

Liftcrane Boom Capacities

222HD SERIES B

Boom No. 222HD With Open Throat Top
63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

LIFTING CAPACITIES: Capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. 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 = 10,000 Lbs., 3rd crane counterweight = 24,800 Lbs. and four 3,500 Lb. crawler frame counterweights.

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 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.	---	150 Ft.	---
140 Ft.	---	140 Ft.	---	140 Ft.	---
130 Ft.	40 Ft.	130 Ft.	40 Ft.	130 Ft.	40 Ft.
120 Ft.	60 Ft.	120 Ft.	60 Ft.	120 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.



Liftcrane Boom Capacities

222HD SERIES B

Boom No. 222HD With Open Throat Top
63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

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		200,000 *
12	78.6	44.5		185,300 *
13	77.1	44.2		171,000 *
14	75.6	44.0		158,800 *
15	74.1	43.7		148,200 *
16	72.6	43.4		138,900 *
17	71.1	43.0		130,700 *
18	69.6	42.6		122,900 *
19	68.0	42.2		117,000 *
20	66.4	41.8		109,200 *
22	63.2	40.8		93,800
24	59.9	39.6		82,000
26	56.5	38.3		72,800
28	53.0	36.8		65,300
30	49.2	35.1		59,100
32	45.2	33.2		53,900
34	40.9	31.0	35,200	48,500 *
36	36.2	28.3	32,600	43,000 *
38	30.8	25.1	30,300	39,800 *
40	24.3	21.1	28,300	34,300 *
50 Ft. BOOM				
12	80.9	54.7		185,100 *
13	79.7	54.5		170,800 *
14	78.6	54.3		158,700 *
15	77.4	54.0		148,100 *
16	76.2	53.8		138,800 *
17	75.0	53.5		128,700 *
18	73.8	53.2		119,300 *
19	72.6	52.9		114,700 *
20	71.4	52.5		106,900 *
22	68.9	51.8		93,600
24	66.4	50.9		81,800
26	63.9	49.9		72,600
28	61.3	48.9		65,100
30	58.6	47.7		58,900
32	55.9	46.3	37,900	53,600
34	53.0	44.8	34,900	49,200
36	50.0	43.2	32,300	45,400
38	46.9	41.3	30,000	42,000
40	43.6	39.3	28,000	39,200
45	34.3	32.9	23,800	33,200
50	21.6	23.0	20,500	24,500 *

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		170,700 *
14	80.5	64.5		158,600 *
15	79.5	64.3		145,800 *
16	78.5	64.1		133,400 *
17	77.6	63.8		123,000 *
18	76.6	63.6		118,200 *
19	75.6	63.3		109,900 *
20	74.6	63.1		102,700 *
22	72.6	62.4		90,600 *
24	70.6	61.7		81,000 *
26	68.5	61.0		72,400
28	66.4	60.1		64,800
30	64.3	59.1	41,000	58,600
32	62.2	58.1	37,500	53,400
34	60.0	56.9	34,500	48,900
36	57.7	55.7	31,900	45,100
38	55.4	54.3	29,600	41,700
40	53.0	52.8	27,700	38,900
45	46.7	48.5	23,500	33,000
50	39.6	43.0	20,200	28,400
55	31.1	35.7	17,500	24,200 *
60	19.6	24.7	15,400	18,100 *
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		113,400 *
19	77.7	73.7		105,500 *
20	76.8	73.4		98,600 *
22	75.2	72.9		87,100 *
24	73.4	72.3		79,300 *
26	71.7	71.6		72,200
28	70.0	70.9	44,900	64,600
30	68.2	70.1	40,800	58,400
32	66.4	69.3	37,300	53,200
34	64.6	68.3	34,300	48,700
36	62.8	67.3	31,700	44,900
38	60.9	66.2	29,400	41,600
40	59.0	65.0	27,500	38,800
45	54.1	61.6	23,300	32,800
50	48.8	57.5	20,000	28,200
55	43.0	52.5	17,400	24,600
60	36.5	46.3	15,200	21,700
65	28.7	38.3	13,400	18,200 *
70	18.1	26.3	11,900	13,700 *

