



Liftcrane Boom Capacities

No Crane Counterweight
Crawler Retracted
Travel with Load Not Permitted
360 Degree Rating

Meets
ANSI B30.5
Requirements



8500 SERIES 1

LIFTING CAPACITIES:

1. Rated loads included in the charts are the maximum allowable freely suspended loads at a given boom length, boom angle and load radius, and have been determined for the machine standing level on firm supporting surface under ideal operating conditions. The user must limit or de-rate rated loads to allow for adverse conditions (such as soft or uneven ground, out-of-level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, inexperience of personnel, and multiple machine lifts).
2. Capacities do not exceed 75% of minimum tipping loads. Capacities based on factors other than machine stability such as structural competence are shown by asterisk * in the charts.
3. Attempting to lift more than rated loads may cause machine to tip or collapse. Do not tip machine to determine capacity.
4. Do not attempt to lift where no radius on load chart is listed as crane may tip or collapse.
5. Weight of hooks, hook blocks, slings and other lifting devices beneath boom and jib point sheaves are part of the total load. Their total weight must be subtracted from the rated load to obtain the weight that can be lifted.
6. Load radius is horizontal distance from axis of rotation to center of gravity of the freely suspended load. Boom angle is angle between horizontal and centerline of boom butt and inserts, and is an indication of radius. In all cases, operating radius shall govern capacity.
7. Least stable position is over the side.
8. Boom point elevation is vertical distance from ground level to centerline of boom point shaft.
9. Auxiliary sheave (upper boom point) capacity for liftcrane service with single part line is 17,000 lbs. In all cases, auxiliary sheave (upper boom point) capacities cannot exceed those listed for Liftcrane Boom capacity reduced by 320 lbs.
10. When lifting over boom point with jib or auxiliary sheave, rated loads for the boom must be reduced as shown below.

Jib length	Aux.	30 ft.	40 ft.	50 ft.	60 ft.
Deduct (lbs)	320	Not applicable			

11. Lifting capacities listed apply only to the machine as originally manufactured and designed. Modifications to this machine or use of equipment other than that specified can reduce operating capacity.
12. Travel with load (pick and carry) is not permitted.
13. Jib installation is prohibited.

OPERATING CONDITION:

1. The machine must be reeved and set-up as stated in the Operators Manual. If this manual is missing, obtain replacement.
 - Boom backstops are required for all boom lengths.
 - Gantry must be fully raised position for all operation.
 - Crawlers must be fully extended and be locked in position.
 - The crane must be leveled to within 1% on a firm supporting surface.
 - Refer to operators manual for operating guidelines.

Maximum Boom Lengths Lifted Unassisted
Over End of Crawlers
90 ft.
Load block, hook and weight ball on ground at start.

2. Front and rear load hoist drum wire rope: 7/8 inch, 6 x 25, FI, IWRC C/O, Minimum breaking strength: 79,586 lbs. Front Drum: 869 feet, Rear Drum: 673 feet.
3. Boom hoist wire rope: 492 feet, 5/8 inch, 6 x 31, WS, IWRC O/O, Minimum breaking strength: 41,234 lbs.
4. Machine equipped with 19 ft. 8 in. crawlers, 36 in. treads, 12 parts of boom hoist reeving, no crane counterweight.

Hoist Reeving for Main Boom Loads

No. of Parts of Line	1	2	3	4
Maximum Loads (lbs)	17,000	34,000	51,600	68,000

Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.



Liftcrane Boom Capacities

No Crane Counterweight
Crawler Retracted
Travel with Load Not Permitted
360 Degree Rating

