



TITAN
CRANES LIMITED

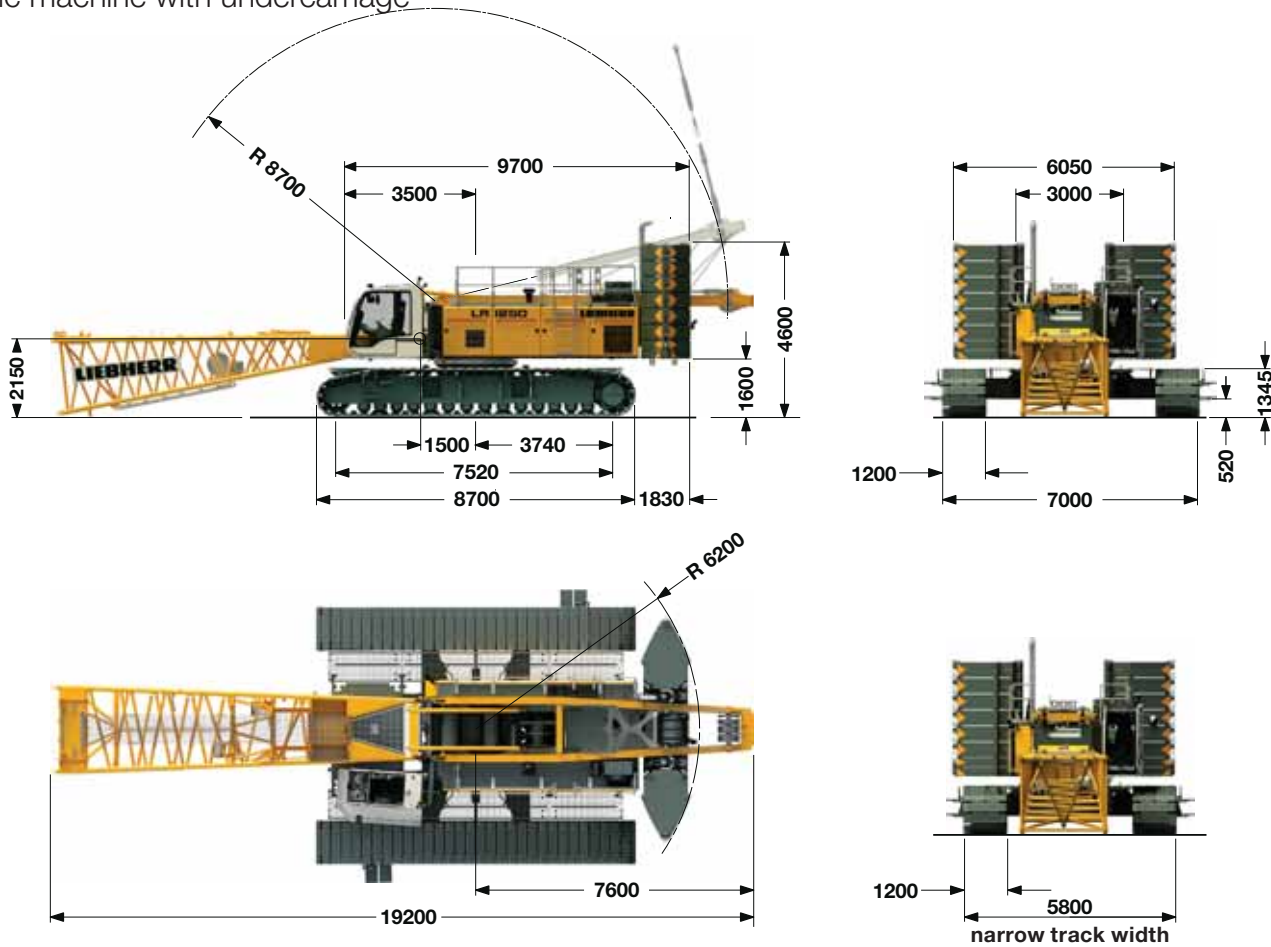
Crawler Crane

LR 1250
Litronic®



Dimensions

Basic machine with undercarriage



Operating weight

The operating weight includes the basic machine with crawlers, 2 main winches 120 kN including wire ropes (260 m and 495 m) and 20 m main boom, consisting of A-frame, boom foot (10 m), boom head (7 m), boom extension (3 m), 82.3 t basic counterweight, 36 t carbody counterweight and 250 t hook block.

