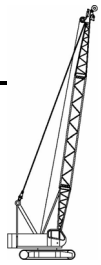
Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

24 900 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

Meets ANSI B30.5 Requirements



8500 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. 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 7 700 kg. In all cases, auxiliary sheave (upper boom point) capacities cannot exceed those listed for Liftcrane Boom capacity reduced by 200 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.	9,1	12,2	15,2	18,3
Deduct (kg)	200	1 100	1 500	2 000	2 400

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.

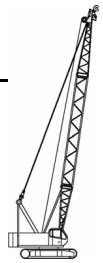
13. Consult jib chart for liftcrane jib capacities.

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

24 900 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

Meets ANSI B30.5 Requirements



8500 SERIES 3

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.

Maximum Boom and Jib Lengths Lifted Unassisted			
Over End of Blocked Crawlers		Over End of Crawlers	
Boom Length	Jib Length	Boom Length	Jib Length
61,0 m (a)	—	61,0 m (a)	—
57,9 m	—	57,9 m	—
54,9 m	18,3 m	51,8 m	18,3 m
Load block, hook and weight ball on ground at start. (a) Auxiliary sheave (upper point) cannot be attached on 61,0 m boom. Jibs can only be mounted on 24,4 m to 54,9 m booms.			

3. Front and rear load hoist drum wire rope: 22 mm, 6 x 25, FI, IWRC C/O, Minimum breaking strength: 36 100 kg. Front Drum: 265 m, Rear Drum: 205 m.

4. Boom hoist wire rope: 150 m, 16 mm, 6 x 31, WS, IWRC O/O, Minimum breaking strength: 18 700 kg.

5. Machine equipped with 5,994 m crawlers, 914 mm treads, 12 parts of boom hoist reeving, 24 900 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)	7 700	15 400	23 100	30 800	38 500

No.of Parts of Line	6	7	8	9	10
Maximum Loads (kg)	46 200	53 900	61 600	69 300	77 000

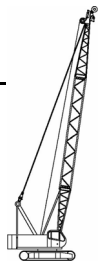
Operation of this equipment in excess of rated loads or disregard of instruction voids the warranty.

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

24 900 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

Meets ANSI B30.5 Requirements



8500 SERIES 3

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)	
12,2 m Boom				
3,1	81,70	13,79	77 100	*
3,5	79,59	13,71	76 300	*
4,0	77,18	13,59	69 500	*
4,5	74,75	13,46	61 800	*
5,0	72,29	13,30	56 300	*
5,5	69,79	13,12	51 200	*
6,0	67,25	12,92	45 400	
7,0	62,00	12,42	35 900	
8,0	56,48	11,80	29 300	
9,0	50,56	11,04	25 100	
10,0	44,06	10,09	21 700	
12,0	27,57	7,22	16 400	
12,1	25,50	6,82	15 700	*
15,2 m Boom				
3,7	81,10	16,78	75 400	*
4,0	79,78	16,71	69 500	*
4,5	77,86	16,61	61 700	*
5,0	75,93	16,48	56 200	*
5,5	73,97	16,34	51 300	*
6,0	72,00	16,18	45 300	
7,0	67,98	15,80	35 800	
8,0	63,83	15,34	29 400	
9,0	59,53	14,78	25 000	
10,0	55,02	14,12	21 600	
12,0	45,10	12,40	17 000	
14,0	32,93	9,87	13 900	
15,2	22,70	7,44	12 100	*
18,3 m Boom				
4,0	81,60	19,81	69 900	*
4,5	79,91	19,72	62 000	*
5,0	78,31	19,62	56 100	*
5,5	76,71	19,50	51 100	*
6,0	75,09	19,37	45 200	
7,0	71,81	19,06	35 700	
8,0	68,46	18,69	29 300	
9,0	65,04	18,24	24 800	
10,0	61,51	17,73	21 500	
12,0	54,04	16,44	16 800	
14,0	45,77	14,71	13 800	
16,0	36,07	12,36	11 600	
18,0	23,10	8,74	10 000	
18,2	20,60	8,02	9 700	*

