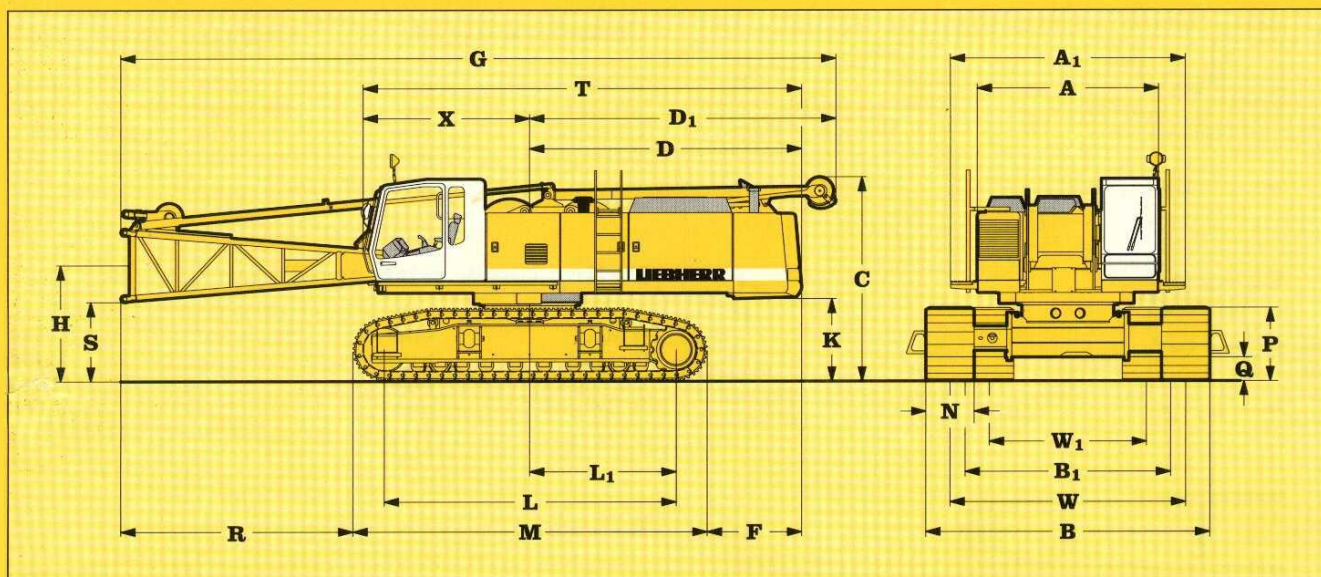


Technical Data Hydraulic lifting crane

LR 853
Litronic®

Basic machine with undercarriage



Dimensions

	mm		mm
A Width of superstructure	3000	X Distance from centre of rotation to end of cab	2750
A ₁ Width of superstructure with walk way	3440	N Width of track shoes	800
C Height of basic machine	3400	W ₁ Track width retracted	2600
D Tail reach	4530	W Track width extended	4200
Tail swing radius	4560	B Crawler width extended	5000
D ₁ Tail reach A-frame	5075	B ₁ Crawler width retracted	3400
F Distance between rear end of crawler and outside of counterweight	1565		
G Overall length of superstructure with lowered A-frame	11840		
H Ground clearance of boom foot pivot	1920		
K Ground clearance of superstructure	1370		
L Wheel base (centre idler to centre tumbler)	4850		
L ₁ Distance from centre of rotation to centre of tumbler	2425		
M Length of crawlers	5930		
P Height of crawler	1260		
Q Ground clearance of crawler	400		
R Distance from edge of horizontal boom foot to crawler	3800		
S Ground clearance of horizontal boom foot	1310		
T Length of superstructure	7280		

For duty cycle operation:

W Track width extended	3900
B Overall width - crawler extended	4700

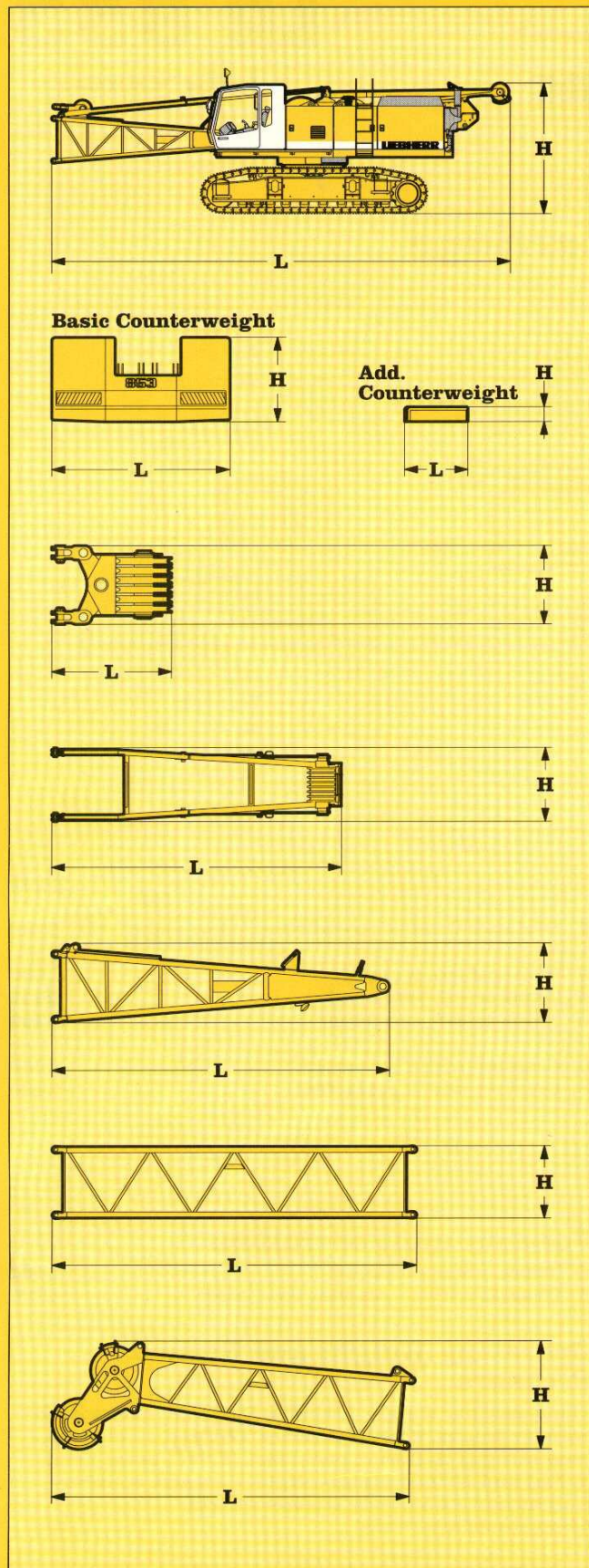
Operating Weight and Ground Pressure

The operating weight includes the basic unit with B7 crawler tracks, 2 main winches 12 t and 11 m boom, consisting of A-frame, boom foot (5.5m), boom head (5.5m) and 23.7 t counterweight + 2 t add. counterweight and 8 t carbody counterweight. All systems are ready.

with 800 mm 3-web shoes 82.8 t - 1.06 kg/cm²

LIEBHERR

The Better Machine



*) including stay ropes

Basic machine

with HD undercarriage, L 6 cylinder Liebherr diesel engine, 2 x 12 t winches with A-frame and boom foot
3-web shoes mm 800