Total weight ————— approx. 210 t

Ground pressure

The actual ground pressure is calculated according to the configuration and position of the machine and displayed in the operator's cab. Using the optional Liebherr Crane-Planner the actual ground pressure, amongst other parameters, can already be calculated and displayed in the planning stage.

Equipment

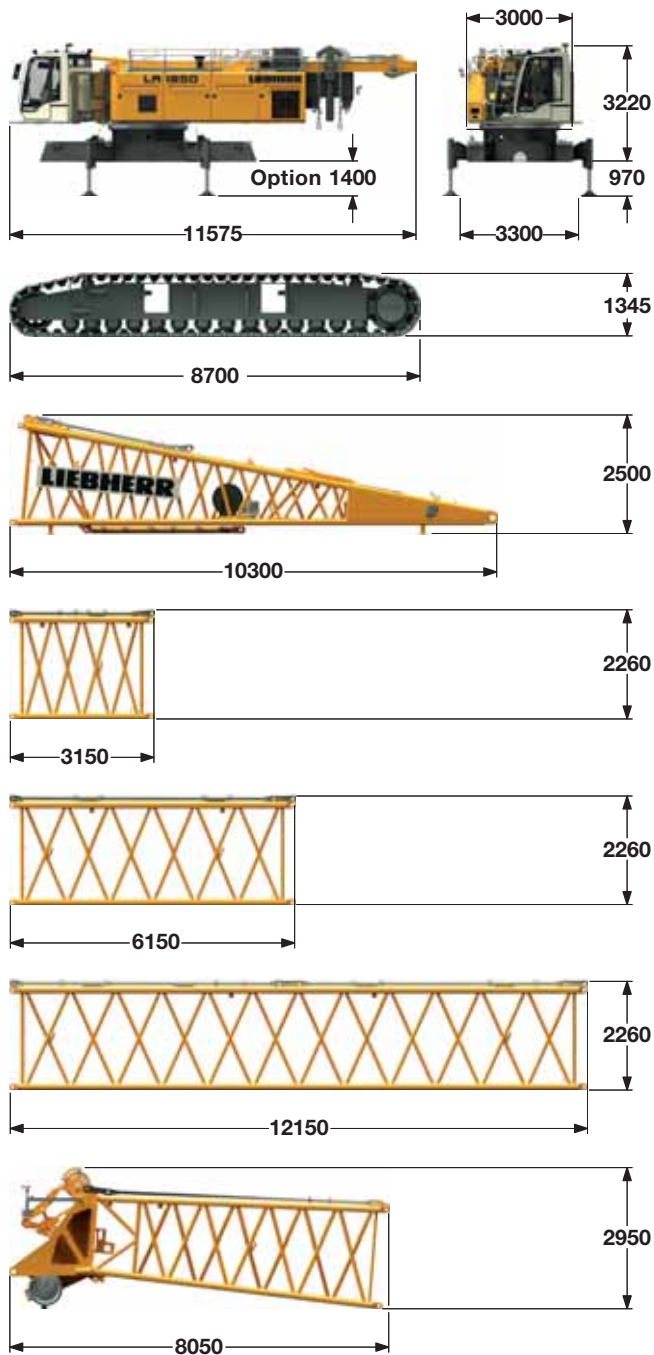
Main boom (No. 2320.xx) max. length	—————	86 m
High reach (No. 2320.xx und 1916.xx)	—————	117 m
Luffing jib (No. 1916.xx) max. length	—————	95 m
Max. combination	—————	main boom 53 m
		luffing jib 95 m
Fixed jib (No. 1008.xx)	—————	11 – 26 m
Auxiliary jib 24 t (option 36 t)		

