126,000
44	77.5	173.6	115,400
46	76.8	173.1	105,900
48	76.1	172.6	97,400
50	75.4	172.0	89,700
55	73.7	170.6	73,600
60	71.9	168.9	60,700
65	70.1	167.1	50,200
70	68.3	165.2	41,400
75	66.4	163.0	33,900
80	64.6	160.6	27,600
85	62.7	158.1	22,000
90	60.8	155.3	17,200
95	58.8	152.3	12,900



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

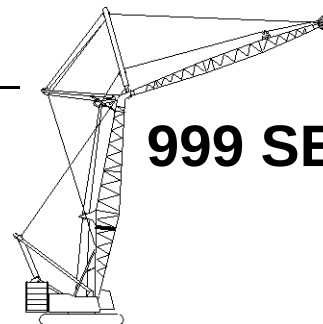
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

110 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	172,300 *
32	82.1	186.0	168,200 *
34	81.4	185.7	164,200 *
36	80.8	185.4	160,100 *
38	80.2	185.0	152,000
40	79.5	184.6	138,200
42	78.9	184.2	126,100
44	78.2	183.8	115,400
46	77.6	183.4	105,900
48	76.9	182.9	97,400
50	76.2	182.4	89,800
55	74.6	181.0	73,600
60	72.9	179.5	60,700
65	71.2	177.8	50,200
70	69.5	175.9	41,400
75	67.8	173.9	33,900
80	66.1	171.7	27,500
85	64.3	169.3	22,000
90	62.5	166.8	17,100
95	60.7	164.0	12,900

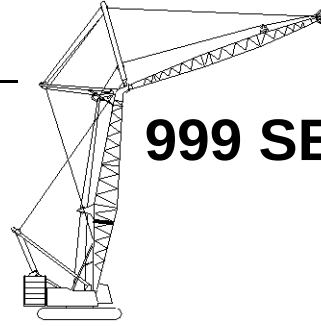
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	116,100
46	78.2	193.6	106,600
48	77.6	193.2	98,000
50	77.0	192.7	90,400
55	75.4	191.4	74,200
60	73.9	189.9	61,200
65	72.3	188.4	50,700
70	70.7	186.6	41,800
75	69.1	184.7	34,400
80	67.4	182.7	28,000
85	65.8	180.4	22,400
90	64.1	178.0	17,500
95	62.4	175.4	13,300



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

120 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	385,700 *
17	82.0	77.1	377,700 *
18	81.1	76.9	374,000 *
19	80.3	76.7	370,400 *
20	79.5	76.5	362,900 *
22	77.8	76.0	328,800 *
24	76.1	75.5	300,000 *
26	74.4	74.9	275,300 *
28	72.7	74.2	253,900 *
30	70.9	73.5	235,100 *
32	69.2	72.7	218,600 *
34	67.4	71.8	202,300
36	65.6	70.9	183,200
38	63.7	69.8	166,900
40	61.9	68.7	152,700
42	60.0	67.5	140,300
44	58.0	66.2	129,400
80 Ft. BOOM			
17	83.0	87.2	364,200 *
18	82.3	87.0	359,400 *
19	81.5	86.9	354,800 *
20	80.8	86.7	350,600 *
22	79.3	86.3	329,100 *
24	77.9	85.8	300,300 *
26	76.4	85.3	275,600 *
28	74.9	84.7	254,200 *
30	73.4	84.1	235,500 *
32	71.9	83.4	219,000 *
34	70.4	82.7	204,100
36	68.8	81.9	184,900
38	67.3	81.0	168,500
40	65.7	80.0	154,300
42	64.1	79.0	141,800
44	62.4	78.0	130,900
46	60.8	76.8	121,100
48	59.1	75.6	112,400
50	57.4	74.3	104,500

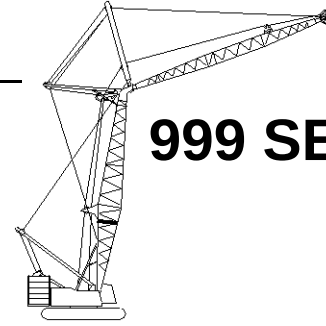
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	325,900 *
20	81.8	96.8	321,900 *
22	80.5	96.5	314,000 *
24	79.2	96.1	300,200 *
26	77.9	95.6	275,600 *
28	76.6	95.1	254,300 *
30	75.3	94.6	235,600 *
32	74.0	94.0	219,100 *
34	72.6	93.3	204,500 *
36	71.3	92.6	186,100
38	69.9	91.8	169,600
40	68.6	91.0	155,400
42	67.2	90.1	142,900
44	65.8	89.2	131,900
46	64.3	88.2	122,100
48	62.9	87.2	113,300
50	61.4	86.0	105,400
55	57.7	82.9	88,700
100 Ft. BOOM			
20	82.7	107.0	311,200 *
22	81.5	106.6	304,400 *
24	80.3	106.3	297,600 *
26	79.2	105.9	276,400 *
28	78.0	105.4	255,100 *
30	76.8	104.9	236,400 *
32	75.6	104.4	220,000 *
34	74.4	103.8	205,300 *
36	73.2	103.2	187,500
38	72.0	102.5	171,000
40	70.8	101.8	156,700
42	69.6	101.0	144,200
44	68.3	100.2	133,200
46	67.1	99.3	123,400
48	65.8	98.4	114,600
50	64.6	97.4	106,700
55	61.3	94.7	90,000
60	57.9	91.6	76,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	283,700 *
24	81.2	116.4	277,500 *
26	80.2	116.1	271,400 *
28	79.1	115.7	254,800 *
30	78.0	115.2	236,100 *
32	77.0	114.7	219,700 *
34	75.9	114.2	205,000 *
36	74.8	113.6	188,200
38	73.7	113.0	171,600
40	72.6	112.4	157,300
42	71.5	111.7	144,800
44	70.4	110.9	133,700
46	69.3	110.2	123,800
48	68.2	109.3	115,000
50	67.0	108.5	107,100
55	64.1	106.1	90,400
60	61.2	103.4	77,000
65	58.1	100.3	66,100
120 Ft. BOOM			
22	82.9	126.9	275,400 *
24	82.0	126.6	269,800 *
26	81.0	126.2	264,400 *
28	80.0	125.9	255,200 *
30	79.1	125.5	236,500 *
32	78.1	125.0	220,100 *
34	77.1	124.5	205,500 *
36	76.1	124.0	189,000
38	75.1	123.5	172,500
40	74.1	122.9	158,100
42	73.1	122.2	145,500
44	72.1	121.6	134,500
46	71.1	120.9	124,600
48	70.1	120.1	115,800
50	69.1	119.3	107,900
55	66.5	117.2	91,100
60	63.8	114.7	77,700
65	61.1	112.0	66,700
70	58.3	109.0	57,600

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

120 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	249,000 *
26	81.7	136.4	241,700 *
28	80.8	136.0	234,600 *
30	79.9	135.7	227,800 *
32	79.0	135.3	220,000 *
34	78.1	134.8	205,400 *
36	77.2	134.3	189,600
38	76.3	133.8	173,000
40	75.4	133.3	158,600
42	74.5	132.7	146,000
44	73.5	132.1	134,900
46	72.6	131.5	125,000
48	71.7	130.8	116,200
50	70.7	130.1	108,300
55	68.4	128.1	91,500
60	66.0	125.9	78,100
65	63.5	123.4	67,100
70	61.0	120.7	57,900
75	58.4	117.6	50,200
140 Ft. BOOM			
26	82.3	146.5	235,300 *
28	81.5	146.2	228,300 *
30	80.6	145.8	221,600 *
32	79.8	145.5	204,000
34	79.0	145.1	182,300
36	78.1	144.6	163,900
38	77.3	144.1	148,200
40	76.4	143.6	134,500
42	75.6	143.1	122,600
44	74.7	142.5	112,100
46	73.9	141.9	102,700
48	73.0	141.3	94,400
50	72.2	140.7	86,800
55	70.0	138.9	70,900
60	67.8	136.8	58,200
65	65.5	134.6	47,800
70	63.3	132.1	39,100
75	60.9	129.3	31,800
80	58.5	126.3	25,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	211,200 *
28	82.0	156.3	205,600 *
30	81.3	156.0	200,100 *
32	80.5	155.6	194,900 *
34	79.7	155.3	182,400
36	78.9	154.8	164,000
38	78.2	154.4	148,200
40	77.4	153.9	134,500
42	76.6	153.5	122,600
44	75.8	152.9	112,000
46	75.0	152.4	102,600
48	74.2	151.8	94,200
50	73.4	151.2	86,700
55	71.4	149.5	70,700
60	69.4	147.6	58,000
65	67.3	145.6	47,500
70	65.2	143.3	38,800
75	63.0	140.8	31,500
80	60.9	138.0	25,200
85	58.6	135.0	19,700
160 Ft. BOOM			
28	82.5	166.4	197,200 *
30	81.8	166.1	191,900 *
32	81.1	165.8	186,800 *
34	80.4	165.4	181,800 *
36	79.6	165.1	164,300
38	78.9	164.6	148,500
40	78.2	164.2	134,800
42	77.4	163.7	122,900
44	76.7	163.3	112,300
46	76.0	162.7	102,900
48	75.2	162.2	94,500
50	74.5	161.6	86,900
55	72.6	160.1	71,000

