

Liftcrane Boom Capacities

222HD

<p align="center">Meets ANSI B30.5 Requirements</p>
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**Boom No. 222HD With Open Throat Top
53,300 Lb. Counterweight
360 Degree Rating**

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*). Retracted crawler capacities are not shown for boom positions which, without load, provide less than required ANSI B30.5 backward stability.

Upper boom point capacity for liftcrane service with single part whip line is 20,000 Lbs. When rear drum is equipped with high line pull option, upper boom point capacity for liftcrane service with single part whip line is 40,000 Lbs. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface with gantry up. Refer to boom rigging No. 911764 and Wire Rope Specification chart No. 9063-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to operators manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface and boom within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart No. 9143-B.

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 22 Ft. 4 in. extendible crawlers, 36 in. treads, 15 Ft. 6 in. retractable gantry, 10 part boom hoist reeving, two 1-1/4 in. boom pendants, 1st crane counterweight = 28,500 Lbs., 2nd crane counterweight = 24,800 Lbs.

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 10
30 Ft.	1,700 Lbs.
40 Ft.	2,100 Lbs.
50 Ft.	2,600 Lbs.
60 Ft.	3,100 Lbs.

Maximum Boom and Jib Lengths Lifted Unassisted					
Over End of Blocked Crawlers		Over Side of Extended Crawlers		Over Side of Retracted Crawlers	
Boom Length	Jib No. 10	Boom Length	Jib No. 10	Boom Length	Jib No. 10
150 Ft.	---	150 Ft.	---	140 Ft.	---
140 Ft.	---	140 Ft.	---	130 Ft.	---
130 Ft.	40 Ft.	130 Ft.	40 Ft.	120 Ft.	50 Ft.
120 Ft.	60 Ft.	120 Ft.	60 Ft.	110 Ft.	60 Ft.

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

Consult jib chart for jib capacities. Upper boom point cannot be used when jib is attached.



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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
40 Ft. BOOM				
10	81.5	44.9		200,000 *
11	80.0	44.7		197,900 *
12	78.6	44.5		182,500 *
13	77.1	44.2		169,000 *
14	75.6	44.0		157,800 *
15	74.1	43.7		147,400 *
16	72.6	43.4		135,800
17	71.1	43.0		121,400
18	69.6	42.6		109,800
19	68.0	42.2		100,100
20	66.4	41.8		91,800
22	63.2	40.8		78,800
24	59.9	39.6		68,800
26	56.5	38.3		60,900
28	53.0	36.8	37,800	54,500
30	49.2	35.1	34,400	49,300
32	45.2	33.2	31,500	44,900
34	40.9	31.0	28,900	41,100
36	36.2	28.3	26,800	37,900
38	30.8	25.1	24,800	35,100
40	24.3	21.1	23,100	32,600
50 Ft. BOOM				
12	80.9	54.7		181,600 *
13	79.7	54.5		168,200 *
14	78.6	54.3		156,600 *
15	77.4	54.0		146,400 *
16	76.2	53.8		135,700
17	75.0	53.5		121,300
18	73.8	53.2		109,700
19	72.6	52.9		99,900
20	71.4	52.5		91,700
22	68.9	51.8		78,700
24	66.4	50.9		68,600
26	63.9	49.9	41,700	60,700
28	61.3	48.9	37,600	54,300
30	58.6	47.7	34,100	49,000
32	55.9	46.3	31,200	44,600
34	53.0	44.8	28,600	40,800
36	50.0	43.2	26,500	37,700
38	46.9	41.3	24,600	34,900
40	43.6	39.3	22,800	32,400
45	34.3	32.9	19,300	27,300
50	21.6	23.0	16,500	23,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
60 Ft. BOOM				
13	81.5	64.7		167,200 *
14	80.5	64.5		155,800 *
15	79.5	64.3		145,800 *
16	78.5	64.1		133,400 *
17	77.6	63.8		121,200
18	76.6	63.6		109,600
19	75.6	63.3		99,800
20	74.6	63.1		91,500
22	72.6	62.4		78,500
24	70.6	61.7	46,300	68,400
26	68.5	61.0	41,400	60,500
28	66.4	60.1	37,200	54,000
30	64.3	59.1	33,800	48,800
32	62.2	58.1	30,800	44,300
34	60.0	56.9	28,300	40,500
36	57.7	55.7	26,200	37,400
38	55.4	54.3	24,300	34,600
40	53.0	52.8	22,500	32,100
45	46.7	48.5	18,900	27,000
50	39.6	43.0	16,100	23,100
55	31.1	35.7	13,900	20,100
60	19.6	24.7	12,100	17,600
70 Ft. BOOM				
14	81.9	74.6		154,100 *
15	81.0	74.5		139,800 *
16	80.2	74.3		127,900 *
17	79.4	74.1		119,100 *
18	78.5	73.9		109,400
19	77.7	73.7		99,600
20	76.8	73.4		91,300
22	75.2	72.9	52,200	78,300
24	73.4	72.3	46,100	68,200
26	71.7	71.6	41,200	60,300
28	70.0	70.9	37,000	53,900
30	68.2	70.1	33,600	48,600
32	66.4	69.3	30,600	44,100
34	64.6	68.3	28,100	40,400
36	62.8	67.3	26,000	37,300
38	60.9	66.2	24,100	34,400
40	59.0	65.0	22,300	32,000
45	54.1	61.6	18,800	26,900
50	48.8	57.5	16,000	23,000
55	43.0	52.5	13,700	19,900
60	36.5	46.3	11,900	17,400
65	28.7	38.3	10,400	15,300
70	18.1	26.3	9,100	13,600