Remarks

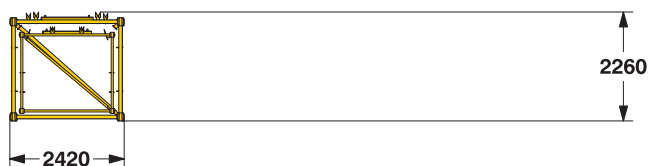
1. The lifting capacities stated are valid for lifting operation only (corresponding with crane classification according to F.E.M. 1.001. crane group A1).
2. Crane standing on firm, horizontal ground.
3. The weight of the lifting device (hoisting ropes, hook block, shackle etc.) must be deducted from the gross lifting capacity to obtain a net lifting value.
4. Additional equipment on boom (e.g. boom walkways, auxiliary jib) must be deducted to get the net lifting capacity.
5. For max. wind speed please refer to lift chart in operator's cab or manual.
6. Working radii are measured from center of swing and under load.
7. The lifting capacities are valid for 360 degrees of swing.
8. Calculation of stability under load is based on DIN 15019 / part 2 / chart 1 and ISO 4305 Table 1 + 2, tipping angle 4°.
9. The structures are calculated according to F.E.M. 1.001 - 1998 (EN 13001-1; EN 13001-2).

Transport dimensions and weights

Basic machine and main boom (No. 2320.xx)



Transport option



Basic machine

with A-frame, 2x 120 kN crane winches without boom foot, hoist ropes, basic counterweight and crawlers

Width	3000 mm
Weight	42500 kg
Weight of hoist rope	3.42 kg/m

Crawler

2x

Track pads	1200 mm
Width	1200 mm
Weight	19800 kg

Boom foot (No. 2320.25)

Width	2430 mm
Weight incl. winch and rope	5600 kg
Weight without winch	4000 kg

Boom section (No. 2320.23)

3 m

Width	2430 mm
Weight with HPT ¹⁾	830 kg
Weight with HPT ¹⁾ and ND ²⁾	920 kg

Boom section (No. 2320.23)

6 m

Width	2430 mm
Weight with HPT ¹⁾	1295 kg
Weight with HPT ¹⁾ and ND ²⁾	1455 kg

Boom section (No. 2320.23)

12 m

Width	2430 mm
Weight with HPT ¹⁾	2340 kg
Weight with HPT ¹⁾ and ND ²⁾	2690 kg

Boom head (No. 2320.23)

