



Liftcrane Boom

Extended Upper Point Capacities

**Boom No. 58 HL with 7 m Extended
Upper Boom Point
150 590 kg Crane Counterweight
54 430 kg Carbody Counterweight
360 Degree Rating**

LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and are calculated to comply with EN 13000, ISO 4305 and include factors based on a 4,0 degree tipping angle. Capacities based on structural competence are denoted by an asterisk (*).

Upper boom point (upper sheave) capacity for liftcrane service with single part whip line is 13 610 kg. In all cases, upper boom point capacities cannot exceed those listed for extended upper boom point (lower sheave) capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath upper boom point sheaves, is considered part of extended upper boom point 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. Refer to boom rigging **No. A10415** or **No. A20296**, Wire Rope Specification chart **No. 8674-B** and Counterweight Arrangement chart **No. 8682-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 Operator's Manual for operating guidelines.

WIND CONDITIONS: Machine may operate with full working load in wind speeds up to the maximum wind speed value provided crane operator judgment is used to allow for wind effect on lifted load and other considerations noted on capacity chart are followed. Wind speed to be measured at boom point elevation. Refer to Wind Conditions Chart **No. 8688-A** for effect of wind on lifted load, additional maximum wind speeds when lifting percentage of full working load, and instructions for parking when wind speed exceeds maximum operating wind speed.

MACHINE TRAVEL: Machine to travel on a firm, level [up to 1 percent (0,5 degrees) grade] and uniformly supporting surface. *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0,4 m/s. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8708-B**.

MAX PERMISSIBLE SLEWING SPEED: Slewing operation with working load shall not exceed 0,4 m/s as measured at the operating radius. The amount of time to brake or start slewing a working load shall not be less than 2,5 seconds.

OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.

BOOM ANGLE: Boom angle in degrees (°) 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.

EXTENDED UPPER BOOM POINT ELEVATION: Extended upper boom point elevation is vertical distance from ground level to centerline of extended upper boom point (lower sheave) shaft.

MACHINE EQUIPMENT: Machine equipped with 10 363 mm crawlers, 1 524 mm treads, 9 754 mm live mast, 26 part boom hoist reeving, boom support straps, 150 590 kg crane counterweight and two 13 610 kg and four 6 800 kg carbody counterweights.

Maximum Boom Length Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
(a) 90,0 m	78,0 m
Load block, hook and weight ball on ground until combined weights are within rated capacity of chart. (a) Luffing jib drum must be removed from boom butt on 90,0 m boom.	

Boom Catwalks Deduct
Deduct 300 kg from capacities when boom catwalks are attached.

Lower boom point must be removed when extended upper boom point is attached.

Explanation of Symbols



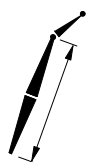
Boom No. 58 Heavy Lift Top
with 7 m Extended Upper
Boom Point



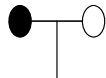
Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Boom Length



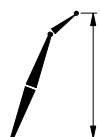
Maximum Wind Speed
(see page 1)



Operating Radius
(see page 1)



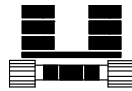
Boom Angle
(see page 1)



Extended Upper
Boom Point elevation
(see page 1)



Lifting Capacities
(see page 1)



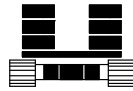
150 590 kg
+
54 430 kg



42,0 m 16 m/s			
m	°	m	kg
13,7	80,5	50,0	97 600 *
14,0	80,2	49,9	97 600 *
16,0	77,7	49,3	97 600 *
18,0	75,3	48,7	97 600 *
20,0	72,7	47,9	97 000
22,0	70,2	47,0	89 700
24,0	67,6	46,1	78 700
26,0	64,9	45,0	70 200
28,0	62,2	43,7	63 000
30,0	59,3	42,4	57 000
32,0	56,4	40,9	51 900
34,0	53,3	39,2	47 300
36,0	50,1	37,3	43 300
38,0	46,7	35,2	39 800
40,0	43,0	32,8	36 700
42,0	39,0	30,0	33 800