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)	
21,3 m Boom				
4,3	82,00	22,85	65 100	*
4,5	81,37	22,81	61 900	*
5,0	80,01	22,73	56 000	*
5,5	78,64	22,63	50 800	*
6,0	77,26	22,52	45 200	
7,0	74,48	22,25	35 700	
8,0	71,67	21,94	29 200	
9,0	68,81	21,57	24 800	
10,0	65,88	21,14	21 400	
12,0	59,82	20,09	16 800	
14,0	53,34	18,75	13 700	
16,0	46,24	17,02	11 500	
18,0	38,16	14,78	9 900	
19,8	29,30	12,01	8 800	
24,4 m Boom				
4,9	81,60	25,84	57 200	*
5,0	81,27	25,82	55 900	*
5,5	80,07	25,73	50 900	*
6,0	78,88	25,64	45 100	
7,0	76,47	25,41	35 600	
8,0	74,03	25,14	29 200	
9,0	71,57	24,82	24 700	
10,0	69,06	24,45	21 300	
12,0	63,92	23,56	16 700	
14,0	58,53	22,44	13 600	
16,0	52,81	21,05	11 400	
18,0	46,60	19,33	9 800	
20,0	39,66	17,16	8 500	
22,0	32,49	14,68	7 500	
22,8	27,30	12,76	7 200	
27,4 m Boom				
5,2	81,90	28,88	53 800	*
5,5	81,19	28,83	50 000	*
6,0	80,13	28,74	44 200	
7,0	78,00	28,54	35 000	
8,0	75,85	28,30	28 700	
9,0	73,68	28,02	24 300	
10,0	71,49	27,70	21 000	
12,0	67,01	26,92	16 400	
14,0	62,37	25,96	13 400	
16,0	57,52	24,78	11 200	
18,0	52,39	23,36	9 600	
20,0	46,87	21,63	8 300	
22,0	41,51	19,78	7 300	
24,0	34,67	17,19	6 500	
25,9	25,70	13,48	6 000	

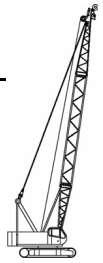
Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)	
30,5 m Boom				
5,9	81,50	31,87	46 100	*
6,0	81,13	31,83	44 600	*
7,0	79,22	31,65	35 300	
8,0	77,29	31,44	29 100	
9,0	75,35	31,19	24 600	
10,0	73,40	30,90	21 200	
12,0	69,42	30,22	16 500	
14,0	65,34	29,37	13 400	
16,0	61,11	28,34	11 200	
18,0	56,70	27,12	9 600	
20,0	52,06	25,66	8 300	
22,0	47,67	24,15	7 300	
24,0	42,31	22,12	6 500	
26,0	36,33	19,64	5 800	
28,0	29,31	16,50	5 300	
28,9	24,30	14,63	5 000	
33,5 m Boom				
6,1	81,80	34,91	41 900	*
7,0	80,21	34,76	35 300	
8,0	78,47	34,56	29 000	
9,0	76,71	34,33	24 500	
10,0	74,95	34,08	21 200	
12,0	71,37	33,46	16 600	
14,0	67,71	32,70	13 500	
16,0	63,96	31,79	11 300	
18,0	60,07	30,71	9 700	
20,0	56,03	29,44	8 400	
22,0	52,27	28,15	7 400	
24,0	47,79	26,45	6 600	
26,0	42,96	24,45	5 900	
28,0	37,63	22,06	5 300	
30,0	31,56	19,13	4 900	
31,9	23,20	15,29	4 300	

