

Liftcrane Boom Capacities

222HD SERIES B

Boom No. 222HD/222 With Open Throat Top
63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
22 Ft. 4 in. Crawlers Extended
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 (*).

Upper boom point capacity for liftcrane service with single part whip line is 20,000 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 crawlers fully extended (16 Ft. 9 in.) and gantry up. Refer to boom rigging **No. 913235** and Wire Rope Specification chart **No. 9175-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-C**.

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	
Boom Length	Jib No. 10	Boom Length	Jib No. 10
200 Ft.	—	200 Ft.	—
190 Ft.	60 Ft.	190 Ft.	50 Ft.
		180 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 Pounds
40 Ft. Boom			
10	80.7	44.9	200,000 *
11	79.2	44.7	200,000 *
12	77.8	44.5	185,300 *
13	76.3	44.2	171,100 *
14	74.8	44.0	158,800 *
15	73.3	43.7	148,200 *
16	71.8	43.3	139,000 *
17	70.3	43.0	130,800 *
18	68.8	42.6	121,600 *
19	67.2	42.2	114,100 *
20	65.6	41.7	106,500 *
22	62.4	40.7	94,700 *
24	59.1	39.6	84,000 *
26	55.7	38.3	77,300 *
28	52.1	36.8	69,600 *
30	48.4	35.1	63,300 *
32	44.4	33.2	58,000 *
34	40.1	30.9	53,500 *
36	35.4	28.3	49,600 *
38	30.0	25.1	44,900 *
40	23.5	21.1	35,300 *
50 Ft. Boom			
11	81.4	54.8	200,000 *
12	80.2	54.7	184,600 *
13	79.1	54.5	170,900 *
14	77.9	54.3	158,700 *
15	76.7	54.0	148,100 *
16	75.5	53.8	138,200 *
17	74.4	53.5	127,900 *
18	73.2	53.2	119,100 *
19	72.0	52.9	112,300 *
20	70.7	52.5	105,400 *
22	68.3	51.8	94,600 *
24	65.8	50.9	86,600 *
26	63.2	49.9	77,200 *
28	60.6	48.9	69,500 *
30	58.0	47.6	63,100 *
32	55.2	46.3	57,800 *
34	52.3	44.8	53,300 *
36	49.4	43.2	49,400 *
38	46.3	41.3	46,000 *
40	43.0	39.3	43,000 *
45	33.6	32.8	36,900 *
50	20.9	23.0	30,400 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
60 Ft. Boom			
12	81.9	64.8	183,700 *
13	80.9	64.6	170,300 *
14	79.9	64.5	155,600 *
15	79.0	64.3	142,400 *
16	78.0	64.1	132,300 *
17	77.0	63.8	122,700 *
18	76.0	63.6	115,700 *
19	75.0	63.3	108,300 *
20	74.1	63.0	101,800 *
22	72.1	62.4	91,800 *
24	70.0	61.7	86,500 *
26	68.0	60.9	77,000 *
28	65.9	60.1	69,300 *
30	63.8	59.1	62,900 *
32	61.6	58.1	57,600 *
34	59.4	56.9	53,000 *
36	57.2	55.7	49,100 *
38	54.9	54.3	45,700 *
40	52.5	52.8	42,700 *
45	46.1	48.5	36,600 *
50	39.0	43.0	31,900 *
55	30.6	35.7	28,200 *
60	19.0	24.7	24,100 *
70 Ft. Boom			
14	81.4	74.6	149,500 *
15	80.6	74.5	138,000 *
16	79.7	74.3	127,200 *
17	78.9	74.1	118,700 *
18	78.1	73.9	111,000 *
19	77.2	73.6	104,400 *
20	76.4	73.4	98,900 *
22	74.7	72.9	91,600 *
24	73.0	72.3	86,300 *
26	71.3	71.6	76,800 *
28	69.5	70.9	69,100 *
30	67.8	70.1	62,800 *
32	66.0	69.2	57,400 *
34	64.2	68.3	52,900 *
36	62.3	67.3	49,000 *
38	60.5	66.2	45,600 *
40	58.6	65.0	42,600 *
45	53.6	61.6	36,500 *
50	48.3	57.5	31,800 *
55	42.5	52.5	28,000 *
60	36.0	46.3	25,000 *
65	28.3	38.3	22,500 *
70	17.6	26.3	19,700 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
80 Ft. Boom			
15	81.8	84.6	133,000 *
16	81.0	84.4	122,500 *
17	80.3	84.3	114,700 *
18	79.6	84.1	106,900 *
19	78.8	83.9	100,100 *
20	78.1	83.7	95,800 *
22	76.6	83.2	90,900 *
24	75.2	82.7	86,100 *
26	73.7	82.1	76,600 *
28	72.2	81.5	68,900 *
30	70.7	80.8	62,500 *
32	69.1	80.1	57,200 *
34	67.6	79.3	52,600 *
36	66.0	78.4	48,700 *
38	64.4	77.5	45,300 *
40	62.8	76.5	42,300 *
45	58.7	73.7	36,200 *
50	54.4	70.3	31,500 *
55	49.9	66.4	27,700 *
60	45.0	61.8	24,700 *
65	39.6	56.2	22,200 *
70	33.6	49.4	20,100 *
75	26.4	40.7	18,300 *
80	16.4	27.7	16,100 *
90 Ft. Boom			
17	81.4	94.4	111,100 *
18	80.7	94.2	103,400 *
19	80.1	94.1	98,100 *
20	79.5	93.9	92,100 *
22	78.2	93.5	87,900 *
24	76.8	93.0	85,900 *
26	75.5	92.5	76,400 *
28	74.2	92.0	68,700 *
30	72.9	91.4	62,300 *
32	71.5	90.7	57,000 *
34	70.2	90.0	52,400 *
36	68.8	89.3	48,500 *
38	67.5	88.4	45,100 *
40	66.1	87.6	42,100 *
45	62.5	85.1	35,900 *
50	58.9	82.3	31,200 *
55	55.1	79.0	27,500 *
60	51.1	75.2	24,500 *
65	46.8	70.9	22,000 *
70	42.3	65.7	19,900 *
75	37.3	59.7	18,100 *
80	31.6	52.3	16,500 *
85	24.8	42.9	15,200 *
90	15.5	29.1	13,300 *