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80 Ft. BOOM				
16	81.4	84.4		123,000 *
17	80.7	84.3		117,800 *
18	80.0	84.1		108,900 *
19	79.2	83.9	64,100	99,400
20	78.5	83.7	59,500	91,100
22	77.0	83.2	51,900	78,100
24	75.6	82.7	45,800	68,000
26	74.1	82.1	40,800	60,100
28	72.6	81.5	36,700	53,600
30	71.1	80.8	33,200	48,300
32	69.5	80.1	30,300	43,900
34	68.0	79.3	27,700	40,100
36	66.4	78.4	25,700	37,000
38	64.9	77.5	23,700	34,200
40	63.3	76.5	22,000	31,700
45	59.1	73.7	18,400	26,600
50	54.8	70.3	15,600	22,700
55	50.3	66.4	13,400	19,600
60	45.4	61.8	11,500	17,100
65	40.1	56.2	10,000	15,000
70	34.0	49.4	8,700	13,300
75	26.8	40.7	7,600	11,800
80	16.9	27.8	6,700	10,100 *
90 Ft. BOOM				
17	81.7	94.4		114,000 *
18	81.1	94.2	69,300	105,300 *
19	80.5	94.1	63,900	97,900 *
20	79.8	93.9	59,200	90,900
22	78.5	93.5	51,700	77,900
24	77.2	93.0	45,500	67,800
26	75.9	92.5	40,600	59,800
28	74.6	92.0	36,400	53,400
30	73.2	91.4	33,000	48,100
32	71.9	90.7	30,000	43,600
34	70.6	90.0	27,500	39,800
36	69.2	89.3	25,500	36,800
38	67.8	88.4	23,500	33,900
40	66.4	87.6	21,800	31,400
45	62.9	85.2	18,200	26,400
50	59.2	82.3	15,400	22,400
55	55.4	79.0	13,100	19,400
60	51.4	75.2	11,300	16,900
65	47.2	70.9	9,800	14,800
70	42.6	65.7	8,500	13,000
75	37.6	59.7	7,400	11,600
80	32.0	52.3	6,400	10,300
85	25.2	42.9	5,600	9,200
90	15.8	29.1	4,900	7,500 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
100 Ft. BOOM				
19	81.4	104.2	63,600	94,800 *
20	80.8	104.0	58,900	88,500 *
22	79.7	103.7	51,400	77,700
24	78.5	103.3	45,200	67,600
26	77.3	102.8	40,300	59,600
28	76.2	102.3	36,100	53,100
30	75.0	101.8	32,700	47,800
32	73.8	101.2	29,700	43,300
34	72.6	100.6	27,100	39,500
36	71.4	99.9	25,200	36,500
38	70.1	99.2	23,200	33,700
40	68.9	98.4	21,500	31,200
45	65.8	96.3	17,900	26,100
50	62.6	93.8	15,100	22,200
55	59.3	91.0	12,800	19,100
60	55.9	87.7	11,000	16,600
65	52.3	84.1	9,500	14,500
70	48.6	79.9	8,200	12,700
75	44.6	75.0	7,100	11,300
80	40.3	69.5	6,100	10,000
85	35.6	62.9	5,300	8,900
90	30.3	55.1	4,500	7,900
95	23.9	45.0	3,900	7,000
100	15.0	30.4	3,300	5,200 *
110 Ft. BOOM				
20	81.7	114.2	59,000	86,700 *
22	80.6	113.8	51,600	77,900
24	79.6	113.5	45,400	67,700
26	78.5	113.1	40,400	59,800
28	77.4	112.6	36,300	53,300
30	76.4	112.1	32,800	48,000
32	75.3	111.6	29,900	43,500
34	74.2	111.1	27,300	39,700
36	73.1	110.4	25,400	36,700
38	72.0	109.8	23,400	33,900
40	70.9	109.1	21,700	31,400
45	68.1	107.2	18,100	26,300
50	65.3	105.0	15,300	22,400
55	62.4	102.5	13,100	19,300
60	59.4	99.6	11,200	16,800
65	56.3	96.4	9,700	14,700
70	53.1	92.8	8,400	13,000
75	49.7	88.8	7,300	11,500
80	46.2	84.2	6,300	10,200
85	42.4	79.0	5,500	9,100
90	38.4	73.0	4,800	8,100
95	33.9	66.0	4,100	7,300
100	28.8	57.7	3,500	6,500
105	22.7	47.1	3,000	5,800
110	14.3	31.7		4,100 *