Width	mm	3400
Weight	t	49.2
L Length	mm	11840
H Height	mm	3400

Counterweight

		Carbody	Basic	Add.
Width	mm	850	1430	1040
Weight	kg	2x 4000	23700	2000
L Length	mm	1950	3000	1070
H Height	mm	730	1430	250

Pulley block with equalizer

Width	mm	490
Weight	kg	300
L Length	mm	1010
H Height	mm	660

A-frame

Width	mm	530
Weight	kg	810
L Length	mm	4830
H Height	mm	1210

Boom foot

Width	mm	1400
Weight	kg	1210
L Length	mm	5680
H Height	mm	1400

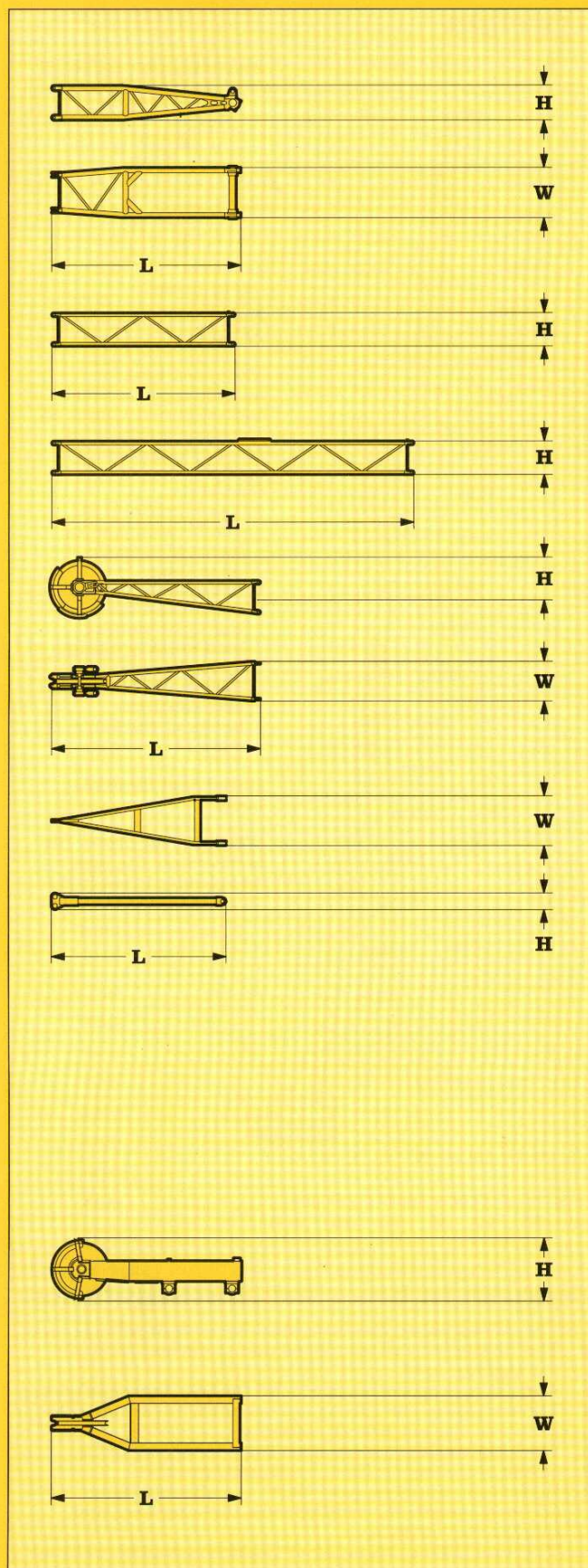
Tubular boom extension

		3m	6m	9m
Width	mm	1400	1400	1400
Weight*	kg	410	650	900
L Length	mm	3140	6140	9140
H Height	mm	1220	1220	1220

Boom head

Width	mm	1400
Weight*	kg	1570
L Length	mm	6070
H Height	mm	1940

Transport dimensions and weights



Jib foot

W Width	mm	855
Weight	kg	375
L Length	mm	3180
H Height	mm	590

Tubular jib extension

		3m	6m
Width	mm	685	685
Weight	kg	160	270
L Length	mm	3080	6080
H Height	mm	565	565

Jib head

W Width	mm	665
Weight	kg	360
L Length	mm	3540
H Height	mm	1025

A-frame

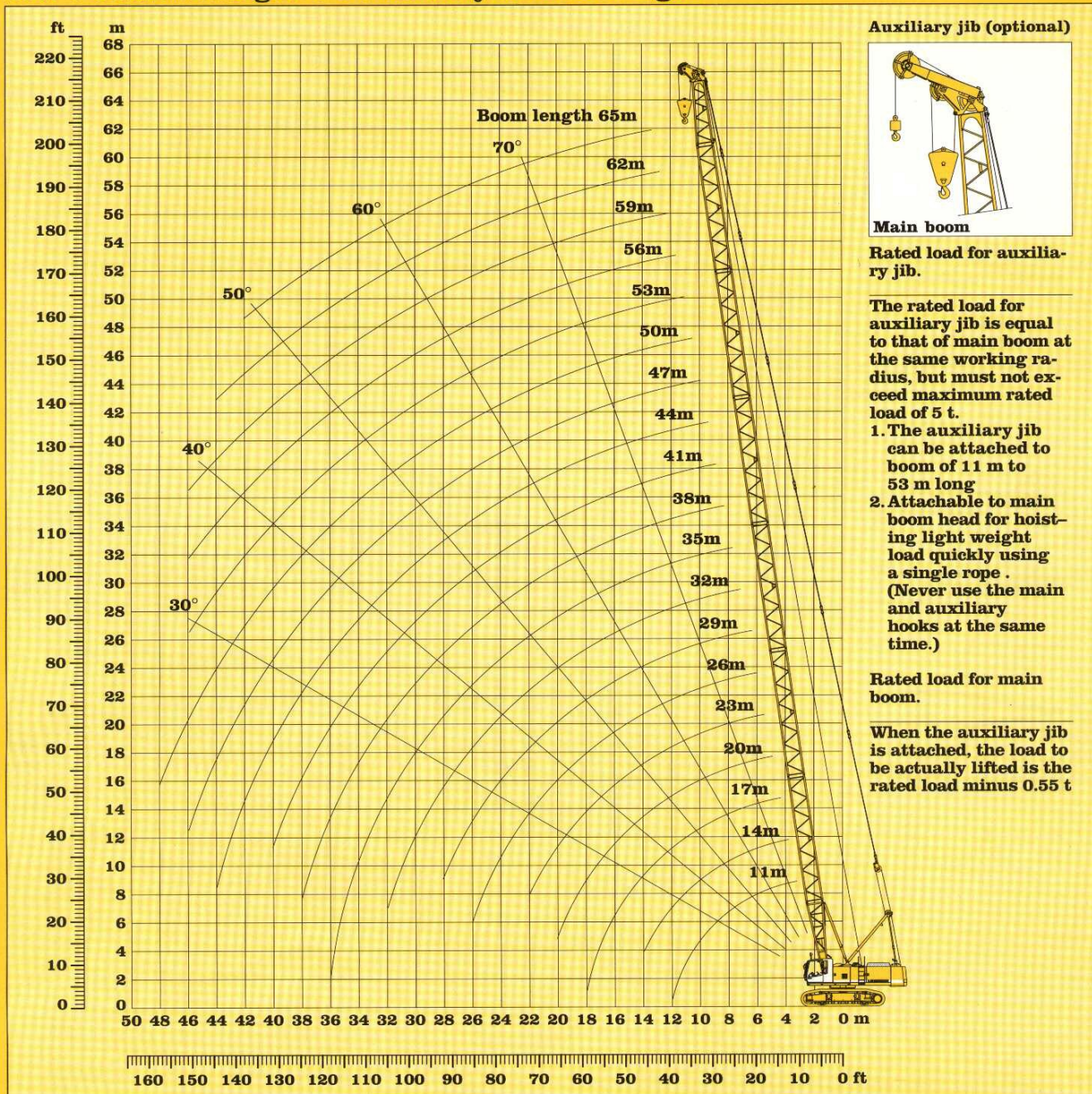
W Width	mm	880
Weight	kg	280
L Length	mm	2935
H Height	mm	280