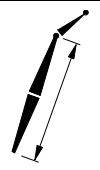
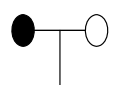
48,0 m 16 m/s			
m	°	m	kg
13,7	81,6	56,1	97 600 *
14,0	81,3	56,1	97 600 *
16,0	79,1	55,6	97 600 *
18,0	76,9	55,0	97 600 *
20,0	74,7	54,3	96 700
22,0	72,5	53,5	87 800
24,0	70,2	52,7	78 300
26,0	67,9	51,8	69 700
28,0	65,6	50,7	62 600
30,0	63,1	49,5	56 600
32,0	60,7	48,3	51 400
34,0	58,1	46,9	46 800
36,0	55,5	45,3	42 900
38,0	52,7	43,6	39 400
40,0	49,9	41,8	36 200
42,0	46,9	39,7	33 400
44,0	43,7	37,4	30 800
46,0	40,2	34,8	28 500

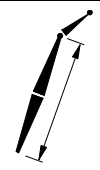
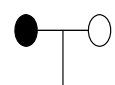
54,0 m 16 m/s			
m	°	m	kg
13,7	82,4	62,3	97 600 *
14,0	82,2	62,2	97 600 *
16,0	80,2	61,8	97 600 *
18,0	78,3	61,2	97 600 *
20,0	76,3	60,6	95 600
22,0	74,3	60,0	85 200
24,0	72,3	59,2	76 800
26,0	70,3	58,4	69 500
28,0	68,2	57,4	62 300
30,0	66,1	56,4	56 200
32,0	63,9	55,3	51 000
34,0	61,7	54,1	46 500
36,0	59,5	52,8	42 500
38,0	57,1	51,3	39 000
40,0	54,7	49,8	35 900
42,0	52,3	48,1	33 100
44,0	49,7	46,2	30 500
46,0	47,0	44,2	28 200
48,0	44,2	41,9	26 100
50,0	41,1	39,4	24 200
52,0	37,9	36,6	22 400

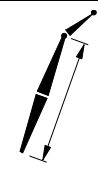
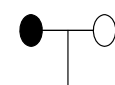


150 590 kg
+
54 430 kg



 60,0 m  16 m/s			
m	°	m	kg
15,2	81,8	68,1	97 600 *
16,0	81,1	67,9	97 600 *
18,0	79,4	67,4	97 600 *
20,0	77,6	66,9	92 400
22,0	75,8	66,3	82 500
24,0	74,0	65,6	74 400
26,0	72,1	64,8	67 600
28,0	70,3	64,0	61 500
30,0	68,4	63,1	55 700
32,0	66,5	62,1	50 400
34,0	64,5	61,1	45 900
36,0	62,6	59,9	41 900
38,0	60,5	58,7	38 400
40,0	58,5	57,3	35 300
42,0	56,3	55,8	32 400
44,0	54,2	54,2	29 900
46,0	51,9	52,5	27 600
48,0	49,6	50,7	25 500
50,0	47,1	48,7	23 600
52,0	44,6	46,5	21 800
54,0	41,9	44,0	20 200
56,0	39,0	41,4	18 700

 66,0 m  16 m/s			
m	°	m	kg
15,2	82,5	74,2	97 600 *
16,0	81,9	74,0	97 600 *
18,0	80,2	73,6	97 600 *
20,0	78,6	73,1	89 500
22,0	77,0	72,5	80 100
24,0	75,3	71,9	72 300
26,0	73,7	71,2	65 600
28,0	72,0	70,5	59 800
30,0	70,3	69,7	54 700
32,0	68,6	68,8	50 000
34,0	66,8	67,8	45 400
36,0	65,1	66,8	41 400
38,0	63,3	65,7	37 900
40,0	61,4	64,5	34 800
42,0	59,6	63,2	31 900
44,0	57,6	61,8	29 400
46,0	55,7	60,3	27 100
48,0	53,7	58,7	25 000
50,0	51,6	57,0	23 100
52,0	49,4	55,1	21 300
54,0	47,2	53,1	19 700
56,0	44,9	51,0	18 200
58,0	42,5	48,6	16 800
60,0	39,9	46,0	15 500
62,0	37,2	43,2	14 200

 72,0 m  13 m/s			
m	°	m	kg
16,8	81,9	80,0	97 600 *
18,0	81,0	79,7	96 100
20,0	79,5	79,3	86 600
22,0	78,0	78,8	77 600
24,0	76,5	78,2	70 000
26,0	75,0	77,6	63 500
28,0	73,4	76,9	57 800
30,0	71,9	76,1	52 900
32,0	70,3	75,3	48 500
34,0	68,7	74,5	44 600
36,0	67,1	73,5	40 800
38,0	65,5	72,5	37 200
40,0	63,8	71,4	34 100
42,0	62,2	70,3	31 300
44,0	60,5	69,0	28 700
46,0	58,7	67,7	26 400
48,0	56,9	66,3	24 300
50,0	55,1	64,8	22 400
52,0	53,2	63,2	20 600
54,0	51,3	61,5	19 000
56,0	49,3	59,6	17 500
58,0	47,3	57,6	16 100
60,0	45,2	55,5	14 800
62,0	42,9	53,2	13 500
64,0	40,6	50,7	12 400
66,0	38,2	48,0	11 300