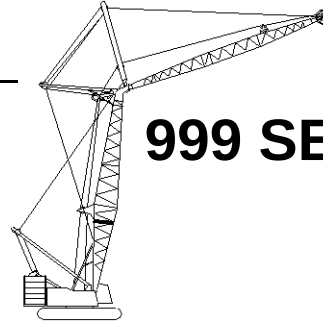
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
60	70.7	158.3	58,200
65	68.8	156.4	47,700
70	66.8	154.3	39,000
75	64.9	152.0	31,700
80	62.9	149.4	25,300
85	60.8	146.7	19,900
90	58.7	143.6	15,100
170 Ft. BOOM			
28	83.0	176.5	183,500 *
30	82.3	176.2	179,100 *
32	81.6	175.9	174,900 *
34	80.9	175.6	170,700 *
36	80.3	175.2	164,400
38	79.6	174.9	148,600
40	78.9	174.4	134,900
42	78.2	174.0	122,900
44	77.5	173.6	112,300
46	76.8	173.1	102,900
48	76.1	172.6	94,500
50	75.4	172.0	86,900
55	73.7	170.6	70,900
60	71.9	168.9	58,100
65	70.1	167.1	47,600
70	68.3	165.2	38,900
75	66.4	163.0	31,500
80	64.6	160.6	25,200
85	62.7	158.1	19,700
90	60.8	155.3	14,900
95	58.8	152.3	10,700



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

120 Ft. Luffing Jib, Attached At 160 Degree Boom To Luffing Jib Angle

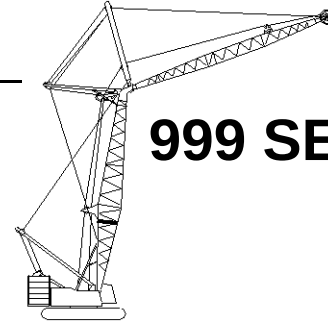
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	170,500 *
32	82.1	186.0	166,300 *
34	81.4	185.7	162,300 *
36	80.8	185.4	158,300 *
38	80.2	185.0	148,800
40	79.5	184.6	135,000
42	78.9	184.2	123,000
44	78.2	183.8	112,400
46	77.6	183.4	103,000
48	76.9	182.9	94,600
50	76.2	182.4	87,000
55	74.6	181.0	71,000
60	72.9	179.5	58,200
65	71.2	177.8	47,700
70	69.5	175.9	38,900
75	67.8	173.9	31,600
80	66.1	171.7	25,200
85	64.3	169.3	19,700
90	62.5	166.8	14,900
95	60.7	164.0	10,700

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	113,100
46	78.2	193.6	103,700
48	77.6	193.2	95,200
50	77.0	192.7	87,600
55	75.4	191.4	71,600
60	73.9	189.9	58,700
65	72.3	188.4	48,200
70	70.7	186.6	39,400
75	69.1	184.7	32,000
80	67.4	182.7	25,700
85	65.8	180.4	20,200
90	64.1	178.0	15,400
95	62.4	175.4	11,100

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

130 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	391,600 *
17	82.0	77.1	380,900 *
18	81.1	76.9	377,700 *
19	80.3	76.7	374,100 *
20	79.5	76.5	366,100 *
22	77.8	76.0	331,500 *
24	76.1	75.5	302,300 *
26	74.4	74.9	277,200 *
28	72.7	74.2	255,500 *
30	70.9	73.5	236,500 *
32	69.2	72.7	219,700 *
34	67.4	71.8	203,800 *
36	65.6	70.9	184,400 *
38	63.7	69.8	167,800 *
40	61.9	68.7	153,300 *
42	60.0	67.5	140,700 *
44	58.0	66.2	129,500 *
46	56.0	64.8	119,600 *
48	54.0	63.4	110,700 *
50	51.9	61.7	102,800 *
80 Ft. BOOM			
17	83.0	87.2	368,400 *
18	82.3	87.0	363,600 *
19	81.5	86.9	358,800 *
20	80.8	86.7	354,400 *
22	79.3	86.3	331,900 *
24	77.9	85.8	302,700 *
26	76.4	85.3	277,700 *
28	74.9	84.7	256,100 *
30	73.4	84.1	237,100 *
32	71.9	83.4	220,400 *
34	70.4	82.7	205,500 *
36	68.8	81.9	186,500 *
38	67.3	81.0	169,800 *
40	65.7	80.0	155,300 *
42	64.1	79.0	142,600 *
44	62.4	78.0	131,400 *
46	60.8	76.8	121,500 *
48	59.1	75.6	112,600 *
50	57.4	74.3	104,500 *
55	52.9	70.6	87,600 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	329,600 *
20	81.8	96.8	325,400 *
22	80.5	96.5	317,300 *
24	79.2	96.1	302,900 *
26	77.9	95.6	277,900 *
28	76.6	95.1	256,200 *
30	75.3	94.6	237,300 *
32	74.0	94.0	220,600 *
34	72.6	93.3	205,700 *
36	71.3	92.6	187,900 *
38	69.9	91.8	171,100 *
40	68.6	91.0	156,600 *
42	67.2	90.1	143,900 *
44	65.8	89.2	132,700 *
46	64.3	88.2	122,700 *
48	62.9	87.2	113,800 *
50	61.4	86.0	105,800 *
55	57.7	82.9	88,800 *
60	53.8	79.3	75,200 *
100 Ft. BOOM			
20	82.7	107.0	314,800 *
22	81.5	106.6	307,700 *
24	80.3	106.3	300,700 *
26	79.2	105.9	278,800 *
28	78.0	105.4	257,200 *
30	76.8	104.9	238,300 *
32	75.6	104.4	221,600 *
34	74.4	103.8	206,700 *
36	73.2	103.2	189,500 *
38	72.0	102.5	172,700 *
40	70.8	101.8	158,200 *
42	69.6	101.0	145,500 *
44	68.3	100.2	134,300 *
46	67.1	99.3	124,300 *
48	65.8	98.4	115,300 *
50	64.6	97.4	107,300 *
55	61.3	94.7	90,300 *
60	57.9	91.6	76,700 *
65	54.4	88.1	65,600 *

