

Technical Data Hydraulic lift crane

LR 853

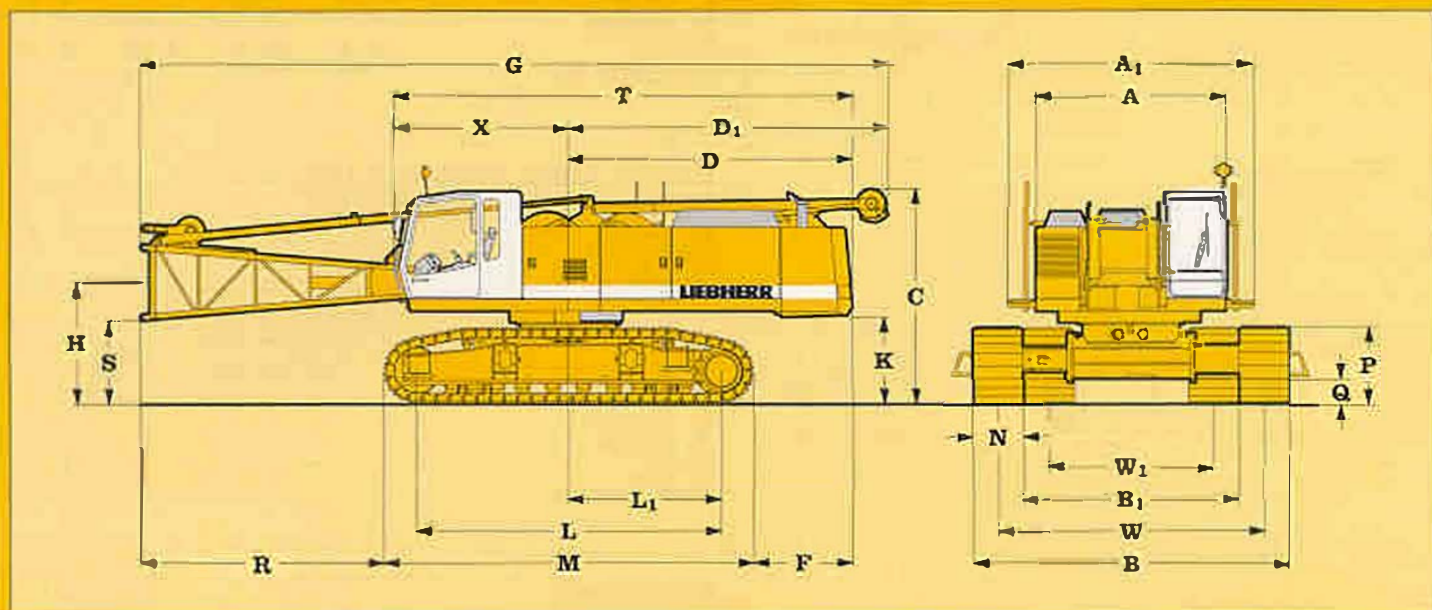
Litronic®

Complies with ANSI B 30.5

MAXIM

1-877-MAX-LIFT

Basic machine with undercarriage



Dimensions

A	Width of superstructure	9' 10"	N	Track shoes	31"
A ₁	Width of superstructure with walkway	11' 3"	W	Track width extended	13' 9"
C	Height of basic machine	11' 2"	W ₁	Track width retracted	8' 6"
D	Tail reach	14' 10"	B	Overall width - crawler extended	16' 5"
	Tail swing radius	15' 0"	B ₁	Overall width - crawler retracted	11'
D ₁	Tail reach A-frame	16' 8"			
F	Distance between rear end of crawler and outside of counterweight	5' 2"			
G	Overall length of superstructure with lowered A-frame	38' 10"			
H	Ground clearance of boom foot pivot	6' 4"			
K	Ground clearance of superstructure	4' 6"			
L	Wheel base (center idler to center tumbler)	15' 11"			
L ₁	Distance from center of rotation to center of tumbler	7' 11"			
M	Length of crawlers	19' 5"			
P	Height of crawlers	4' 2"			
Q	Ground clearance of crawlers	1' 4"			
R	Distance from edge of horizontal boom foot to crawlers	12' 6"			
S	Ground clearance of horizontal boom foot	4' 4"			
T	Length of superstructure	23' 11"			
X	Distance from center of rotation to end of cable	9' 0"			

For duty cycle operation:

W	Track width extended	12' 9"
B	Overall width - crawler extended	15' 5"

Operating Weight and Ground Pressure

The operating weight includes the basic unit, with B7 crawler tracks, 2 main winches 35,300 lbs and 36' boom, consisting of A-frame, 18' boom foot, 18' boom head, 48,500 lbs basic counterweight, 8,200 lbs add. counterweight and 17,600 lbs carbody counterweight.

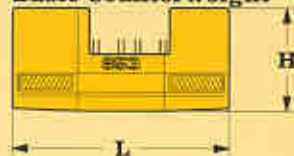
31" triple grouser track shoe 182,800 lbs - 14.2 lbs/sq in

LIEBHERR

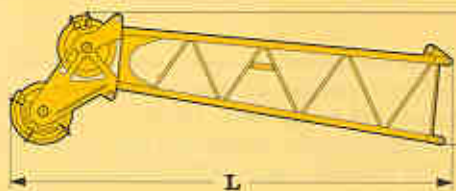
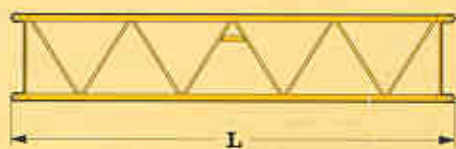
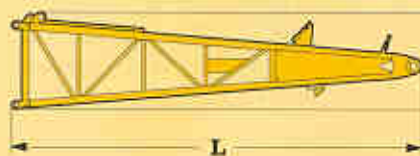
The Better Machine.



Basic Counterweight



Add. Counterweight



Basic machine

with HD undercarriage, in-line 6 cylinder Liebherr diesel engine, 2 x 35,300 lbs winches with A-frame and boom foot
Triple grouser track shoe 31"

L Length	38' 10"
H Height	11' 2"
Width	11' 2"
Weight in lbs	108,500

Counterweight

	Carbody	Basic	Add.	Add.I
L Length	6' 4"	9' 10"	3' 6"	4' 5"
H Height	2' 4"	4' 8"	10"	8"
Width	2' 8"	4' 2"	3' 5"	3' 3"
Weight in lbs	17,600	48,500	4,400	3,800

Pulley block with equalizer

L Length	3' 4"
H Height	2' 2"
Width	1' 8"
Weight in lbs	660

A-frame

L Length	15' 10"
H Height	4' 0"
Width	1' 9"
Weight in lbs	1,800

Boom foot

	Standard
L Length	19' 3"
H Height	4' 7"
Width	4' 7"
Weight in lbs	2,700

Tubular boom extension

	10'	20'	30'
L Length	10' 4"	20' 2"	30' 0"
H Height	4' 0"	4' 0"	4' 0"
Width	4' 7"	4' 7"	4' 7"
Weight in lbs*	900	1,430	2,000