Width	2430 mm
Weight with HPT ¹⁾	4300 kg

1) Pendant straps for main boom • 2) Pendant straps for jib

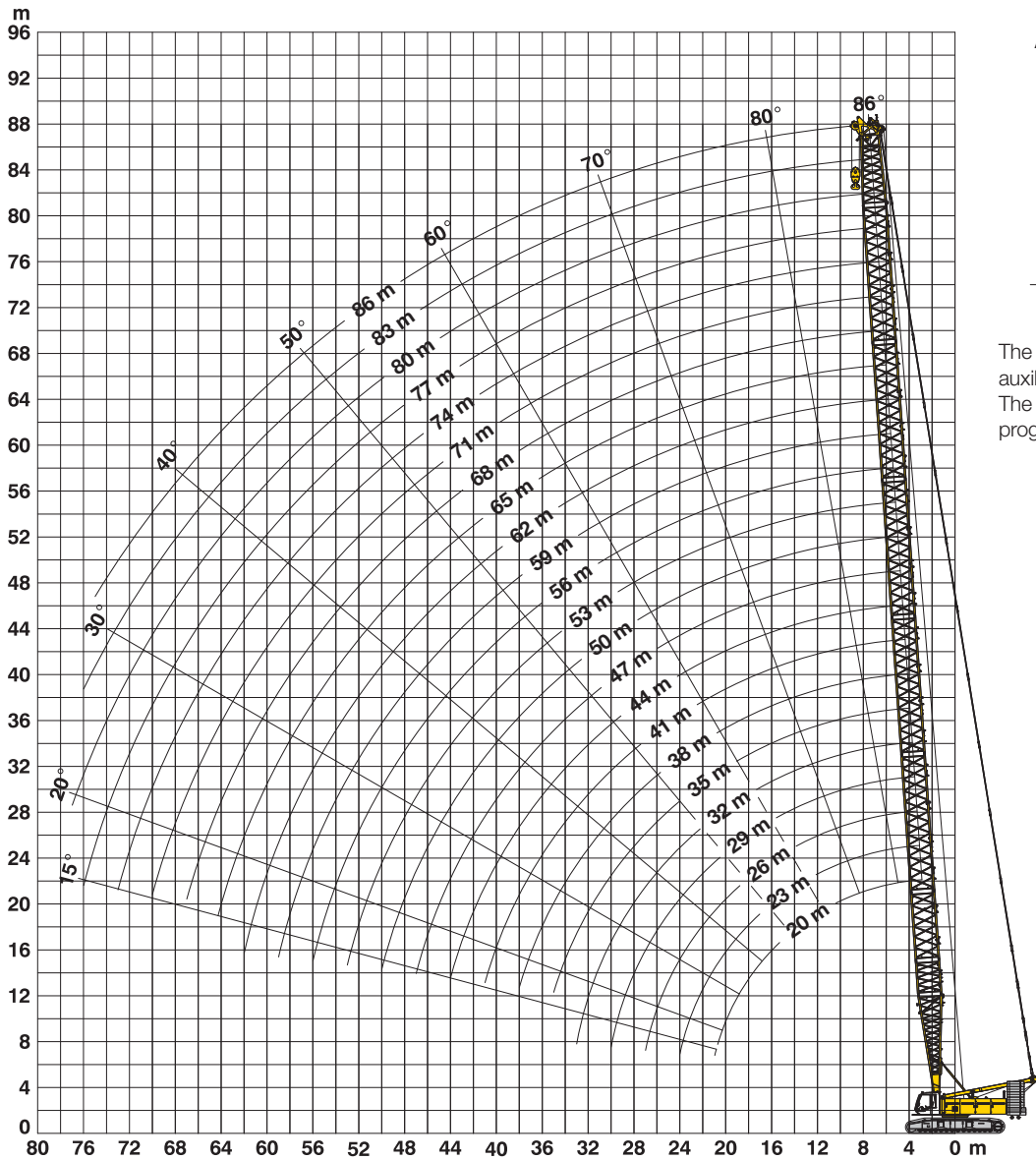
Boom transport option

(No. 2320.xx/1916.xx)	12/12	6/6	3/3	m
Length	12250	6250	3250	mm
Weight*	3940	2145	1475	kg

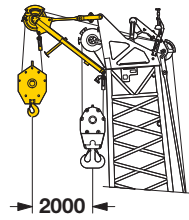
*) Including pendant straps

Main boom 86° - 15° (No. 2320.xx)

82.3 t counterweight and 36 t carbody counterweight



Auxiliary jib 24 t



The maximum capacity of the auxiliary jib is 24 t.
The corresponding load chart is programmed in the LMI system.

Main boom configuration (Table 1 – No. 2320.xx) Configuration for boom lengths between 20 m and 86 m

Component	Length	Amount of boom extensions																		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Boom foot	10 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Boom insert	3 m	1		1		1		1		1		1		1		1		1		
Boom insert	6 m		1	1		1	1		1	1		1	1		1	1		1		
Boom insert	12 m				1	1	1	1		2	2	2	2		3	3	3	3		
Boom head	7 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Boom length (m)		20	23	26	29	32	35	38	41	44	47	50	53	56	59	62	65	68	71	74

Lift chart for main boom (No. 2320.xx)