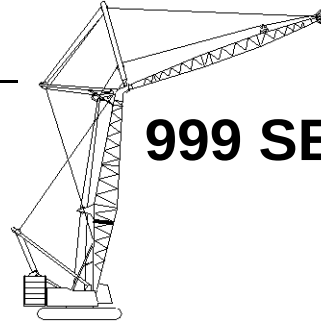
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	286,400 *
24	81.2	116.4	280,300 *
26	80.2	116.1	274,000 *
28	79.1	115.7	257,000 *
30	78.0	115.2	238,100 *
32	77.0	114.7	221,400 *
34	75.9	114.2	206,600 *
36	74.8	113.6	190,300 *
38	73.7	113.0	173,500 *
40	72.6	112.4	158,900 *
42	71.5	111.7	146,200 *
44	70.4	110.9	134,900 *
46	69.3	110.2	124,900 *
48	68.2	109.3	115,900 *
50	67.0	108.5	107,900 *
55	64.1	106.1	90,800 *
60	61.2	103.4	77,200 *
65	58.1	100.3	66,000 *
70	55.0	96.8	56,700 *
75	51.7	93.0	48,800 *
120 Ft. BOOM			
22	82.9	126.9	278,000 *
24	82.0	126.6	272,300 *
26	81.0	126.2	266,800 *
28	80.0	125.9	257,400 *
30	79.1	125.5	238,600 *
32	78.1	125.0	221,900 *
34	77.1	124.5	207,100 *
36	76.1	124.0	191,300 *
38	75.1	123.5	174,500 *
40	74.1	122.9	159,900 *
42	73.1	122.2	147,100 *
44	72.1	121.6	135,800 *
46	71.1	120.9	125,800 *
48	70.1	120.1	116,800 *
50	69.1	119.3	108,700 *
55	66.5	117.2	91,700 *
60	63.8	114.7	78,000 *
65	61.1	112.0	66,900 *
70	58.3	109.0	57,600 *
75	55.4	105.6	49,700 *
80	52.4	101.8	42,900 *



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

130 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	250,700 *
26	81.7	136.4	243,300 *
28	80.8	136.0	236,100 *
30	79.9	135.7	229,200 *
32	79.0	135.3	207,200
34	78.1	134.8	185,000
36	77.2	134.3	166,300
38	76.3	133.8	150,200
40	75.4	133.3	136,300
42	74.5	132.7	124,100
44	73.5	132.1	113,300
46	72.6	131.5	103,800
48	71.7	130.8	95,200
50	70.7	130.1	87,500
55	68.4	128.1	71,200
60	66.0	125.9	58,200
65	63.5	123.4	47,600
70	61.0	120.7	38,700
75	58.4	117.6	31,200
80	55.8	114.3	24,700
85	53.0	110.6	19,100
140 Ft. BOOM			
26	82.3	146.5	236,900 *
28	81.5	146.2	229,900 *
30	80.6	145.8	223,100 *
32	79.8	145.5	208,000
34	79.0	145.1	185,800
36	78.1	144.6	167,100
38	77.3	144.1	151,000
40	76.4	143.6	137,000
42	75.6	143.1	124,800
44	74.7	142.5	114,100
46	73.9	141.9	104,500
48	73.0	141.3	95,900
50	72.2	140.7	88,200
55	70.0	138.9	71,900
60	67.8	136.8	58,900
65	65.5	134.6	48,300
70	63.3	132.1	39,400
75	60.9	129.3	31,800
80	58.5	126.3	25,400
85	56.1	123.0	19,800
90	53.5	119.3	14,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	212,800 *
28	82.0	156.3	207,100 *
30	81.3	156.0	201,600 *
32	80.5	155.6	196,300 *
34	79.7	155.3	186,100
36	78.9	154.8	167,200
38	78.2	154.4	151,100
40	77.4	153.9	137,100
42	76.6	153.5	124,900
44	75.8	152.9	114,100
46	75.0	152.4	104,500
48	74.2	151.8	95,900
50	73.4	151.2	88,200
55	71.4	149.5	71,900
60	69.4	147.6	58,800
65	67.3	145.6	48,100
70	65.2	143.3	39,200
75	63.0	140.8	31,600
80	60.9	138.0	25,200
85	58.6	135.0	19,600
90	56.3	131.7	14,600
95	54.0	128.1	10,300
160 Ft. BOOM			
28	82.5	166.4	198,700 *
30	81.8	166.1	193,400 *
32	81.1	165.8	188,200 *
34	80.4	165.4	183,200 *
36	79.6	165.1	167,700
38	78.9	164.6	151,500
40	78.2	164.2	137,500
42	77.4	163.7	125,300
44	76.7	163.3	114,500
46	76.0	162.7	104,900
48	75.2	162.2	96,300
50	74.5	161.6	88,500
55	72.6	160.1	72,200
60	70.7	158.3	59,100

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
65	68.8	156.4	48,400
70	66.8	154.3	39,500
75	64.9	152.0	31,900
80	62.9	149.4	25,400
85	60.8	146.7	19,800
90	58.7	143.6	14,900
95	56.6	140.4	10,600
170 Ft. BOOM			
28	83.0	176.5	185,000 *
30	82.3	176.2	180,500 *
32	81.6	175.9	176,200 *
34	80.9	175.6	172,000 *
36	80.3	175.2	167,800 *
38	79.6	174.9	151,700
40	78.9	174.4	137,700
42	78.2	174.0	125,400
44	77.5	173.6	114,600
46	76.8	173.1	104,900
48	76.1	172.6	96,300
50	75.4	172.0	88,600
55	73.7	170.6	72,200
60	71.9	168.9	59,100
65	70.1	167.1	48,400
70	68.3	165.2	39,500
75	66.4	163.0	31,900
80	64.6	160.6	25,400
85	62.7	158.1	19,800
90	60.8	155.3	14,900
95	58.8	152.3	10,500



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

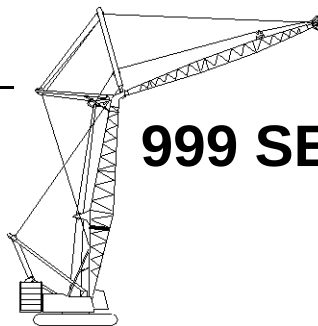
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

130 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	171,800 *
32	82.1	186.0	167,700 *
34	81.4	185.7	163,600 *
36	80.8	185.4	159,500 *
38	80.2	185.0	151,900
40	79.5	184.6	137,900
42	78.9	184.2	125,600
44	78.2	183.8	114,700
46	77.6	183.4	105,100
48	76.9	182.9	96,500
50	76.2	182.4	88,700
55	74.6	181.0	72,300
60	72.9	179.5	59,200
65	71.2	177.8	48,500
70	69.5	175.9	39,600
75	67.8	173.9	32,000
80	66.1	171.7	25,500
85	64.3	169.3	19,900
90	62.5	166.8	14,900
95	60.7	164.0	10,600

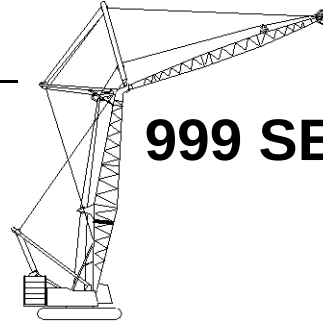
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	115,500
46	78.2	193.6	105,800
48	77.6	193.2	97,200
50	77.0	192.7	89,400
55	75.4	191.4	73,000
60	73.9	189.9	59,900
65	72.3	188.4	49,100
70	70.7	186.6	40,100
75	69.1	184.7	32,500
80	67.4	182.7	26,000
85	65.8	180.4	20,400
90	64.1	178.0	15,500
95	62.4	175.4	11,100



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

140 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	387,900 *
17	82.0	77.1	378,000 *
18	81.1	76.9	374,600 *
19	80.3	76.7	370,800 *
20	79.5	76.5	363,400 *
22	77.8	76.0	328,900 *
24	76.1	75.5	299,700 *
26	74.4	74.9	274,600 *
28	72.7	74.2	252,900 *
30	70.9	73.5	233,900 *
32	69.2	72.7	217,200 *
34	67.4	71.8	200,400
36	65.6	70.9	181,100
38	63.7	69.8	164,500
40	61.9	68.7	150,100
42	60.0	67.5	137,500
44	58.0	66.2	126,400
46	56.0	64.8	116,600
48	54.0	63.4	107,700
50	51.9	61.7	99,800
80 Ft. BOOM			
17	83.0	87.2	365,400 *
18	82.3	87.0	360,500 *
19	81.5	86.9	355,700 *
20	80.8	86.7	351,300 *
22	79.3	86.3	329,400 *
24	77.9	85.8	300,300 *
26	76.4	85.3	275,300 *
28	74.9	84.7	253,600 *
30	73.4	84.1	234,700 *
32	71.9	83.4	218,000 *
34	70.4	82.7	202,700
36	68.8	81.9	183,300
38	67.3	81.0	166,700
40	65.7	80.0	152,300
42	64.1	79.0	139,700
44	62.4	78.0	128,500
46	60.8	76.8	118,600
48	59.1	75.6	109,800
50	57.4	74.3	101,800
55	52.9	70.6	84,900