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**Meets
ANSI B30.5
Requirements**

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
100 Ft. Boom			
18	81.7	104.4	100,300 *
19	81.1	104.2	95,100 *
20	80.5	104.0	89,300 *
22	79.4	103.7	79,500 *
24	78.2	103.3	78,000 *
26	77.0	102.8	76,600
28	75.8	102.3	68,900
30	74.6	101.8	62,500
32	73.5	101.2	57,200
34	72.3	100.6	52,600
36	71.0	99.9	48,700
38	69.8	99.2	45,300
40	68.6	98.4	42,300
45	65.5	96.3	36,100
50	62.3	93.8	31,400
55	59.0	91.0	27,700
60	55.6	87.7	24,700
65	52.0	84.1	22,200
70	48.3	79.8	20,100
75	44.3	75.0	18,300
80	40.0	69.5	16,700
85	35.3	62.9	15,400
90	29.9	55.1	14,200
95	23.5	45.0	13,100
100	14.7	30.4	9,200 *
110 Ft. Boom			
19	81.9	114.3	93,300 *
20	81.4	114.2	87,500 *
22	80.3	113.8	78,800 *
24	79.3	113.5	77,600 *
26	78.2	113.1	76,400
28	77.1	112.6	68,700
30	76.1	112.1	62,300
32	75.0	111.6	57,000
34	73.9	111.0	52,400
36	72.8	110.4	48,500
38	71.7	109.8	45,000
40	70.6	109.1	42,000
45	67.8	107.2	35,900
50	65.0	105.0	31,200
55	62.1	102.5	27,500
60	59.1	99.6	24,500
65	56.0	96.4	22,000
70	52.8	92.8	19,900
75	49.4	88.8	18,100
80	45.9	84.2	16,500
85	42.1	79.0	15,200
90	38.1	73.0	14,000
95	33.6	66.0	12,900
100	28.5	57.6	12,000
105	22.4	47.1	11,100
110	14.0	31.7	8,000 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
120 Ft. Boom			
22	81.1	124.0	77,100 *
24	80.2	123.6	69,300 *
26	79.2	123.3	68,900 *
28	78.2	122.9	68,500
30	77.3	122.4	62,100
32	76.3	121.9	56,700
34	75.3	121.4	52,200
36	74.3	120.9	48,200
38	73.3	120.3	44,800
40	72.3	119.7	41,800
45	69.8	117.9	35,600
50	67.2	115.9	30,900
55	64.6	113.7	27,200
60	61.9	111.1	24,200
65	59.2	108.3	21,700
70	56.3	105.1	19,500
75	53.4	101.6	17,800
80	50.4	97.6	16,200
85	47.2	93.2	14,800
90	43.8	88.3	13,600
95	40.2	82.7	12,600
100	36.4	76.3	11,600
105	32.1	68.9	10,800
110	27.3	60.1	10,000
115	21.4	49.0	9,300
120	13.4	32.8	6,400 *
130 Ft. Boom			
22	81.8	134.1	75,300 *
24	80.9	133.8	67,600 *
26	80.0	133.4	61,400 *
28	79.1	133.1	59,800 *
30	78.2	132.7	58,100 *
32	77.3	132.2	56,500
34	76.4	131.7	51,900
36	75.5	131.2	48,000
38	74.6	130.7	44,500
40	73.7	130.1	41,500
45	71.4	128.5	35,400
50	69.0	126.7	30,700
55	66.7	124.7	26,900
60	64.2	122.4	23,900
65	61.8	119.8	21,400
70	59.2	117.0	19,300
75	56.6	113.8	17,500
80	53.9	110.3	15,900
85	51.1	106.5	14,600
90	48.3	102.2	13,400