Auxiliary jib

W Width	mm	920
Weight	kg	550
L Length	mm	3205
H Height	mm	1070

Transport dimensions and weights

25.7 t Counterweight + 8 t carbody counterweight



Scope of delivery:

- Basic machine with 800 mm track shoes
- A-frame
- Pulley block
- Boom foot 5.5 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head 5.5 m with 2 + 3 pulleys
- Stay ropes according to boom length
- Main winches 2 x 12 tonnes
- Hoisting limit switch
- Load moment limiter
- Corresponding hook block optional
- Auxiliary jib optional

Remarks for boom and jib configuration:

1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75 % of the tipping load.
3. The lifting capacities are valid for 360 degree of swing
4. The weight of the lifting device must be deducted to arrive at the net lifting capacity.
5. Working radii are measured from centre of swing.
6. Crane standing on firm, horizontal ground.
7. Indicated values on load chart are affected by off-lead operation, wind speeds, slewing load and stop/go movements.
8. The max. lifting capacity of the crane may be reduced dependent on the admissible rope safety regulations of each country.

Working ranges - main boom

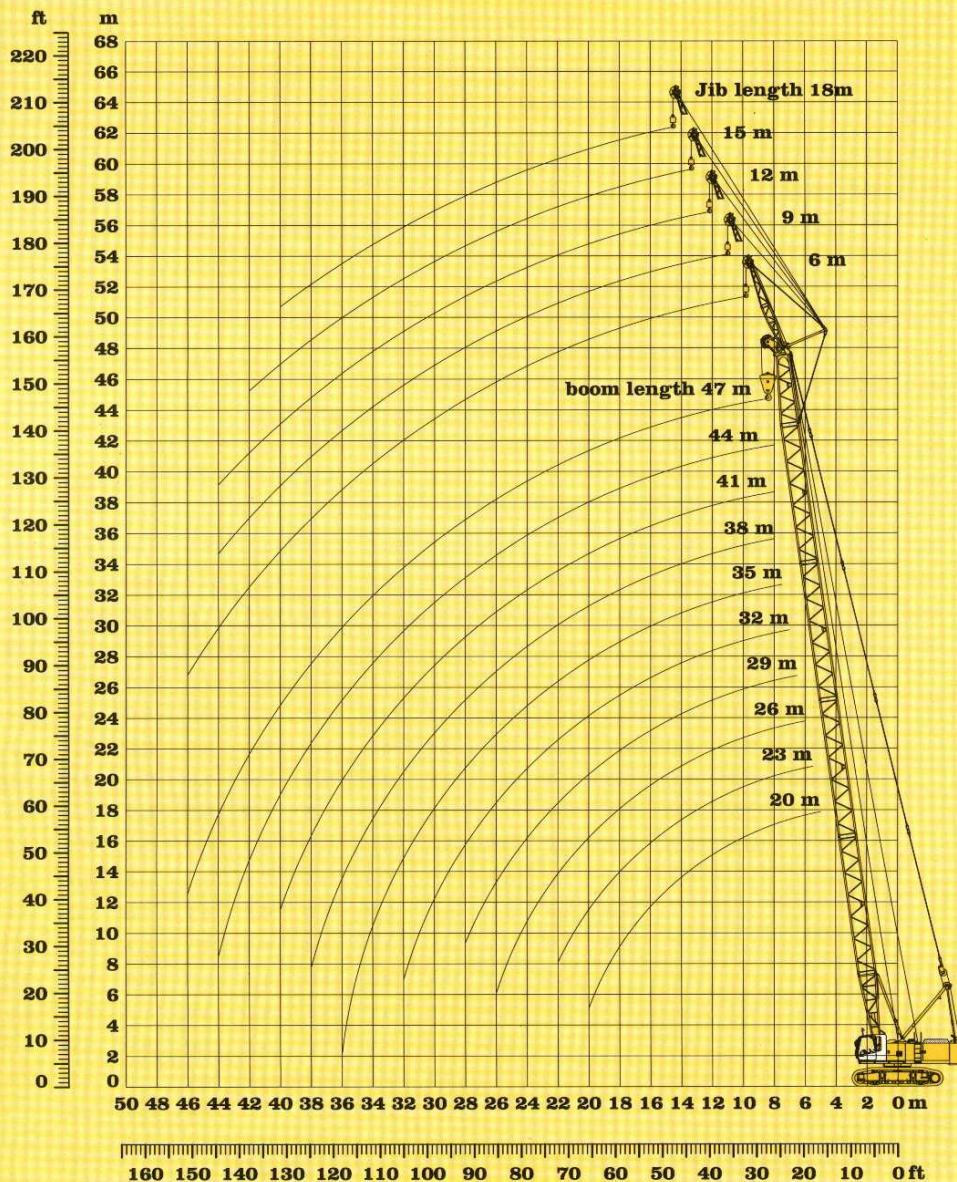
Capacities in metric tons for boom lengths from 11 m to 65 m:										25.7 t counterweight + 8 t carbody counterweight									
Boom length	11 m	14 m	17 m	20 m	23 m	26 m	29 m	32 m	35 m	38 m	41 m	44 m	47 m	50 m	53 m	56 m	59 m	62 m	65 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t
3.5	90.7																		
4.0	80.0	80.0																	
4.5	75.4	75.3	74.6																
5.0	67.5	67.3	67.2	67.1															
5.5	60.9	60.8	60.7	60.6	60.2														
6.0	52.9	52.9	52.9	52.8	52.8	52.8	50.0												
6.5	46.6	46.6	45.6	46.6	46.5	46.5	46.4												
7.0	41.7	41.7	41.6	41.6	41.5	41.5	41.4	41.4	40.3										
7.5	37.6	37.6	37.6	37.5	37.5	37.4	37.4	37.3	37.3										
8.0	34.3	34.3	34.2	34.2	34.1	34.1	34.0	34.0	33.9	33.8									
9.0	29.1	29.0	29.0	29.0	28.9	28.8	28.8	28.7	28.6	28.5	28.5	28.5							
10.0	25.2	25.1	25.1	25.1	25.0	24.9	24.8	24.8	24.7	24.6	24.5	24.4	24.2	20.6					
11.0	22.2	22.1	22.1	22.0	22.0	21.9	21.8	21.7	21.6	21.6	21.5	21.4	21.3	20.3	17.5	14.7			
12.0		19.7	19.7	19.6	19.5	19.5	19.4	19.3	19.2	19.1	19.0	19.0	18.9	18.8	16.8	14.5	13.0	11.6	
13.0		17.8	11.7	17.7	17.6	17.5	17.4	17.3	17.2	17.2	17.1	17.0	16.9	16.8	15.9	13.7	12.7	11.5	9.3
14.0		16.1	16.1	16.0	15.9	15.9	15.8	15.7	15.6	15.5	15.4	15.3	15.2	15.1	15.0	12.9	12.3	11.2	9.1
15.0			14.7	14.6	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9	13.8	13.7	13.6	12.3	11.9	10.9	8.9
16.0			13.5	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.6	12.5	12.4	11.8	11.5	10.6	8.6
17.0			12.5	12.4	12.3	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.2	11.1	10.2	8.4
18.0				11.5	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.5	10.4	10.3	9.9	8.1
19.0				10.8	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4	7.9
20.0				10.0	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7	7.6
22.0					8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.2
24.0						7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4
26.0						6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6
28.0							6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9
30.0								5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3
32.0								4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8
34.0									4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.6	3.5	3.4	3.3
36.0										3.9	3.8	3.7	3.6	3.5	3.4	3.2	3.1	3.0	2.9
38.0										3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6
40.0											3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.2
42.0												2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.0
44.0													2.4	2.2	2.1	2.0	1.9	1.8	1.7
46.0													2.1	2.0	1.9	1.8	1.7	1.6	1.5
48.0														1.8	1.7	1.6	1.5	1.4	1.3
50.0															1.5	1.4	1.3	1.2	1.1