150 590 kg
+
54 430 kg



78,0 m 13 m/s			
m	°	m	kg
16,8	82,5	86,1	91 300 *
18,0	81,7	85,8	89 600 *
20,0	80,3	85,4	84 100
22,0	78,9	84,9	75 200
24,0	77,5	84,4	67 900
26,0	76,1	83,8	61 500
28,0	74,7	83,2	56 000
30,0	73,2	82,5	51 200
32,0	71,8	81,8	46 900
34,0	70,3	81,0	43 100
36,0	68,9	80,1	39 600
38,0	67,4	79,2	36 600
40,0	65,9	78,2	33 500
42,0	64,3	77,2	30 700
44,0	62,8	76,1	28 100
46,0	61,2	74,9	25 800
48,0	59,6	73,6	23 700
50,0	58,0	72,2	21 800
52,0	56,3	70,8	20 000
54,0	54,6	69,3	18 300
56,0	52,9	67,6	16 800
58,0	51,1	65,9	15 400
60,0	49,3	64,1	14 100
62,0	47,4	62,1	12 900
64,0	45,4	60,0	11 700
66,0	43,4	57,7	10 700
68,0	41,2	55,3	9 700
70,0	39,0	52,7	8 700
72,0	36,6	49,8	7 800

84,0 m 13 m/s			
m	°	m	kg
16,8	83,0	92,2	87 800 *
18,0	82,2	91,9	86 500 *
20,0	80,9	91,6	81 500
22,0	79,6	91,1	72 800
24,0	78,3	90,6	65 700
26,0	77,0	90,1	59 500
28,0	75,7	89,5	54 100
30,0	74,4	88,9	49 300
32,0	73,1	88,2	45 200
34,0	71,7	87,4	41 400
36,0	70,3	86,7	38 100
38,0	69,0	85,8	35 100
40,0	67,6	84,9	32 300
42,0	66,2	83,9	29 800
44,0	64,8	82,9	27 400
46,0	63,3	81,8	25 000
48,0	61,9	80,7	22 900
50,0	60,4	79,4	21 000
52,0	58,9	78,1	19 300
54,0	57,4	76,8	17 600
56,0	55,8	75,3	16 100
58,0	54,2	73,7	14 700
60,0	52,6	72,1	13 400
62,0	50,9	70,4	12 200
64,0	49,2	68,5	11 000
66,0	47,4	66,6	10 000
68,0	45,6	64,5	8 900
70,0	43,7	62,3	8 000
72,0	41,7	59,9	7 100
74,0	39,7	57,3	6 200
76,0	37,5	54,6	5 400

90,0 m 11 m/s			
m	°	m	kg
18,3	82,5	98,0	76 400 *
20,0	81,5	97,7	74 600
22,0	80,3	97,3	71 100
24,0	79,1	96,8	63 600
26,0	77,9	96,3	57 600
28,0	76,6	95,8	52 300
30,0	75,4	95,2	47 700
32,0	74,1	94,5	43 600
34,0	72,9	93,8	39 900
36,0	71,6	93,1	36 700
38,0	70,4	92,3	33 700
40,0	69,1	91,5	31 000
42,0	67,8	90,6	28 600
44,0	66,5	89,6	26 300
46,0	65,1	88,6	24 300
48,0	63,8	87,6	22 300
50,0	62,4	86,4	20 400
52,0	61,1	85,2	18 600
54,0	59,7	84,0	17 000
56,0	58,2	82,7	15 500
58,0	56,8	81,3	14 000
60,0	55,3	79,8	12 700
62,0	53,8	78,2	11 500
64,0	52,3	76,6	10 400
66,0	50,7	74,8	9 300
68,0	49,1	73,0	8 300
70,0	47,5	71,1	7 300
72,0	45,8	69,0	6 500
74,0	44,0	66,8	5 600
76,0	42,2	64,5	4 800
78,0	40,3	62,0	4 100