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

24 900 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

Meets ANSI B30.5 Requirements



8500 SERIES 3

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
36,6 m Boom			
6,8	81,50	37,93	36 500 *
7,0	81,03	37,85	34 900 *
8,0	79,44	37,67	28 900
9,0	77,84	37,46	24 300
10,0	76,23	37,23	21 000
12,0	72,98	36,66	16 400
14,0	69,66	35,98	13 200
16,0	66,27	35,15	11 100
18,0	62,79	34,19	9 500
20,0	59,20	33,07	8 200
22,0	55,89	31,92	7 200
24,0	52,00	30,45	6 300
26,0	47,89	28,75	5 700
28,0	43,49	26,78	5 100
30,0	38,69	24,46	4 600
32,0	33,32	21,67	4 200
34,0	27,02	18,19	3 900
35,0	22,20	15,91	3 700
39,6 m Boom			
7,5	81,30	40,88	32 200 *
8,0	80,47	40,77	29 100
9,0	78,99	40,58	24 000
10,0	77,50	40,36	21 200
12,0	74,50	39,85	16 400
14,0	71,44	39,22	13 300
16,0	68,33	38,47	11 100
18,0	65,16	37,59	9 400
20,0	61,89	36,58	8 100
22,0	58,52	35,55	7 100
24,0	55,02	34,25	6 300
26,0	51,37	32,75	5 500
28,0	47,51	31,05	5 000
30,0	43,40	29,10	4 500
32,0	38,94	26,83	4 100
34,0	33,99	24,17	3 700
36,0	28,29	20,93	3 400
38,0	21,20	16,51	3 100

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
42,7 m Boom			
7,4	81,90	43,97	27 900 *
8,0	81,16	43,86	27 400 *
9,0	79,79	43,68	24 400
10,0	78,42	43,48	21 000
12,0	75,64	43,01	16 300
14,0	72,82	42,43	13 200
16,0	69,97	41,74	11 000
18,0	67,05	40,93	9 300
20,0	64,08	40,01	8 100
22,0	61,02	39,08	7 000
24,0	57,87	37,90	6 100
26,0	54,60	36,57	5 400
28,0	51,20	35,06	4 900
30,0	47,62	33,35	4 400
32,0	43,82	31,41	3 900
34,0	39,73	29,20	3 600
36,0	35,25	26,62	3 300
38,0	30,20	23,56	3 000
40,0	24,21	19,78	2 800
41,0	20,50	17,11	2 600
45,7 m Boom			
7,9	81,70	46,96	23 800 *
8,0	80,48	46,95	23 800 *
9,0	79,20	46,78	23 200
10,0	76,62	46,60	20 900
12,0	74,01	46,15	16 200
14,0	71,36	45,61	13 100
16,0	68,68	44,97	10 900
18,0	65,94	44,23	9 200
20,0	63,13	43,38	8 000
22,0	60,26	42,53	6 900
24,0	57,30	41,45	6 100
26,0	54,24	40,24	5 400
28,0	51,05	38,88	4 800
30,0	47,71	37,36	4 300
32,0	44,18	35,65	3 900
34,0	40,41	33,73	3 500
36,0	36,32	31,55	3 200
38,0	31,77	29,05	2 900
40,0	26,54	26,13	2 600
42,6	24,80	21,27	2 400

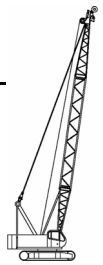
Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
48,8 m Boom			
8,6	81,50	49,95	19 900 *
9,0	81,09	49,87	19 700 *
10,0	79,89	49,70	19 200 *
12,0	77,48	49,28	16 200
14,0	75,04	48,78	13 100
16,0	72,58	48,19	10 900
18,0	70,08	47,50	9 200
20,0	67,54	46,71	8 000
22,0	64,95	45,92	6 900
24,0	62,30	44,93	6 000
26,0	59,59	43,82	5 400
28,0	56,80	42,58	4 700
30,0	53,92	41,20	4 200
32,0	50,92	39,66	3 800
34,0	47,79	37,95	3 400
36,0	44,50	36,04	3 100
38,0	41,00	33,90	2 800
40,0	37,22	31,46	2 600
42,0	33,09	28,66	2 300
44,0	28,42	25,36	2 100
45,7	24,00	21,94	1 900
51,8 m Boom			
8,6	82,00	53,03	17 600 *
9,0	81,62	52,96	17 500 *
10,0	80,49	52,80	16 900 *
12,0	78,23	52,41	15 900 *
14,0	75,95	51,93	13 000
16,0	73,64	51,38	10 800
18,0	71,30	50,73	9 100
20,0	68,93	50,00	7 800
22,0	66,53	49,26	6 800
24,0	64,07	48,34	5 900
26,0	61,57	47,31	5 200
28,0	59,00	46,17	4 600
30,0	56,36	44,91	4 100
32,0	53,64	43,51	3 700
34,0	50,81	41,97	3 300
36,0	47,87	40,25	3 000
38,0	44,78	38,35	2 700
40,0	41,51	36,23	2 400
42,0	38,01	33,85	2 200
44,0	34,21	31,14	2 000
46,0	29,99	28,00	1 800
48,0	25,13	24,25	1 600
48,7	23,30	22,61	1 500