82.3 t counterweight and 36 t carbody counterweight

Capacities in metric tonnes for boom lengths (20 m - 86 m) – with 120 kN winches

Radius (m)	Boom length in (m)										Radius (m)	
	20	26	32	38	44	50	56	62	68	74		
5.8					122.1							5.8
6				143.5	122.1							6
7			149.9	136.5	117.5	101.4	86.4	72.1				7
8		139.3	132.1	124.2	112.6	96.9	83.4	71.5	59.1	49.8		8
9	128.6	122.4	115.6	109.3	103.6	93.0	80.4	68.1	57.7	49.5		9
10	113.8	108.1	102.6	97.5	92.8	88.0	77.1	65.7	56.0	48.1		10
12	87.2	87.2	83.5	79.8	76.4	73.1	70.1	61.3	52.9	45.8		12
14	70.2	70.2	70.1	67.3	64.7	62.1	59.7	57.3	50.0	43.2		14
16	58.5	58.5	58.4	57.9	55.8	53.7	51.7	49.8	47.4	41.3		16
18	49.9	49.9	49.7	49.5	48.9	47.1	45.4	43.7	42.1	38.7		18
20	43.2	43.3	43.2	42.9	42.6	41.8	40.3	38.8	37.4	36.0		20
26		30.2	30.2	29.9	29.7	29.3	28.9	28.4	27.3	26.2		26
32			22.5	22.3	22.0	21.7	21.3	20.9	20.5	19.8		32
38				17.2	17.0	16.6	16.3	15.9	15.5	15.0		38
44					13.4	13.1	12.7	12.3	12.0	11.5		44
50						10.4	10.1	9.7	9.3	8.8		50
55							8.3	7.9	7.5	7.1		55
60								6.4	6.0	5.6		60
65									4.8	4.4		65
70										3.3		70

72.3 t counterweight and 36 t carbody counterweight