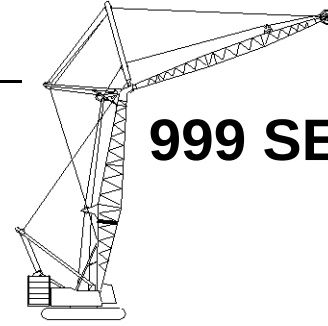
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	326,800 *
20	81.8	96.8	322,600 *
22	80.5	96.5	314,400 *
24	79.2	96.1	300,500 *
26	77.9	95.6	275,500 *
28	76.6	95.1	253,900 *
30	75.3	94.6	235,000 *
32	74.0	94.0	218,300 *
34	72.6	93.3	203,500 *
36	71.3	92.6	184,900
38	69.9	91.8	168,300
40	68.6	91.0	153,800
42	67.2	90.1	141,100
44	65.8	89.2	130,000
46	64.3	88.2	120,000
48	62.9	87.2	111,200
50	61.4	86.0	103,200
55	57.7	82.9	86,300
60	53.8	79.3	72,700
100 Ft. BOOM			
20	82.7	107.0	312,000 *
22	81.5	106.6	304,900 *
24	80.3	106.3	297,900 *
26	79.2	105.9	276,500 *
28	78.0	105.4	254,900 *
30	76.8	104.9	236,100 *
32	75.6	104.4	219,400 *
34	74.4	103.8	204,600 *
36	73.2	103.2	186,700
38	72.0	102.5	170,000
40	70.8	101.8	155,500
42	69.6	101.0	142,800
44	68.3	100.2	131,700
46	67.1	99.3	121,700
48	65.8	98.4	112,800
50	64.6	97.4	104,800
55	61.3	94.7	87,900
60	57.9	91.6	74,400
65	54.4	88.1	63,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	284,200 *
24	81.2	116.4	277,800 *
26	80.2	116.1	271,500 *
28	79.1	115.7	254,800 *
30	78.0	115.2	235,900 *
32	77.0	114.7	219,300 *
34	75.9	114.2	204,500 *
36	74.8	113.6	187,600
38	73.7	113.0	170,900
40	72.6	112.4	156,300
42	71.5	111.7	143,600
44	70.4	110.9	132,400
46	69.3	110.2	122,500
48	68.2	109.3	113,500
50	67.0	108.5	105,500
55	64.1	106.1	88,500
60	61.2	103.4	75,000
65	58.1	100.3	63,900
70	55.0	96.8	54,600
75	51.7	93.0	46,700
120 Ft. BOOM			
22	82.9	126.9	275,700 *
24	82.0	126.6	269,900 *
26	81.0	126.2	264,400 *
28	80.0	125.9	255,300 *
30	79.1	125.5	229,300
32	78.1	125.0	202,900
34	77.1	124.5	180,900
36	76.1	124.0	162,200
38	75.1	123.5	146,300
40	74.1	122.9	132,400
42	73.1	122.2	120,300
44	72.1	121.6	109,600
46	71.1	120.9	100,100
48	70.1	120.1	91,600
50	69.1	119.3	84,000
55	66.5	117.2	67,800
60	63.8	114.7	54,900
65	61.1	112.0	44,300
70	58.3	109.0	35,500
75	55.4	105.6	28,000
80	52.4	101.8	21,600

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

140 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	249,000 *
26	81.7	136.4	241,500 *
28	80.8	136.0	234,300 *
30	79.9	135.7	227,500 *
32	79.0	135.3	203,700
34	78.1	134.8	181,700
36	77.2	134.3	163,000
38	76.3	133.8	147,000
40	75.4	133.3	133,200
42	74.5	132.7	121,000
44	73.5	132.1	110,300
46	72.6	131.5	100,800
48	71.7	130.8	92,300
50	70.7	130.1	84,600
55	68.4	128.1	68,500
60	66.0	125.9	55,500
65	63.5	123.4	44,900
70	61.0	120.7	36,100
75	58.4	117.6	28,600
80	55.8	114.3	22,200
85	53.0	110.6	16,600
140 Ft. BOOM			
26	82.3	146.5	235,100 *
28	81.5	146.2	228,100 *
30	80.6	145.8	221,300 *
32	79.8	145.5	204,600
34	79.0	145.1	182,600
36	78.1	144.6	163,900
38	77.3	144.1	147,900
40	76.4	143.6	134,000
42	75.6	143.1	121,900
44	74.7	142.5	111,200
46	73.9	141.9	101,600
48	73.0	141.3	93,100
50	72.2	140.7	85,500
55	70.0	138.9	69,300
60	67.8	136.8	56,300
65	65.5	134.6	45,700
70	63.3	132.1	36,900
75	60.9	129.3	29,400
80	58.5	126.3	23,000
85	56.1	123.0	17,400
90	53.5	119.3	12,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	211,100 *
28	82.0	156.3	205,400 *
30	81.3	156.0	199,900 *
32	80.5	155.6	194,500 *
34	79.7	155.3	182,900
36	78.9	154.8	164,100
38	78.2	154.4	148,100
40	77.4	153.9	134,200
42	76.6	153.5	122,000
44	75.8	152.9	111,300
46	75.0	152.4	101,700
48	74.2	151.8	93,200
50	73.4	151.2	85,500
55	71.4	149.5	69,200
60	69.4	147.6	56,200
65	67.3	145.6	45,600
70	65.2	143.3	36,700
75	63.0	140.8	29,200
80	60.9	138.0	22,800
85	58.6	135.0	17,200
90	56.3	131.7	12,300
160 Ft. BOOM			
28	82.5	166.4	196,900 *
30	81.8	166.1	191,600 *
32	81.1	165.8	186,500 *
34	80.4	165.4	181,500 *
36	79.6	165.1	164,600
38	78.9	164.6	148,600
40	78.2	164.2	134,600
42	77.4	163.7	122,400
44	76.7	163.3	111,700
46	76.0	162.7	102,100
48	75.2	162.2	93,600
50	74.5	161.6	85,900
55	72.6	160.1	69,600

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
60	70.7	158.3	56,600
65	68.8	156.4	46,000
70	66.8	154.3	37,100
75	64.9	152.0	29,600
80	62.9	149.4	23,100
85	60.8	146.7	17,600
90	58.7	143.6	12,700
170 Ft. BOOM			
28	83.0	176.5	183,300 *
30	82.3	176.2	178,900 *
32	81.6	175.9	174,500 *
34	80.9	175.6	170,300 *
36	80.3	175.2	164,900
38	79.6	174.9	148,800
40	78.9	174.4	134,800
42	78.2	174.0	122,600
44	77.5	173.6	111,900
46	76.8	173.1	102,300
48	76.1	172.6	93,700
50	75.4	172.0	86,000
55	73.7	170.6	69,700
60	71.9	168.9	56,700
65	70.1	167.1	46,000
70	68.3	165.2	37,100
75	66.4	163.0	29,600
80	64.6	160.6	23,200
85	62.7	158.1	17,600
90	60.8	155.3	12,700



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

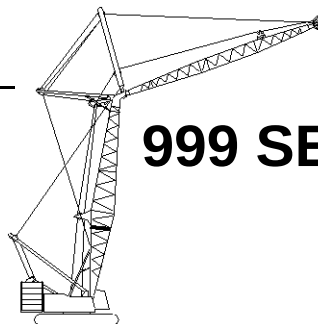
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

140 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	170,100 *
32	82.1	186.0	166,000 *
34	81.4	185.7	161,900 *
36	80.8	185.4	157,900 *
38	80.2	185.0	149,100
40	79.5	184.6	135,100
42	78.9	184.2	122,900
44	78.2	183.8	112,100
46	77.6	183.4	102,500
48	76.9	182.9	93,900
50	76.2	182.4	86,200
55	74.6	181.0	69,900
60	72.9	179.5	56,900
65	71.2	177.8	46,200
70	69.5	175.9	37,300
75	67.8	173.9	29,800
80	66.1	171.7	23,300
85	64.3	169.3	17,700
90	62.5	166.8	12,800