Manitowoc Cranes, Inc.
Manitowoc, Wisconsin 54220 U.S.A.

Liftcrane Boom Capacities

24 900 kg Crane Counterweight
6 700 kg Carbody Counterweight
Extended Position Crawlers
360 Degree Rating

Meets ANSI B30.5 Requirements



8500 SERIES 3

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
54,9 m Boom			
9,4	81,80	56,02	15 300 *
10,0	82,17	55,89	14 900 *
12,0	81,11	55,52	14 100 *
14,0	78,99	55,08	12 900 *
16,0	76,85	54,55	10 700
18,0	74,69	53,95	9 000
20,0	72,51	53,26	7 700
22,0	70,31	52,57	6 700
24,0	68,07	51,71	5 800
26,0	65,80	50,75	5 100
28,0	61,12	49,69	4 500
30,0	58,70	48,52	4 000
32,0	56,21	47,24	3 600
34,0	53,66	45,82	3 200
36,0	51,01	44,27	2 900
38,0	48,26	42,56	2 600
40,0	45,39	40,66	2 300
42,0	42,36	38,57	2 000
44,0	39,15	36,23	1 800
46,0	35,69	33,60	1 600
48,0	31,92	30,59	1 400
50,0	27,69	27,07	1 300
52,0	22,60	23,23	1 100

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
57,9 m Boom			
10,0	81,60	58,97	13 300 *
12,0	79,58	58,63	12 500 *
14,0	77,56	58,21	11 900 *
16,0	75,52	57,71	10 700
18,0	73,46	57,14	9 000
20,0	71,39	56,49	7 700
22,0	69,28	55,85	6 700
24,0	67,15	55,04	5 800
26,0	64,98	54,14	5 200
28,0	62,77	53,15	4 500
30,0	60,52	52,06	4 000
32,0	58,21	50,87	3 600
34,0	55,85	49,56	3 200
36,0	53,42	48,13	2 900
38,0	50,90	46,57	2 600
40,0	48,30	44,86	2 300
42,0	45,58	42,97	2 000
44,0	42,73	40,90	1 800
46,0	39,72	38,60	1 600
48,0	36,49	36,03	1 400
50,0	33,01	33,13	1 200
51,7	29,10	30,13	1 100

Load Radius (m)	Boom Angle (deg)	Boom Point Elev. (m)	360° Rated Load (kg)
61,0 m Boom			
10,7	81,40	62,00	11 600 *
12,0	80,10	61,73	11 100 *
14,0	78,19	61,33	10 500 *
16,0	76,26	60,86	9 900 *
18,0	74,31	60,32	8 900
20,0	72,35	59,78	7 600
22,0	70,36	59,10	6 600
24,0	68,35	58,34	5 700
26,0	66,31	57,49	5 100
28,0	64,24	56,56	4 400
30,0	62,13	55,55	3 900
32,0	59,98	54,43	3 500
34,0	57,78	53,21	3 100
36,0	55,52	51,89	2 800
38,0	53,20	50,44	2 400
40,0	50,81	48,87	2 200
42,0	48,33	47,16	1 900
44,0	45,76	45,28	1 700
46,0	43,06	43,23	1 400
48,0	40,22	40,96	1 300
49,0	38,70	40,04	1 200