Liftcrane Boom Capacities

222HD SERIES B

Boom No. 222HD With Open Throat Top
63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Crawlers Retracted Pounds	Boom Capacity Crawlers Extended Pounds
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		101,300 *
20	78.5	83.7		94,600 *
22	77.0	83.2		83,600 *
24	75.6	82.7		78,800 *
26	74.1	82.1	49,400	70,900 *
28	72.6	81.5	44,600	64,400
30	71.1	80.8	40,500	58,100
32	69.5	80.1	37,000	52,900
34	68.0	79.3	34,000	48,400
36	66.4	78.4	31,300	44,600
38	64.9	77.5	29,000	41,200
40	63.3	76.5	27,200	38,500
45	59.1	73.7	23,000	32,500
50	54.8	70.3	19,700	27,900
55	50.3	66.4	17,000	24,300
60	45.4	61.8	14,800	21,300
65	40.1	56.2	13,000	18,900
70	34.0	49.4	11,500	16,600 *
75	26.8	40.7	10,200	13,500 *
80	16.9	27.8	9,100	10,100 *
90 Ft. BOOM				
17	81.7	94.4		114,000 *
18	81.1	94.2		105,300 *
19	80.5	94.1		97,900 *
20	79.8	93.9		91,400 *
22	78.5	93.5		80,700 *
24	77.2	93.0	55,000	76,000 *
26	75.9	92.5	49,200	68,400 *
28	74.6	92.0	44,300	62,100 *
30	73.2	91.4	40,200	56,800 *
32	71.9	90.7	36,700	52,200 *
34	70.6	90.0	33,700	48,200
36	69.2	89.3	31,100	44,300
38	67.8	88.4	28,800	41,000
40	66.4	87.6	26,900	38,300
45	62.9	85.2	22,700	32,300
50	59.2	82.3	19,400	27,700
55	55.4	79.0	16,800	24,000
60	51.4	75.2	14,600	21,100
65	47.2	70.9	12,800	18,700
70	42.6	65.7	11,300	16,600
75	37.6	59.7	10,000	14,900
80	32.0	52.3	8,800	12,500 *
85	25.2	42.9	7,900	10,200 *
90	15.8	29.1	7,000	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		94,800 *
20	80.8	104.0		88,500 *
22	79.7	103.7	61,700	79,000 *
24	78.5	103.3	54,700	73,400 *
26	77.3	102.8	48,900	65,900 *
28	76.2	102.3	44,000	59,800 *
30	75.0	101.8	39,900	54,600 *
32	73.8	101.2	36,400	50,200 *
34	72.6	100.6	33,400	46,400 *
36	71.4	99.9	30,700	43,100 *
38	70.1	99.2	28,400	40,200 *
40	68.9	98.4	26,600	38,000
45	65.8	96.3	22,400	32,000
50	62.6	93.8	19,100	27,400
55	59.3	91.0	16,500	23,800
60	55.9	87.7	14,300	20,800
65	52.3	84.1	12,500	18,400
70	48.6	79.9	11,000	16,300
75	44.6	75.0	9,700	14,600
80	40.3	69.5	8,500	13,000 *
85	35.6	62.9	7,500	11,100 *
90	30.3	55.1	6,700	9,300 *
95	23.9	45.0	5,900	7,400 *
100	15.0	30.4	5,200 *	5,200 *
110 Ft. BOOM				
20	81.7	114.2		86,700 *
22	80.6	113.8	61,900	79,000 *
24	79.6	113.5	54,900	71,900 *
26	78.5	113.1	49,100	64,600 *
28	77.4	112.6	44,200	58,600 *
30	76.4	112.1	40,100	53,500 *
32	75.3	111.6	36,600	49,200 *
34	74.2	111.1	33,600	45,500 *
36	73.1	110.4	30,900	42,300 *
38	72.0	109.8	28,600	39,400 *
40	70.9	109.1	26,900	38,200
45	68.1	107.2	22,600	32,200
50	65.3	105.0	19,300	27,600
55	62.4	102.5	16,700	24,000
60	59.4	99.6	14,500	21,000
65	56.3	96.4	12,700	18,600
70	53.1	92.8	11,200	16,500
75	49.7	88.8	9,900	14,800
80	46.2	84.2	8,800	13,300
85	42.4	79.0	7,800	12,000
90	38.4	73.0	6,900	10,400 *
95	33.9	66.0	6,100	8,900 *
100	28.8	57.7	5,400	7,400 *
105	22.7	47.1	4,800	5,900 *
110	14.3	31.7	4,100 *	4,100 *



Liftcrane Boom Capacities

222HD SERIES B

Boom No. 222HD With Open Throat Top
63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
360 Degree Rating