The necessary hoist rope reeving arrangement has to be provided according to the load diagram in the cabin.
Above lift chart for planning purposes only. For actual lift duty please refer to lift chart in operator's cab or manual.

Boom configuration required to realize above load chart.																			
	Length	Number of boom extensions																	
Boom foot	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom extension	3.0 m		1				1			1			1			1			
Boom extension	6.0 m			1				1			1			1			1		
Boom extension	9.0 m				1	1	1	2	2	2	3	3	3	4	4	4	5	5	6
Boom head	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length in metres		11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59	62

Lifting capacities – main boom

25.7 t Counterweight + 8 t carbody counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Main boom
- Jib A-frame
- Stay ropes according to jib length
- Jib foot 3 m
- Jib extension 3 m tubular steel
- Jib extension 6 m tubular steel
- Jib head 3 m
- Corresponding hook block optional

Remarks:

1. Same remarks apply as for main boom.
2. The jib can be attached to main boom from 20 m to 47 m.
3. Rated load on jib are only applicable with no load on main boom.

Working ranges - fixed jib 15° main boom

Capacity in metric tons for jib lengths 6 m.										
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m
Radius in (m)	t	t	t	t	t	t	t	t	t	t
8	16.0	16.0								
9	16.0	16.0	16.0	16.0	16.0					
10	16.0	16.0	16.0	16.0	16.0	16.0	16.0			
11	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	
12	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	14.7
13	16.0	16.0	16.0	16.0	15.9	16.0	16.0	16.0	16.0	14.4
14	15.8	15.8	15.7	15.6	15.5	15.4	15.3	15.2	15.1	14.2
15	14.5	14.4	14.3	14.2	14.1	14.0	13.9	13.8	13.7	13.6
16	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.6	12.5	12.4
17	12.3	12.2	12.0	12.0	11.9	11.8	11.7	11.6	11.5	11.4
18	11.3	11.2	11.2	11.0	11.0	10.9	10.8	10.7	10.6	10.4
19	10.5	10.4	10.3	10.3	10.1	10.0	10.0	9.8	9.8	9.7
20		9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9
22		8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.7
24			7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7
26				6.5	6.4	6.3	6.2	6.1	6.0	5.9
28					5.7	5.6	5.5	5.4	5.3	5.2
30						5.0	4.9	4.8	4.7	4.6
32							4.4	4.3	4.2	4.0
34								3.8	3.7	3.6
36									3.2	3.1
38										2.7
40										
42										

Capacity in metric tons for jib lengths 12 m.										
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m
Radius in (m)	t	t	t	t	t	t	t	t	t	t
12.0	12.6	12.8								
13.0	12.1	12.4	12.6	12.7	12.6					
14.0	11.6	12.0	12.2	12.4	12.3	11.9	11.9			
15.0	11.0	11.5	11.8	12.0	12.1	11.7	11.7	11.5	11.4	10.1
16.0	10.5	11.0	11.4	11.7	11.8	11.5	11.5	11.3	11.2	9.9
17.0	10.0	10.6	11.0	11.3	11.5	11.3	11.4	11.1	11.1	9.8
18.0	9.6	10.1	10.6	10.9	11.2	11.0	11.1	11.0	10.9	9.7
19.0	9.3	9.6	10.2	10.6	10.4	10.4	10.3	10.2	10.1	9.6
20.0	9.0	9.4	9.7	9.8	9.7	9.6	9.6	9.4	9.4	9.3
22.0	8.3	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0
24.0	7.7	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0
26.0		7.0	6.8	6.8	6.7	6.5	6.4	6.4	6.2	6.2
28.0			6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.4
30.0					5.4	5.3	5.2	5.1	5.0	4.8
32.0						4.8	4.7	4.6	4.5	4.4
34.0							4.2	4.1	4.0	3.8
36.0								3.7	3.6	3.4
38.0									3.2	3.1
40.0										2.7
42.0										2.4
44.0										2.0
46.0										

Capacity in metric tons for jib lengths 18 m.										
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m
Radius in (m)	t	t	t	t	t	t	t	t	t	t
15	8.0	8.0								
16	7.7	7.8	7.9	7.8	7.8					
17	7.5	7.6	7.7	7.7	7.6	7.4	7.4			
18	7.3	7.4	7.5	7.6	7.5	7.3	7.4	6.9	6.7	
19	7.1	7.2	7.4	7.4	7.4	7.2	7.3	6.8	6.6	6.3
20	6.8	7.0	7.2	7.3	7.3	7.1	7.2	6.8	6.6	6.3
22	6.4	6.7	6.9	7.0	7.0	7.0	7.0	6.7	6.5	6.3
24	6.1	6.3	6.5	6.7	6.7	6.8	6.8	6.6	6.4	6.2
26	5.7	6.0	6.2	6.4	6.4	6.6	6.6	6.5	6.3	6.1
28	5.3	5.6	5.9	6.1	6.1	6.0	5.9	5.7	5.7	5.6
30		5.3	5.6	5.6	5.4	5.3	5.2	5.1	5.0	4.9
32			5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4
34			4.6	4.6	4.4	4.3	4.2	4.1	4.0	3.9
36				4.1	4.0	3.9	3.8	3.7	3.6	3.5
38					3.6	3.6	3.4	3.3	3.2	3.1
40						3.2	3.1	3.0	2.9	2.7
42							2.8	2.7	2.5	2.4
44								2.4	2.3	2.1
46									2.0	1.9