Capacities in metric tonnes for boom lengths (20 m - 83 m) – with 120 kN winches

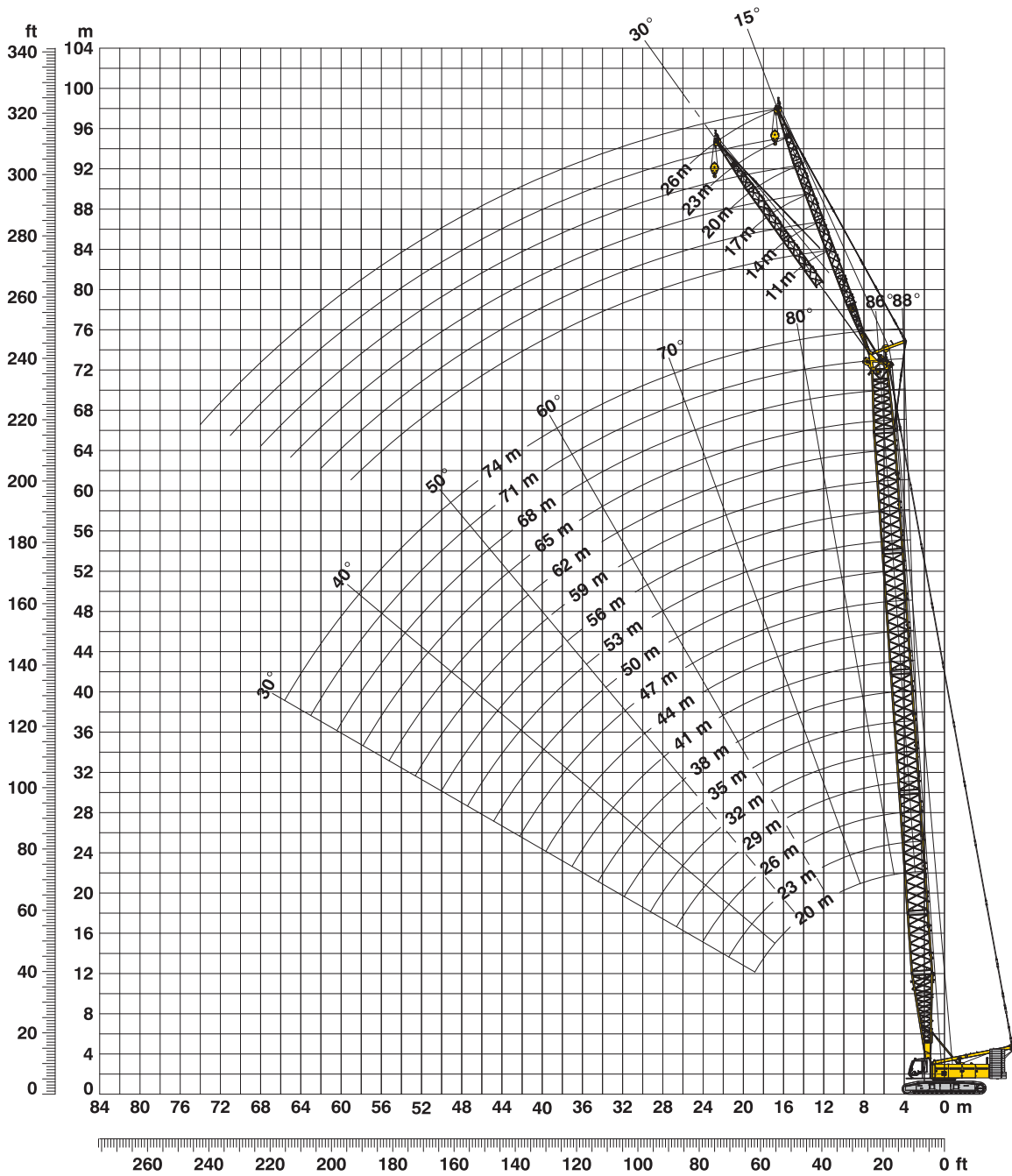
Radius (m)	Auslegerlänge (m)										Radius (m)	
	20	26	32	38	44	50	56	62	68	74		
4.1	250.0*											4.1
5	217.0	196.5	173.7									5
6	185.8	180.1	165.5	143.5	122.1							6
7	162.1	152.0	141.3	131.8	117.5	101.4	86.4	72.1				7
8	138.5	129.3	121.3	114.0	107.5	96.9	83.4	71.5	59.1	49.8		8
9	119.4	112.3	106.1	100.3	95.0	90.1	80.4	68.1	57.7	49.5		9
10	104.4	99.2	94.1	89.3	85.0	80.9	77.1	65.7	56.0	48.1		10
12	79.9	79.8	76.5	73.1	69.9	66.9	64.0	61.3	52.9	45.8		12
14	64.3	64.2	64.1	61.5	59.0	56.6	54.4	52.2	50.0	43.2		14
16	53.4	53.4	53.3	52.9	50.9	48.9	47.0	45.2	43.5	41.3		16
18	45.5	45.5	45.4	45.1	44.5	42.8	41.2	39.6	38.1	36.6		18
20	39.3	39.4	39.3	39.0	38.7	37.9	36.5	35.1	33.8	32.4		20
26		27.4	27.4	27.1	26.8	26.4	26.1	25.5	24.4	23.4		26
32			20.3	20.1	19.8	19.4	19.0	18.6	18.2	17.5		32
38				15.3	15.1	14.8	14.4	14.0	13.6	13.1		38
44					11.8	11.5	11.2	10.8	10.4	9.9		44
50						9.0	8.7	8.3	7.9	7.4		50
55							7.0	6.6	6.3	5.8		55
60								5.3	4.9	4.5		60
65									3.7	3.3		65
70										2.3		70