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
130 Ft. Boom			
95	45.2	97.5	12,300
100	42.0	92.2	11,400
105	38.6	86.3	10,500
110	34.9	79.5	9,800
115	30.8	71.7	9,100
120	26.2	62.5	8,400
125	20.6	50.8	7,800
130	12.8	34.0	5,000 *
140 Ft. Boom			
24	81.6	143.9	66,000 *
26	80.8	143.6	59,800 *
28	79.9	143.2	58,700 *
30	79.1	142.9	57,600 *
32	78.3	142.5	56,500
34	77.4	142.0	52,000
36	76.6	141.6	48,000
38	75.7	141.1	44,600
40	74.9	140.5	41,600
45	72.8	139.1	35,400
50	70.6	137.4	30,700
55	68.4	135.5	27,000
60	66.2	133.4	24,000
65	63.9	131.1	21,400
70	61.6	128.5	19,300
75	59.3	125.6	17,500
80	56.9	122.5	16,000
85	54.4	119.1	14,600
90	51.8	115.3	13,400
95	49.2	111.1	12,400
100	46.4	106.6	11,400
105	43.5	101.5	10,600
110	40.4	95.9	9,800
115	37.1	89.7	9,100
120	33.6	82.6	8,500
125	29.7	74.4	7,900
130	25.2	64.7	7,400
135	19.8	52.6	4,900 *
140	12.4	35.1	3,700 *



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63,300 Lb. Crane Counterweight
14,000 Lb. Crawler Frame Counterweight
22 Ft. 4 in. Crawlers Extended
360 Degree Rating

Meets
 ANSI B30.5
 Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
150 Ft. Boom			
26	81.4	153.7	58,900 *
28	80.6	153.4	55,100 *
30	79.8	153.0	54,700 *
32	79.1	152.7	53,300 *
34	78.3	152.3	51,700
36	77.5	151.8	47,800
38	76.7	151.4	44,400
40	75.9	150.9	41,300
45	73.9	149.5	35,200
50	71.9	148.0	30,500
55	69.9	146.2	26,700
60	67.9	144.3	23,700
65	65.8	142.1	21,200
70	63.7	139.7	19,100
75	61.5	137.1	17,300
80	59.3	134.3	15,700
85	57.1	131.2	14,400
90	54.8	127.8	13,200
95	52.4	124.1	12,100
100	49.9	120.0	11,200
105	47.4	115.6	10,300
110	44.7	110.8	9,600
115	41.9	105.4	8,900
120	39.0	99.5	8,200
125	35.8	93.0	7,700
130	32.4	85.5	7,100
135	28.6	77.0	6,600
140	24.3	66.9	4,100 *
145	19.1	54.3	3,100 *
160 Ft. Boom			
26	81.9	163.8	59,000 *
28	81.2	163.5	53,700 *
30	80.5	163.2	49,300 *
32	79.7	162.8	45,500 *
34	79.0	162.5	45,000 *
36	78.3	162.1	44,600 *
38	77.6	161.6	44,100 *
40	76.8	161.2	41,100
45	75.0	159.9	34,900
50	73.1	158.5	30,200
55	71.2	156.8	26,500
60	69.3	155.0	23,400
65	67.4	153.0	20,900
70	65.4	150.8	18,800
75	63.5	148.4	17,000
80	61.4	145.8	15,500
85	59.4	142.9	14,100
90	57.3	139.8	12,900
95	55.1	136.5	11,800
100	52.9	132.8	10,900