Light boom head

	Crane
L Length	20' 0"
H Height	6' 4"
Width	4' 7"
Weight in lbs*	1,960

Heavy duty boom head

	Crane
L Length	20' 0"
H Height	6' 4"
Width	4' 7"
Weight in lbs*	3,500

*) including boom pendants

Transport dimensions and weights



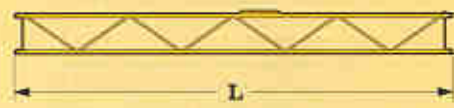
H



H



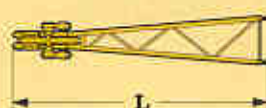
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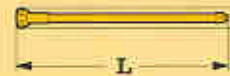
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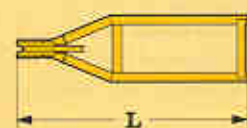
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H



H



H

Jib foot

L Length	10' 0"
H Height	23"
W Width	34"
Weight in lbs	827

Tubular jib extension

	10'	20'
L Length	10' 0"	20' 0"
H Height	22"	22"
W Width	27"	27"
Weight in lbs*	352	595

Jib head

L Length	11' 7"
H Height	3' 4"
W Width	28"
Weight in lbs*	794

A-frame

L Length	10' 0"
H Height	11"
W Width	35"
Weight in lbs	618

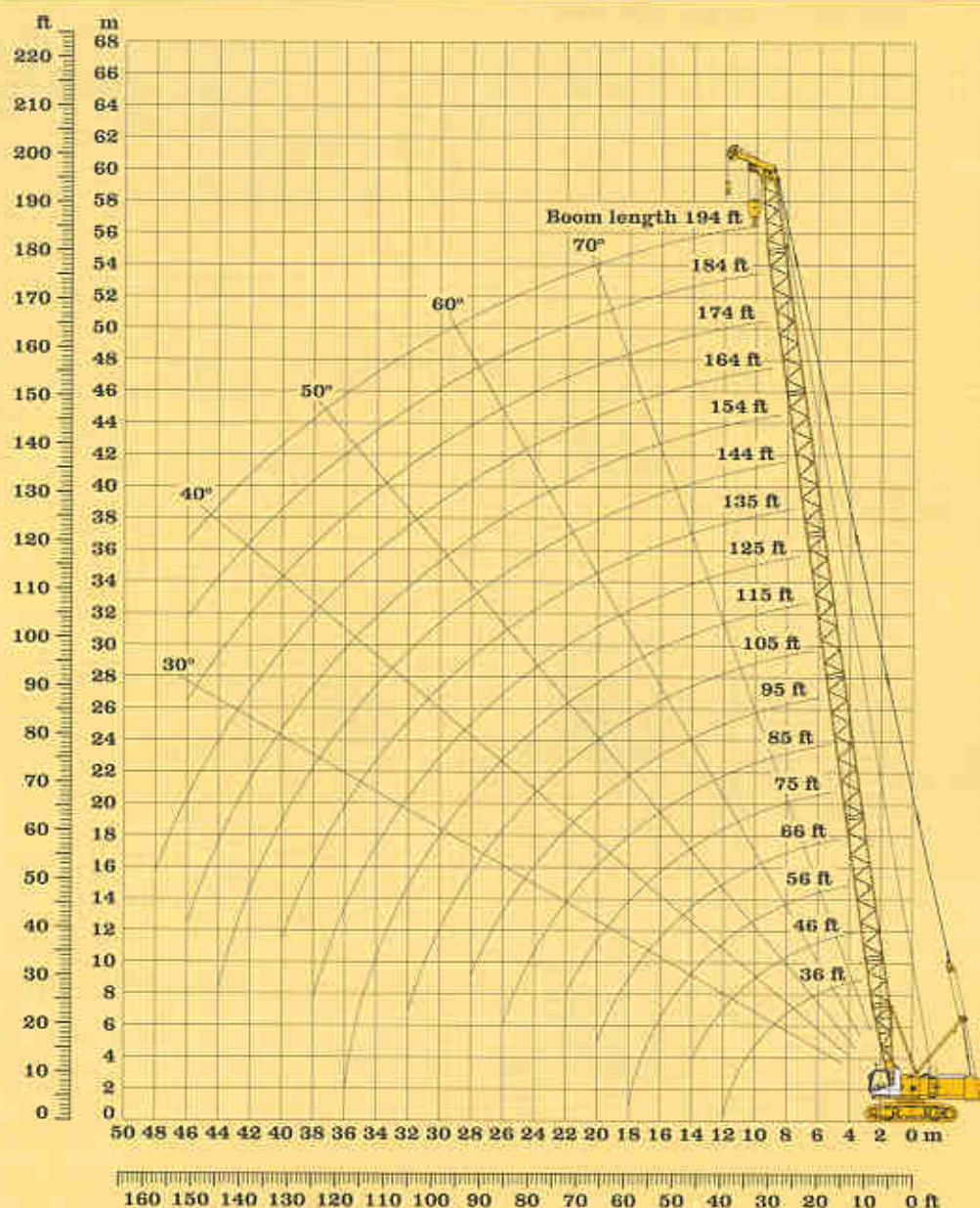
Auxiliary head

L Length	11' 0"
H Height	3' 6"
W Width	36"
Weight in lbs	1,212

*) including boom pendants

Transport dimensions and weights

56,700 lbs basic counterweight + 17,600 lbs carbody counterweight



Auxiliary jib (optional)



Rated load for auxiliary jib.

The rated load for auxiliary jib is equal to that of main boom at the same working radius, but must not exceed maximum rated load of 11,000 lbs

1. The auxiliary jib can be attached to boom of 36 ft to 194 ft long
2. Attachable to main boom top for hoisting light weight load quickly using a single rope. (Never use the main and auxiliary hooks at the same time.)

Rated load for main boom.

When the auxiliary jib is attached, the load to be actually lifted is the rated load minus 1,200 lbs

The following equipment is required:

- Basic machine with corresponding track shoes
- A-frame
- Pulley block
- Boom foot 18ft
- Boom extension 10 ft tubular steel
- Boom extension 20 ft tubular steel
- Boom extension 30 ft tubular steel
- Heavy duty boom head 18 ft with 2 + 3 pulleys
- Pendants according to boom length
- Main winches 2 x 35,300 lbs
- Anti two-block
- Corresponding hook block optional
- LMI cut-off switch
- 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 center of swing.
6. Crane standing on firm, horizontal ground.
7. Indicated values on load chart are affected by off-load operation, wind speeds, slewing load and stop/go movements.
8. The max. lifting capacity of the crane may be reduced depending on the admissible rope safety regulations of each country.