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.

*) Capacities over 220 t require a special heavy duty boom head.

Working range - fixed jib 15° and 30° (No. 1008.xx)

Main boom 88° – 30°



Boom configuration for boom lengths (20 m – 74 m) – see table 1 on Seite 10

Fixed jib configuration for fixed jib lengths (11 m – 26 m)

	Length	Amount of fixed jib extensions					
Fixed jib foot	5.5 m	1	1	1	1	1	1
Fixed jib insert	3.0 m		1		1		1
Fixed jib insert	6.0 m			1	1	2	2
Fixed jib head	5.5 m	1	1	1	1	1	1
Fixed jib length (m)		11	14	17	20	23	26

Lift chart - fixed jib (No. 1008.xx)

Offset 15°

Main boom 20 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
9	35.9	35.5		
11	35.9	34.0	28.9	
12	35.9	33.2	27.7	19.8
14	35.9	31.5	25.5	18.3
16	35.1	29.9	23.9	17.1
20	32.8	26.5	20.0	15.1
24	27.5	23.2	17.0	13.4
28	24.0	20.7	14.8	11.7
30	23.0	19.5	13.8	11.1
32		18.4	13.0	10.5
38			11.3	9.0
44				7.9

Main boom 29 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
8	35.9	35.9		
10	35.9	35.2	30.2	
12	35.9	34.2	28.5	19.7
16	35.9	32.0	25.0	17.3
20	34.7	29.9	21.9	15.4
28	27.6	24.6	17.1	13.0
32	23.0	21.8	15.3	11.6
36	19.3	19.7	13.7	10.6
38	17.8	18.2	13.2	10.1
40		16.8	12.7	9.7
46			11.4	8.7
50				8.1

Main boom 38 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
6.3	35.9			
8	35.9	35.8		
10	35.9	35.2	29.4	
13	35.9	33.6	26.8	18.9
16	35.9	32.3	24.7	17.3
20	35.9	30.3	22.6	15.6
28	27.0	26.2	18.6	13.5
36	18.7	19.0	15.1	11.5
46	12.5	12.8	12.5	9.5
48		11.9	12.1	9.2
55			9.7	8.4
60				7.9

Main boom 47 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
6.6	35.9			
8	35.9	35.8		
11	35.9	34.5	28.3	
13	35.9	33.7	26.9	18.5
16	35.9	32.6	25.1	17.1
20	34.8	31.1	22.9	15.7
28	26.4	26.8	19.8	13.7
36	18.1	18.4	16.8	12.3
50	10.2	10.5	11.0	9.7
55		8.7	9.1	9.0
60			7.6	8.0
65				6.7

Main boom 56 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
6.9	35.9			
9	35.9	34.5		
11	35.9	33.7	26.6	
13	35.9	32.8	25.5	17.8
20	34.3	29.9	22.0	15.5
28	25.4	25.6	19.5	13.7
36	17.4	17.8	17.3	12.7
44	12.3	12.6	13.1	11.2
55	7.8	8.0	8.5	8.9
60	6.2	6.5	7.0	7.4
70			4.5	4.9
75				3.9

Main boom 62 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
7.1	35.9			
9	35.9	33.9		
11	35.9	33.2	25.5	
13	35.9	32.4	24.7	17.3
20	32.7	28.9	21.6	15.2
28	24.3	24.5	19.3	13.6
36	17.0	17.3	17.7	12.6
44	11.8	12.1	12.7	11.5
55	7.3	7.6	8.1	8.5
65	4.5	4.8	5.2	5.6
75			3.1	3.5
80				2.6

Main boom 68 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
7.3	35.9			
9	35.9	32.8		
11	35.8	32.3	24.3	
14	34.9	30.9	23.2	16.7
20	31.1	27.8	20.9	14.9
28	23.4	23.5	18.8	13.4
36	16.3	16.5	16.9	12.5
44	11.4	11.7	12.3	11.7
55	6.9	7.1	7.6	8.1
70	3.0	3.2	3.7	4.1
75		2.3	2.7	3.1
80				2.2

Main boom 71 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
7.4	35.8			
9	35.2	32.2		
11	33.9	31.0	24.0	
14	32.6	29.4	22.8	16.3
16	31.9	28.7	21.9	15.8
20	29.3	26.9	20.7	14.6
28	22.9	23.1	18.7	13.3
36	15.9	16.1	16.5	12.4
44	11.2	11.5	11.9	11.6
55	6.6	6.9	7.4	7.9
65	3.9	4.1	4.6	5.0
75		2.0	2.5	2.9

Main boom 74 m

Radius (m)	Fixed jib length in (m)		
	11	14	17
7.6	35.1		
9	34.3	31.1	
10	32.8	30.8	27.8
12	31.2	28.3	26.7
16	30.1	26.9	24.4
20	27.8	25.5	23.4
28	22.4	22.3	21.1
36	15.5	15.7	15.9
44	10.9	11.1	11.3
55	6.4	6.6	6.9
70	2.5	2.8	3.0
75			2.0

Capacities in metric tonnes with fixed jib (No. 1008.xx), 82.3 counterweight + 36 t carbody counterweight. Above lift chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to lift chart in operator's cab or manual.