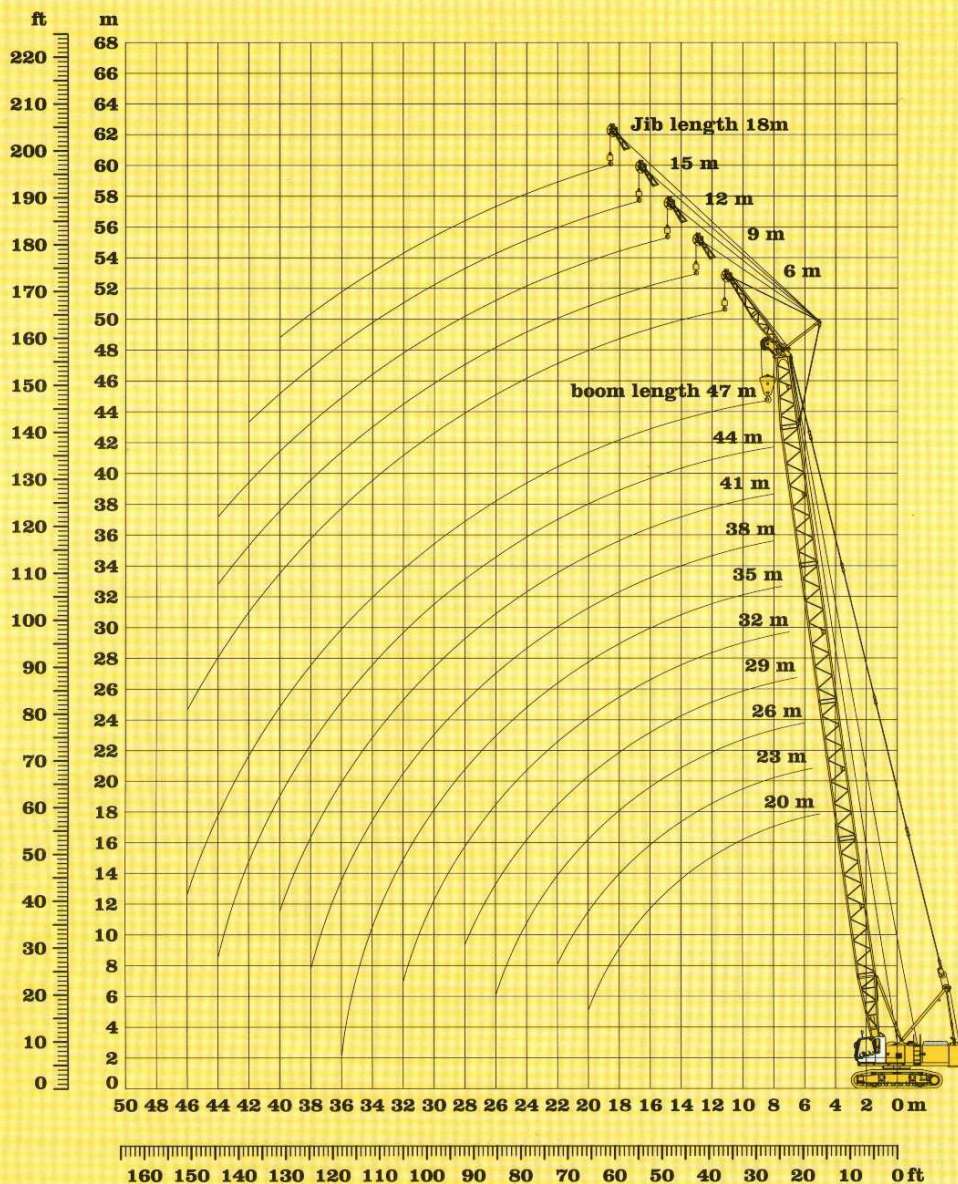
Capacity in metric tons for jib lengths 9 m.										
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m
Radius in (m)	t	t	t	t	t	t	t	t	t	t
8										
9										
10	15.5	15.7								
11	15.2	15.4	15.6	15.7						
12	14.8	15.1	15.3	15.4	15.6	15.5	15.5			
13	14.3	14.7	14.9	15.1	15.2	15.0	15.2	15.0	14.5	
14	13.9	14.3	14.6	14.8	14.9	14.5	14.9	14.7	14.3	12.5
15	13.5	13.9	14.2	14.4	14.3	14.0	14.1	14.0	13.9	12.3
16	13.0	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.1
17	12.5	12.3	12.2	12.2	12.0	12.0	11.8	11.8	11.6	11.6
18	11.5	11.4	11.3	11.2	11.1	11.0	11.0	10.8	10.8	10.6
19	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.9
20	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1
22	8.8	8.7	8.6	8.5	8.3	8.3	8.1	8.1	8.0	7.9
24		7.7	7.5	7.5	7.4	7.3	7.2	7.1	6.9	6.9
26			6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0
28				5.9	5.8	5.7	5.6	5.5	5.4	5.3
30					5.2	5.1	5.0	4.9	4.8	4.7
32						4.6	4.5	4.4	4.3	4.2
34							4.0	3.9	3.8	3.7
36								3.5	3.4	3.3
38									3.0	2.9
40										2.5
42										

Capacity in metric tons for jib lengths 15 m.										
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m
Radius in (m)	t	t	t	t	t	t	t	t	t	t
12										
13	10.5									
14	10.1	10.3	10.4							
15	9.7	9.9	10.1	10.2	9.9	10.0				
16	9.2	9.5	9.8	9.9	9.6	9.8	9.5	9.4		
17	8.8	9.1	9.4	9.6	9.3	9.7	9.4	9.3	8.7	7.8
18	8.4	8.8	9.1	9.3	9.1	9.5	9.2	9.1	8.6	7.8
19	7.9	8.4	8.8	9.0	8.9	9.3	9.1	9.0	8.6	7.8
20	7.6	8.0	8.4	8.7	8.7	9.1	8.9	8.9	8.5	7.8
22	7.2	7.5	7.7	8.1	8.2	8.5	8.4	8.3	8.2	7.7
24	6.7	7.1	7.4	7.6	7.6	7.4	7.4	7.3	7.2	7.1
26	6.3	6.7	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2
28		6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5
30			5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9
32				5.0	4.8	4.8	4.6	4.6	4.4	4.3
34					4.4	4.3	4.2	4.1	4.0	3.9
36					4.0	3.9	3.8	3.7	3.5	3.4
38						3.5	3.4	3.3	3.2	3.0
40							3.0	2.9	2.8	2.7
42								2.6	2.5	2.4
44									2.2	2.1
46										1.8

Lifting capacities for main boom lengths up to 59 m on request.

Lifting capacities – fixed jib 15° main boom

25.7 t Counterweight + 8 t carbody counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Main boom
- Jib A-frame
- Stay ropes according to jib length
- Jib foot 3 m
- Jib extension 3 m tubular steel
- Jib extension 6 m tubular steel
- Jib head 3 m
- Corresponding hook block optional

Remarks:

1. Same remarks apply as for main boom.
2. The jib can be attached to main boom from 20 m to 47 m.
3. Rated load on jib are only applicable with no load on main boom.

Working ranges - fixed jib 30° main boom

Capacity in metric tons for jib lengths 6 m.											
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
8	15.9	16.0									
9	15.6	15.7	15.7	15.6	15.5						
10	15.2	15.4	15.4	15.5	15.4	15.2	15.0				
11	14.9	15.1	15.2	15.2	15.2	15.1	15.0	14.9			
12	14.7	14.8	14.9	15.0	15.0	14.9	14.8	14.7	14.3	12.8	
13	14.4	14.6	14.7	14.8	14.8	14.7	14.7	14.6	14.2	13.1	
14	14.1	14.3	14.5	14.6	14.6	14.5	14.5	14.4	14.0	13.4	
15	13.9	14.1	14.3	14.3	14.3	14.2	14.1	14.0	13.8	13.1	
16	13.4	13.3	13.2	13.1	13.0	13.0	12.9	12.8	12.7	12.6	
17	12.3	12.2	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	
18	11.4	11.3	11.2	11.2	11.1	11.0	10.9	10.8	10.7	10.6	
19	10.6	10.5	10.4	10.3	10.2	10.2	10.1	10.0	9.9	9.8	
20	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.2	9.1	
22		8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	
24			7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	
26				6.6	6.4	6.4	6.3	6.2	6.1	6.0	
28					5.7	5.6	5.6	5.5	5.4	5.3	
30						5.0	4.9	4.8	4.7	4.6	
32							4.4	4.3	4.2	4.1	
34								3.8	3.7	3.6	
36									3.3	3.2	
38										2.8	
40											
42											
44											