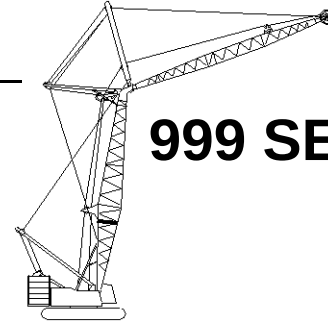
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	112,900
46	78.2	193.6	103,300
48	77.6	193.2	94,700
50	77.0	192.7	86,900
55	75.4	191.4	70,600
60	73.9	189.9	57,500
65	72.3	188.4	46,800
70	70.7	186.6	37,900
75	69.1	184.7	30,300
80	67.4	182.7	23,900
85	65.8	180.4	18,300
90	64.1	178.0	13,400



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

150 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	385,200 *
17	82.0	77.1	375,900 *
18	81.1	76.9	372,100 *
19	80.3	76.7	368,300 *
20	79.5	76.5	361,500 *
22	77.8	76.0	327,000 *
24	76.1	75.5	297,800 *
26	74.4	74.9	272,800 *
28	72.7	74.2	251,100 *
30	70.9	73.5	232,200 *
32	69.2	72.7	215,400 *
34	67.4	71.8	197,900 *
36	65.6	70.9	178,600 *
38	63.7	69.8	162,100 *
40	61.9	68.7	147,800 *
42	60.0	67.5	135,300 *
44	58.0	66.2	124,300 *
46	56.0	64.8	114,400 *
48	54.0	63.4	105,700 *
50	51.9	61.7	97,700 *
80 Ft. BOOM			
17	83.0	87.2	363,100 *
18	82.3	87.0	358,200 *
19	81.5	86.9	353,400 *
20	80.8	86.7	348,900 *
22	79.3	86.3	327,600 *
24	77.9	85.8	298,500 *
26	76.4	85.3	273,600 *
28	74.9	84.7	251,900 *
30	73.4	84.1	233,000 *
32	71.9	83.4	216,300 *
34	70.4	82.7	200,400 *
36	68.8	81.9	181,100 *
38	67.3	81.0	164,500 *
40	65.7	80.0	150,200 *
42	64.1	79.0	137,600 *
44	62.4	78.0	126,500 *
46	60.8	76.8	116,700 *
48	59.1	75.6	107,800 *
50	57.4	74.3	99,900 *
55	52.9	70.6	83,100 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	324,700 *
20	81.8	96.8	320,500 *
22	80.5	96.5	312,200 *
24	79.2	96.1	298,800 *
26	77.9	95.6	273,900 *
28	76.6	95.1	252,300 *
30	75.3	94.6	233,400 *
32	74.0	94.0	216,800 *
34	72.6	93.3	202,000 *
36	71.3	92.6	182,800 *
38	69.9	91.8	166,200 *
40	68.6	91.0	151,800 *
42	67.2	90.1	139,200 *
44	65.8	89.2	128,100 *
46	64.3	88.2	118,200 *
48	62.9	87.2	109,300 *
50	61.4	86.0	101,400 *
55	57.7	82.9	84,600 *
60	53.8	79.3	71,100 *
100 Ft. BOOM			
20	82.7	107.0	310,300 *
22	81.5	106.6	302,800 *
24	80.3	106.3	295,700 *
26	79.2	105.9	275,000 *
28	78.0	105.4	253,400 *
30	76.8	104.9	234,600 *
32	75.6	104.4	217,900 *
34	74.4	103.8	203,100 *
36	73.2	103.2	184,700 *
38	72.0	102.5	168,100 *
40	70.8	101.8	153,600 *
42	69.6	101.0	141,000 *
44	68.3	100.2	129,900 *
46	67.1	99.3	120,000 *
48	65.8	98.4	111,100 *
50	64.6	97.4	103,200 *
55	61.3	94.7	86,300 *
60	57.9	91.6	72,800 *
65	54.4	88.1	61,800 *

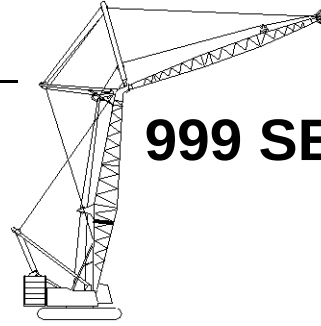
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	282,300 *
24	81.2	116.4	275,900 *
26	80.2	116.1	269,500 *
28	79.1	115.7	253,300 *
30	78.0	115.2	225,100 *
32	77.0	114.7	198,900 *
34	75.9	114.2	177,000 *
36	74.8	113.6	158,500 *
38	73.7	113.0	142,600 *
40	72.6	112.4	128,900 *
42	71.5	111.7	116,900 *
44	70.4	110.9	106,300 *
46	69.3	110.2	96,800 *
48	68.2	109.3	88,400 *
50	67.0	108.5	80,800 *
55	64.1	106.1	64,700 *
60	61.2	103.4	51,900 *
65	58.1	100.3	41,400 *
70	55.0	96.8	32,600 *
75	51.7	93.0	25,200 *
120 Ft. BOOM			
22	82.9	126.9	274,000 *
24	82.0	126.6	268,200 *
26	81.0	126.2	262,600 *
28	80.0	125.9	253,900 *
30	79.1	125.5	226,600 *
32	78.1	125.0	200,300 *
34	77.1	124.5	178,400 *
36	76.1	124.0	159,900 *
38	75.1	123.5	144,000 *
40	74.1	122.9	130,200 *
42	73.1	122.2	118,200 *
44	72.1	121.6	107,600 *
46	71.1	120.9	98,100 *
48	70.1	120.1	89,700 *
50	69.1	119.3	82,000 *
55	66.5	117.2	66,000 *
60	63.8	114.7	53,100 *
65	61.1	112.0	42,600 *
70	58.3	109.0	33,800 *
75	55.4	105.6	26,400 *
80	52.4	101.8	20,000 *



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

150 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	247,700 *
26	81.7	136.4	240,200 *
28	80.8	136.0	233,100 *
30	79.9	135.7	226,200 *
32	79.0	135.3	201,200
34	78.1	134.8	179,300
36	77.2	134.3	160,700
38	76.3	133.8	144,800
40	75.4	133.3	131,000
42	74.5	132.7	119,000
44	73.5	132.1	108,300
46	72.6	131.5	98,900
48	71.7	130.8	90,400
50	70.7	130.1	82,800
55	68.4	128.1	66,700
60	66.0	125.9	53,800
65	63.5	123.4	43,300
70	61.0	120.7	34,500
75	58.4	117.6	27,000
80	55.8	114.3	20,700
85	53.0	110.6	15,100
140 Ft. BOOM			
26	82.3	146.5	233,800 *
28	81.5	146.2	226,800 *
30	80.6	145.8	220,000 *
32	79.8	145.5	202,200
34	79.0	145.1	180,300
36	78.1	144.6	161,700
38	77.3	144.1	145,800
40	76.4	143.6	132,000
42	75.6	143.1	119,900
44	74.7	142.5	109,200
46	73.9	141.9	99,800
48	73.0	141.3	91,300
50	72.2	140.7	83,600
55	70.0	138.9	67,500
60	67.8	136.8	54,600
65	65.5	134.6	44,100
70	63.3	132.1	35,300
75	60.9	129.3	27,900
80	58.5	126.3	21,500
85	56.1	123.0	16,000
90	53.5	119.3	11,100