Meets
ANSI B30.5
Requirements

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	61,900	78,700 *
24	80.4	123.6	54,700	69,700 *
26	79.5	123.3	48,800	62,500 *
28	78.5	122.9	43,900	56,600 *
30	77.5	122.4	39,800	51,600 *
32	76.5	121.9	36,300	47,400 *
34	75.6	121.4	33,300	43,800 *
36	74.6	120.9	30,600	40,600 *
38	73.6	120.3	28,300	39,300 *
40	72.6	119.7	26,600	38,000 *
45	70.0	117.9	22,300	31,900 *
50	67.5	115.9	19,000	27,300 *
55	64.9	113.7	16,400	23,700 *
60	62.2	111.2	14,200	20,700 *
65	59.4	108.3	12,400	18,300 *
70	56.6	105.1	10,900	16,200 *
75	53.7	101.6	9,600	14,500 *
80	50.6	97.6	8,400	13,000 *
85	47.4	93.2	7,400	11,500 *
90	44.1	88.3	6,600	10,100 *
95	40.5	82.7	5,800	8,800 *
100	36.6	76.3	5,100	7,600 *
105	32.4	68.9	4,500	6,400 *
110	27.5	60.1	3,900	5,200 *
115	21.7	49.0	3,400	3,900 *
130 Ft. BOOM				
24	81.2	133.8	54,400	67,900 *
26	80.3	133.4	48,500	60,800 *
28	79.4	133.1	43,600	55,000 *
30	78.5	132.7	39,500	50,100 *
32	77.6	132.2	36,000	46,000 *
34	76.7	131.8	33,000	42,400 *
36	75.8	131.2	30,300	39,300 *
38	74.9	130.7	28,000	39,200 *
40	73.9	130.1	26,300	37,400 *
45	71.6	128.5	22,100	31,600 *
50	69.3	126.7	18,800	27,100 *
55	66.9	124.7	16,100	23,400 *
60	64.5	122.4	13,900	20,500 *
65	62.0	119.8	12,100	18,000 *
70	59.5	117.0	10,600	16,000 *
75	56.9	113.8	9,300	14,200 *
80	54.2	110.3	8,100	12,500 *
85	51.4	106.5	7,200	11,100 *
90	48.5	102.2	6,300	9,800 *
95	45.5	97.5	5,500	8,600 *
100	42.3	92.2	4,800	7,400 *
105	38.8	86.3	4,200	6,400 *
110	35.1	79.5	3,600	5,400 *
115	31.1	71.7	3,100	4,400 *
120	26.4	62.5	3,400	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	54,100	66,200 *
26	81.0	143.6	48,200	59,200 *
28	80.2	143.2	43,300	53,400 *
30	79.3	142.9	39,200	48,600 *
32	78.5	142.5	35,700	44,500 *
34	77.7	142.0	32,700	41,000 *
36	76.8	141.6	30,000	39,100 *
38	76.0	141.1	28,100	38,900 *
40	75.1	140.5	26,000	36,100 *
45	73.0	139.1	21,800	30,400 *
50	70.8	137.4	18,500	26,000 *
55	68.6	135.5	15,800	22,500 *
60	66.4	133.4	13,600	19,600 *
65	64.2	131.1	11,800	17,200 *
70	61.9	128.5	10,300	15,200 *
75	59.5	125.6	9,000	13,400 *
80	57.1	122.5	7,800	11,800 *
85	54.6	119.1	6,800	10,400 *
90	52.0	115.3	6,000	9,200 *
95	49.4	111.1	5,200	8,100 *
100	46.6	106.6	4,500	7,000 *
105	43.7	101.5	3,900	6,000 *
110	40.6	95.9	3,300	5,100 *
115	37.4	89.7	3,300	4,300 *
120	33.8	82.6		3,400 *
150 Ft. BOOM				
26	81.6	153.7	48,200	58,300 *
28	80.8	153.4	43,300	52,600 *
30	80.0	153.0	39,200	47,800 *
32	79.3	152.7	35,700	43,800 *
34	78.5	152.3	32,700	40,300 *
36	77.7	151.8	30,100	39,100 *
38	76.9	151.4	28,200	38,300 *
40	76.1	150.9	26,100	35,500 *
45	74.2	149.5	21,800	29,800 *
50	72.2	148.0	18,500	25,500 *
55	70.1	146.2	15,900	22,000 *
60	68.1	144.3	13,700	19,200 *
65	66.0	142.1	11,900	16,900 *
70	63.9	139.7	10,400	14,900 *
75	61.7	137.1	9,100	13,200 *
80	59.5	134.3	7,900	11,700 *
85	57.3	131.2	6,900	10,300 *
90	55.0	127.8	6,000	9,100 *
95	52.6	124.1	5,300	8,100 *
100	50.1	120.0	4,600	7,100 *
105	47.6	115.6	4,000	6,200 *
110	44.9	110.8	3,400	5,300 *
115	42.1	105.4		4,500 *
120	39.2	99.5		3,700 *
125	36.0	93.0		3,000 *