Capacity in metric tons for jib lengths 9 m.											
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
8											
9											
10											
11	11.5	11.6	11.6	11.5							
12	11.2	11.3	11.4	11.4	11.4	11.2					
13	11.0	11.1	11.2	11.2	11.2	11.1	10.9	10.8	10.5		
14	10.7	10.9	11.0	11.0	11.0	11.0	10.7	10.7	10.5	10.3	
15	10.5	10.7	10.8	10.8	10.8	10.8	10.6	10.6	10.6	10.2	
16	10.2	10.4	10.6	10.7	10.7	10.7	10.5	10.5	10.5	10.1	
17	10.0	10.2	10.4	10.5	10.5	10.5	10.4	10.4	10.4	10.0	
18	9.7	10.0	10.2	10.4	10.4	10.4	10.2	10.4	10.3	10.0	
19	9.5	9.8	10.0	10.2	10.3	10.3	10.1	10.2	10.2	9.9	
20	9.3	9.6	9.9	9.8	9.8	9.7	9.6	9.5	9.4	9.3	
22	8.8	8.8	8.7	8.6	8.5	8.4	8.3	8.3	8.2	8.1	
24		7.7	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	
26			6.8	6.7	6.6	6.5	6.5	6.4	6.3	6.2	
28				6.0	5.9	5.8	5.7	5.6	5.5	5.5	
30					5.3	5.2	5.1	5.0	4.9	4.8	
32						4.7	4.6	4.5	4.4	4.3	
34							4.2	4.1	4.0	3.9	
36								3.7	3.6	3.5	
38									3.2	3.1	
40										2.7	
42											2.3
44											

Capacity in metric tons for jib lengths 12 m.											
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
12	9.1	9.1									
13	8.8	9.0	9.0	8.9	8.7						
14	8.5	8.7	8.8	8.8	8.7	8.4	8.3				
15	8.3	8.4	8.6	8.6	8.6	8.4	8.3	8.4	8.1		
16	8.0	8.2	8.3	8.4	8.4	8.3	8.2	8.4	8.1	8.0	
17	7.8	8.0	8.1	8.3	8.3	8.2	8.2	8.3	8.1	7.9	
18	7.5	7.8	8.0	8.1	8.2	8.2	8.1	8.2	8.0	7.8	
19	7.3	7.6	7.8	7.9	8.1	8.1	8.0	8.1	7.9	7.7	
20	7.1	7.3	7.6	7.8	7.9	8.0	7.9	8.0	7.8	7.7	
22	6.8	7.0	7.2	7.4	7.6	7.7	7.7	7.8	7.6	7.5	
24	6.6	6.8	6.9	7.1	7.3	7.4	7.5	7.4	7.4	7.2	
26	6.3	6.5	6.7	6.9	6.8	6.7	6.6	6.6	6.5	6.4	
28		6.3	6.2	6.2	6.1	6.0	5.9	5.8	5.7	5.6	
30			5.6	5.5	5.5	5.4	5.3	5.2	5.1	5.0	
32				5.0	4.9	4.8	4.7	4.6	4.5	4.5	
34					4.4	4.3	4.2	4.1	4.1	4.0	
36						3.9	3.8	3.7	3.6	3.5	
38							3.4	3.3	3.2	3.1	
40								3.0	2.9	2.8	
42									2.5	2.4	
44										2.1	
46											

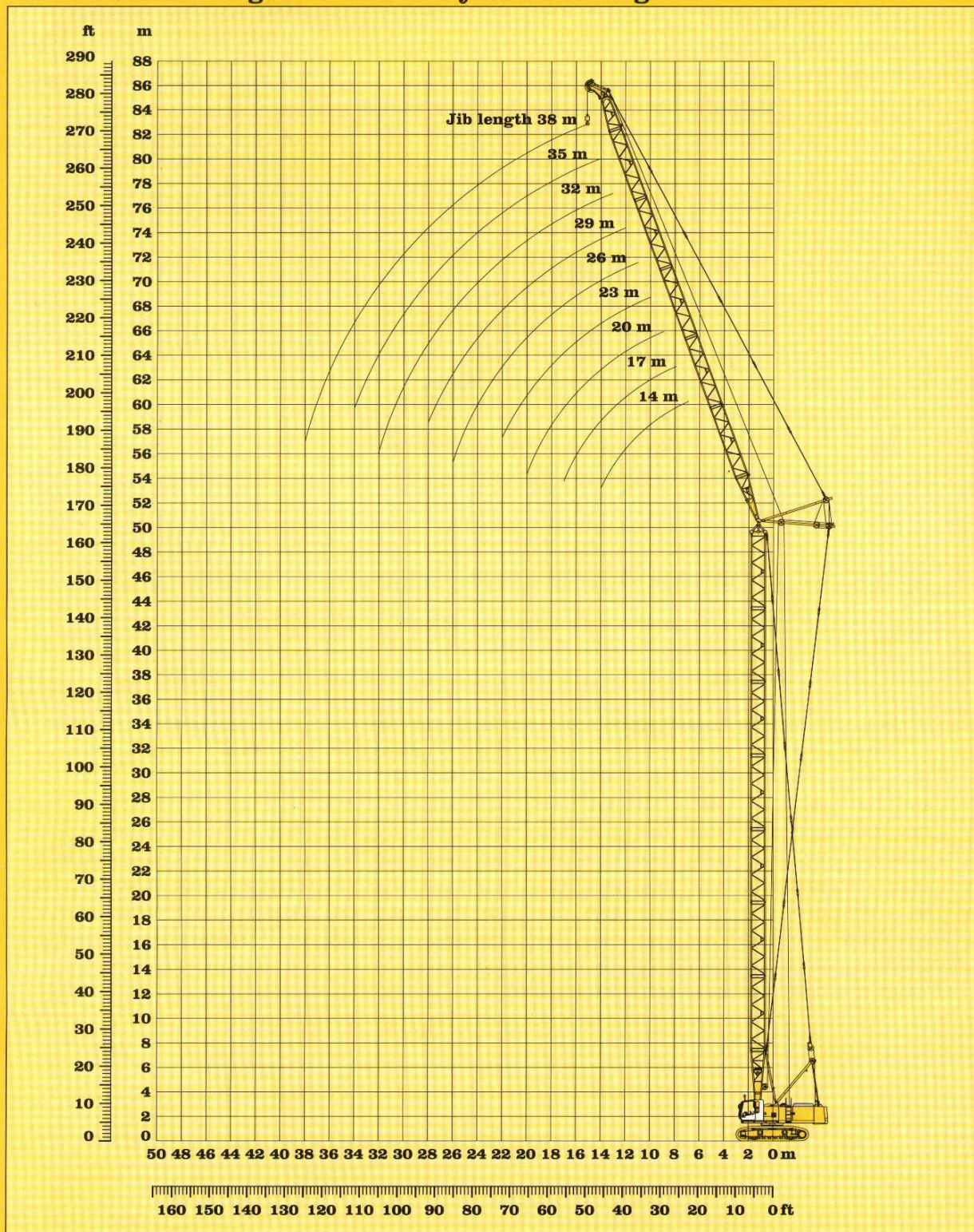
Capacity in metric tons for jib lengths 15 m.											
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
12											
13	7.3										
14	7.3	7.2	7.1								
15	7.1	7.1	7.1	7.0	7.0						
16	6.8	6.9	6.9	7.0	6.9	7.1	7.0	7.1			
17	6.6	6.7	6.8	6.8	6.8	6.8	6.9	7.0	6.6		
18	6.4	6.5	6.6	6.7	6.7	6.7	6.6	7.0	6.7	6.6	
19	6.2	6.4	6.5	6.6	6.6	6.6	6.5	6.9	6.8	6.5	
20	6.0	6.2	6.3	6.5	6.5	6.5	6.5	6.8	6.7	6.5	
22	5.7	5.9	6.0	6.2	6.3	6.3	6.3	6.7	6.5	6.3	
24	5.4	5.6	5.7	5.9	6.0	6.1	6.1	6.5	6.3	6.2	
26	5.2	5.4	5.5	5.6	5.8	5.9	5.9	6.3	6.1	6.1	
28	5.0	5.2	5.3	5.5	5.6	5.7	5.8	6.0	5.9	5.8	
30		5.0	5.2	5.3	5.4	5.5	5.4	5.3	5.2	5.1	
32			5.0	5.1	5.0	4.9	4.8	4.7	4.7	4.6	
34				4.6	4.5	4.4	4.3	4.3	4.2	4.1	
36					4.1	4.0	3.9	3.8	3.7	3.6	
38						3.6	3.5	3.4	3.3	3.2	
40							3.2	3.1	3.0	2.9	
42								2.7	2.6	2.5	
44									2.4	2.3	2.2
46										2.0	1.9