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	209,900 *
28	82.0	156.3	204,200 *
30	81.3	156.0	198,700 *
32	80.5	155.6	193,300 *
34	79.7	155.3	180,600
36	78.9	154.8	162,000
38	78.2	154.4	146,000
40	77.4	153.9	132,200
42	76.6	153.5	120,100
44	75.8	152.9	109,400
46	75.0	152.4	99,900
48	74.2	151.8	91,400
50	73.4	151.2	83,700
55	71.4	149.5	67,600
60	69.4	147.6	54,700
65	67.3	145.6	44,100
70	65.2	143.3	35,300
75	63.0	140.8	27,800
80	60.9	138.0	21,400
85	58.6	135.0	15,800
90	56.3	131.7	11,000
160 Ft. BOOM			
28	82.5	166.4	195,700 *
30	81.8	166.1	190,400 *
32	81.1	165.8	185,200 *
34	80.4	165.4	180,200 *
36	79.6	165.1	162,600
38	78.9	164.6	146,600
40	78.2	164.2	132,700
42	77.4	163.7	120,600
44	76.7	163.3	109,900
46	76.0	162.7	100,400
48	75.2	162.2	91,800
50	74.5	161.6	84,200
55	72.6	160.1	68,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
60	70.7	158.3	55,100
65	68.8	156.4	44,500
70	66.8	154.3	35,700
75	64.9	152.0	28,200
80	62.9	149.4	21,800
85	60.8	146.7	16,200
90	58.7	143.6	11,400
170 Ft. BOOM			
28	83.0	176.5	182,100 *
30	82.3	176.2	177,700 *
32	81.6	175.9	173,400 *
34	80.9	175.6	169,100 *
36	80.3	175.2	162,800
38	79.6	174.9	146,800
40	78.9	174.4	132,900
42	78.2	174.0	120,800
44	77.5	173.6	110,100
46	76.8	173.1	100,500
48	76.1	172.6	92,000
50	75.4	172.0	84,300
55	73.7	170.6	68,100
60	71.9	168.9	55,200
65	70.1	167.1	44,600
70	68.3	165.2	35,700
75	66.4	163.0	28,300
80	64.6	160.6	21,800
85	62.7	158.1	16,300
90	60.8	155.3	11,400



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

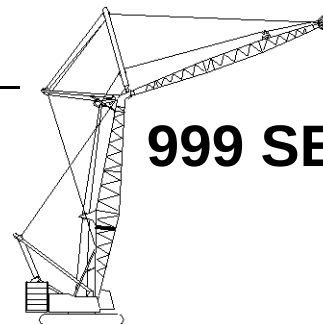
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

150 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	169,000 *
32	82.1	186.0	164,800 *
34	81.4	185.7	160,800 *
36	80.8	185.4	156,700 *
38	80.2	185.0	147,100
40	79.5	184.6	133,200
42	78.9	184.2	121,100
44	78.2	183.8	110,300
46	77.6	183.4	100,800
48	76.9	182.9	92,300
50	76.2	182.4	84,600
55	74.6	181.0	68,400
60	72.9	179.5	55,400
65	71.2	177.8	44,800
70	69.5	175.9	35,900
75	67.8	173.9	28,400
80	66.1	171.7	22,000
85	64.3	169.3	16,500
90	62.5	166.8	11,600

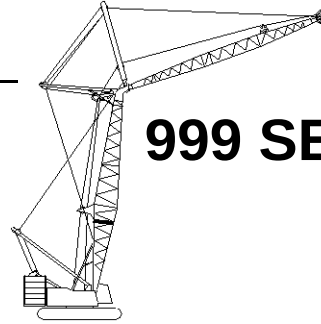
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	111,200
46	78.2	193.6	101,600
48	77.6	193.2	93,100
50	77.0	192.7	85,400
55	75.4	191.4	69,100
60	73.9	189.9	56,100
65	72.3	188.4	45,400
70	70.7	186.6	36,600
75	69.1	184.7	29,100
80	67.4	182.7	22,600
85	65.8	180.4	17,000
90	64.1	178.0	12,200



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

160 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	381,400 *
17	82.0	77.1	372,600 *
18	81.1	76.9	368,700 *
19	80.3	76.7	364,700 *
20	79.5	76.5	358,700 *
22	77.8	76.0	324,200 *
24	76.1	75.5	295,100 *
26	74.4	74.9	270,100 *
28	72.7	74.2	248,400 *
30	70.9	73.5	229,500 *
32	69.2	72.7	212,800 *
34	67.4	71.8	194,200
36	65.6	70.9	175,100
38	63.7	69.8	158,700
40	61.9	68.7	144,400
42	60.0	67.5	132,000
44	58.0	66.2	121,000
46	56.0	64.8	111,200
48	54.0	63.4	102,500
50	51.9	61.7	94,600
80 Ft. BOOM			
17	83.0	87.2	359,900 *
18	82.3	87.0	354,800 *
19	81.5	86.9	350,000 *
20	80.8	86.7	345,400 *
22	79.3	86.3	325,000 *
24	77.9	85.8	295,900 *
26	76.4	85.3	271,000 *
28	74.9	84.7	249,400 *
30	73.4	84.1	230,500 *
32	71.9	83.4	213,800 *
34	70.4	82.7	197,000
36	68.8	81.9	177,800
38	67.3	81.0	161,300
40	65.7	80.0	147,000
42	64.1	79.0	134,500
44	62.4	78.0	123,500
46	60.8	76.8	113,700
48	59.1	75.6	104,900
50	57.4	74.3	97,000
55	52.9	70.6	80,300

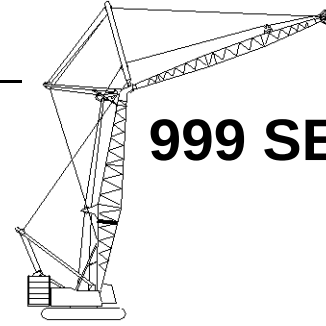
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	321,700 *
20	81.8	96.8	317,400 *
22	80.5	96.5	309,000 *
24	79.2	96.1	296,300 *
26	77.9	95.6	271,400 *
28	76.6	95.1	249,900 *
30	75.3	94.6	231,000 *
32	74.0	94.0	214,400 *
34	72.6	93.3	199,000
36	71.3	92.6	179,700
38	69.9	91.8	163,200
40	68.6	91.0	148,800
42	67.2	90.1	136,300
44	65.8	89.2	125,200
46	64.3	88.2	115,400
48	62.9	87.2	106,600
50	61.4	86.0	98,700
55	57.7	82.9	81,900
60	53.8	79.3	68,500
100 Ft. BOOM			
20	82.7	107.0	307,300 *
22	81.5	106.6	299,800 *
24	80.3	106.3	292,600 *
26	79.2	105.9	272,600 *
28	78.0	105.4	251,100 *
30	76.8	104.9	219,700
32	75.6	104.4	193,600
34	74.4	103.8	172,000
36	73.2	103.2	153,600
38	72.0	102.5	137,900
40	70.8	101.8	124,300
42	69.6	101.0	112,300
44	68.3	100.2	101,800
46	67.1	99.3	92,500
48	65.8	98.4	84,100
50	64.6	97.4	76,600
55	61.3	94.7	60,700
60	57.9	91.6	48,000
65	54.4	88.1	37,500

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	279,600 *
24	81.2	116.4	273,100 *
26	80.2	116.1	266,700 *
28	79.1	115.7	251,100 *
30	78.0	115.2	221,100
32	77.0	114.7	195,000
34	75.9	114.2	173,200
36	74.8	113.6	154,800
38	73.7	113.0	139,100
40	72.6	112.4	125,400
42	71.5	111.7	113,400
44	70.4	110.9	102,900
46	69.3	110.2	93,500
48	68.2	109.3	85,100
50	67.0	108.5	77,500
55	64.1	106.1	61,600
60	61.2	103.4	48,800
65	58.1	100.3	38,400
70	55.0	96.8	29,700
75	51.7	93.0	22,300
120 Ft. BOOM			
22	82.9	126.9	271,500 *
24	82.0	126.6	265,700 *
26	81.0	126.2	260,100 *
28	80.0	125.9	251,700 *
30	79.1	125.5	222,700
32	78.1	125.0	196,600
34	77.1	124.5	174,800
36	76.1	124.0	156,300
38	75.1	123.5	140,500
40	74.1	122.9	126,900
42	73.1	122.2	114,900
44	72.1	121.6	104,300
46	71.1	120.9	94,900
48	70.1	120.1	86,500
50	69.1	119.3	78,900
55	66.5	117.2	63,000
60	63.8	114.7	50,200
65	61.1	112.0	39,700
70	58.3	109.0	31,000
75	55.4	105.6	23,600
80	52.4	101.8	17,300