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Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
120 Ft. BOOM				
22	81.4	124.0	51,300	77,700
24	80.4	123.6	45,200	67,600
26	79.5	123.3	40,200	59,500
28	78.5	122.9	36,000	53,100
30	77.5	122.4	32,500	47,700
32	76.5	121.9	29,600	43,300
34	75.6	121.4	27,000	39,500
36	74.6	120.9	25,100	36,500
38	73.6	120.3	23,100	33,600
40	72.6	119.7	21,400	31,100
45	70.0	117.9	17,800	26,000
50	67.5	115.9	15,000	22,100
55	64.9	113.7	12,700	19,000
60	62.2	111.2	10,900	16,500
65	59.4	108.3	9,400	14,400
70	56.6	105.1	8,100	12,700
75	53.7	101.6	7,000	11,200
80	50.6	97.6	6,000	9,900
85	47.4	93.2	5,100	8,800
90	44.1	88.3	4,400	7,800
95	40.5	82.7	3,800	6,900
100	36.6	76.3	3,200	6,100
105	32.4	68.9		5,500
110	27.5	60.1		4,800
115	21.7	49.0		3,900 *
130 Ft. BOOM				
24	81.2	133.8	44,900	67,300
26	80.3	133.4	39,900	59,300
28	79.4	133.1	35,700	52,800
30	78.5	132.7	32,300	47,500
32	77.6	132.2	29,300	43,000
34	76.7	131.8	26,700	39,200
36	75.8	131.2	24,800	36,300
38	74.9	130.7	22,900	33,400
40	73.9	130.1	21,100	30,900
45	71.6	128.5	17,500	25,800
50	69.3	126.7	14,700	21,900
55	66.9	124.7	12,500	18,700
60	64.5	122.4	10,600	16,200
65	62.0	119.8	9,100	14,200
70	59.5	117.0	7,800	12,400
75	56.9	113.8	6,700	10,900
80	54.2	110.3	5,700	9,600
85	51.4	106.5	4,900	8,500
90	48.5	102.2	4,100	7,500
95	45.5	97.5	3,500	6,700
100	42.3	92.2		5,900
105	38.8	86.3		5,200
110	35.1	79.5		4,600
115	31.1	71.7		4,000
120	26.4	62.5		3,400 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
140 Ft. BOOM				
24	81.8	143.9	44,600	66,200 *
26	81.0	143.6	39,600	59,100
28	80.2	143.2	35,400	52,600
30	79.3	142.9	31,900	47,200
32	78.5	142.5	29,000	42,700
34	77.7	142.0	26,800	39,300
36	76.8	141.6	24,500	36,000
38	76.0	141.1	22,600	33,100
40	75.1	140.5	20,800	30,600
45	73.0	139.1	17,200	25,500
50	70.8	137.4	14,400	21,600
55	68.6	135.5	12,200	18,500
60	66.4	133.4	10,300	15,900
65	64.2	131.1	8,800	13,900
70	61.9	128.5	7,500	12,100
75	59.5	125.6	6,400	10,600
80	57.1	122.5	5,400	9,300
85	54.6	119.1	4,600	8,200
90	52.0	115.3	3,800	7,200
95	49.4	111.1	3,200	6,400
100	46.6	106.6		5,600
105	43.7	101.5		4,900
110	40.6	95.9		4,300
115	37.4	89.7		3,700
120	33.8	82.6		3,200
150 Ft. BOOM				
26	81.6	153.7	39,600	58,300 *
28	80.8	153.4	35,500	52,600
30	80.0	153.0	32,000	47,300
32	79.3	152.7	29,000	42,800
34	78.5	152.3	26,900	39,400
36	77.7	151.8	24,600	36,100
38	76.9	151.4	22,700	33,200
40	76.1	150.9	20,900	30,700
45	74.2	149.5	17,300	25,600
50	72.2	148.0	14,500	21,600
55	70.1	146.2	12,200	18,500
60	68.1	144.3	10,400	16,000
65	66.0	142.1	8,900	13,900
70	63.9	139.7	7,600	12,200
75	61.7	137.1	6,500	10,700
80	59.5	134.3	5,500	9,400
85	57.3	131.2	4,600	8,300
90	55.0	127.8	3,900	7,300
95	52.6	124.1	3,200	6,400
100	50.1	120.0		5,700
105	47.6	115.6		5,000
110	44.9	110.8		4,300
115	42.1	105.4		3,800
120	39.2	99.5		3,300