Capacity in metric tons for jib lengths 18 m.											
Boom length	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
15	6.2	6.2									
16	6.1	6.1	6.2	6.1							
17	5.8	5.9	6.0	6.1	6.1	6.0					
18	5.6	5.8	5.9	5.9	5.8	5.9	5.7	5.7	5.7		
19	5.4	5.6	5.7	5.7	5.6	5.6	5.8	5.7	5.7	5.6	
20	5.2	5.4	5.5	5.5	5.5	5.5	5.7	5.6	5.6	5.6	
22	4.9	5.1	5.2	5.2	5.3	5.4	5.5	5.5	5.5	5.5	
24	4.5	4.8	4.9	5.0	5.1	5.2	5.3	5.3	5.5	5.3	
26	4.4	4.5	4.6	4.8	5.0	5.0	5.1	5.2	5.4	5.2	
28	4.2	4.3	4.4	4.6	4.8	4.9	4.9	5.1	5.2	5.1	
30	4.1	4.2	4.3	4.4	4.6	4.7	4.8	5.0	5.1	5.0	
32		4.0	4.1	4.3	4.5	4.5	4.6	4.9	4.8	4.7	
34			3.9	4.0	4.1	4.3	4.4	4.4	4.3	4.2	
36				3.9	4.0	4.1	4.1	4.0	3.9	3.8	
38					3.9	3.8	3.7	3.6	3.5	3.4	
40						3.4	3.4	3.3	3.2	3.1	
42							3.0	2.9	2.8	2.7	
44								2.6	2.5	2.4	
46									2.2	2.1	2.0

Lifting capacities for main boom lengths up to 59 m on request.

Lifting capacities – fixed jib 30° main boom

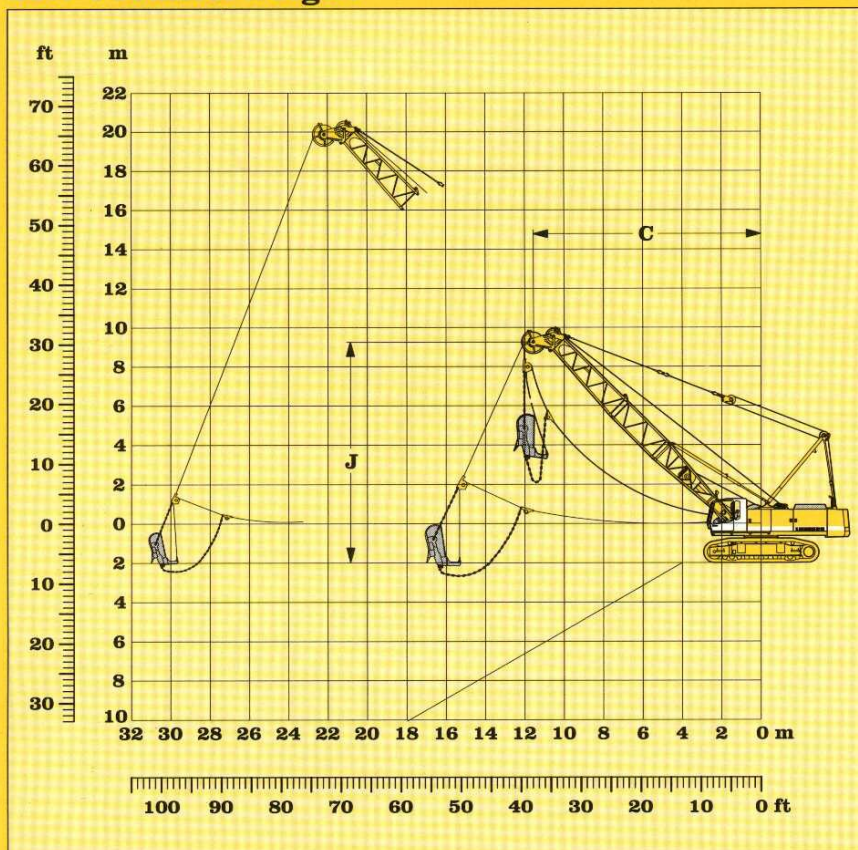
25.7 t Counterweight + 8 t carbody counterweight



Lifting capacities on request!

Working ranges - luffing jib main boom 90°

25.7 t counterweight



The following optional equipment is required for dragline operation:

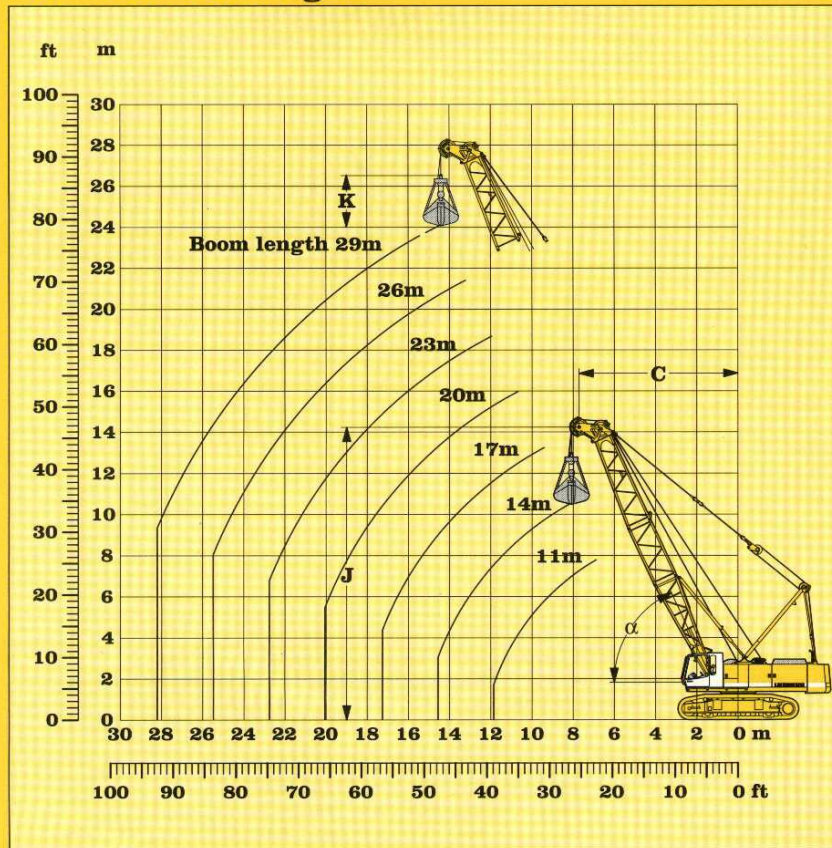
- Second swing drive with free swing
- Boom head 5.5 m with 1 + 1 pulley
- Drag rope should be 2 mm below nominal diameter
- Fair lead
- Ropes
- Dragline bucket