Working ranges main boom - heavy duty head

Capacities in 1000 lbs for boom lengths from 36 ft to 194 ft:								56,700 lbs basic counterweight + 17,600 lbs carbody counterweight										
Boom length	36ft	46ft	56ft	66ft	75ft	85ft	95ft	105ft	115ft	125ft	135ft	144ft	154ft	164ft	174ft	184ft	194ft	
Radius in ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	
11.5	200.0																	
15.0	176.3	166.9	163.6															
20.0	116.9	116.9	116.8	116.8	116.7	116.6	109.9											
25.0	83.4	83.4	83.3	83.2	83.1	83.0	82.8	82.7	82.6									
30.0	64.6	64.5	64.4	64.3	64.1	64.0	63.8	63.7	63.5	63.3	63.2	63.0						
35.0	52.4	52.3	52.2	52.1	52.0	51.8	51.6	51.5	51.3	51.1	50.9	50.7	50.5	45.0				
40.0		43.8	43.8	43.6	43.5	43.3	43.1	42.9	42.7	42.6	42.4	42.2	41.9	41.8	36.6	31.5	28.5	
45.0		37.6	37.5	37.4	37.2	37.0	36.9	36.7	36.5	36.3	36.1	35.8	35.7	35.5	33.9	28.9	27.4	
50.0			32.7	32.6	32.4	32.2	32.1	31.8	31.7	31.4	31.2	31.0	30.8	30.6	30.4	26.8	26.0	
55.0			28.9	28.8	28.6	28.4	28.3	28.0	27.8	27.6	27.4	27.2	27.0	26.8	26.6	24.9	24.7	
60.0				25.7	25.5	25.3	25.2	24.9	24.7	24.5	24.3	24.1	23.9	23.7	23.4	23.0	23.0	
65.0				23.2	23.0	22.8	22.6	22.4	22.2	22.0	21.7	21.5	21.3	21.1	20.9	20.6	20.4	
70.0					20.8	20.6	20.5	20.3	20.0	19.8	19.6	19.4	19.2	18.9	18.7	18.5	18.2	
75.0						18.8	18.6	18.4	18.2	18.0	17.7	17.5	17.3	17.1	16.8	16.6	16.4	
80.0						17.2	17.0	16.8	16.6	16.4	16.1	15.9	15.7	15.5	15.3	15.0	14.8	
85.0						15.8	15.6	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.8	13.6	13.4	
90.0							14.4	14.2	14.0	13.8	13.5	13.3	13.1	12.9	12.6	12.4	12.2	
95.0								13.1	12.9	12.7	12.4	12.2	12.0	11.8	11.5	11.3	11.1	
100.0								12.1	11.9	11.7	11.5	11.3	11.0	10.8	10.6	10.3	10.0	
105.0									11.1	10.9	10.6	10.5	10.2	9.9	9.7	9.4	9.1	
110.0									10.3	10.1	9.8	9.6	9.4	9.1	8.8	8.5	8.3	
115.0										9.4	9.1	8.9	8.6	8.3	8.1	7.8	7.5	
120.0										8.7	8.5	8.2	7.9	7.6	7.4	7.1	6.8	
125.0											7.8	7.5	7.3	7.0	6.7	6.4	6.2	
130.0												7.2	7.0	6.7	6.4	6.2	5.9	
135.0														6.2	5.9	5.6	5.3	
140.0															5.7	5.4	5.1	
145.0																5.2	4.9	
150.0																	4.8	
155.0																		
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175.0																		
180.0																		
185.0																		
190.0																		

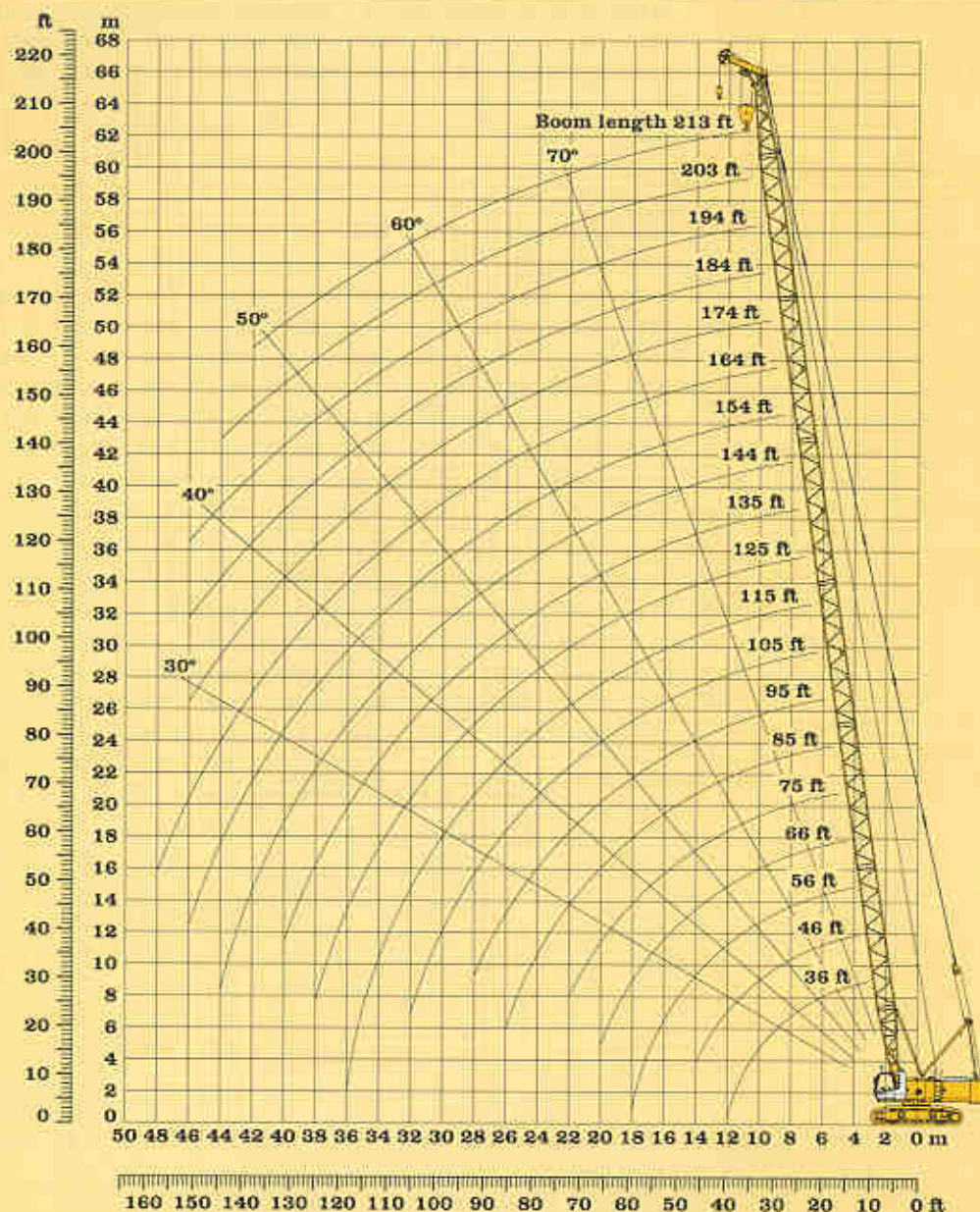
The parts of line required to lift the loads of the above chart is shown on a decal in the operator's cab.