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

160 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	245,800 *
26	81.7	136.4	238,300 *
28	80.8	136.0	231,200 *
30	79.9	135.7	223,800
32	79.0	135.3	197,600
34	78.1	134.8	175,800
36	77.2	134.3	157,300
38	76.3	133.8	141,500
40	75.4	133.3	127,800
42	74.5	132.7	115,800
44	73.5	132.1	105,200
46	72.6	131.5	95,800
48	71.7	130.8	87,400
50	70.7	130.1	79,800
55	68.4	128.1	63,800
60	66.0	125.9	51,000
65	63.5	123.4	40,500
70	61.0	120.7	31,800
75	58.4	117.6	24,400
80	55.8	114.3	18,000
85	53.0	110.6	12,500
140 Ft. BOOM			
26	82.3	146.5	231,900 *
28	81.5	146.2	224,800 *
30	80.6	145.8	218,100 *
32	79.8	145.5	198,700
34	79.0	145.1	176,800
36	78.1	144.6	158,400
38	77.3	144.1	142,500
40	76.4	143.6	128,800
42	75.6	143.1	116,800
44	74.7	142.5	106,200
46	73.9	141.9	96,800
48	73.0	141.3	88,300
50	72.2	140.7	80,700
55	70.0	138.9	64,700
60	67.8	136.8	51,900
65	65.5	134.6	41,400
70	63.3	132.1	32,700
75	60.9	129.3	25,300
80	58.5	126.3	18,900
85	56.1	123.0	13,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	208,000 *
28	82.0	156.3	202,300 *
30	81.3	156.0	196,800 *
32	80.5	155.6	191,400 *
34	79.7	155.3	177,300
36	78.9	154.8	158,800
38	78.2	154.4	142,900
40	77.4	153.9	129,100
42	76.6	153.5	117,000
44	75.8	152.9	106,400
46	75.0	152.4	97,000
48	74.2	151.8	88,500
50	73.4	151.2	80,900
55	71.4	149.5	64,800
60	69.4	147.6	52,000
65	67.3	145.6	41,500
70	65.2	143.3	32,700
75	63.0	140.8	25,300
80	60.9	138.0	18,900
85	58.6	135.0	13,400
160 Ft. BOOM			
28	82.5	166.4	193,900 *
30	81.8	166.1	188,500 *
32	81.1	165.8	183,400 *
34	80.4	165.4	177,900
36	79.6	165.1	159,400
38	78.9	164.6	143,500
40	78.2	164.2	129,700
42	77.4	163.7	117,600
44	76.7	163.3	107,000
46	76.0	162.7	97,500
48	75.2	162.2	89,000
50	74.5	161.6	81,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
55	72.6	160.1	65,300
60	70.7	158.3	52,500
65	68.8	156.4	41,900
70	66.8	154.3	33,200
75	64.9	152.0	25,700
80	62.9	149.4	19,400
85	60.8	146.7	13,900
170 Ft. BOOM			
28	83.0	176.5	180,300 *
30	82.3	176.2	175,900 *
32	81.6	175.9	171,500 *
34	80.9	175.6	167,300 *
36	80.3	175.2	159,700
38	79.6	174.9	143,800
40	78.9	174.4	130,000
42	78.2	174.0	117,900
44	77.5	173.6	107,200
46	76.8	173.1	97,800
48	76.1	172.6	89,300
50	75.4	172.0	81,600
55	73.7	170.6	65,500
60	71.9	168.9	52,600
65	70.1	167.1	42,100
70	68.3	165.2	33,300
75	66.4	163.0	25,900
80	64.6	160.6	19,500
85	62.7	158.1	14,000



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code

Boom No. 82 or 22EL

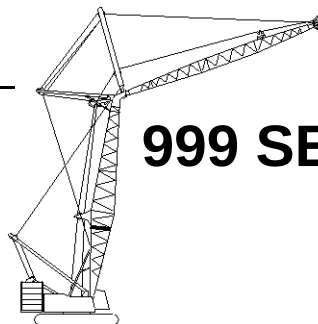
Luffing Jib No. 135

219,600 Lb. Crane Counterweight

80,000 Lb. Carbody Counterweight

360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

160 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	167,200 *
32	82.1	186.0	163,000 *
34	81.4	185.7	159,000 *
36	80.8	185.4	154,900 *
38	80.2	185.0	144,200
40	79.5	184.6	130,300
42	78.9	184.2	118,200
44	78.2	183.8	107,600
46	77.6	183.4	98,100
48	76.9	182.9	89,600
50	76.2	182.4	82,000
55	74.6	181.0	65,800
60	72.9	179.5	52,900
65	71.2	177.8	42,400
70	69.5	175.9	33,600
75	67.8	173.9	26,100
80	66.1	171.7	19,700
85	64.3	169.3	14,200

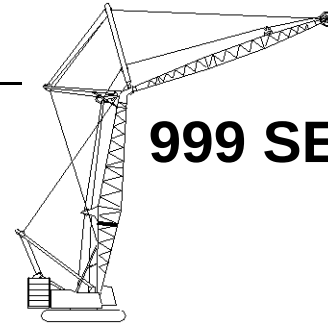
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	118,000 *
44	78.8	194.0	108,500
46	78.2	193.6	98,900
48	77.6	193.2	90,400
50	77.0	192.7	82,800
55	75.4	191.4	66,600
60	73.9	189.9	53,700
65	72.3	188.4	43,100
70	70.7	186.6	34,300
75	69.1	184.7	26,800
80	67.4	182.7	20,400
85	65.8	180.4	14,800
90	64.1	178.0	10,000



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

170 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
70 Ft. BOOM			
16	82.8	77.2	377,800 *
17	82.0	77.1	370,100 *
18	81.1	76.9	365,900 *
19	80.3	76.7	361,900 *
20	79.5	76.5	356,100 *
22	77.8	76.0	321,700 *
24	76.1	75.5	292,500 *
26	74.4	74.9	267,600 *
28	72.7	74.2	245,900 *
30	70.9	73.5	227,000 *
32	69.2	72.7	210,300 *
34	67.4	71.8	190,800
36	65.6	70.9	171,800
38	63.7	69.8	155,500
40	61.9	68.7	141,300
42	60.0	67.5	128,900
44	58.0	66.2	118,000
46	56.0	64.8	108,300
48	54.0	63.4	99,600
50	51.9	61.7	91,800
80 Ft. BOOM			
17	83.0	87.2	357,300 *
18	82.3	87.0	352,200 *
19	81.5	86.9	347,300 *
20	80.8	86.7	342,700 *
22	79.3	86.3	322,600 *
24	77.9	85.8	293,500 *
26	76.4	85.3	268,600 *
28	74.9	84.7	247,100 *
30	73.4	84.1	228,200 *
32	71.9	83.4	211,500 *
34	70.4	82.7	193,800
36	68.8	81.9	174,700
38	67.3	81.0	158,300
40	65.7	80.0	144,100
42	64.1	79.0	131,700
44	62.4	78.0	120,700
46	60.8	76.8	110,900
48	59.1	75.6	102,200
50	57.4	74.3	94,300
55	52.9	70.6	77,800

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
90 Ft. BOOM			
19	82.5	97.0	319,300 *
20	81.8	96.8	315,000 *
22	80.5	96.5	306,600 *
24	79.2	96.1	294,000 *
26	77.9	95.6	269,200 *
28	76.6	95.1	244,500
30	75.3	94.6	213,000
32	74.0	94.0	187,200
34	72.6	93.3	165,600
36	71.3	92.6	147,400
38	69.9	91.8	131,800
40	68.6	91.0	118,300
42	67.2	90.1	106,500
44	65.8	89.2	96,000
46	64.3	88.2	86,800
48	62.9	87.2	78,500
50	61.4	86.0	71,000
55	57.7	82.9	55,200
60	53.8	79.3	42,600
100 Ft. BOOM			
20	82.7	107.0	305,000 *
22	81.5	106.6	297,400 *
24	80.3	106.3	290,100 *
26	79.2	105.9	270,400 *
28	78.0	105.4	247,300
30	76.8	104.9	215,700
32	75.6	104.4	189,900
34	74.4	103.8	168,300
36	73.2	103.2	150,100
38	72.0	102.5	134,500
40	70.8	101.8	120,900
42	69.6	101.0	109,100
44	68.3	100.2	98,600
46	67.1	99.3	89,300
48	65.8	98.4	81,000
50	64.6	97.4	73,500
55	61.3	94.7	57,700
60	57.9	91.6	45,100
65	54.4	88.1	34,800