Capacities in metric tons for boom lengths from 14 m to 29 m													Counterweight 25.7 t					
α°	14 m			17 m			20 m			23 m			26 m			29 m		
	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t
45	12.0	11.3	15.8	14.1	13.4	12.6	16.2	15.5	10.4	18.3	17.6	8.7	20.5	19.7	7.4	22.6	21.9	6.3
40	12.8	10.4	14.5	15.1	12.3	11.6	17.4	14.3	9.5	19.6	16.2	7.9	21.9	18.1	6.7	24.2	20.0	5.6
35	13.5	9.5	13.5	15.9	11.2	10.8	18.4	12.9	8.8	20.8	14.6	7.3	23.3	16.4	6.1	25.7	18.1	5.1
30	14.1	8.5	12.7	16.7	10.0	10.1	19.3	11.5	8.3	21.9	13.0	6.8	24.5	14.5	5.7	27.0	16.0	4.8
25	14.6	7.5	12.0	17.3	8.7	9.5	20.0	10.0	7.7	22.7	11.3	6.3	25.4	12.5	5.3	28.2	13.8	4.4

Max. capacities in metric tons do not exceed 75 % of tipping load
Reduced track width for duty cycle operation required.

Dragline equipment

25.7 t counterweight



The following optional equipment is required for clamshell operation:

- Tagline winch
- Corresponding ropes
- Clamshell

Working diagram

C = Radius / dumping radius

J = Height of boom head sheave centre above ground level

K = Length of clamshell (depending on type and capacity of bucket)

Capacities in metric tons for two rope operation, boom lengths from 14 m to 29 m: Counterweight 25.7 t

	14 m			17 m			20 m			23 m			26 m			29 m		
	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t
α°	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	8.1	13.9	14.4	9.4	16.6	14.4	10.7	19.3	14.4	11.9	22.1	13.9	13.2	24.8	12.0	14.5	27.5	10.5
60	9.2	13.4	14.4	10.7	16.0	14.4	12.2	18.6	13.6	13.7	21.2	11.5	15.2	23.8	9.9	16.7	26.4	8.6
55	10.2	12.7	14.4	11.9	15.2	14.1	13.6	17.7	11.7	15.3	20.1	9.9	17.0	22.6	8.4	18.8	25.0	7.3
50	11.1	12.0	14.4	13.0	14.3	12.5	15.0	16.6	10.3	16.9	18.9	8.7	18.8	21.2	7.4	20.8	23.5	6.3
45	12.0	11.3	14.0	14.1	13.4	11.2	16.2	15.5	9.3	18.3	17.6	7.7	20.5	19.7	6.6	22.6	21.9	5.6
40	12.8	10.4	12.9	15.0	12.3	10.3	17.4	14.3	8.4	19.6	16.2	7.0	21.9	18.1	5.9	24.2	20.0	5.0
35	13.5	9.5	12.0	15.9	11.2	9.6	18.4	12.9	7.8	20.8	14.6	6.5	23.3	16.4	5.4	25.7	18.1	4.6
30	14.0	8.5	11.3	16.7	10.0	9.0	19.3	11.5	7.3	21.9	13.0	6.1	24.5	14.5	5.1	27.0	16.0	4.2
25	14.6	7.5	10.7	17.3	8.7	8.4	20.0	10.0	6.8	22.7	11.3	5.6	25.4	12.5	4.7	28.2	13.8	3.9

Max. capacities in metric tons do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches	120 kN
Rope diameter	24 mm
Calc. breaking load	524 kN
1-rope clamshell	9.5 t
2-rope clamshell	14.4 t

Clamshell equipment



Engine

Water cooled, in-line 6 cylinder Liebherr diesel engine, turbocharged with intercooler, model D 926 TI-E, power rating according to ISO 9249, 220 kW (300 hp) at 1800 rpm.

The automatic limiting load control adapts perfectly the power of the main users to the present engine speed. The temperature and engine speed controlled cooling system saves energy and reduces the noise emission. Fuel Tank: 800 l capacity with continuous level indicator and reserve warning.



Hydraulic System

The main pumps are operated by a distributor gearbox. Axial piston displacement pumps work in closed and open circuits supplying oil only when needed (flow control on demand). To minimize peak pressure a automatically working pressure cut off is integrated. This spares pumps and saves energy.

Winch 1 and 2: Axial piston displacement pumps (swash plate design) with 324 l/min. each.

Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 296 l/min.

Swing gear: Axial piston displacement pump (swash plate design) with 296 l/min.

Boom hoist: Axial piston displacement pump (swash plate design) with 296 l/min.

Max. working pressure: 350 bar.

Hydraulic oil tank capacity: 650 l

The cleaning of the hydraulic oil is made through electronically controlled pressure and return filters. Eventual contamination is signaled in the cabin.



Winches

Winch options:

Line pull (nom. load)	120 kN
Rope diameter :	24 mm
Drum diameter :	525 mm
Rope speed	0-60 m/min
Rope capacity 1st layer	45 m

The winches stand out for their compact design and easy assembly.

Propulsion is via a planetary gearbox in oil bath. Load support by the hydraulic system; additional safety factor provided by a spring loaded, multi disc holding brake.

Clutch and braking functions on the free - fall system are provided by a compact designed, low wear and maintenance free multi disc brake.



Noise emission

Special sound proofing results in a very low noise pressure level of 76 dB (A) at 16 m radius.



Equipment

Lattice boom of tubular construction up to 65 m, universal boom head with 2 + 3 rope pulleys.

Jibs and fly jibs of different lengths are available on request.



Swing Drive

Consists of single row ballbearing with external teeth for lower tooth flank pressure, fixed axial piston hydraulic motor, spring loaded and hydraulically released multi disc holding brake, planetary gearbox and pinion.

Free swing with hydraulic moment control reduces wear to a minimum, because rotation moment is sustained through the hydraulic system by the diesel engine.

Swing speed for crane operation:

0 - 0.5 rpm proportional variable.

Swing speed for dragline and clamshell operation:

0 - 4.7 rpm continuously variable, selector for 3 speed ranges to increase swing precision.



Crawler

The track width of the undercarriage is changed hydraulically.

Propulsion through axial piston motor, hydraulically released spring loaded multi disc brake, maintenance free crawler tracks, hydraulic chain tensioning device. 3 - web track shoes.

Drive speed 0 - 1.4 km/h.



Control

The control system - developed and manufactured by Liebherr - is designed to withstand temperature extremes and the many heavy-duty construction tasks for which this crane has been designed. Complete machine operating data are displayed on a high resolution monitor screen. To ensure clarity of the information on display, different levels of data are shown in enlarged lettering and symbols. Control and monitoring of the sensors are also handled by this high technology system. Error indications are automatically displayed on the monitor in English. The crane is equipped with proportional control for all movements, which can be carried out simultaneously.

An option is the so-called "Redundant" control system, which allows restricted operation of the machine in the event of a failure on the electronic base control or its sensors.

The operation of the crane is done with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear.



Boom hoist drive

Twin drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi disc brake.

Max. line pull 2 x 50 kN. Rope diameter: 18 mm

Max. line speed: 45 m/min.

Counterweight lifting with boom hoist.

Technical Description

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