Optimal boom configuration for boom lengths between 36 ft and 194 ft:																		
	Length	Amount of boom extensions																
Boom foot	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom extension	10 ft		1			1			1			1			1			1
Boom extension	20 ft			1			1			1			1			1		
Boom extension	30 ft				1	1	1	2	2	2	3	3	3	4	4	4	5	5
Boom head	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (ft)		36	46	56	66	75	85	95	105	115	125	135	144	154	164	174	184	194

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

Load diagram main boom - heavy duty head

56,700 lbs basic counterweight + 17,600 lbs carbody counterweight



Auxiliary jib (optional)



Rated load for auxiliary jib.

The rated load for auxiliary jib is equal to that of main boom at the same working radius, but must not exceed maximum rated load of 11,000 lbs

1. The auxiliary jib can be attached to boom of 36 ft to 213 ft long
2. Attachable to main boom top for hoisting light weight load quickly using a single rope.
(Never use the main and auxiliary hooks at the same time.)

Rated load for main boom.

When the auxiliary jib is attached, the load to be actually lifted is the rated load minus 1,200 lbs

The following equipment is required:

- Basic machine with corresponding track shoes
- A-frame
- Pulley block
- Boom foot 18ft
- Boom extension 10 ft tubular steel
- Boom extension 20 ft tubular steel
- Boom extension 30 ft tubular steel
- Light boom head 18 ft with 2 + 3 pulleys
- Pendants according to boom length
- Main winches 2 x 35,300 lbs
- Anti two-block
- Corresponding hook block optional
- LMI cut-off switch
- 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° 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 depending on the admissible rope safety regulations of each country.

Working ranges main boom - light head

Capacities in 1000 lbs for boom lengths from 36ft to 213ft:									56,700 lbs basic counterweight + 17,600 lbs carbody counterweight										
Boom length	36ft	46ft	56ft	66ft	75ft	85ft	95ft	105ft	115ft	125ft	135ft	144ft	154ft	164ft	174ft	184ft	194ft	203ft	213ft
Radius in ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs
11.5	70.6																		
15.0	70.6	70.6	70.6																
20.0	70.6	70.6	70.6	70.6	70.6	70.6	70.6												
25.0	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6										
30.0	65.4	65.3	65.2	65.1	65.0	64.8	64.6	64.5	64.3	64.1	63.9	63.4							
35.0	53.3	53.2	53.1	53.0	52.8	52.6	52.4	52.3	52.1	51.9	51.7	51.5	51.5	45.0					
40.0		44.7	44.6	44.5	44.3	44.1	43.9	43.7	43.5	43.3	43.1	43.0	42.9	42.2	36.6	31.6	28.5	25.5	
45.0		38.4	38.4	38.2	38.0	37.9	37.7	37.5	37.3	37.0	36.8	36.6	36.6	36.4	33.9	28.9	27.4	24.9	20.2
50.0			33.6	33.4	33.2	33.0	32.9	32.6	32.4	32.2	32.0	31.8	31.8	31.6	31.4	26.9	26.0	23.8	19.4
55.0			29.8	29.6	29.4	26.2	29.0	28.8	28.6	28.4	28.7	28.0	28.0	27.7	27.5	24.9	24.7	22.7	18.5
60.0				26.6	26.3	26.1	26.0	25.7	25.5	25.2	25.1	24.8	24.9	24.6	24.4	23.0	23.3	21.6	17.7
65.0				24.0	23.8	23.6	23.4	23.1	23.0	22.7	22.5	22.3	22.3	22.1	21.8	21.1	21.4	20.5	16.9
70.0					21.6	21.5	21.3	21.0	20.8	20.6	20.3	20.1	20.1	19.9	19.7	19.2	19.2	19.2	16.1
75.0						19.6	19.4	19.2	19.0	18.7	18.5	18.3	18.3	18.1	17.8	17.6	17.4	17.3	15.3
80.0						18.0	17.8	17.6	17.4	17.1	16.9	16.7	16.7	16.5	16.2	16.0	15.8	15.7	14.5
85.0						16.6	16.4	16.2	16.0	15.7	15.5	15.3	15.3	15.1	14.8	14.6	14.4	14.3	13.7
90.0							15.2	15.0	14.8	14.5	14.3	14.1	14.1	13.8	13.6	13.4	13.1	13.1	12.9
95.0								13.9	13.7	13.4	13.2	13.0	13.0	12.8	12.5	12.3	12.1	12.0	11.8
100.0								12.9	12.8	12.5	12.2	12.0	12.0	11.8	11.6	11.3	11.1	11.0	10.8
105.0									11.8	11.6	11.4	11.1	11.2	10.9	10.7	10.5	10.2	10.1	9.9
110.0									11.1	10.8	10.6	10.3	10.4	10.1	9.9	9.7	9.4	9.4	9.1
115.0										10.1	9.8	9.6	9.7	9.4	9.2	9.0	8.7	8.6	8.3
120.0										9.5	9.2	9.0	9.0	8.8	8.5	8.3	8.0	7.9	7.6
125.0											8.6	8.4	8.4	8.2	7.9	7.6	7.3	7.2	7.0
130.0											8.1	7.8	7.9	7.6	7.3	7.0	6.7	6.7	6.4
135.0														7.4	7.1	6.8	6.5	6.2	5.9
140.0														6.9	6.6	6.3	6.0	5.7	5.4
145.0														6.4	6.1	5.8	5.5	5.2	4.9
150.0														5.9	5.7	5.4	5.1	4.8	4.5
155.0															5.3	5.0	4.7	4.4	4.1
160.0															4.9	4.6	4.3	4.0	3.7
165.0																4.3	4.0	3.7	3.4
170.0																3.9	3.6	3.3	3.0
175.0																	3.3	3.0	2.7
180.0																	3.0	2.7	2.4
185.0																		2.4	2.1
190.0																		2.1	1.9