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
160 Ft. Boom			
105	50.6	128.9	10,000
110	48.2	124.6	9,300
115	45.8	119.9	8,600
120	43.2	114.8	7,900
125	40.5	109.2	7,400
130	37.7	103.0	6,800
135	34.6	96.1	6,300
140	31.3	88.4	5,900
145	27.7	79.5	5,400 *
150	23.5	69.0	3,600 *
170 Ft. Boom			
28	81.7	173.6	52,600 *
30	81.0	173.3	48,100 *
32	80.4	173.0	44,400 *
34	79.7	172.6	41,100 *
36	79.0	172.3	39,500 *
38	78.3	171.9	38,000 *
40	77.6	171.4	36,500 *
45	75.9	170.2	34,700
50	74.1	168.9	30,000
55	72.4	167.4	26,200
60	70.6	165.7	23,200
65	68.8	163.8	20,700
70	67.0	161.8	18,500
75	65.1	159.5	16,700
80	63.3	157.1	15,200
85	61.3	154.5	13,800
90	59.4	151.6	12,600
95	57.4	148.5	11,600
100	55.4	145.2	10,600
105	53.3	141.6	9,800
110	51.2	137.7	9,000
115	49.0	133.5	8,300
120	46.7	128.9	7,700
125	44.3	124.0	7,100
130	41.9	118.7	6,600
135	39.3	112.8	6,100
140	36.5	106.3	5,600
145	33.6	99.2	5,100 *
150	30.4	91.1	4,600 *
155	26.9	81.9	3,000 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
180 Ft. Boom			
30	81.5	183.4	40,000 *
32	80.9	183.1	40,000 *
34	80.3	182.8	40,000 *
36	79.6	182.4	38,400 *
38	79.0	182.1	36,000 *
40	78.3	181.6	35,300 *
45	76.7	180.5	33,200 *
50	75.0	179.3	29,900
55	73.4	177.8	26,200
60	71.7	176.3	23,100
65	70.0	174.5	20,600
70	68.3	172.6	18,500
75	66.6	170.5	16,700
80	64.8	168.2	15,200
85	63.1	165.8	13,800
90	61.3	163.1	12,600
95	59.4	160.3	11,500
100	57.6	157.2	10,600
105	55.7	153.9	9,800
110	53.7	150.3	9,000
115	51.7	146.5	8,300
120	49.6	142.4	7,700
125	47.5	138.0	7,100
130	45.3	133.2	6,500
135	43.0	128.0	6,000
140	40.6	122.4	5,600
145	38.1	116.3	5,200
150	35.5	109.6	4,700 *
155	32.6	102.1	3,200 *

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Meets
ANSI B30.5
Requirements

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
190 Ft. Boom			
30	82.0	193.6	37,900 *
32	81.4	193.3	37,200 *
34	80.8	192.9	36,600 *
36	80.2	192.6	36,100 *
38	79.5	192.2	35,400 *
40	78.9	191.9	32,900 *
45	77.4	190.8	30,500 *
50	75.8	189.6	28,700 *
55	74.3	188.3	25,900
60	72.7	186.8	22,900
65	71.1	185.1	20,400
70	69.5	183.3	18,300
75	67.9	181.4	16,500
80	66.3	179.2	14,900
85	64.6	176.9	13,600
90	62.9	174.5	12,400
95	61.2	171.8	11,300
100	59.5	168.9	10,400
105	57.7	165.9	9,500
110	55.9	162.6	8,700
115	54.1	159.1	8,000
120	52.2	155.3	7,400
125	50.2	151.3	6,800
130	48.2	146.9	6,300
135	46.2	142.3	5,800
140	44.0	137.3	5,300
145	41.8	131.9	4,900
150	39.5	126.0	4,400 *
155	37.1	119.7	3,500 *

Oper. Rad. Feet	Boom Ang. Deg.	Boom Point Elev. Feet	Boom Capacity Pounds
200 Ft. Boom			
32	81.8	203.4	33,900 *
34	81.2	203.1	32,500 *
36	80.7	202.7	32,000 *
38	80.1	202.4	31,500 *
40	79.5	202.0	31,100 *
45	78.0	201.0	27,900 *
50	76.6	199.9	26,300 *
55	75.1	198.6	24,700 *
60	73.6	197.2	22,600
65	72.1	195.7	20,100
70	70.6	194.0	18,000
75	69.1	192.1	16,200
80	67.5	190.1	14,600
85	66.0	188.0	13,300
90	64.4	185.6	12,100
95	62.8	183.1	11,000
100	61.1	180.5	10,100
105	59.5	177.6	9,200
110	57.8	174.5	8,400
115	56.1	171.3	7,700
120	54.4	167.8	7,100
125	52.6	164.1	6,500
130	50.7	160.1	6,000
135	48.9	155.9	5,500
140	46.9	151.3	5,000
145	44.9	146.5	4,600 *
150	42.9	141.3	4,100 *
155	40.7	135.6	3,600 *
160	38.5	129.6	3,200 *