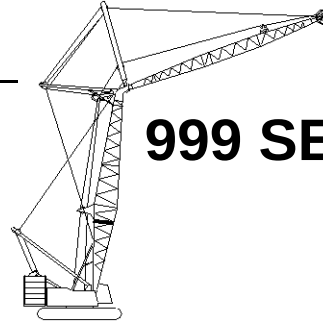
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
110 Ft. BOOM			
22	82.3	116.8	277,500 *
24	81.2	116.4	271,000 *
26	80.2	116.1	264,500 *
28	79.1	115.7	249,000 *
30	78.0	115.2	217,300
32	77.0	114.7	191,400
34	75.9	114.2	169,700
36	74.8	113.6	151,500
38	73.7	113.0	135,800
40	72.6	112.4	122,200
42	71.5	111.7	110,300
44	70.4	110.9	99,800
46	69.3	110.2	90,500
48	68.2	109.3	82,200
50	67.0	108.5	74,600
55	64.1	106.1	58,800
60	61.2	103.4	46,100
65	58.1	100.3	35,700
70	55.0	96.8	27,100
75	51.7	93.0	19,800
120 Ft. BOOM			
22	82.9	126.9	269,600 *
24	82.0	126.6	263,700 *
26	81.0	126.2	258,100 *
28	80.0	125.9	249,700 *
30	79.1	125.5	219,100
32	78.1	125.0	193,100
34	77.1	124.5	171,400
36	76.1	124.0	153,100
38	75.1	123.5	137,400
40	74.1	122.9	123,800
42	73.1	122.2	111,900
44	72.1	121.6	101,400
46	71.1	120.9	92,000
48	70.1	120.1	83,700
50	69.1	119.3	76,200
55	66.5	117.2	60,300
60	63.8	114.7	47,600
65	61.1	112.0	37,200
70	58.3	109.0	28,500
75	55.4	105.6	21,200
80	52.4	101.8	14,900



Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

170 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. BOOM			
24	82.6	136.7	244,400 *
26	81.7	136.4	236,900 *
28	80.8	136.0	229,700 *
30	79.9	135.7	220,300
32	79.0	135.3	194,200
34	78.1	134.8	172,500
36	77.2	134.3	154,200
38	76.3	133.8	138,400
40	75.4	133.3	124,800
42	74.5	132.7	112,900
44	73.5	132.1	102,400
46	72.6	131.5	93,000
48	71.7	130.8	84,600
50	70.7	130.1	77,100
55	68.4	128.1	61,200
60	66.0	125.9	48,500
65	63.5	123.4	38,100
70	61.0	120.7	29,400
75	58.4	117.6	22,000
80	55.8	114.3	15,800
85	53.0	110.6	10,300
140 Ft. BOOM			
26	82.3	146.5	230,400 *
28	81.5	146.2	223,400 *
30	80.6	145.8	216,600 *
32	79.8	145.5	195,400
34	79.0	145.1	173,700
36	78.1	144.6	155,300
38	77.3	144.1	139,600
40	76.4	143.6	125,900
42	75.6	143.1	114,000
44	74.7	142.5	103,400
46	73.9	141.9	94,100
48	73.0	141.3	85,700
50	72.2	140.7	78,100
55	70.0	138.9	62,200
60	67.8	136.8	49,500
65	65.5	134.6	39,100
70	63.3	132.1	30,400
75	60.9	129.3	23,000
80	58.5	126.3	16,700
85	56.1	123.0	11,300

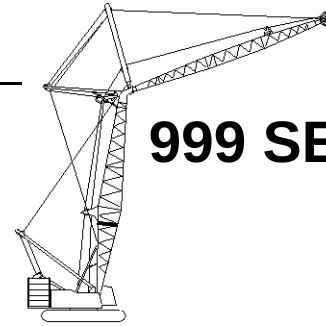
Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. BOOM			
26	82.8	156.6	206,600 *
28	82.0	156.3	200,900 *
30	81.3	156.0	195,400 *
32	80.5	155.6	190,000 *
34	79.7	155.3	174,200
36	78.9	154.8	155,800
38	78.2	154.4	140,000
40	77.4	153.9	126,300
42	76.6	153.5	114,300
44	75.8	152.9	103,800
46	75.0	152.4	94,400
48	74.2	151.8	86,000
50	73.4	151.2	78,400
55	71.4	149.5	62,400
60	69.4	147.6	49,700
65	67.3	145.6	39,200
70	65.2	143.3	30,500
75	63.0	140.8	23,100
80	60.9	138.0	16,800
85	58.6	135.0	11,300
160 Ft. BOOM			
28	82.5	166.4	192,500 *
30	81.8	166.1	187,100 *
32	81.1	165.8	181,900 *
34	80.4	165.4	174,900
36	79.6	165.1	156,500
38	78.9	164.6	140,700
40	78.2	164.2	126,900
42	77.4	163.7	115,000
44	76.7	163.3	104,400
46	76.0	162.7	95,000
48	75.2	162.2	86,600
50	74.5	161.6	79,000

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. BOOM			
55	72.6	160.1	63,000
60	70.7	158.3	50,200
65	68.8	156.4	39,700
70	66.8	154.3	31,000
75	64.9	152.0	23,600
80	62.9	149.4	17,300
85	60.8	146.7	11,800
170 Ft. BOOM			
28	83.0	176.5	179,000 *
30	82.3	176.2	174,500 *
32	81.6	175.9	170,200 *
34	80.9	175.6	166,000 *
36	80.3	175.2	156,900
38	79.6	174.9	141,000
40	78.9	174.4	127,300
42	78.2	174.0	115,300
44	77.5	173.6	104,700
46	76.8	173.1	95,300
48	76.1	172.6	86,800
50	75.4	172.0	79,300
55	73.7	170.6	63,200
60	71.9	168.9	50,400
65	70.1	167.1	40,000
70	68.3	165.2	31,200
75	66.4	163.0	23,800
80	64.6	160.6	17,500
85	62.7	158.1	12,000

Liftcrane Boom Capacities With Luffing Jib Attached

New York City Code
Boom No. 82 or 22EL
Luffing Jib No. 135
219,600 Lb. Crane Counterweight
80,000 Lb. Carbody Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements



999 SERIES 3

170 Ft. Luffing Jib, Attached At 168 Degree Boom To Luffing Jib Angle

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. BOOM			
30	82.7	186.3	165,800 *
32	82.1	186.0	161,700 *
34	81.4	185.7	157,600 *
36	80.8	185.4	153,500 *
38	80.2	185.0	141,500
40	79.5	184.6	127,700
42	78.9	184.2	115,700
44	78.2	183.8	105,100
46	77.6	183.4	95,700
48	76.9	182.9	87,200
50	76.2	182.4	79,600
55	74.6	181.0	63,600
60	72.9	179.5	50,800
65	71.2	177.8	40,300
70	69.5	175.9	31,500
75	67.8	173.9	24,100
80	66.1	171.7	17,800
85	64.3	169.3	12,300

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. BOOM			
32	82.5	196.2	118,000 *
34	81.9	195.9	118,000 *
36	81.3	195.5	118,000 *
38	80.7	195.2	118,000 *
40	80.1	194.8	118,000 *
42	79.4	194.4	116,700
44	78.8	194.0	106,000
46	78.2	193.6	96,600
48	77.6	193.2	88,100
50	77.0	192.7	80,500
55	75.4	191.4	64,400
60	73.9	189.9	51,600
65	72.3	188.4	41,000
70	70.7	186.6	32,300
75	69.1	184.7	24,800
80	67.4	182.7	18,500
85	65.8	180.4	13,000