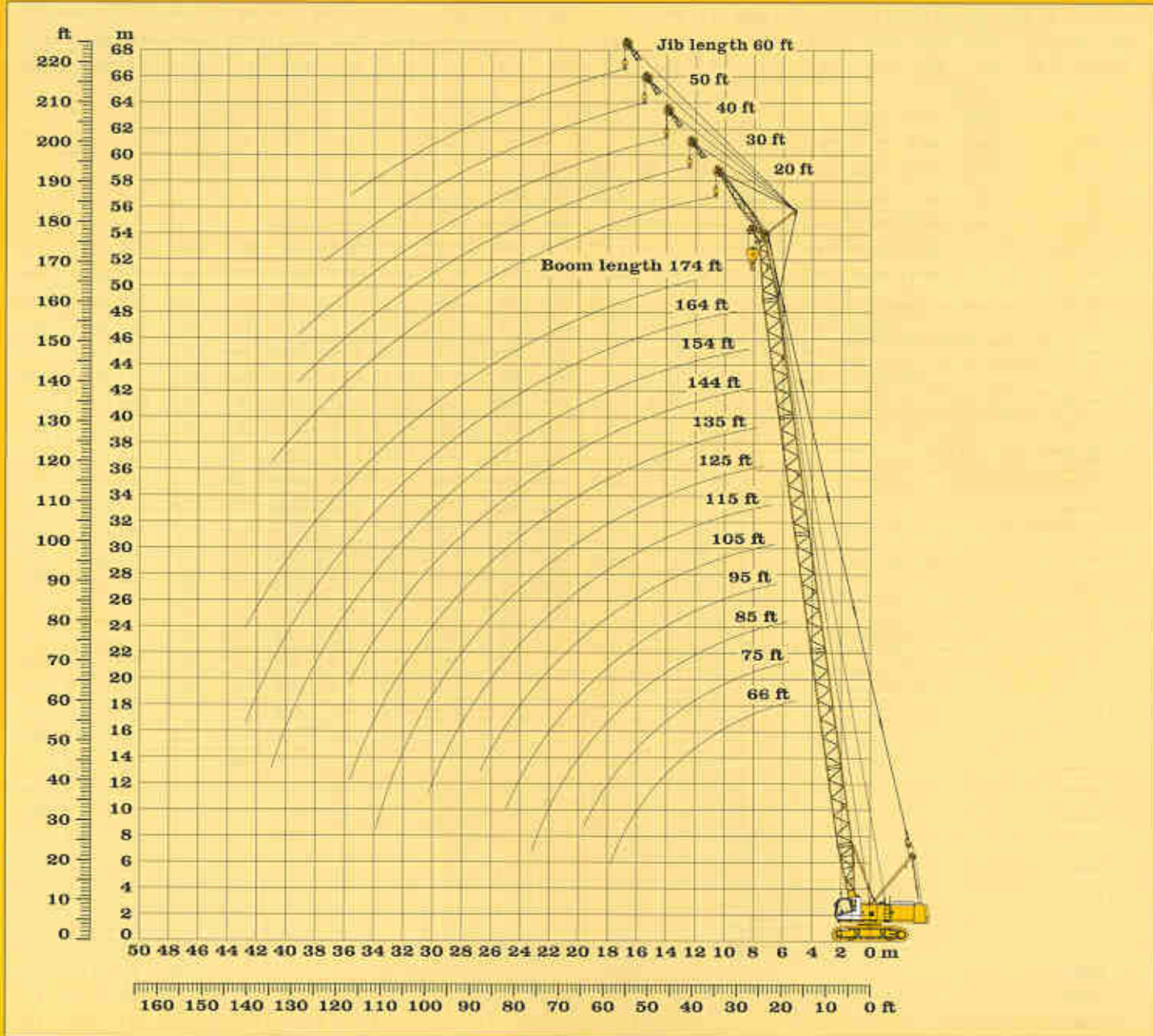
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Optimal boom configuration for boom lengths between 36 ft and 213 ft:																				
	Length	Amount of boom extensions																		
Boom foot	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom extension	10 ft		1			1			1			1			1			1		
Boom extension	20 ft			1			1			1			1			1			1	1
Boom extension	30 ft				1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6
Boom head	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (ft)		36	46	56	66	75	85	95	105	115	125	135	144	154	164	174	184	194	203	213

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

Load diagram main boom - light head

56,700 lbs basic counterweight + 17,600 lbs carbody counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Main boom
- Light boom head
- Jib A-frame
- Stay ropes according to jib length
- Jib foot 10 ft
- Jib extension 10 ft tubular steel
- Jib extension 20 ft tubular steel
- Jib head 10 ft
- Corresponding hook block optional

Remarks:

1. Same remarks apply as for main boom.
2. The jib can be attached to main boom from 66 ft to 174 ft.
3. Rated load on jib is only applicable with no load on main boom.

**Working ranges - fixed jib 15°
main boom - light head**



Jib length 50 ft

[illegible]

- wide track
- 56,700 lbs basic counterweight
- 17,600 lbs carbody counterweight
- Above lift chart is for reference only