Lift chart - fixed jib (No. 1008.xx)

Offset 30°

Main boom 20 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
11	34.8			
12	32.7	26.9		
14	29.8	24.7	17.5	
18	25.1	21.6	15.1	12.1
20	23.4	20.1	14.0	11.3
24	21.5	17.6	12.3	9.8
26	20.3	16.7	11.7	9.2
28	19.6	15.9	11.2	8.7
30	19.0	15.2	10.8	8.3
34		14.5	9.8	7.6
40			9.1	6.8
46				6.4

Main boom 29 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
10	35.9			
11	35.2	28.9		
15	30.8	25.8	17.8	
18	27.6	24.0	16.0	12.0
24	23.3	20.1	13.4	10.2
28	22.0	18.2	12.2	9.2
32	20.2	16.7	11.2	8.5
36	19.2	15.7	10.6	7.9
38	17.9	15.3	10.2	7.6
40		15.0	9.9	7.4
46			9.5	6.8
50				6.6

Main boom 38 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
8.9	35.9			
11	35.7	28.3		
15	32.3	25.9	17.5	
19	28.7	23.5	15.6	12.0
20	27.8	23.4	15.2	11.7
28	23.2	19.1	12.6	9.6
36	19.0	16.6	11.1	8.4
44	13.7	14.0	9.9	7.4
46	12.6	13.0	9.7	7.2
48		12.0	9.5	7.1
55			9.2	6.7
60				6.5

Main boom 47 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
9.3	35.9			
12	35.5	28.8		
15	33.6	27.2	17.5	
19	30.1	24.6	16.1	12.0
20	29.5	24.0	15.8	11.7
28	24.8	21.0	13.4	9.9
36	18.5	18.2	11.8	8.7
44	13.2	13.5	10.8	7.8
50	10.4	10.7	10.0	7.3
55		8.8	9.4	6.9
60			7.7	6.7
65				6.6

Main boom 56 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
9.6	35.9			
12	35.3	28.0		
16	32.6	25.7	17.2	
19	30.4	24.2	16.1	11.8
28	25.9	20.8	13.6	10.1
36	17.9	18.0	12.1	9.0
44	12.6	13.0	11.0	8.1
55	7.9	8.2	8.9	7.2
60	6.3	6.6	7.2	6.9
65		5.3	5.8	6.4
70			4.6	5.1
75				4.0

Main boom 62 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
9.8	34.1			
12	33.1	26.7		
16	30.6	24.8	17.0	
19	28.9	23.8	16.2	11.7
28	25.1	20.6	13.7	10.2
36	17.5	18.0	12.3	9.1
44	12.2	12.6	11.3	8.3
55	7.5	7.8	8.5	7.4
65	4.6	4.9	5.5	6.0
70		3.7	4.3	4.8
75			3.2	3.7
80				2.7

Main boom 68 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
10	31.8			
12	31.1	25.6		
16	28.8	24.1	17.0	
20	26.9	22.9	16.0	11.7
28	23.8	20.0	14.0	10.3
36	16.9	17.3	12.6	9.3
44	11.8	12.2	11.5	8.4
55	7.1	7.4	8.1	7.6
65	4.2	4.5	5.1	5.7
70	3.1	3.4	3.9	4.4
75		2.3	2.9	3.4
80				2.4

Main boom 71 m

Radius (m)	Fixed jib length in (m)			
	11	14	20	26
10.1	30.1			
12	29.0	25.3		
16	26.7	24.0	17.3	
20	25.4	22.5	16.4	11.6
28	22.6	19.9	14.3	10.4
36	16.5	16.9	12.9	9.3
44	11.6	12.0	11.7	8.5
55	6.9	7.2	7.9	7.6
65	4.0	4.3	4.9	5.5
70	2.9	3.2	3.7	4.3
75		2.1	2.7	3.2
80				2.2

Main boom 74 m

Radius (m)	Fixed jib length in (m)			
	11	14	17	26
10.2	28.8			
13	26.0	24.1		
14	25.1	23.7	20.4	
16	24.9	22.8	20.6	
20	24.2	21.4	19.1	
28	21.7	19.1	16.8	
36	16.1	16.5	15.1	
44	11.3	11.7	12.0	
55	6.7	7.0	7.4	
65	3.8	4.1	4.4	
70	2.7	2.9	3.3	
75			2.2	

Capacities in metric tonnes with fixed jib (No. 1008.xx), 82.3 counterweight + 36 t carbody counterweight. Above lift chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to lift chart in operator's cab or manual.