



Liftcrane Boom Capacities

25 700 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

8500E SERIES 3

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. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and are calculated to comply with DIN 15018/3 and EN 13000. 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 6 600 kg. In all cases, auxiliary sheave (upper boom point) capacities cannot exceed those listed for Liftcrane Boom capacity reduced by 300 kg.

10. When lifting over boom point with jib or auxiliary sheave (upper point), rated loads for the boom must be reduced as shown below.

Jib length (m)	Aux.	6,1	12,2	18,3
Deduct (kg)	300	1 100	1 600	2 100

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. Machine travel with load (pick and carry).
 - A. Travel with crane upperworks in-line with crawlers. Grade in any direction must not exceed 1 percent (0.5 degrees).
 - B. Travel surface must be firm, level and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines. Travel slowly and smoothly to avoid shock loading boom, jib and rigging.
13. Consult jib chart for liftcrane jib capacities.



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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.
2. The total load that can be lifted over a jib is limited by the rated jib loads.

5. Machine equipped with 5,994 m crawlers, 800 mm treads, 12 parts of boom hoist reeving, 25 700 kg crane counterweight and two 3 350 kg carbody counterweights.

Hoist Reeving for Main Boom Loads

No. of Parts of Line	1	2	3	4	5
Maximum Loads (kg)	8 000	16 000	24 000	32 000	40 000

No. of Parts of Line	6	7	8	9	10
Maximum Loads (kg)	48 000	56 000	64 000	72 000	80 000

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

Maximum Boom and Jib Lengths Lifted Unassisted	
Over End of Crawlers	
Boom Length	Jib Length
54,9 m (a)	—
51,8 m	—
45,7 m	12,2 m
42,7 m	18,3 m
Load block, hook and weight ball on ground at start. (a) Auxiliary sheave (upper point) cannot be attached on 54,9 m boom. Jibs can only be mounted on 30,5 m to 45,7 m booms.	

3. Front and rear load hoist drum wire rope: 22 mm,
U4xSeS(39) O/O, Minimum breaking strength: 37 000 kg.
Front Drum: 220 m, Rear Drum: 130 m.
4. Boom hoist wire rope: 150 m, 16 mm, 6XP • WS(31)
IWRC O/O, Minimum breaking strength: 21 400 kg.



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Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
9,1 m Boom			
3,0	80,6	10,7	80 000 *
4,0	74,1	10,4	69 000 *
5,0	67,3	10,0	57 900 *
6,0	60,2	9,5	47 500 *
7,0	52,4	8,7	39 800
8,0	43,6	7,8	32 900
9,0	32,9	6,4	26 000 *
9,2	30,3	6,0	24 500 *
12,2 m Boom			
3,6	80,1	13,7	76 200 *
4,0	78,2	13,6	72 600 *
5,0	73,3	13,3	57 700 *
6,0	68,2	12,9	47 300 *
7,0	63,0	12,4	39 600
8,0	57,5	11,8	32 700
9,0	51,6	11,0	27 800
10,0	45,1	10,1	24 100
11,9	29,6	7,4	19 300
15,2 m Boom			
4,2	79,8	16,7	69 600 *
5,0	76,7	16,5	57 500 *
6,0	72,8	16,2	46 700
7,0	68,8	15,8	38 900
8,0	64,6	15,3	32 500
9,0	60,3	14,8	27 600
10,0	55,8	14,1	23 900
12,0	45,9	12,4	18 800
14,0	33,7	9,9	15 400
14,5	30,0	9,0	14 700
18,3 m Boom			
4,7	79,9	19,7	59 300
5,0	79,0	19,6	55 100
6,0	75,7	19,4	44 600
7,0	72,5	19,1	37 300
8,0	69,1	18,7	32 000
9,0	65,7	18,2	27 500
10,0	62,2	17,7	23 800
12,0	54,7	16,4	18 700
14,0	46,4	14,7	15 300
16,0	36,7	12,4	12 900
17,1	30,3	10,6	11 800

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
21,3 m Boom			
5,2	80,0	22,7	50 000
6,0	77,8	22,5	42 600
7,0	75,0	22,3	35 800
8,0	72,2	21,9	30 900
9,0	69,4	21,6	27 000
10,0	66,4	21,1	23 700
12,0	60,4	20,1	18 600
14,0	53,9	18,7	15 100
16,0	46,8	17,0	12 700
18,0	38,7	14,8	10 900
19,8	29,9	12,0	9 600
24,4 m Boom			
5,7	80,1	25,7	42 900
6,0	79,4	25,6	40 800
7,0	77,0	25,4	34 500
8,0	74,5	25,1	29 800
9,0	72,1	24,8	26 200
10,0	69,6	24,5	23 300
12,0	64,4	23,6	18 500
14,0	59,0	22,4	15 000
16,0	53,3	21,1	12 600
18,0	47,1	19,3	10 800
20,0	40,2	17,2	9 300
22,0	32,0	14,3	8 200
22,4	30,1	13,6	8 000
27,4 m Boom			
6,3	79,9	28,7	37 200
7,0	78,4	28,5	33 300
8,0	76,3	28,3	28 800
9,0	74,1	28,0	25 400
10,0	71,9	27,7	22 600
12,0	67,4	26,9	18 400
14,0	62,8	26,0	14 900
16,0	58,0	24,8	12 500
18,0	52,8	23,4	10 700
20,0	47,3	21,6	9 200
22,0	41,2	19,5	8 100
24,0	34,3	16,9	7 200
25,1	29,8	15,0	6 800

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
30,5 m Boom			
6,8	80,0	31,7	33 000
7,0	79,6	31,7	32 000
8,0	77,7	31,4	27 800
9,0	75,7	31,2	24 500
10,0	73,8	30,9	21 900
12,0	69,8	30,2	17 900
14,0	65,7	29,4	14 800
16,0	61,5	28,3	12 300
18,0	57,1	27,1	10 500
20,0	52,4	25,7	9 100
22,0	47,5	23,9	7 900
24,0	42,1	21,9	7 000
26,0	36,0	19,3	6 200
27,7	30,0	16,6	5 700
33,5 m Boom			
7,3	80,0	34,7	29 500
8,0	78,8	34,6	26 900
9,0	77,1	34,3	23 800
10,0	75,3	34,1	21 300
12,0	71,7	33,5	17 400
14,0	68,1	32,7	14 700
16,0	64,3	31,8	12 200
18,0	60,4	30,7	10 400
20,0	56,4	29,4	9 000
22,0	52,1	28,0	7 800
24,0	47,6	26,2	6 900
26,0	42,7	24,2	6 100
28,0	37,3	21,8	5 500
30,0	31,2	18,8	4 900
30,3	30,1	18,2	4 900



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Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
36,6 m Boom			
7,9	79,9	37,7	26 400
8,0	79,8	37,7	26 000
9,0	78,2	37,5	23 100
10,0	76,6	37,2	20 600
12,0	73,3	36,7	16 900
14,0	70,0	36,0	14 200
16,0	66,6	35,2	12 100
18,0	63,1	34,2	10 300
20,0	59,5	33,1	8 800
22,0	55,8	31,8	7 700
24,0	51,9	30,3	6 800
26,0	47,7	28,5	6 000
28,0	43,3	26,5	5 400
30,0	38,4	24,2	4 800
32,0	33,0	21,3	4 300
33,0	29,9	19,6	4 100
39,6 m Boom			
8,4	80,0	40,7	24 000
9,0	79,1	40,6	22 400
10,0	77,6	40,4	20 000
12,0	74,6	39,8	16 500
14,0	71,6	39,2	13 900
16,0	68,5	38,5	11 900
18,0	65,3	37,6	10 200
20,0	62,1	36,6	8 700
22,0	58,8	35,4	7 600
24,0	55,3	34,1	6 600
26,0	51,7	32,6	5 900
28,0	47,8	30,8	5 200
30,0	43,8	28,9	4 700
32,0	39,3	26,6	4 200
34,0	34,5	23,8	3 800
35,0	31,8	22,3	3 500
42,7 m Boom			
9,0	79,9	43,7	21 700
10,0	78,5	43,5	19 400
12,0	75,7	43,0	16 000
14,0	73,0	42,4	13 500
16,0	70,1	41,7	11 500
18,0	67,2	40,9	10 000
20,0	64,3	40,0	8 600
22,0	61,2	39,0	7 500
24,0	58,1	37,8	6 500
26,0	54,8	36,4	5 700

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
42,7 m Boom			
28,0	51,5	34,9	5 100
30,0	47,9	33,1	4 500
32,0	44,2	31,2	4 000
34,0	40,1	28,9	3 600
36,0	35,7	26,3	3 300
38,0	30,7	23,2	2 900
38,3	29,9	22,7	2 900
45,7 m Boom			
9,4	80,1	46,7	20 100
10,0	79,3	46,6	19 000
12,0	76,7	46,2	15 600
14,0	74,1	45,6	13 200
16,0	71,5	45,0	11 300
18,0	68,8	44,2	9 800
20,0	66,1	43,4	8 500
22,0	63,3	42,4	7 400
24,0	60,5	41,3	6 400
26,0	57,5	40,1	5 600
28,0	54,5	38,7	5 000
30,0	51,3	37,2	4 400
32,0	48,0	35,4	3 900
34,0	44,5	33,5	3 500
36,0	40,8	31,3	3 200
38,0	36,7	28,7	2 800
40,0	32,2	25,8	2 600
40,9	30,0	24,3	2 400
48,8 m Boom			
10,0	80,0	49,7	18 400
12,0	77,6	49,3	15 100
14,0	75,1	48,8	12 800
16,0	72,7	48,2	10 900
18,0	70,2	47,5	9 400
20,0	67,7	46,7	8 300
22,0	65,1	45,8	7 200
24,0	62,5	44,8	6 300
26,0	59,8	43,7	5 500
28,0	57,0	42,4	4 900
30,0	54,1	41,0	4 300
32,0	51,2	39,5	3 800
34,0	48,1	37,8	3 400
36,0	44,8	35,8	3 000
38,0	41,3	33,6	2 700
40,0	37,6	31,2	2 400
42,0	33,5	28,3	2 100
43,5	30,1	25,8	2 000

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
51,8 m Boom			
10,5	80,0	52,7	17 100
12,0	78,3	52,4	14 800
14,0	76,0	51,9	12 500
16,0	73,7	51,4	10 700
18,0	71,4	50,7	9 300
20,0	69,1	50,0	8 100
22,0	66,7	49,2	7 100
24,0	64,2	48,2	6 200
26,0	61,7	47,2	5 400
28,0	59,2	46,0	4 800
30,0	56,6	44,8	4 200
32,0	53,8	43,3	3 700
34,0	51,0	41,8	3 300
36,0	48,1	40,1	2 900
38,0	45,0	38,1	2 600
40,0	41,8	36,0	2 300
42,0	38,3	33,6	2 000
44,0	34,6	30,8	1 800
46,0	30,4	27,6	1 600
54,9 m Boom			
11,0	80,0	55,7	15 700
12,0	79,0	55,5	14 400
14,0	76,8	55,1	12 100
16,0	74,7	54,6	10 400
18,0	72,5	53,9	9 000
20,0	70,3	53,3	7 800
22,0	68,0	52,5	6 900
24,0	65,8	51,6	6 100
26,0	63,4	50,6	5 300
28,0	61,1	49,6	4 700
30,0	58,6	48,4	4 100
32,0	56,1	47,1	3 600
34,0	53,6	45,7	3 200
36,0	50,9	44,1	2 800
38,0	48,2	42,4	2 500
40,0	45,3	40,4	2 200
42,0	42,2	38,3	1 900
44,0	39,0	36,0	1 700
46,0	35,5	33,3	1 500
48,0	31,7	30,2	1 300
48,7	30,2	29,0	1 200