Load diagram - fixed jib 15° main boom light head

Jib length 60 ft

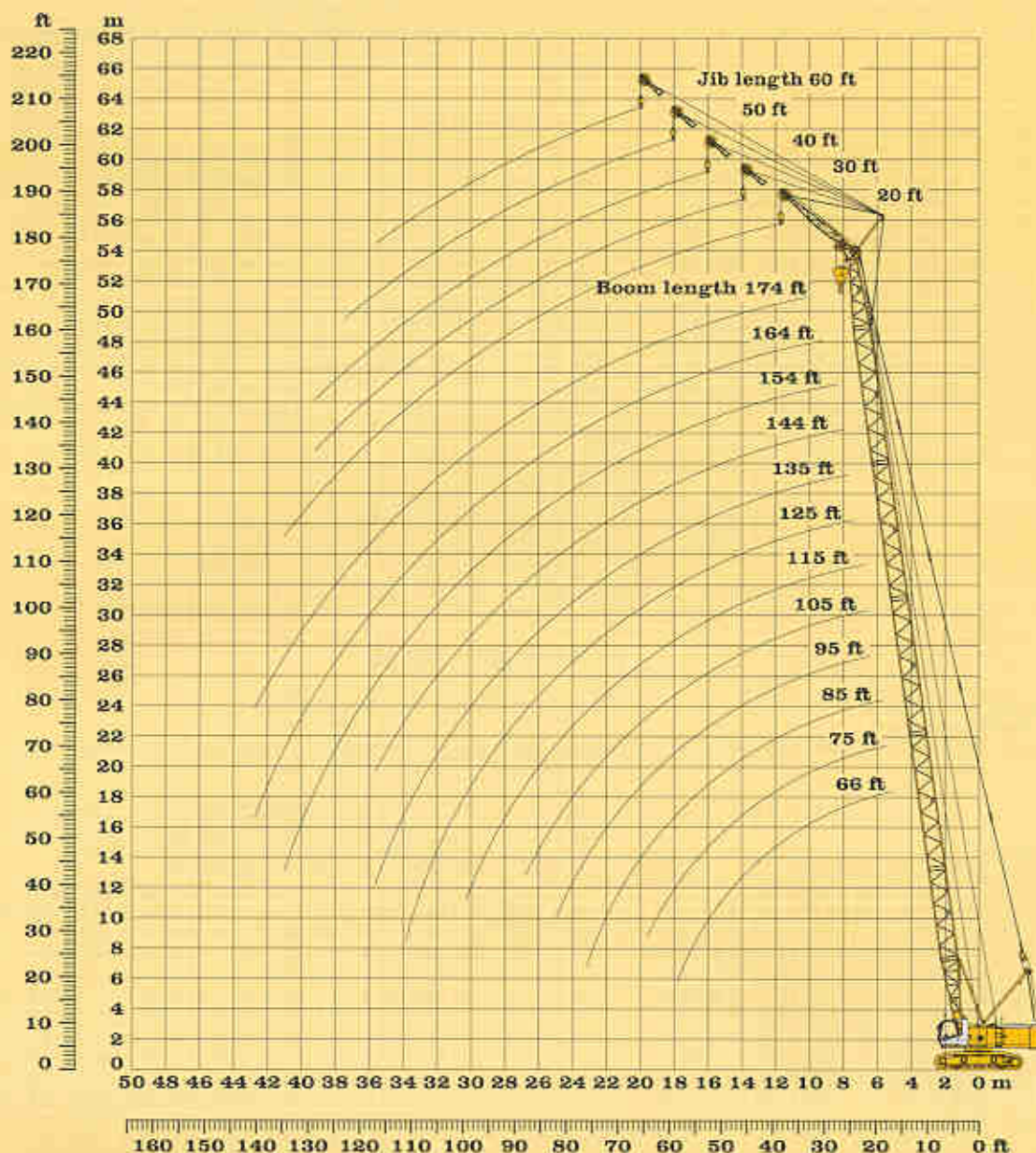
Capacity in 1000 lbs for jib length 60 ft													
Radius in ft	Boom length in ft												
	66	75	85	95	105	115	125	135	144	154	164	174	
35.0	19.5												
40.0	18.5	18.8	18.7	18.4	18.1								
45.0	18.1	18.2	18.1	18.0	17.7	17.4	17.1						
50.0	17.4	17.5	17.6	17.5	17.3	16.8	16.6	15.7	14.9	13.8			
55.0	16.6	16.9	17.0	17.1	16.9	16.4	16.3	15.3	14.8	13.8	12.9	12.0	
60.0	15.9	16.2	16.5	16.6	16.5	16.1	16.2	15.2	14.6	13.8	12.7	11.6	
65.0	15.1	15.6	15.9	16.1	16.0	15.8	16.0	14.8	14.5	13.8	12.7	11.6	
70.0	14.5	14.9	15.4	15.6	15.6	15.5	15.7	14.7	14.3	13.8	12.7	11.6	
75.0	13.8	14.4	14.8	15.0	15.1	15.1	15.3	14.5	14.2	13.7	12.6	11.6	
80.0	13.1	13.8	14.2	14.6	14.7	14.8	15.0	14.3	14.0	13.6	12.6	11.5	
85.0	12.5	13.2	13.7	14.0	14.2	14.5	14.7	14.1	13.9	13.4	12.4	11.4	
90.0	11.9	12.6	13.2	13.6	13.7	14.2	14.3	12.9	13.7	13.2	12.2	11.3	
95.0	11.3	12.0	12.7	13.1	13.3	13.4	13.2	11.9	12.7	12.7	12.0	11.2	
100.0		11.5	12.1	12.7	12.6	12.4	12.2	10.9	11.7	11.6	11.4	11.0	
105.0		10.9	11.7	12.0	11.7	11.5	11.2	10.1	10.7	10.7	10.4	10.1	
110.0			11.1	11.1	10.9	10.6	10.4	9.3	9.8	9.8	9.5	9.3	
115.0				10.4	10.1	9.8	9.6	8.6	9.0	9.0	8.7	8.5	
120.0				7.8	9.4	9.1	8.9	7.8	8.3	8.3	8.0	7.7	
125.0					8.7	8.5	8.2	7.3	7.7	7.6	7.3	7.1	
130.0						7.9	7.6	6.7	7.1	7.0	6.7	6.5	
135.0							7.1	6.2	6.5	6.4	6.2	5.9	
140.0							6.5	5.8	5.9	5.9	5.6	5.4	
145.0									5.5	5.4	5.2	4.9	
150.0									5.0	5.0	4.7	4.4	
155.0										4.6	4.3	4.0	
160.0										4.2	3.9	3.6	
165.0											3.5	3.3	
170.0											3.2	2.9	
175.0											1.9	2.6	
180.0												2.3	
185.0												2.0	

Load charts are calculated based on

- wide track
- 56,700 lbs basic counterweight
- 17,600 lbs carbody counterweight
- Above lift chart is for reference only

Load diagram - fixed jib 15° main boom light head

56,700 lbs basic counterweight + 17,600 lbs carbody counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Main boom
- Light boom head
- Jib A-frame
- Stay ropes according to jib length
- Jib foot 10 ft
- Jib extension 10 ft tubular steel
- Jib extension 20 ft tubular steel
- Jib head 10 ft
- Corresponding hook block optional

Remarks:

1. Same remarks apply as for main boom.
2. The jib can be attached to main boom from 66 ft to 174 ft.
3. Rated load on jib is only applicable with no load on main boom.

Working ranges - fixed jib 30° main boom light head

Jib length 30 ft

[illegible][illegible]

Jib length 50 ft

Capacity in 1000 lbs for jib length 40 ft													
Radius in ft	Boom length in ft												
	66	75	85	95	105	115	125	135	144	154	164	174	
30.0						lbs							
35.0													
40.0	20.0	20.0	19.9										
45.0	19.0	19.3	19.5	19.5	19.1								
50.0	18.1	18.5	18.7	18.9	18.8	18.4	18.2	18.5	17.9				
55.0	17.3	17.7	18.1	18.3	18.4	18.2	18.0	18.2	17.8	17.5			
60.0	16.5	17.0	17.4	17.7	18.0	19.0	17.8	17.9	17.6	17.2	17.1	15.2	
65.0	15.7	16.3	16.8	17.1	17.5	17.7	17.5	17.7	17.3	16.9	16.9	14.8	
70.0	15.3	15.7	16.1	16.5	16.9	17.2	17.2	17.4	16.9	16.6	16.5	14.6	
75.0	14.8	15.2	15.6	16.0	16.4	16.7	16.8	17.1	16.6	16.2	16.1	14.5	
80.0	14.3	14.8	15.2	15.5	15.9	16.2	16.4	16.8	16.2	15.7	15.6	14.3	
85.0	13.9	14.4	14.8	15.2	15.5	15.8	15.7	15.5	15.4	15.1	15.1	13.8	
90.0		14.0	14.4	14.8	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.3	
95.0			14.1	13.9	13.7	13.5	13.3	13.1	12.9	12.9	12.7	12.5	
100.0				12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4	
105.0				11.9	11.7	11.5	11.3	11.1	10.9	10.9	10.6	10.4	
110.0					10.9	10.7	10.5	10.2	10.0	10.0	9.7	9.5	
115.0						9.9	9.7	9.4	9.2	9.2	8.9	8.7	
120.0							8.9	8.7	8.4	8.4	8.2	7.9	
125.0							8.3	8.0	7.7	7.7	7.5	7.3	
130.0								7.4	7.1	7.1	6.9	6.6	
135.0									6.5	6.5	6.3	6.3	
140.0									6.0	6.0	5.7	5.5	
145.0										5.5	5.2	5.0	
150.0											4.8	4.5	
155.0												4.1	
160.0												3.7	
165.0													

[illegible]

- wide track
- 56,700 lbs basic counterweight
- 17,600 lbs carbody counterweight
- Above lift chart is for reference only