Meets
ANSI B30.5
Requirements



8500 SERIES 1

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	360° Rated Load (lbs)
40 Ft. Boom			
10	81.7	45.2	62,600
11	80.3	45.1	52,900
12	78.8	44.9	45,400
13	77.4	44.6	39,600
14	75.9	44.4	35,000
15	74.4	44.1	31,500
16	72.9	43.8	28,400
17	71.4	43.4	26,000
18	69.9	43.1	23,800
19	68.3	42.7	22,000
20	66.7	42.2	20,200
22	63.6	41.3	17,600
24	60.3	40.2	15,600
26	56.9	38.9	13,800
28	53.4	37.5	12,300
30	49.7	35.8	11,200
32	45.7	33.9	10,300
34	41.5	31.8	9,400
36	36.9	29.2	8,500
38	31.6	26.2	7,900
40	25.5	22.4	7,400
50 Ft. Boom			
12	81.1	55.0	45,100
13	79.9	54.9	39,400
14	78.8	54.7	34,800
15	77.6	54.4	31,300
16	76.4	54.2	28,200
17	75.2	53.9	25,700
18	74.0	53.6	23,500
19	72.8	53.3	21,600
20	71.6	53.0	20,000
22	69.2	52.2	17,400
24	66.7	51.4	15,200
26	64.2	50.5	13,600
28	61.6	49.4	12,100
30	58.9	48.2	11,000
32	56.2	46.9	9,900
34	53.3	45.5	9,000
36	50.4	43.8	8,300
38	47.3	42.0	7,700
40	44.1	40.0	7,000
45	34.9	33.8	5,900
50	22.7	24.4	5,000

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	360° Rated Load (lbs)
60 Ft. Boom			
13	81.6	65.0	39,200
14	80.7	64.8	34,600
15	79.7	64.7	31,000
16	78.7	64.5	27,900
17	77.7	64.2	25,300
18	76.8	64.0	23,300
19	75.8	63.7	21,300
20	74.8	63.5	19,800
22	72.8	62.9	17,100
24	70.8	62.2	14,900
26	68.7	61.4	13,200
28	66.6	60.6	11,900
30	64.5	59.6	10,500
32	62.4	58.6	9,700
34	60.2	57.5	8,800
36	58.0	56.3	7,900
38	55.7	54.9	7,200
40	53.3	53.5	6,600
45	47.0	49.2	5,500
50	40.0	43.8	4,600
55	31.7	36.7	3,900
60	20.6	26.2	3,300
70 Ft. Boom			
14	82.0	75.0	34,300
15	81.2	74.8	30,800
16	80.3	74.6	27,700
17	79.5	74.5	25,300
18	78.7	74.2	23,100
19	77.8	74.0	21,300
20	77.0	73.8	19,600
22	75.3	73.3	16,900
24	73.6	72.7	14,700
26	71.9	72.1	13,200
28	70.1	71.4	11,600
30	68.4	70.6	10,500
32	66.6	69.7	9,400
34	64.8	68.8	8,500
36	63.0	67.8	7,700
38	61.1	66.7	7,000
40	59.2	65.5	6,600
45	54.3	62.2	5,200
50	49.0	58.2	4,400
55	43.3	53.3	3,500

Load Radius (ft)	Boom Angle (deg)	Boom Point Elev. (ft)	360° Rated Load (lbs)
70 Ft. Boom			
60	36.9	47.2	3,000
65	29.3	39.4	2,400
80 Ft. Boom			
16	81.6	84.8	27,700
17	80.8	84.6	25,100
18	80.1	84.4	22,900
19	79.4	84.2	21,100
20	78.6	84.0	19,400
22	77.2	83.6	16,700
24	75.7	83.1	14,500
26	74.2	82.5	13,000
28	72.7	81.9	11,400
30	71.2	81.3	10,300
32	69.7	80.5	9,200
34	68.1	79.7	8,300
36	66.6	78.9	7,400
38	65.0	78.0	6,800
40	63.4	77.0	6,300
45	59.3	74.2	5,000
50	55.0	70.9	3,900
55	50.5	67.1	3,300
60	45.6	62.5	2,600
90 Ft. Boom			
17	81.9	94.7	25,100
18	81.2	94.6	22,900
19	80.6	94.4	20,900
20	79.9	94.2	19,400
22	78.6	93.8	16,700
24	77.3	93.4	14,500
26	76.0	92.9	12,700
28	74.7	92.4	11,200
30	73.4	91.8	10,100
32	72.0	91.1	9,000
34	70.7	90.5	8,100
36	69.3	89.7	7,400
38	68.0	88.9	6,800
40	66.6	88.1	6,100
45	63.0	85.7	4,800
50	59.4	82.9	3,900
55	55.6	79.6	3,000
60	51.6	75.9	2,400