Load diagram - fixed jib 30° main boom light head

Jib length 60 ft

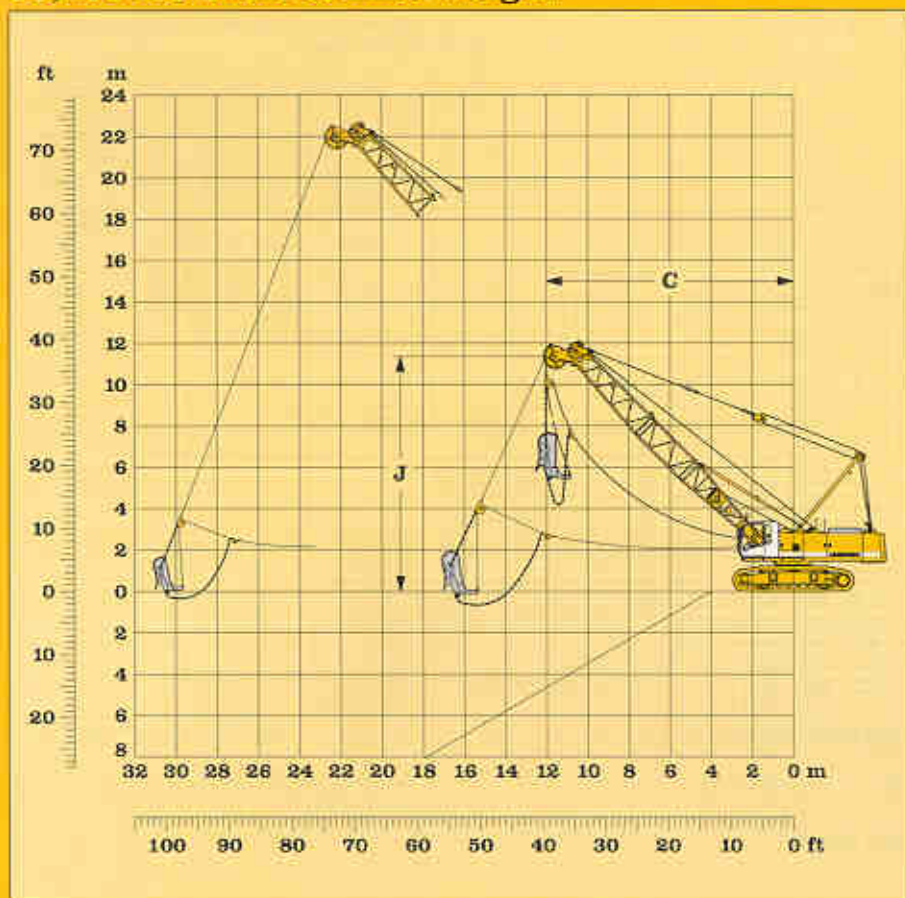
Capacity in 1000 lbs for jib length 60 ft													
Radius in ft	Boom length in ft												
	66	75	85	95	105	115	125	135	144	154	164	174	
35.0													
40.0													
45.0													
50.0	13.6	13.6											
55.0	12.9	13.2	13.4	13.4									
60.0	12.2	12.6	12.8	12.8	12.6	12.8	12.6	12.5	12.5				
65.0	11.6	12.0	12.2	12.2	12.2	12.3	12.6	12.4	12.3	12.4			
70.0	11.0	11.5	11.7	11.7	11.9	11.9	12.3	12.2	12.2	12.2	11.7	11.3	
75.0	10.4	10.9	11.1	11.3	11.6	11.6	11.9	11.9	12.1	12.0	11.5	11.1	
80.0	9.9	10.4	10.6	10.9	11.3	11.3	11.5	11.7	12.0	11.7	11.4	11.0	
85.0	9.7	9.9	10.1	10.6	10.9	11.1	11.3	11.5	11.8	11.5	11.2	11.0	
90.0	9.4	9.7	9.8	10.2	10.6	10.8	11.0	11.3	11.6	11.3	11.1	11.0	
95.0	9.1	9.4	9.5	9.9	10.3	10.5	10.7	11.1	11.4	11.1	10.8	10.8	
100.0	8.8	9.2	9.3	9.6	10.1	10.3	10.5	10.9	11.1	10.0	10.6	10.5	
105.0	8.6	8.9	9.1	9.4	9.8	10.0	10.2	10.7	10.9	10.8	10.4	10.1	
110.0		8.6	8.9	9.2	9.5	9.8	10.0	10.5	10.4	10.3	10.1	9.7	
115.0			8.7	8.9	9.3	9.5	9.8	9.8	9.5	9.5	9.3	9.1	
120.0				8.7	9.0	9.3	9.3	9.0	8.7	8.7	8.5	8.3	
125.0				8.5	8.8	8.8	8.6	8.3	8.1	8.1	7.8	7.6	
130.0					8.4	8.2	7.9	7.7	7.4	7.4	7.2	7.0	
135.0						7.6	7.3	7.1	6.8	6.8	6.6	6.4	
140.0						7.0	6.8	6.5	6.3	6.3	6.0	5.8	
145.0							6.3	6.0	5.8	5.8	5.5	5.3	
150.0								5.5	5.3	5.3	5.1	4.8	
155.0								5.1	4.8	4.8	4.6	4.4	
160.0									4.4	4.4	4.2	4.0	
165.0										4.0	3.8	3.6	
170.0											3.4	3.2	
175.0											3.1	2.8	
180.0												2.5	
185.0													2.2

Load charts are calculated based on

- wide track
- 56,700 lbs basic counterweight
- 17,600 lbs carbody counterweight
- Above lift chart is for reference only

Load diagram - fixed jib 15° main boom light head

56,700 lbs basic counterweight



The following optional equipment is required for dragline operation:

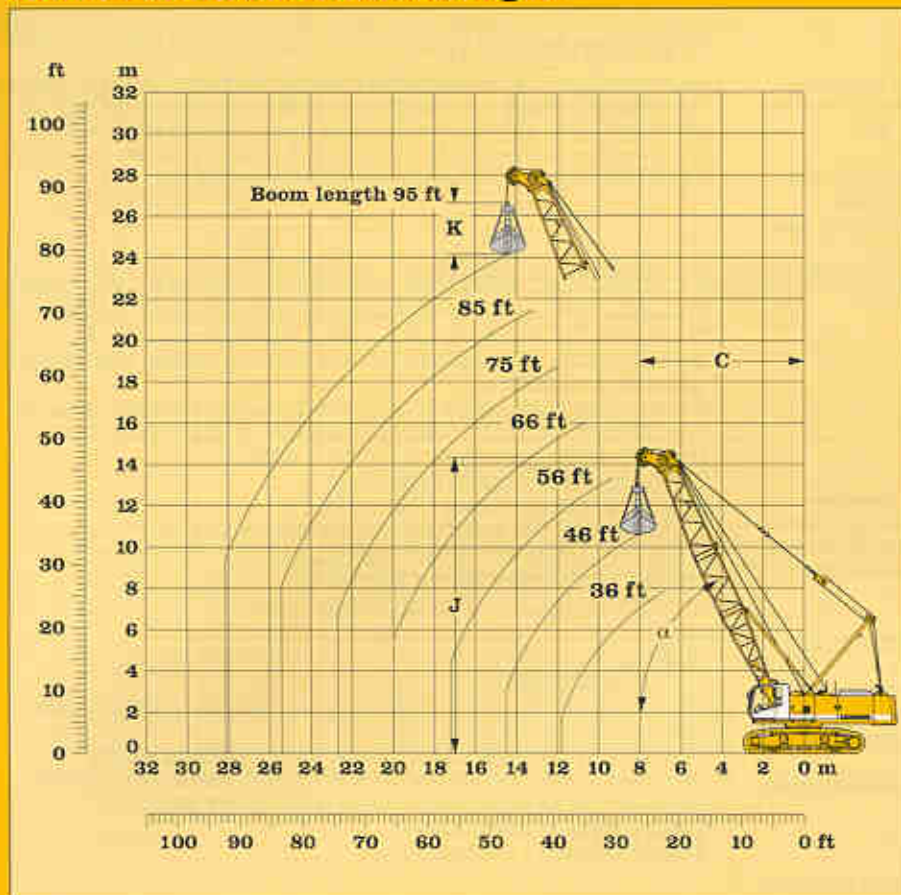
- Second swing drive with free swing
- Heavy duty boom head 18 ft with 1 + 1 sheaves
- Drag rope should be 2 mm below nominal diameter
- Fair lead
- Ropes
- Dragline bucket

Capacities in 1000 lbs for boom lengths from 46ft (14m) to 96ft (26m)												53,100 lbs basic counterweight						
	46ft (14m)			56ft (17m)			66ft (20m)			76ft (23m)			86ft (26m)			96ft (29m)		
	C	J		C	J		C	J		C	J		C	J		C	J	
Boom angle	ft	ft	t	ft	ft	t	ft	ft	t	ft	ft	t	ft	ft	t	ft	ft	t
45	39.4	37.1	34.8	46.3	44.0	27.7	53.2	51.0	22.9	60.0	57.9	19.1	67.3	64.7	16.3	74.2	72.0	13.9
40	42.0	34.1	32.0	49.6	40.4	25.6	57.1	47.0	20.9	64.4	53.2	17.4	72.0	59.4	14.8	79.5	65.7	12.3
35	44.3	31.2	29.7	52.2	36.9	23.8	60.4	42.4	19.4	68.3	48.0	16.0	76.5	53.9	13.4	84.4	59.4	11.2
30	46.3	28.0	28.0	54.9	33.0	22.3	63.4	37.9	18.3	72.0	42.8	15.0	80.4	47.7	12.6	88.7	52.6	10.6
25	48.0	24.7	26.4	56.9	28.6	20.9	65.7	33.0	16.9	74.6	37.1	13.9	83.4	41.0	11.7	92.6	45.3	9.7
Content of dragline bucket																		
cu.yd.	2 ¹ / ₂			2 ¹ / ₂			2 ¹ / ₂			2 ¹ / ₂			2 ¹ / ₂			2		
m ³	1.9			1.9			1.9			1.9			1.9			1.5		

Max. capacities do not exceed 75 % of tipping load
 Reduced track width for duty cycle operation required.
 Bucket size is limited by safety factors of standard ropes.

Dragline equipment

56,700 lbs basic counterweight



The following optional equipment is required for clamshell operation:

- Tagline winch
- Corresponding ropes
- Clamshell
- Heavy duty boom head

Working diagram

C = Radius / dumping radius

J = Height of boom head sheave center above ground level

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

Capacities in 1000 lbs for two rope operation, boom lengths from 46ft - 95ft:												53,100 lbs basic counterweight						
Boom angle	46ft (14m)			56ft (17m)			66ft (20m)			76ft (23m)			86ft (26m)			96ft (29m)		
	C ft	J ft	lbs	C ft	J ft	lbs	C ft	J ft	lbs	C ft	J ft	lbs	C ft	J ft	lbs	C ft	J ft	lbs
65	26.7	45.7	31.7	31.0	54.5	31.7	35.1	63.4	31.7	39.0	72.6	30.6	43.4	81.4	26.4	47.7	90.3	23.1
60	30.2	44.0	31.7	35.1	52.6	31.7	40.0	61.0	30.0	45.0	69.7	25.3	50.0	78.1	21.8	54.9	86.7	18.9
55	33.5	41.8	31.7	39.0	50.0	31.0	44.7	58.1	25.8	50.2	66.0	21.8	55.9	74.2	18.5	61.8	82.0	16.1
50	36.5	39.4	31.7	42.8	47.0	27.5	49.2	54.5	22.7	55.5	62.0	19.1	61.8	69.7	16.3	68.3	77.1	13.9
45	39.4	37.1	30.8	46.3	44.0	24.7	53.2	51.0	20.5	60.0	57.9	16.9	67.3	64.7	14.5	74.2	72.0	12.3
40	42.0	34.1	28.4	49.2	40.4	22.7	57.1	47.0	18.5	64.4	53.2	15.4	72.0	59.4	13.0	79.5	65.7	11.0
35	44.3	31.2	26.4	52.2	36.9	21.1	60.4	42.4	17.2	68.3	48.0	14.3	76.5	53.9	11.9	84.4	59.5	10.1
30	46.0	28.0	24.9	54.9	33.0	19.8	63.4	37.8	16.1	72.0	42.8	13.4	80.4	47.7	11.2	88.7	52.6	9.2
25	48.0	24.7	23.6	56.9	28.6	18.5	65.7	33.0	15.0	74.6	37.1	12.3	83.4	41.0	10.4	92.6	45.3	8.6

Max. capacities do not exceed 66.7 % of tipping load.

Reduced track width for duty cycle operation required.

Load diagram restricted by safety factors of standard ropes:

Winches 35,300 lbs

Rope diameter 1"

Calc. breaking load 137,760 lbs

1-rope clamshell 24,470 lbs

2-rope clamshell 31,740 lbs

Clamshell equipment



Engine

Water cooled, in-line 6 cylinder Liebherr diesel engine, turbocharged with intercooler, model 926 Ti, power rating according to DIN ISO 3046 T1 IFN: 300hp (220 kW) 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: 211 gal 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 an 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 85 gal/min. each.

Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 78 gal/min.

Swing gear: Axial piston displacement pump (swash plate design) with 78 gal/min.

Boom hoist: Axial piston displacement pump (swash plate design) with 78 gal/min.

Max. working pressure: 5075 psi.

Hydraulic oil tank capacity: 171 gal.

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 in lbs	35,300
Rope diameter :	1"
Drum diameter :	21.6"
Rope speed ft/min	0-345
Rope capacity 1st layer	152 ft

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 52 ft radius.



Equipment

Lattice boom of tubular construction universal heavy duty boom head with 2 + 3 sheaves, for self erection up to 194 ft of main boom, alternatively light boom head with 2 + 1 sheaves for self erection up to 213 ft of main boom. Fixed jibs up to 60 ft, max. combination 233 ft.



Swing Drive

Consists of single row ballbearing with external teeth, 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.

Triple grouser track shoes.

Travel speed 0 - 0.9 mph.



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.

Standard equipment includes a so-called "redundant" control system, which allows restricted operation of the machine in the event of a shut down by the electronic control system or failure of 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 11,000 lbs.

Rope diameter: 18 mm (metric only)

Max. line speed: 148 ft/min.

Counterweight lifting with boom hoist.

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LOCAL DEALER: