LIEBHERR

Press Information

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LIEBHERR HYDRAULIC CRAWLER CRANES

As the leading producer of modern Hydraulic Crawler Cranes and basic machines for special foundation work, Liebherr is very successful on the international building machinery market.

Due to the application of customer-oriented solutions as well as carefully tested components and systems, the Liebherr - Werk Nenzing GmbH has been able to continually improve its market position in special foundation work, in the extracting and transhipment industry as well as in the field of demolition and recycling companies.

Its success induced the company to extend its range of products step by step. Until a few years ago the Liebherr-Werk Nenzing GmbH concentrated on the production of the traditional crawler crane, which was based on a modular conception, fulfilling all requirements in the fields of material handling as well as in special and deep foundation. As a reaction to changed market needs this conception was completed by two additional product series. The company introduced, on the one hand, hydraulically driven lift cranes with lattice boom and, on the other hand, complete systems for piling and drilling jobs. According to these fields of application the current range of products can be divided into 3 groups:

The crawler crane series (HS) currently includes six types of machines with lifting capacities of 35 to 200 t. The variety of applications is nearly unlimited due to several equipment possibilities and includes jobs like material handling with grab/clamshell, dragline bucket or similar, different types of demolition applications, dynamic soil compaction and jobs with diaphragm wall grab or casing oscillator.

The lift crane series (LR) consists of five types with capacities between 100 and 275 t. Due to their high level of mobility and excellent performance the wide range of possible

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applications starts with the common lifting and assembly jobs and ends with smaller grab/clamshell and dragline applications.

The Liebherr series of piling and drilling machines (LRB) currently consists of three types and includes weights from 65 to 140 t. These special machines are conceived for different piling jobs with vibrator and hydraulic hammer as well as drilling jobs with double rotary head, continuous flight auger and kelly drilling equipment.

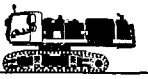
With these three product series, which can each be applied very flexibly, Liebherr offers solutions for job requirements in special and deep foundation as well as in material handling or demolition tasks. The flexibility of these machines can even be enlarged through the possibility of combining standard elements and thus creating one's individual machine.

All these variants have been developed in close co-operation with customers and operators guaranteeing optimal efficiency and user friendliness. The close contact between customers and manufacturer is of benefit to our partners, whenever own ideas and solutions should be put into practice. After all, there are practically no limits to the operational possibilities of a modern crawler crane. The vast experience of all Liebherr fields of interest is also used in the design of crawler cranes.
Liebherr guarantees its customers world-wide service. Whether it is to discuss technical or commercial details, to clarify machine modifications and adjustments, to exchange ideas or simply to communicate regularly. Every customer has the possibility to go directly to the manufacturer at any time. Co-operation and partnership are of utmost importance within Liebherr companies.

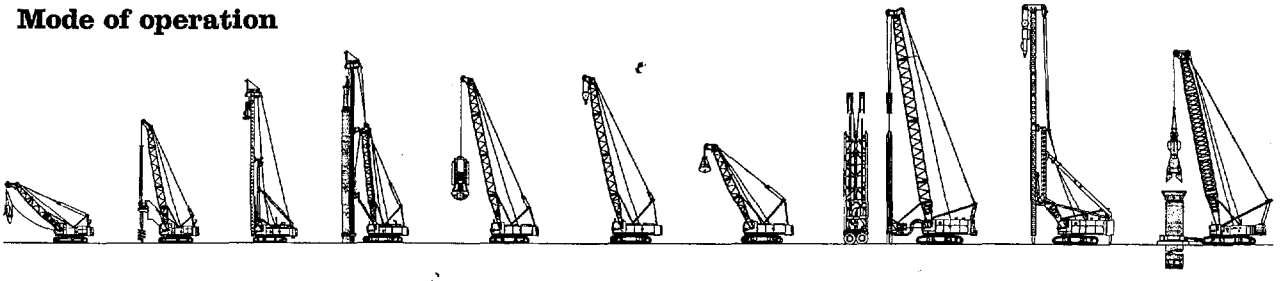
Crawler Cranes HS Series

Duty Cycle

Litronic®

Type HS 833 HD	Type HS 843 HD	Type HS 853 HD	Type HS 873 HD	Type HS 883 HD	Type HS 895 HD
					
Capacity	**Capacity**	**Capacity**	**Capacity**	**Capacity**	**Capacity**
Max. lifting capacity 35 t	Max. lifting capacity 60 t	Max. lifting capacity 80 t	Max. lifting capacity 100 t	Max. lifting capacity 120 t	Max. lifting capacity 200 t
Engine	**Engine**	**Engine**	**Engine**	**Engine**	**Engine**
In-line 4 cylinder diesel engine, type Liebherr D 924 TI-E, 125 kW at 1800 rpm	In-line 6 cylinder diesel engine, type Liebherr D 926 TI-E, 220 kW at 1800 rpm	In-line 6 cylinder diesel engine, type Liebherr D 926 TI-E, 220 kW at 1800 rpm	V 8 cylinder diesel engine, type Liebherr D 9408 TI-E, 340 kW at 1900 rpm	V 8 cylinder diesel engine, type Liebherr D 9408 TI-E, 340 kW at 1900 rpm	V 12 cylinder diesel engine, type Mercedes Benz OM 444 LA, 605 kW at 1900 rpm
power rating according to ISO 9249	power rating according to ISO 9249	power rating according to ISO 9249	power rating according to ISO 9249	power rating according to ISO 9249	power rating according to ISO 3046 IFN
In-line 6 cylinder diesel engine, type Liebherr D 926 TI-E, 210 kW at 1800 rpm	V 8 cylinder diesel engine, type Liebherr D 9408 TI-E, 400 kW at 1900 rpm	V 8 cylinder diesel engine, type Liebherr D 9408 TI-E, 400 kW at 1900 rpm	V 12 cylinder diesel engine, type Mercedes Benz OM 444 LA, 480 kW at 1900 rpm	V 12 cylinder diesel engine, type Mercedes Benz OM 444 LA, 605 kW at 1900 rpm	
power rating according to ISO 9249	power rating according to ISO 9249	power rating according to ISO 9249	power rating according to 80 / 1269 / EWG	power rating according to ISO 3046 IFN	
Winches	**Winches**	**Winches**	**Winches**	**Winches**	**Winches**
Line pull 80 kN 120 kN	Line pull 80 kN 120 kN 160 kN 200 kN	Line pull 120 kN 160 kN 200 kN 250 kN	Line pull 160 kN 200 kN 250 kN	Line pull 200 kN 250 kN 300 kN	Line pull 200 kN 250 kN 300 kN 350 kN
Boom	**Boom**	**Boom**	**Boom**	**Boom**	**Boom**
Max. main boom length 38 m	Max. main boom length 53 m	Max. main boom length 65 m	Max. main boom length 50 m	Max. main boom length 74 m	Max. main boom length 84.5
clamshell operation length from 8 m to 23 m	clamshell operation length from 11 m to 26 m	clamshell operation length from 14 m to 29 m	clamshell operation length from 15 m to 30 m	clamshell operation length from 18 m to 33 m	clamshell operation length from 25.7 m to 55.1 m
dragline operation length from 11 m to 23 m	dragline operation length from 14 m to 26 m	dragline operation length from 14 m to 29 m	dragline operation length from 15 m to 30 m	dragline operation length from 18 m to 33 m	dragline operation length from 25.7 m to 55.1 m

Mode of operation



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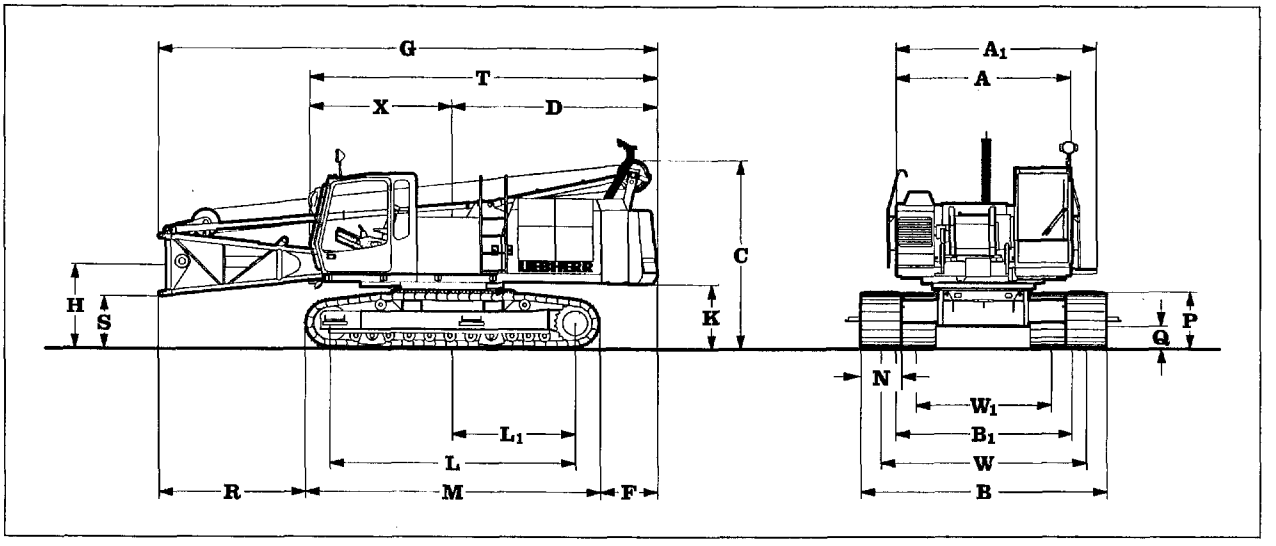
The Better Machine

Technical Data
Hydraulic crawler crane

HS 833 HD
Litronic®

Basic machine with undercarriage



Dimensions	mm
A Width of superstructure	3000
A_1 Width of superstructure with walk way	3440
C Height of basic machine	3280
D Tail reach	3510
Tail swing radius	3600
F Distance between rear end of crawler and outside of counterweight	970
G Overall length of superstructure with lowered A-frame	8570
H Ground clearance of boom foot pivot	1450
K Ground clearance of superstructure	1120
L Wheel base (centre idler to centre tumbler)	4210
L_1 Distance from centre of rotation to centre of tumbler	2100
M Length of crawlers	5110
P Height of crawlers	1015
Q Ground clearance of crawler	400
R Distance from edge of horizontal boom foot to crawler	2520
S Ground clearance of horizontal boom foot	910
T Length of superstructure	5970

		mm		
X	Distance from centre of rotation to end of cab	2460		
N	Width of track shoes	600	700	800
W	Track width extended	3500	3500	3500
W_1	Track width retracted	2300	2300	2500
B	Crawler width extended	4100	4200	4300
B_1	Crawler width retracted	2900	3000	3300

Operating Weight and Ground Pressure

The operating weight includes the basic unit with B60 crawler tracks, 2 main winches 12 t and 8 m boom, consisting of A-frame, boom foot (4 m), boom head (4 m) and 6.3 t counterweight.
All systems are ready.

with	600 mm 3-web shoes	34.7 t – 0.69 kg/cm²
with	700 mm 3-web shoes	35.2 t – 0.60 kg/cm²
with	800 mm 3-web shoes	35.7 t – 0.54 kg/cm²

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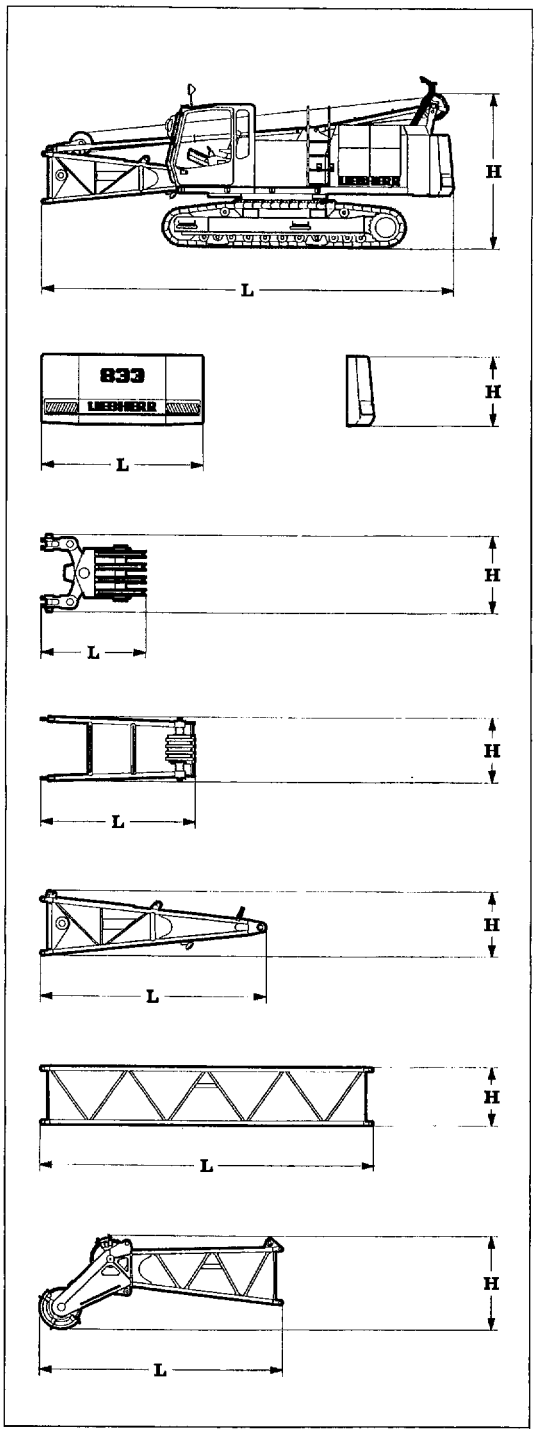
The Better Machine



*) including stay ropes

Basic machine

with HD undercarriage, without counterweight 6.3 t, R 6 cylinder Liebherr diesel engine, 2 x 12 t winches, A-frame, boom foot section with boom back stops and pulley block with equalizer.

3-web shoes	mm	600	700	800
Width	mm	2900	3000	3300
Weight	t	33.6	34.1	34.6
L Length	mm	8570	8570	8570
H Height	mm	3250	3250	3250

Counterweight

		Basic
Width	mm	500
Weight	kg	6300
L Length	mm	2980
H Height	mm	1295

Pulley block with equalizer

Width	mm	480
Weight	kg	200
L Length	mm	970
H Height	mm	750

A-frame

Width	mm	600
Weight	kg	800
L Length	mm	2850
H Height	mm	1235

Boom foot section

		Basic
Width	mm	1310
Weight	kg	800
L Length	mm	4150
H Height	mm	1210

Tubular boom extension

		3 m	6 m
Width	mm	1290	1290
Weight*	kg	340	540
L Length	mm	3110	6110
H Height	mm	1090	1090

Boom head

		Crane	Dragline
Width	mm	1310	1310
Weight*	kg	1085	1070
L Length	mm	4460	4600
H Height	mm	1750	1860

Transport dimensions and weights

Engine

Water cooled, in-line 4 cylinder Liebherr diesel engine, turbocharged with intercooler, model D 924 TI-E, power rating according to ISO 9249, 125 kW (170 hp) at 1800 rpm.
Option:
Water cooled, in-line 6 cylinder Liebherr diesel engine, turbo charged 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.
Fuel Tank: 540 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 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 214 l/min. each.
Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 214 l/min.
Swing gear: Axial piston displacement pump (swash plate design) with 193 l/min. in a closed circuit.
Boom hoist: Axial piston displacement pump (swash plate design) with 214 l/min.
Max. working pressure: 350 bar.
Hydraulic oil tank capacity: 500 l
The hydraulic oil is cleaned through electronically controlled pressure and return filters.
Possible contamination is signalled in the cabin.
The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:

Line pull (nom. load)	80 kN	120 kN
Rope diameter :	20 mm	24 mm
Drum diameter :	420 mm	505 mm
Rope speed m/min	0–138	0–112
Rope capacity 1st layer	46.5 m	46.5m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 80 kN (8 t) – without clutch, but with multi-disc holding brake.

Equipment

Lattice boom of tubular construction up to 38 m, universal boom head with interchangeable rope pulleys.
Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot. This minimizes rope angle to drum, which results in lower rope wear. 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.
A multi-disc holding brake acts automatically at zero swing motion.
Variable swing speed control from 0 – 4.2 rpm.

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.
Flat or 3 – web track shoes. Drive speed 0 – 1.7 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature and the many heavy-duty construction tasks for which this crane has been designed. Control and displaying of the sensors are also handled by this high technology system. The crane is equipped with proportional control for all movements, which can be carried out simultaneously.
On request, Liebherr also offers special custom designed control systems for freefall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
The Liebherr developed Load-Sensing-Control in connection with Liebherr Litronic power management enables simultaneous operation of all crane functions, full utilization of installed engine power and reduced fuel consumption.

Boom hoist drive

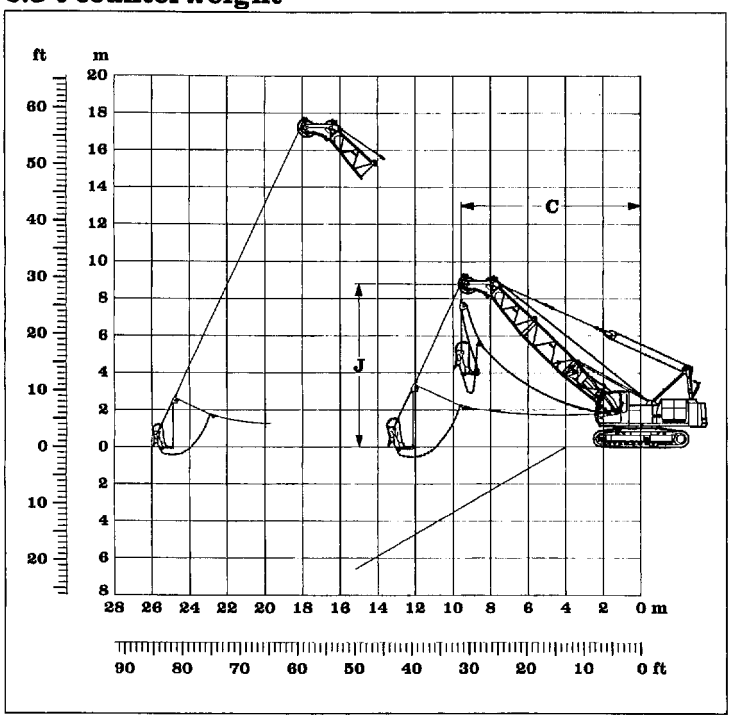
Twin drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi-disc brake.
Max. line pull 1 x 50 kN. Rope diameter: 18 mm
Max. line speed: 0 – 67 m/min.
Counterweight lifting with boom hoist.
Two speed boom hoist option

Noise emission

Special sound proofing results in a very low noise pressure level of 73 dB (A) at 16 m radius.

Technical description

6.3 t counterweight



Scope of delivery:

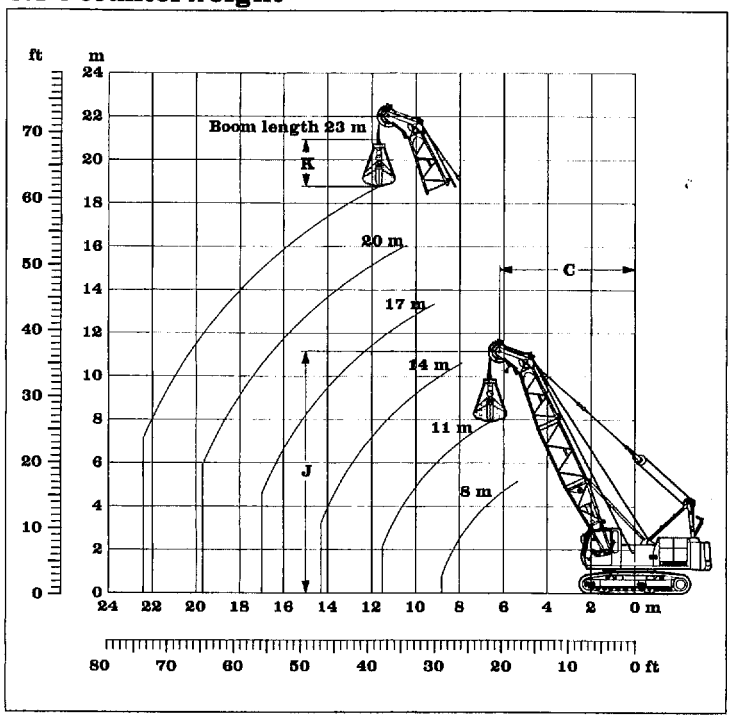
- Basic machine with corresponding track shoes
- Second swing drive with free swing
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom head 4 m
- Boom head with interchangeable pulleys
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

Capacities in metric tons for boom lengths from 11 m to 23 m															Counterweight 6.3 t
	11 m			14 m			17 m			20 m			23 m		
α°	C m	J m	t	C m	J m	t	C m	J m	t	C m	J m	t	C m	J m	t
45	9.5	8.8	8.3	11.7	10.9	6.2	13.8	13.0	4.8	15.9	15.2	3.8	18.0	17.3	3.0
40	10.1	8.1	7.6	12.4	10.0	5.7	14.7	11.9	4.4	17.0	13.8	3.4	19.3	15.8	2.7
35	10.7	7.3	7.1	13.1	9.0	5.2	15.6	10.7	4.0	18.1	12.4	3.1	20.5	14.2	2.4
30	11.2	6.4	6.7	13.8	7.9	4.9	16.3	9.4	3.7	18.9	10.9	2.9	21.5	12.4	2.2
25	11.5	5.6	6.3	14.3	6.8	4.6	17.0	8.1	3.5	19.7	9.4	2.7	22.4	10.6	2.1

Max. capacities in metric tons do not exceed 75 % of tipping load

Dragline equipment

6.3 t counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom head 4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Stabilizing winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

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 boom lengths from 8 m to 23 m:																		Counterweight 6.3 t
	8 m			11 m			14 m			17 m			20 m			23 m		
α°	C m	J m	t	C m	J m	t	C m	J m	t	C m	J m	t	C m	J m	t	C m	J m	t
65	5.3	8.4	13.8	6.5	11.2	12.9	7.8	13.9	9.7	9.1	16.6	7.9	10.3	19.3	6.4	11.6	22.0	5.4
60	5.8	8.1	13.8	7.3	10.7	10.8	8.8	13.3	8.2	10.3	15.9	6.5	11.8	18.5	5.3	13.3	21.1	4.3
55	6.4	7.7	13.2	8.1	10.1	9.3	9.8	12.6	7.0	11.6	15.0	5.5	13.3	17.5	4.4	15.0	19.9	3.6
50	6.9	7.2	11.7	8.9	9.5	8.2	10.8	11.8	6.2	12.7	14.1	4.8	14.6	16.4	3.8	16.6	18.7	3.1
45	7.4	6.7	10.6	9.5	8.8	7.4	11.7	10.9	5.5	13.8	13.0	4.3	15.9	15.2	3.4	18.0	17.3	2.7
40	7.8	6.1	9.8	10.1	8.1	6.8	12.4	10.0	5.0	14.7	11.9	3.9	17.0	13.8	3.1	19.3	15.8	2.4
35	8.2	5.5	9.1	10.7	7.3	6.3	13.1	9.0	4.7	15.6	10.7	3.6	18.1	12.4	2.8	20.5	14.2	2.2
30	8.6	4.9	8.6	11.2	6.4	5.9	13.8	7.9	4.4	16.3	9.4	3.3	18.9	10.9	2.6	21.5	12.4	2.0
25	8.8	4.3	8.2	11.5	5.6	5.6	14.3	6.8	4.1	17.0	8.1	3.1	19.7	9.4	2.4	22.4	10.6	1.8

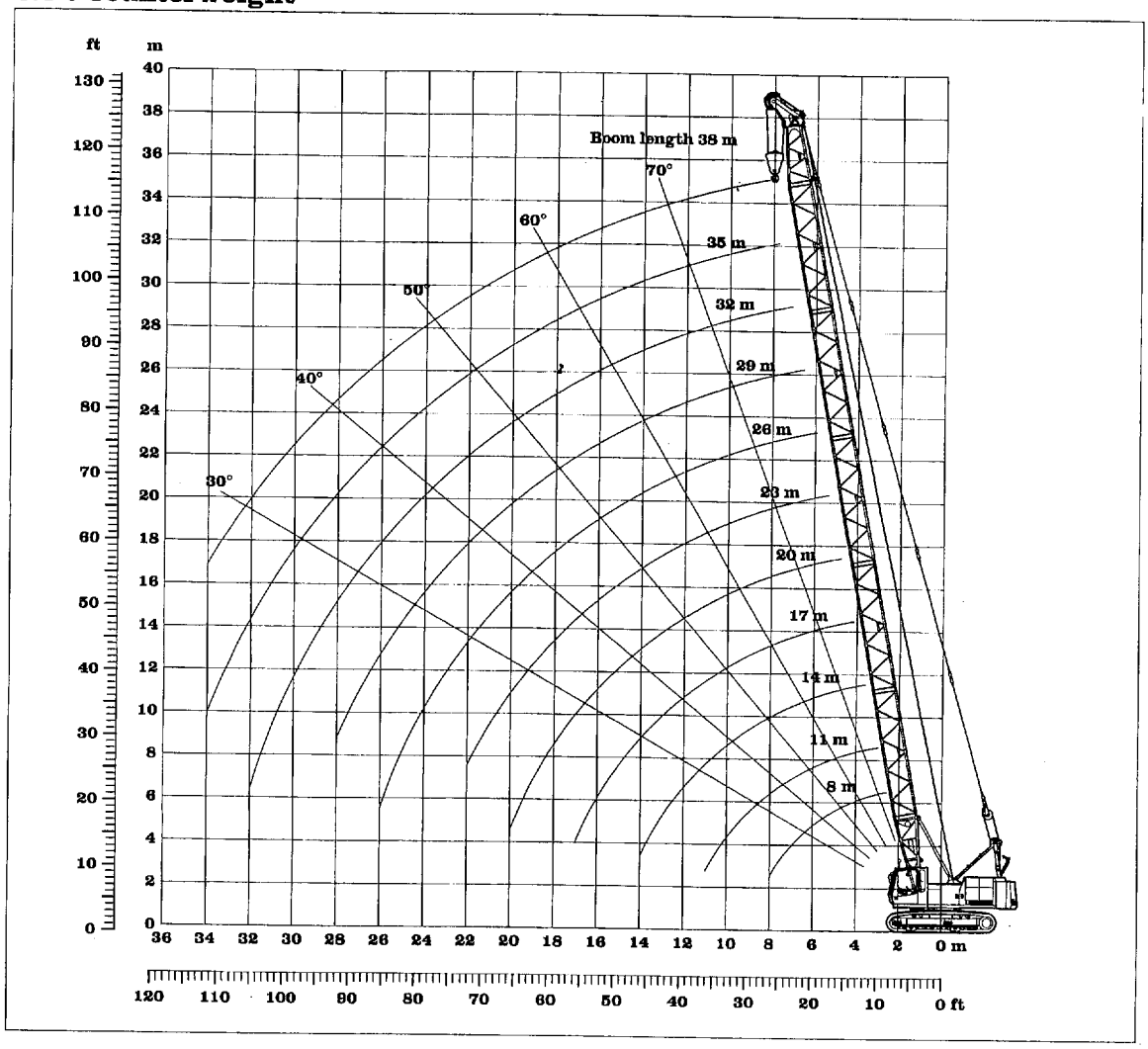
Max. capacities in metric tons do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches	80 kN	120 kN
Rope diameter	20 mm	24 mm
Calc. breaking load	363 kN	524 kN
1-rope clamshell	6.5 t	9.5 t
2-rope clamshell	9.9 t	14.4 t

Clamshell equipment

6.3 t Counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- A-frame
- Pulley block
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom head 4 m with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoisting limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

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 indicated in metric tons with unlimited swing (360 degrees).
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, load under slew and stop/go movements.

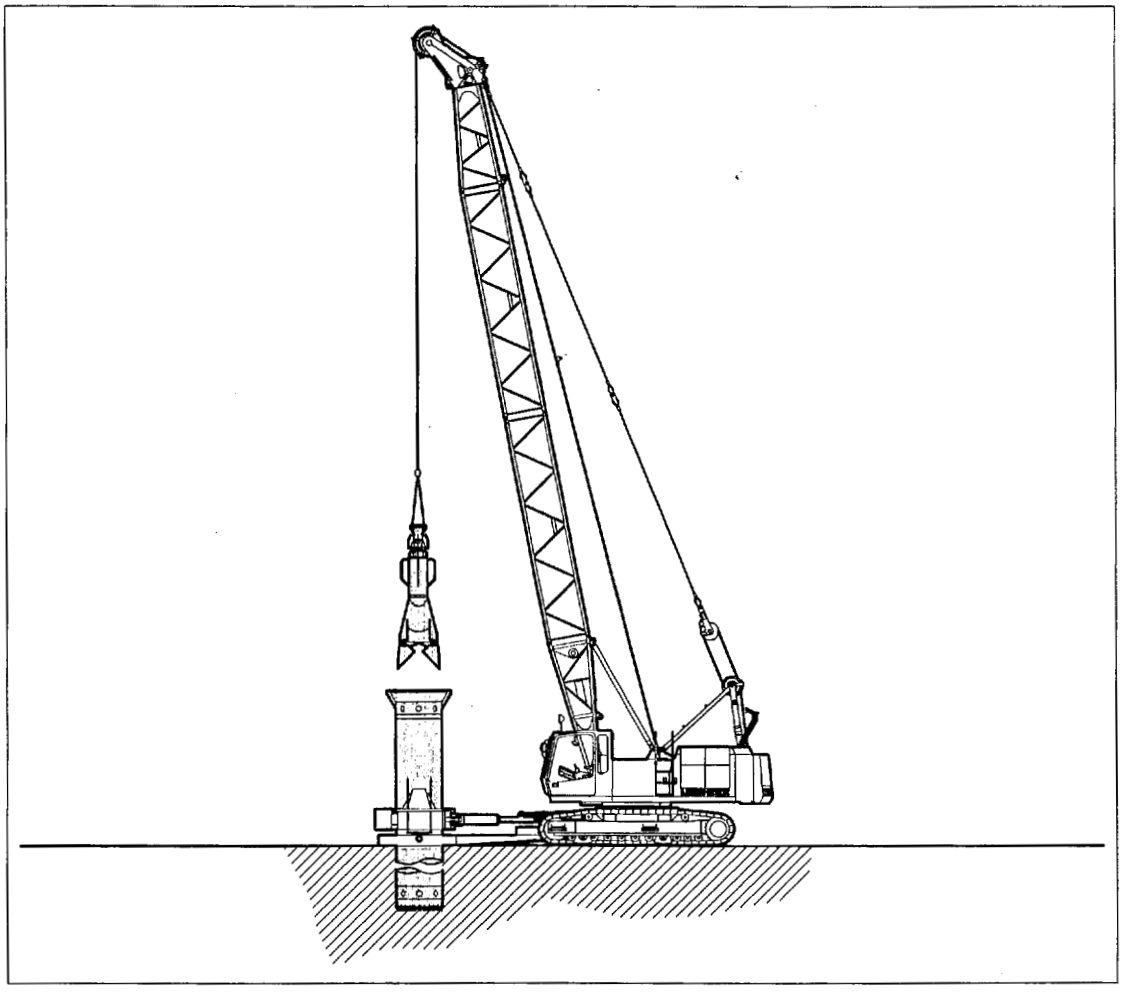
Crane configuration

Boom length	8 m	11 m	14 m	17 m	20 m	23 m	26 m	29 m	32 m	35 m	38 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t
3.0	35.0										
3.5	35.0	32.8									
4.0	31.5	31.4	28.4								
4.5	25.5	25.5	25.4	24.9							
5.0	21.4	21.3	21.3	21.2	21.2						
5.5	18.4	18.3	18.3	18.2	18.1	18.0					
6.0	16.1	16.0	16.0	15.9	15.8	15.7	15.7				
6.5	14.3	14.2	14.2	14.1	14.0	13.9	13.8	13.8			
7.0	12.8	12.8	12.7	12.6	12.5	12.5	12.4	12.3	12.2		
7.5	11.6	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0	10.9	
8.0	10.6	10.6	10.5	10.4	10.3	10.2	10.1	10.0	10.0	9.9	9.6
9.0		9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1
10.0		7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.2	6.9
11.0		6.8	6.7	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0
12.0			6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.2
13.0			5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6
14.0			4.8	4.8	4.7	4.6	4.4	4.3	4.2	4.1	4.0
15.0				4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6
16.0				3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2
17.0				3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9
18.0					3.2	3.1	3.0	2.9	2.8	2.7	2.5
19.0					2.9	2.8	2.7	2.6	2.5	2.4	2.3
20.0					2.7	2.6	2.5	2.4	2.3	2.1	2.0
22.0						2.2	2.1	2.0	1.9	1.7	1.6
24.0							1.8	1.6	1.5	1.4	1.2
26.0							1.5	1.4	1.2	1.1	1.0
28.0								1.1	1.0	0.8	0.7
30.0									0.8	0.6	0.5
32.0									0.6	0.5	0.3
34.0										0.3	0.2

The necessary hoist rope reeving arrangement has to be provided according to the load diagram in the cabin.

Optimal boom configuration for boom lengths between 8 m to 38 m:												
	Length	Amount of boom extensions										
Boom foot	4.0 m	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	2	2	3	3	4	4	5
Boom head	4.0 m	1		1	1	1	1	1	1	1	1	1
Boom length (m)		8	11	14	17	20	23	26	29	32	35	38

Load diagram for crane configuration



Casing oscillator

Winch options	**2 x 8 t**	**2 x 12 t**
Line pull 2 x	**160 kN**	**240 kN**
Line speed 1st layer (m/min)	**0–138**	**0–112**
Drilling diameter	**1300 mm**	**1300 mm**
Chisel weight	**6 t**	**10 t**
Maximum capacity with boom position in longitudinal direction of under-carriage at 6.5 m radius.	**16.0 t**	**16.0 t**

Free fall winches with maintenance free, spring loaded multi-disc brake working in an oil bath.
Simultaneous working of both winches is assured through our hydraulic system.
Hydraulic supply for casing oscillator q = 2 x 200 l/min.
P = 300 bar max.
Mechanical connection casing oscillator on undercarriage.
Automatic operation for one and two rope grabs. (optional)
Hoisting speed will have priority over the casing oscillator while main winches are activated.

8099 442 14 – 01/98 Subject to change without notice.

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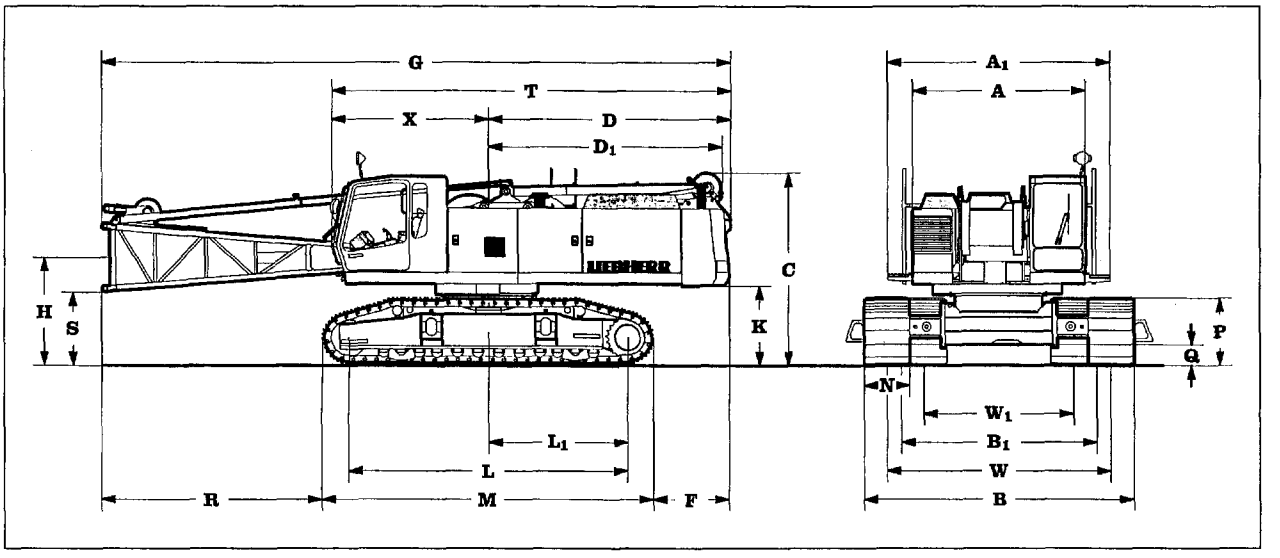
Technical Data
Hydraulic crawler crane

HS 843 HD
Litronic®

Basic machine with undercarriage



Dimensions

		mm
A	Width of superstructure	3000
A_1	Width of superstructure with walk way	3440
C	Height of basic machine	3250
D	Tail reach	4230
	Tail swing radius	4260
D1	Tail reach A-frame	4070
F	Distance between rear end of crawler and outside of counterweight	1320
G	Overall length of superstructure with lowered A-frame	11000
H	Ground clearance of boom foot pivot	1740
K	Ground clearance of superstructure	1240
L	Wheel base (centre idler to centre tumbler)	4800
L_1	Distance from centre of rotation to centre of tumbler	2400
M	Length of crawlers	5760
P	Height of crawlers	1040
Q	Ground clearance of crawler	375
R	Distance from edge of horizontal boom foot to crawler	3900
S	Ground clearance of horizontal boom foot	1130
T	Length of superstructure	6980

		mm
X	Distance from centre of rotation to end of cab	2750

N	Width of track shoes	700	800	900	1000
W_1	Track width retracted	2400	2400	2600	2600
W	Track width extended	3850	3850	3850	3850
B	Crawler width extended	4550	4650	4750	4850
B_1	Crawler width retracted	3500	3500	3700	3700

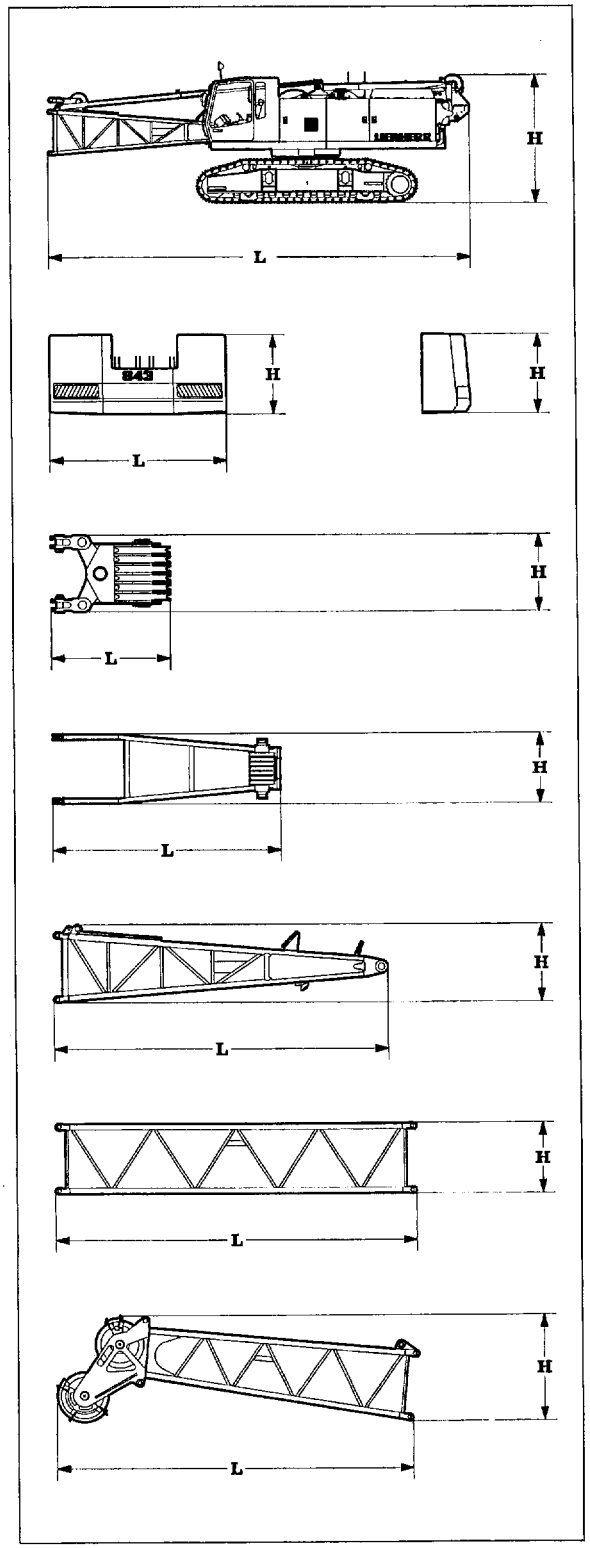
Operating Weight and Ground Pressure

The operating weights include the basic unit with B6 crawler tracks, 2 main winches 20 t and 11 m boom, consisting of A-frame, boom foot (5.5 m), boom head (5.5 m) and 12.3 t counterweight.

All systems are ready.

with 700 mm flat track shoes	55.0 t – 0.80 kg/cm²
with 800 mm flat track shoes	55.6 t – 0.71 kg/cm²
with 900 mm flat track shoes	56.2 t – 0.64 kg/cm²
with 1000 mm flat track shoes	56.8 t – 0.58 kg/cm²
with 700 mm 3-web shoes	53.0 t – 0.77 kg/cm²
with 800 mm 3-web shoes	53.5 t – 0.68 kg/cm²
with 900 mm 3-web shoes	54.0 t – 0.61 kg/cm²
with 1000 mm 3-web shoes	54.5 t – 0.55 kg/cm²

LIEBHERR
The Better Machine



Basic machine

with HD undercarriage, without counterweight 12.3 t, L 6 cylinder Liebherr diesel engine, 2 x 20 t winches, A-frame, boom foot section with boom back stops and pulley block with equalizer

3-web shoes	mm	700	800	900	1000
Width	mm	3500	3500	3700	3700
Weight	t	36.8	37.4	37.9	38.4
L Length	mm	11000	11000	11000	11000
H Height	mm	3400	3400	3400	3400

Counterweight

		Basic
Width	mm	830
Weight	kg	12300
L Length	mm	3000
H Height	mm	1365

Pulley block with equalizer

Width	mm	480
Weight	kg	300
L Length	mm	1010
H Height	mm	640

A-frame

Width	mm	530
Weight	kg	645
L Length	mm	3825
H Height	mm	1210

Boom foot

		Basic
Width	mm	1400
Weight	kg	1280
L Length	mm	5680
H Height	mm	1370

Tubular boom extension

		3 m	6 m	9 m
Width	mm	1400	1400	1400
Weight*	kg	400	670	850
L Length	mm	3140	6140	9140
H Height	mm	1215	1215	1215

Boom head

		Crane	Dragline
Width	mm	1400	1400
Weight*	kg	1315	1400
L Length	mm	5950	6090
H Height	mm	1890	2035

*) including stay ropes

Transport dimensions and weights

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.
Option:
Water cooled, V-8-cylinder Liebherr diesel engine, turbo charged with intercooler, model D 9408 TI-E, power rating according to ISO 9249, 400 kW (544 hp) at 1900 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 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 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 hydraulic oil is cleaned through electronically controlled pressure and return filters.
Possible contamination is signalled in the cabin. The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:

Line pull (nom. load)	80 kN	120 kN	160 kN	200 kN
Rope diameter :	20 mm	24 mm	26 mm	30 mm
Drum diameter :	420 mm	525 mm	550 mm	630 mm
Rope speed m/min	0–148	0–136	0–114	0–92
Rope capacity 1st layer	45 m	46 m	46.5 m	46.5m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors.
This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 80 kN (8 t) – without clutch, but with multi-disc holding brake.

Noise emission

Special sound proofing results in a very low noise pressure level of 77 dB(A) at 16 m radius.

Equipment

Lattice boom of tubular construction up to 53 m, universal boom head with interchangeable rope pulleys.
Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot. This minimizes rope angle to drum, which results in lower rope wear. 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.
A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 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.
Flat or 3 – web track shoes. Drive speed 0 – 1.6 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature 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.
A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake.
An additional option is also 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.
On request, Liebherr also offers special custom designed control systems for free fall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
Options:

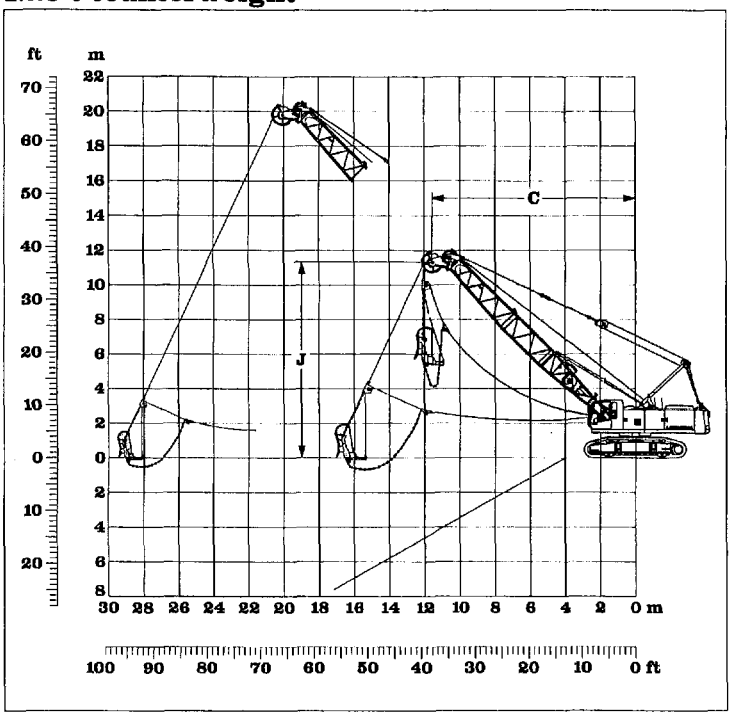
- Both main winches with double-T levers
- Special demolition control system
- MDE: Machine data recording
- PDE: Process data recording

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 2x 50 kN. Rope diameter: 18 mm
Max. line speed: 45 m/min.
Counterweight lifting with boom hoist.
Two speed boom hoist option

Technical description

12.3 t counterweight



Scope of delivery:

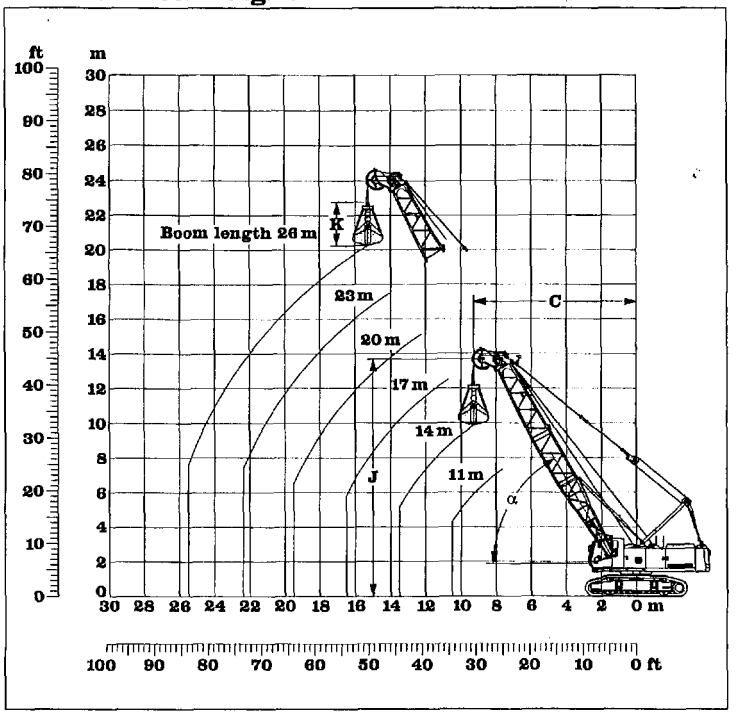
- Basic machine with corresponding track shoes
- Second swing drive with free swing
- A-frame
- Boom foot 5.5 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head 5.5 m
- Boom head with interchangeable pulleys
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

Capacities in metric tons for boom lengths from 14 m to 26 m:															Counterweight 12.3 t
Boom length	14 m			17 m			20 m			23 m			26 m		
	C	J		C	J		C	J		C	J		C	J	
α°	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	12.0	11.1	11.1	14.0	13.2	8.8	16.2	15.3	7.2	18.3	17.4	6.0	20.5	19.6	5.0
40	12.8	10.2	10.2	15.0	12.1	8.1	17.4	14.1	6.6	19.6	16.0	5.5	22.0	17.9	4.5
35	13.5	9.3	9.5	15.9	11.0	7.5	18.4	12.7	6.1	20.8	14.5	5.0	23.3	16.2	4.2
30	14.0	8.3	8.9	16.7	9.8	7.1	19.3	11.3	5.7	21.8	12.8	4.7	24.4	14.3	3.9

Max. capacities in metric tons do not exceed 75 % of tipping load

Dragline equipment

12.3 t counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- A-frame
- 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
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Tagline winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

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 boom lengths from 11 m to 26 m:																		Counterweight 12.3 t
Boom length	11 m			14 m			17 m			20 m			23 m			26 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α°	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	6.8	11.0	21.4	8.1	13.7	16.8	9.3	16.5	13.6	10.6	19.2	11.4	11.9	21.9	9.7	13.1	24.9	8.3
60	7.6	10.6	18.1	9.1	13.2	14.1	10.6	15.8	11.4	12.7	18.4	9.5	11.9	21.0	8.0	15.1	23.6	6.9
55	8.4	10.1	15.8	10.1	12.6	12.2	11.8	15.0	9.9	13.6	17.5	8.2	15.3	19.9	6.9	17.0	22.4	5.8
50	9.1	9.6	14.1	11.1	11.9	10.9	13.0	14.2	8.7	14.9	16.5	7.2	16.8	18.8	6.0	18.8	21.1	5.1
45	9.8	9.0	12.8	11.9	11.1	9.8	14.0	13.2	7.9	16.2	15.3	6.4	18.3	17.4	5.4	20.4	19.6	4.5
40	10.4	8.3	11.8	12.7	10.2	9.0	15.5	12.1	7.2	17.3	14.1	5.9	19.6	16.0	4.9	21.9	17.9	4.0
35	10.9	7.6	11.0	13.4	9.3	8.4	15.9	11.0	6.7	18.3	12.7	5.4	20.8	14.5	4.5	23.2	16.2	3.7
30	11.4	6.8	10.4	14.0	8.3	7.9	16.6	9.8	6.3	19.2	11.3	5.1	21.8	12.8	4.2	24.4	14.3	3.4
25	11.8	6.0	9.8	14.5	7.3	7.5	17.2	8.5	5.9	20.0	9.8	4.7	22.7	11.1	3.9	25.4	12.4	3.2

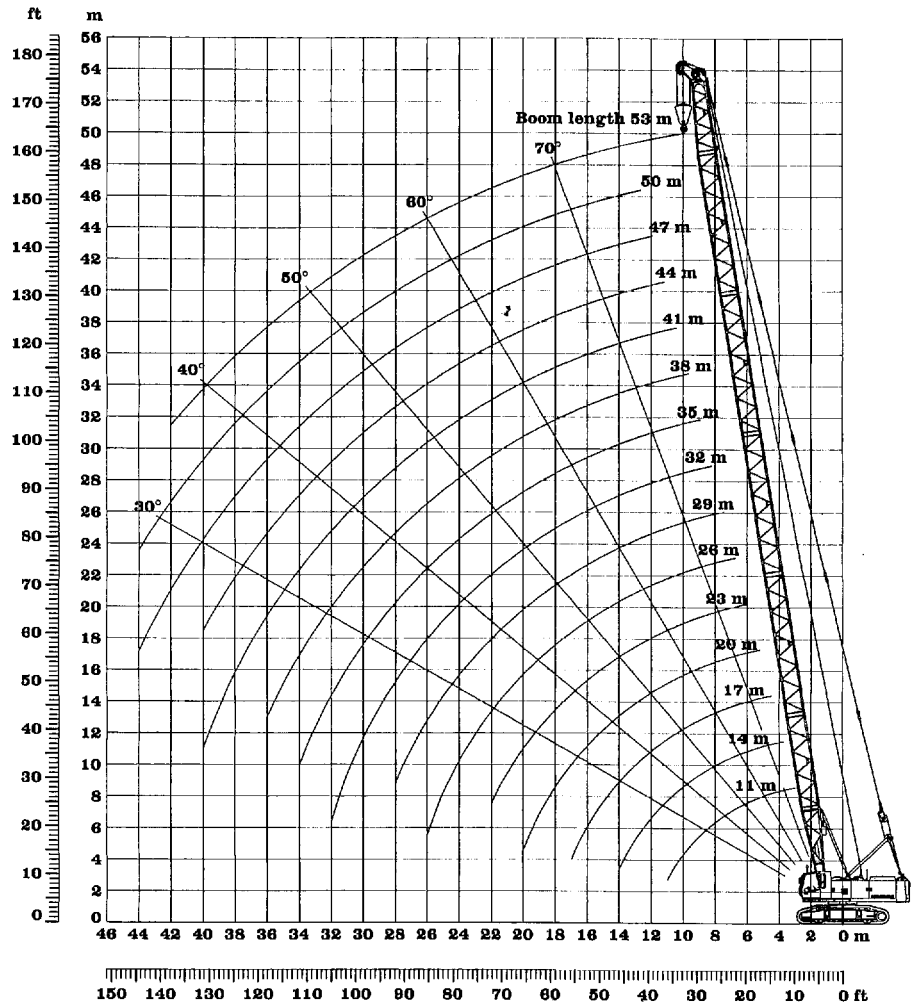
Max. capacities in metric tons do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches	120 kN	160 kN	200 kN
Rope diameter	24 mm	26 mm	30 mm
Calc. breaking load	524 kN	613 kN	820 kN
1-rope clamshell	9.5 t	11.1 t	14.8 t
2-rope clamshell	14.1 t	16.8 t	22.5 t

Clamshell equipment

12.3 t counterweight



Scope of delivery:

- Basic machine with corresponding 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 interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoisting limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

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 indicated in metric tons with unlimited swing (360 degrees).
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, load under slew and stop/go movements.

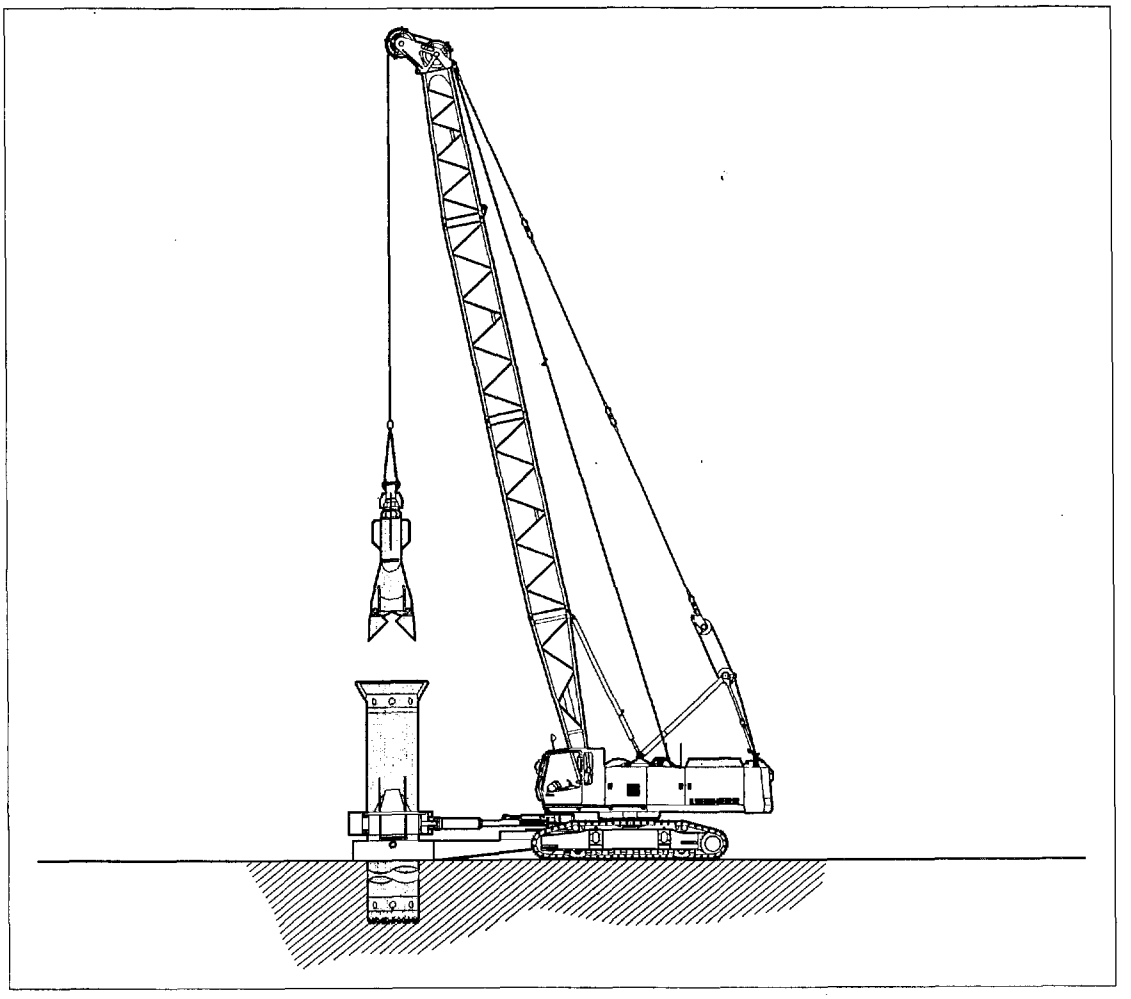
Crane configuration

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
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t
3.5	60.0														
4	49.9	45.4													
4.5	47.3	43.8	38.6												
5	39.2	39.2	37.4	34.6											
5.5	33.4	33.4	33.4	33.3	31.1	28.8									
6	29.1	29.0	29.0	29.0	28.9	28.0	25.9								
6.5	25.7	25.7	25.6	25.6	25.5	25.4	25.2	23.5							
7	23.0	23.0	22.9	22.9	22.8	22.7	22.6	22.6	21.2						
7.5	20.8	20.8	20.7	20.7	20.6	20.7	20.4	20.4	19.3	17.9					
8	19.0	19.0	18.9	18.8	18.7	18.7	18.6	18.6	18.5	17.5	16.2	14.9			
9	16.1	16.1	16.0	15.9	15.8	15.7	15.6	15.7	15.6	15.5	15.4	14.2	11.6	9.4	
10	13.9	13.9	13.8	13.8	13.6	13.6	13.5	13.5	13.4	13.3	13.2	13.1	10.6	8.6	7.0
11	12.2	12.2	12.1	12.0	12.0	11.9	11.8	11.8	11.7	11.6	11.5	11.4	9.8	7.9	6.5
12		10.9	10.8	10.7	10.6	10.5	10.4	10.4	10.3	10.2	10.1	10.0	9.1	7.3	6.0
13		9.8	9.7	9.6	9.5	9.4	9.3	9.3	9.2	9.1	9.0	8.9	8.5	6.9	5.6
14		8.8	8.7	8.7	8.6	8.5	8.4	8.4	8.3	8.2	8.1	8.0	7.9	6.5	5.2
15			8.0	7.9	7.8	7.7	7.6	7.6	7.5	7.4	7.3	7.2	7.1	6.1	4.9
16			7.3	7.2	7.1	7.0	6.9	6.9	6.8	6.7	6.6	6.5	6.4	5.7	4.6
17			6.7	6.6	6.5	6.4	6.3	6.3	6.2	6.1	6.0	5.9	5.8	5.4	4.3
18				6.1	6.0	5.9	5.8	5.8	5.7	5.6	5.5	5.4	5.3	5.1	4.0
19				5.7	5.6	5.5	5.4	5.4	5.3	5.2	5.1	5.0	4.9	4.7	3.8
20				5.3	5.2	5.1	5.0	5.0	4.9	4.8	4.7	4.5	4.4	4.3	3.6
22					4.5	4.4	4.3	4.3	4.2	4.0	4.0	3.9	3.8	3.6	3.2
24						3.8	3.7	3.7	3.6	3.5	3.4	3.3	3.2	3.0	2.9
26						3.4	3.2	3.3	3.1	3.0	2.9	2.8	2.7	2.5	2.4
28							2.9	2.9	2.7	2.6	2.5	2.4	2.2	2.1	2.0
30								2.5	2.4	2.3	2.1	2.0	1.9	1.8	1.6
32								2.2	2.1	1.9	1.8	1.7	1.6	1.4	1.3
34									1.8	1.7	1.5	1.4	1.3	1.2	1.0
36										1.4	1.3	1.2	1.0	0.9	0.8
38											1.1	0.9	0.8	0.7	0.6
40											0.9	0.8	0.6	0.5	0.4
42												0.6	0.5	0.3	0.2
44													0.3	0.2	

The necessary hoistrope reeving arrangement has to be provided according to the load diagram in the cabin.

Optimal boom configuration for boom lengths between 11 m and 53 m:															
	Length	Number of boom extensions													
Boom foot	5.5 m	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
Boom head	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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

Load diagram for crane configuration



Casing oscillator

Winch options	2 x 16 t	2 x 20 t
Line pull 2 x	320 kN	400 kN
Line speed 1st layer (m/min)	0–114	0–92
Drilling diameter	2000 mm	2000 mm
Chisel weight	12 t	16 t
Maximum capacity with boom position in longitudinal direction of undercarriage at 7.5 m radius.	25.2 t	25.2 t

Free fall winches with maintenance free, spring loaded multi-disc brake working in an oil bath.
Simultaneous working of both winches is assured through our hydraulic system.
Hydraulic supply for casing oscillator
q = 2 x 296 l/min.
P = 300 bar max.
Mechanical connection casing oscillator on undercarriage.
Automatic operation for one and two rope grabs. (optional)
Hoisting speed will have priority over the casing oscillator while main winches are activated.

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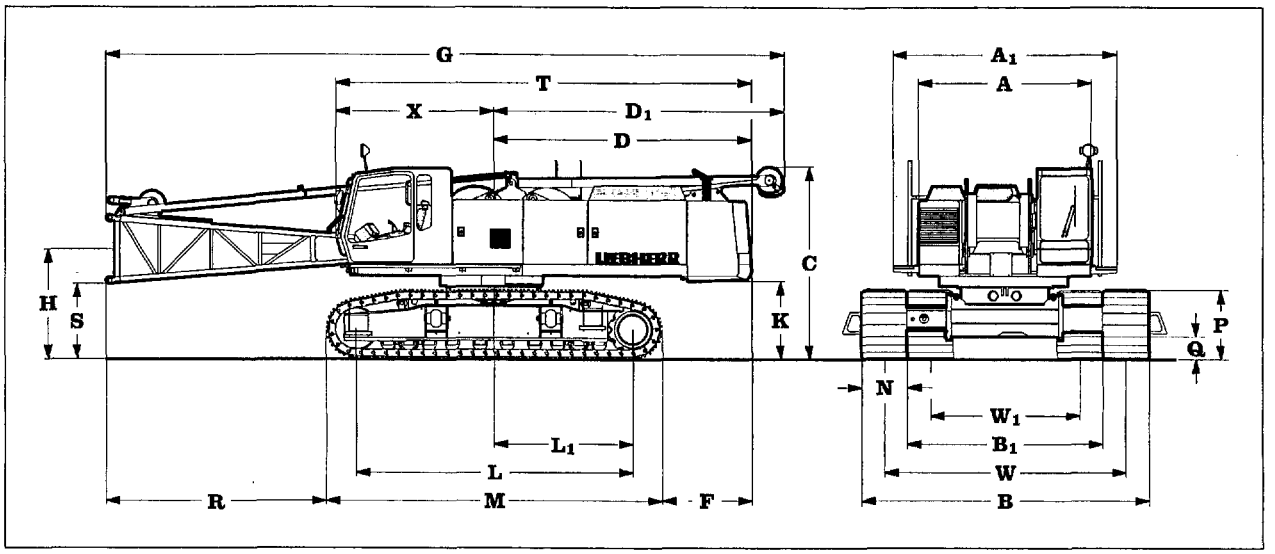
Technical Data
Hydraulic crawler crane

HS 853 HD
Litronic®

Basic machine with undercarriage



Dimensions

		mm
A	Width of superstructure	3000
A_1	Width of superstructure with walk way	3440
C	Height of basic machine	3450
D	Tail reach	4530
	Tail swing radius	4560
D_1	Tail reach A-frame	5090
F	Distance between rear end of crawler and outside of counterweight	1590
G	Overall length of superstructure with lowered A-frame	11860
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	5890
P	Height of crawlers	1260
Q	Ground clearance of crawler	400
R	Distance from edge of horizontal boom foot to crawler	3820
S	Ground clearance of horizontal boom foot	1320
T	Length of superstructure	7280

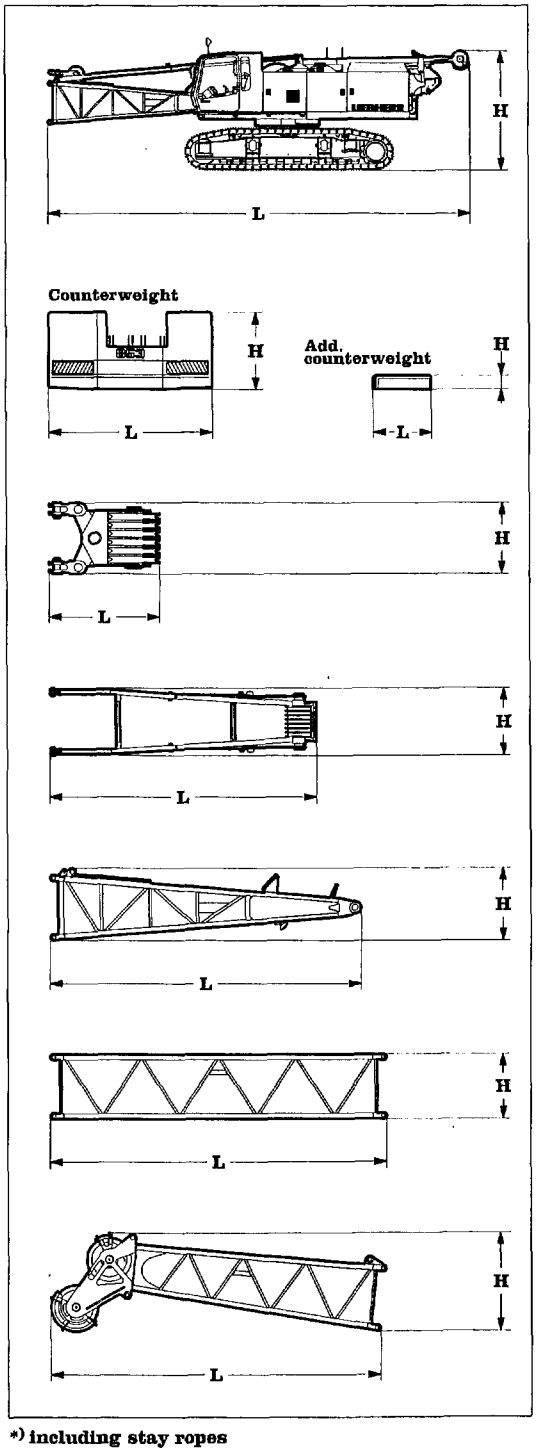
		mm			
X	Distance from centre of rotation to end of cab	2750			
N	Width of track shoes	700	800	900	1000
W_1	Track width retracted	2600	2600	2600	2600
W	Track width extended	3900	3900	3900	3900
B	Crawler width extended	4600	4700	4800	4900
B_1	Crawler width retracted	3300	3400	3500	3600

Operating Weight and Ground Pressure

The operating weight includes the basic unit with B7 crawler tracks, 2 main winches 25 t and 11 m boom, consisting of A-frame, boom foot (5.5 m), boom head (5.5 m) and 22 t counterweight + 2 t add. counter-weight.
All systems are ready.

with 700 mm flat track shoes	78.4 t – 1.08 kg/cm²
with 800 mm flat track shoes	79.3 t – 0.96 kg/cm²
with 900 mm flat track shoes	80.2 t – 0.86 kg/cm²
with 1000 mm flat track shoes	81.2 t – 0.79 kg/cm²
with 700 mm 3-web shoes	76.4 t – 1.05 kg/cm²
with 800 mm 3-web shoes	76.8 t – 0.93 kg/cm²
with 900 mm 3-web shoes	77.5 t – 0.83 kg/cm²
with 1000 mm 3-web shoes	78.1 t – 0.75 kg/cm²

LIEBHERR
The Better Machine



*) including stay ropes

Basic machine

with HD undercarriage, without counterweight, L 6 cylinder Liebherr diesel engine, 2 x 25 t winches A-frame, boom foot section with boom back stops and pulley block with equalizer

3-web shoes	mm	700	800	900	1000
Width	mm	3300	3400	3500	3600
Weight	t	47.7	48.4	49.0	49.6
L Length	mm	11860	11860	11860	11860
H Height	mm	3450	3450	3450	3450

Counterweight

		Basic	Additional
Width	mm	1240	1040
Weight	kg	22000	2000
L Length	mm	3000	1070
H Height	mm	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	790
L Length	mm	4830
H Height	mm	1210

Boom foot

		Basic
Width	mm	1400
Weight	kg	1280
L Length	mm	5680
H Height	mm	1340

Tubular boom extension

		3 m	6 m	9 m
Width	mm	1400	1400	1400
Weight*	kg	420	670	930
L Length	mm	3140	6140	9140
H Height	mm	1220	1220	1220

Boom head

		Crane	Dragline
Width	mm	1400	1400
Weight*	kg	1600	1550
L Length	mm	6070	6160
H Height	mm	1940	2030

Transport dimensions and weights

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.
Option:
Water cooled, V 8 cylinder Liebherr diesel engine, turbo charged with intercooler, model D 9408 TI-E, power rating according to ISO 9249, 400 kW (544 hp) at 1900 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 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 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 hydraulic oil is cleaned through electronically controlled pressure and return filters.
Possible contamination is signalled in the cabin. The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:

Line pull (nom. load)	120 kN	160 kN	200 kN	250 kN
Rope diameter :	24 mm	26 mm	30 mm	34 mm
Drum diameter :	525 mm	550 mm	630 mm	750 mm
Rope speed m/min	0–136	0–114	0–92	0–72
Rope capacity 1st layer	45 m	46.5 m	46.5 m	48.3m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 80 kN (8 t) – without clutch, but with multi-disc holding 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 interchangeable rope pulleys. Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot. This minimizes rope angle to drum, which results in lower rope wear. 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.
A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 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.
Flat or 3 – web track shoes. Drive speed 0 – 1.4 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature 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 en-larged 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.
A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake.
An additional option is also 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.
On request, Liebherr also offers special custom designed control systems for free fall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
Options:

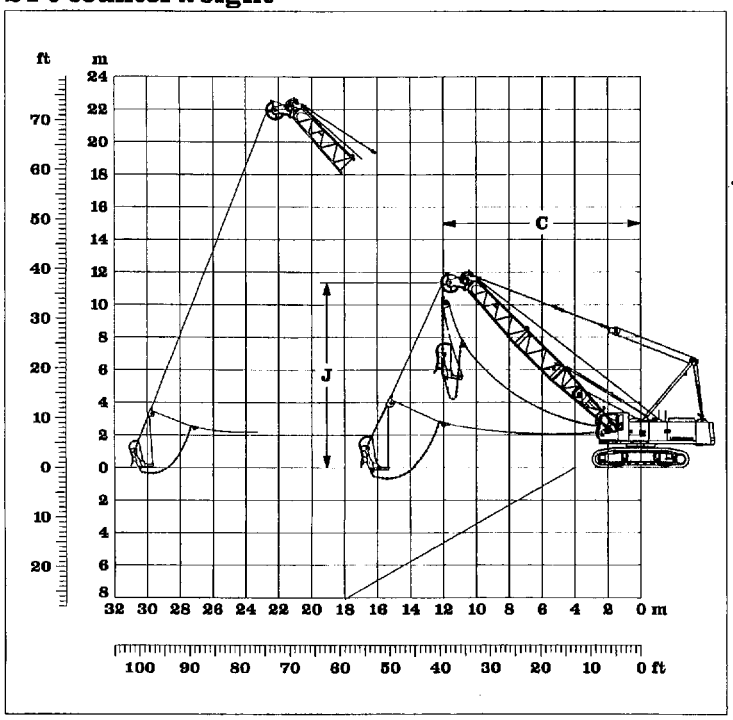
- Both main winches with double-T levers
- Special demolition control system
- MDE: Machine data recording
- PDE: Process data recording

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 2x 50 kN. Rope diameter: 18 mm
Max. line speed: 45 m/min.
Counterweight lifting with boom hoist.
Two speed boom hoist option

Technical Description

24 t counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Second swing drive with free swing
- A-frame
- 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
- Boom head with interchangeable pulleys
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

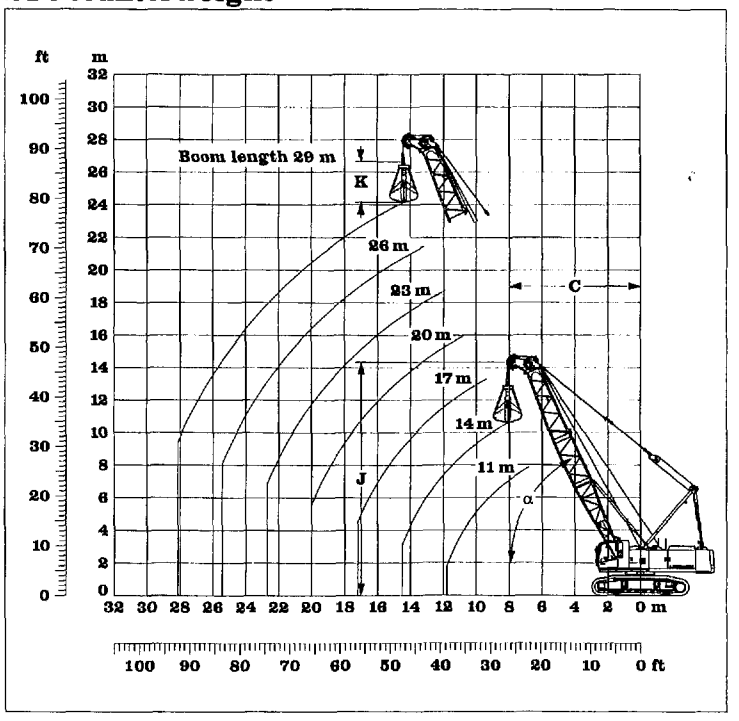
Capacities in metric tons for boom lengths from 14 m to 29 m — **Counterweight 24 t**

	14 m			17 m			20 m			23 m			26 m			29 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α°	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	12.0	11.3	17.4	14.1	13.4	14.0	16.2	15.5	11.6	18.3	17.6	8.2	20.5	19.7	8.2	22.6	21.9	7.1
40	12.8	10.4	16.0	15.1	12.3	12.9	17.4	14.3	10.6	19.6	16.2	7.5	21.9	18.1	7.5	24.2	20.0	6.4
35	13.5	9.5	15.0	15.9	11.2	12.0	18.4	12.9	9.8	20.8	14.6	6.9	23.3	16.4	6.9	25.7	18.1	5.8
30	14.1	8.5	14.1	16.7	10.0	11.3	19.3	11.5	9.2	21.9	13.0	6.4	24.5	14.5	6.4	27.0	16.0	5.4
25	14.6	7.5	13.3	17.3	8.7	10.5	20.0	10.0	8.6	22.7	11.3	5.9	25.4	12.5	5.9	28.2	13.8	5.0

Max. capacities in metric tons do not exceed 75 % of tipping load

Dragline equipment

24 t counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- A-frame
- 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
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Tagline winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

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 boom lengths from 14 m to 29 m:																		Counterweight 24 t
	14 m			17 m			20 m			23 m			26 m			29 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α°	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	8.1	13.9	26.3	9.4	16.6	21.5	10.7	19.3	18.0	11.9	22.1	15.4	13.2	24.8	13.3	14.5	27.5	11.7
60	9.2	13.4	22.2	10.7	16.0	18.0	12.2	18.6	15.0	13.7	21.2	12.8	15.2	23.8	11.0	16.7	26.4	9.6
55	10.2	12.7	19.3	11.9	15.2	15.6	13.6	17.7	13.0	15.3	20.1	11.0	17.0	22.6	9.4	18.8	25.0	8.1
50	11.1	12.0	17.1	13.0	14.3	13.8	15.0	16.6	11.4	16.9	18.9	9.6	18.8	21.2	8.2	20.8	23.5	7.1
45	12.0	11.3	15.5	14.1	13.4	12.5	16.2	15.5	10.3	18.3	17.6	8.6	20.5	19.7	7.3	22.6	21.9	6.3
40	12.8	10.4	14.3	15.0	12.3	11.4	17.4	14.3	9.4	19.6	16.2	7.9	21.9	18.1	6.6	24.2	20.0	5.7
35	13.5	9.5	13.3	15.9	11.2	10.6	18.4	12.9	8.7	20.8	14.6	7.3	23.3	16.4	6.1	25.7	18.1	5.2
30	14.0	8.5	12.6	16.7	10.0	10.0	19.3	11.5	8.2	21.9	13.0	6.8	24.5	14.5	5.7	27.0	16.0	4.8
25	14.6	7.5	11.8	17.3	8.7	9.4	20.0	10.0	7.6	22.7	11.3	6.3	25.4	12.5	5.3	28.2	13.8	4.4

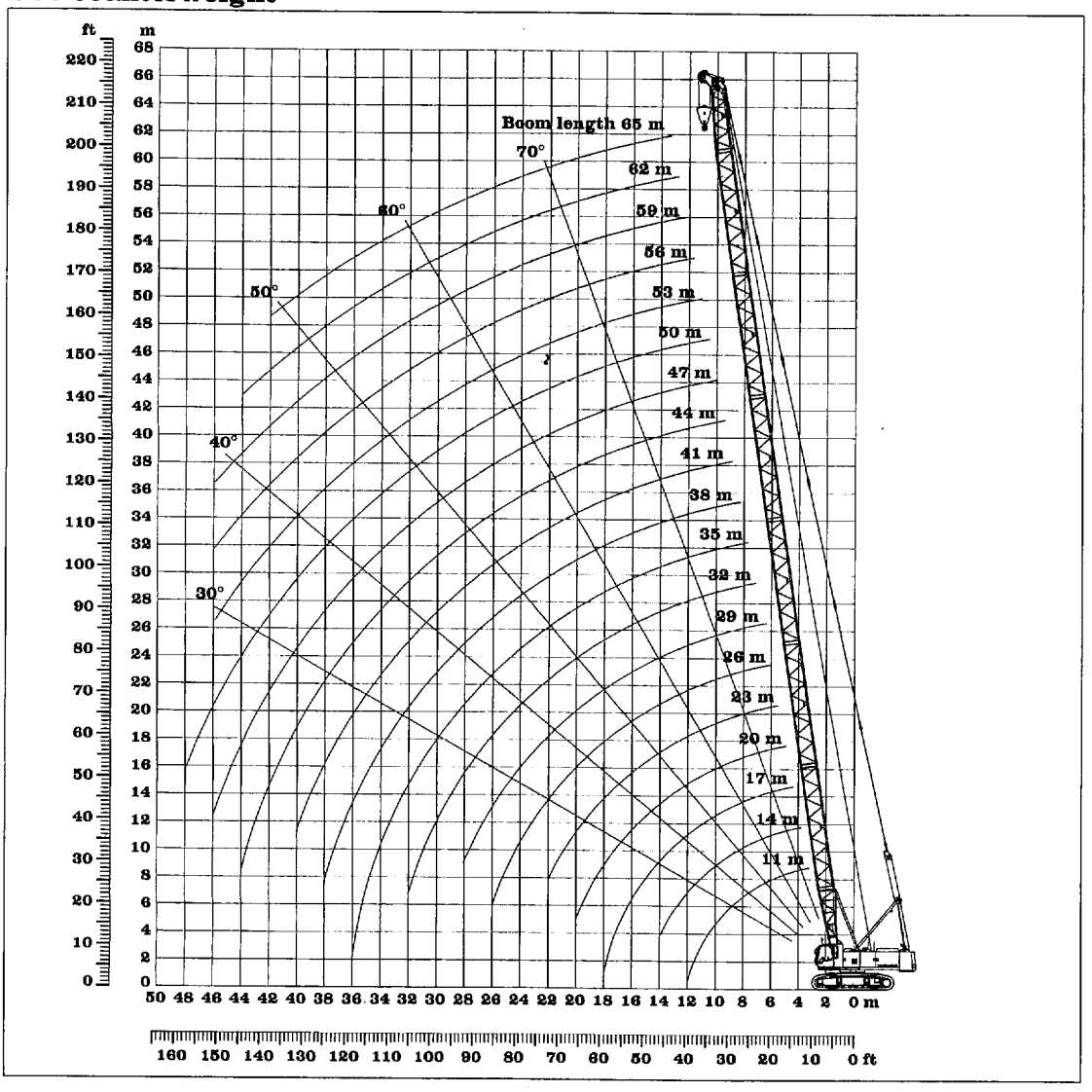
Max. capacities in metric tons do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches	120 kN	160 kN	200 kN	250 kN
Rope diameter	24 mm	26 mm	30 mm	34 mm
Calc. breaking load	524 kN	613 kN	820 kN	1051 kN
1-rope clamshell	9.5 t	11.1 t	14.8 t	19.0 t
2-rope clamshell	14.4 t	16.8 t	22.5 t	28.9 t

Clamshell equipment

24 t Counterweight



Scope of delivery:

- Basic machine with corresponding 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 interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoisting limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

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 indicated in metric tons with unlimited swing (360 degrees).
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, load under slew 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.

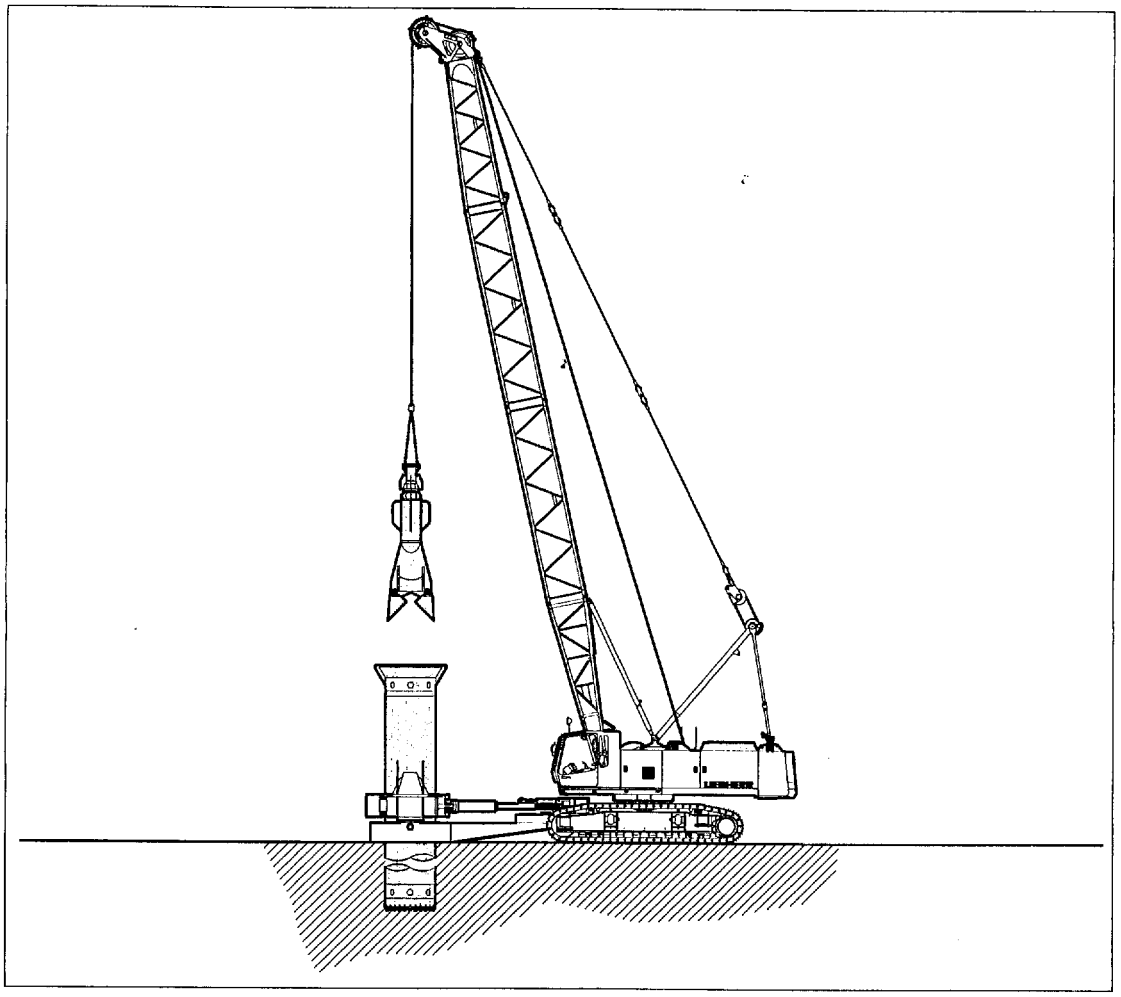
Crane configuration

Capacities in metric tons for boom lengths from 11 m to 65 m:																			Counterweight 24 t
Boom length	11m	14m	17m	20m	23m	26m	29m	32m	35m	38m	41m	44m	47m	50m	53m	56m	59m	62m	65m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t
3.5	80.0																		
4.0	80.0	78.6																	
4.5	74.0	73.9	73.7																
5.0	61.9	61.9	61.9	61.9															
5.5	52.8	52.8	52.8	52.7	52.7	52.7													
6.0	46.0	46.0	45.9	45.9	45.9	45.8	45.8												
6.5	40.7	40.6	40.6	40.6	40.5	40.5	40.4	40.4											
7.0	36.4	36.4	36.4	36.3	36.3	36.2	36.2	36.1	36.0										
7.5	30.1	32.9	32.9	32.9	32.8	32.7	32.7	32.6	32.5	32.5									
8.0	25.6	30.1	30.0	30.0	29.9	29.8	29.8	29.7	29.6	29.6	29.5	27.3							
9.0	22.2	25.5	25.5	25.4	25.4	25.3	25.2	25.1	25.1	25.0	24.9	24.8	22.8	19.9					
10.0	19.5	22.1	22.1	22.0	22.0	21.9	21.8	21.7	21.6	21.6	21.5	21.4	21.3	19.2	16.7	14.9			
11.0		19.5	19.5	19.4	19.3	19.2	19.2	19.1	19.0	18.9	18.8	18.7	18.6	18.5	16.1	14.4	12.0	10.2	8.8
12.0		17.4	17.3	17.3	17.2	17.1	17.0	16.9	16.9	16.8	16.7	16.6	16.5	16.4	15.5	13.8	11.5	9.7	8.3
13.0		15.6	15.6	15.5	15.5	15.4	15.3	15.2	15.1	15.0	14.9	14.8	14.7	14.7	14.6	13.3	10.9	9.2	7.8
14.0		14.2	14.2	14.1	14.0	13.9	13.9	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1	12.9	10.3	8.7	7.3
15.0			12.9	12.9	12.8	12.7	12.6	12.5	12.4	12.4	12.3	12.2	12.1	12.0	11.9	11.8	9.8	8.2	6.9
16.0			11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.7	9.4	7.7	6.5
17.0			11.0	10.9	10.8	10.8	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.8	8.9	7.3	6.1
18.0				10.1	10.0	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.4	6.9	5.8
19.0				9.4	9.3	9.3	9.2	9.1	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.0	6.5	5.4
20.0				8.8	8.7	8.6	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.6	7.5	6.2	5.1
22.0					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	5.6	4.5
24.0						6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.0	4.0
26.0						6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.5	3.6
28.0							5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.2	4.1	3.1
30.0								4.6	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	2.8
32.0									4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.1	2.5
34.0									3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.8	2.7	2.1
36.0										3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	1.8
38.0										2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	1.5
40.0											2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.3
42.0													2.1	2.0	1.9	1.8	1.6	1.5	1.1
44.0													1.8	1.7	1.6	1.5	1.4	1.3	0.8
46.0													1.6	1.5	1.4	1.3	1.2	1.1	
48.0														1.3	1.2	1.1	1.0		

Up to 59 m of boom length self erection is possible.
The necessary hoistrope reeving arrangement has to be provided according to the load diagram in the cabin.

Optimal boom configuration for boom lengths between 11 m to 65 m:																				
	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	1
Boom extension	3.0 m		1			1			1			1			1			1		
Boom extension	6.0 m			1			1			1			1			1			1	
Boom extension	9.0 m				1	1	1	2	2	2	3	3	3	4	4	4	5	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	1
Boom length in meters		11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59	62	65

Load diagram for crane configuration



Casing oscillator

Winch options	2 x 20 t	2 x 25 t
Line pull 2 x	400 kN	500 kN
Line speed 1st layer (m/min)	0–92	0–72
Drilling diameter	2000 mm	2000 mm
Chisel weight	12 t	16 t
Max. capacity with boom position in longitudinal direction of undercarriage at 7.5 m radius.	37.8 t	37.8 t

Free fall winches with maintenance free, spring loaded multi disc brake working in an oil bath.
Simultaneous working of both winches is assured through our hydraulic system.
Hydraulic supply for casing oscillator
q = 2 x 296 l/min.
P = 300 bar max.
Mechanical connection casing oscillator on undercarriage.
Automatic operation for one and two rope grabs. (optional)
Hoisting speed will have priority over the casing oscillator while main winches are activated.

8099 444 14 – 01/98 Subject to change without notice.

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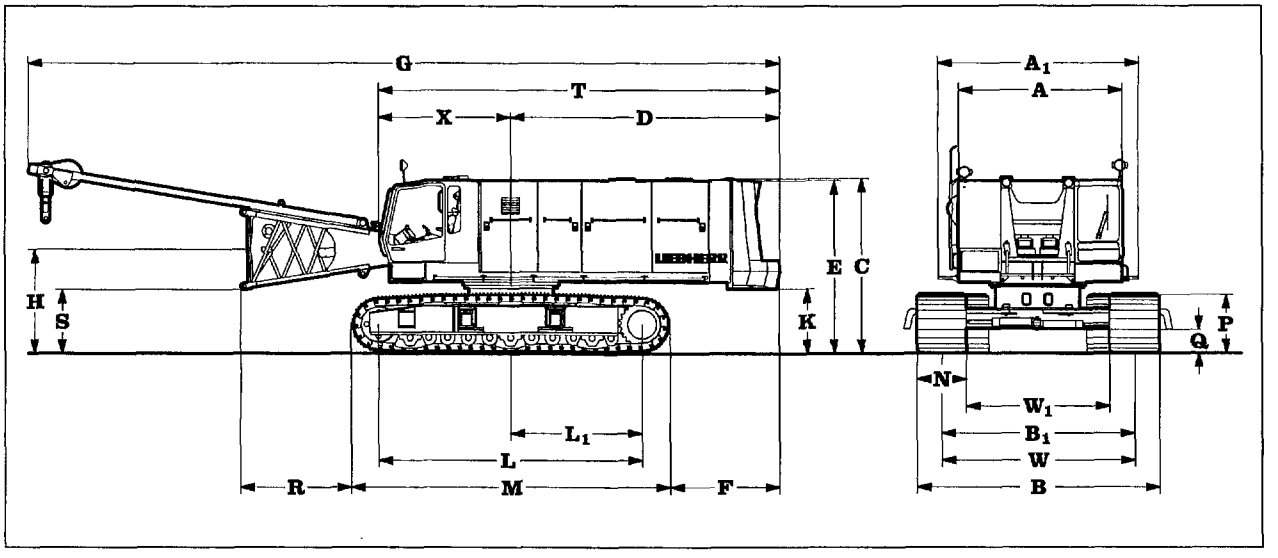
Technical Data
Hydraulic crawler crane

HS 873 HD
Litronic®

Basic machine with undercarriage



Dimensions		mm
A	Width of superstructure	3300/3480
A_1	Width of superstructure with walk way	4040
C	Height of basic machine	3580
D	Tail reach	5440
	Tail swing radius	5510
E	Height over counterweight	3510
F	Distance between rear end of crawler and outside of counterweight	2210
G	Overall length of superstructure with lowered A-frame	15200
H	Ground clearance of boom foot pivot	2130
K	Ground clearance of superstructure	1340
L	Wheel base (centre idler to centre tumbler)	5330
L_1	Distance from centre of rotation to centre of tumbler	2660
M	Length of crawlers	6460
P	Height of crawlers	1200
Q	Ground clearance of crawler	500
R	Distance from edge of horizontal boom foot to crawler	2250
S	Ground clearance of horizontal boom foot	1300
T	Length of superstructure	8120

		mm
X	Distance from centre of rotation to end of cab	2685

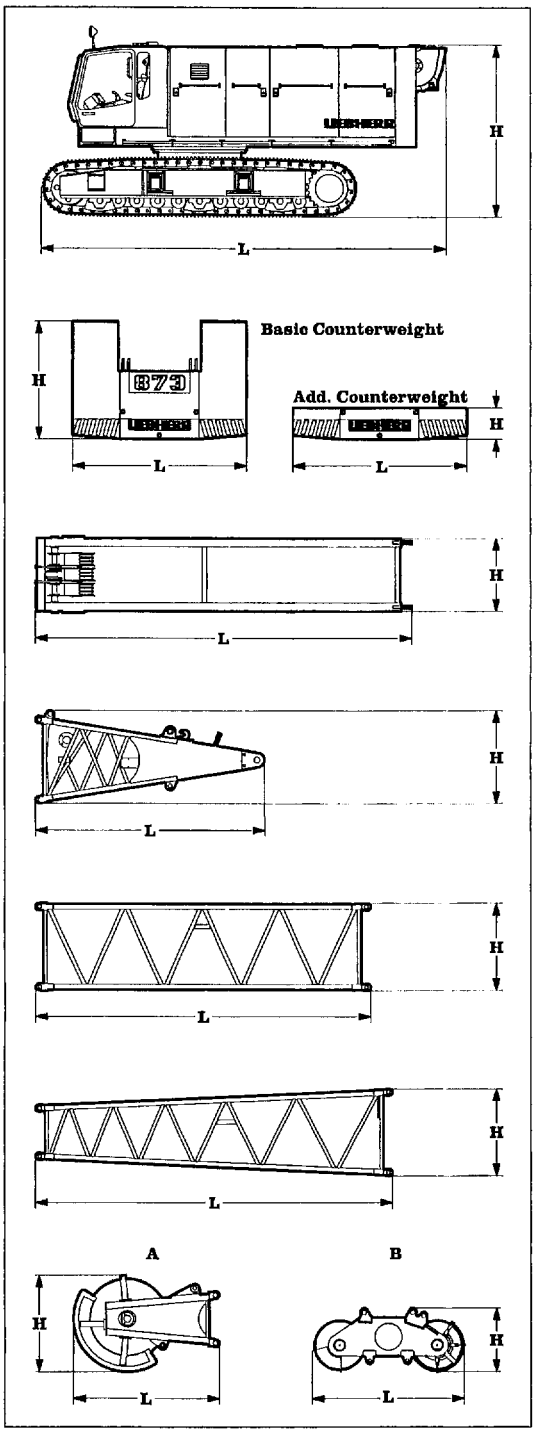
N	Width of track shoes	700	800	900	1000
W_1	Track width retracted	2900	2900	2900	2900
W	Track width extended	3900	3900	3900	3900
B	Crawler width extended	4600	4700	4800	4900
B_1	Crawler width retracted	4000	4000	4000	4000

Operating Weight and Ground Pressure

The operating weight includes the basic unit with B8 crawler tracks, 2 main winches 25 t with speed change gear and 11 m boom, consisting of A-frame, boom foot (4 m), boom head section (6.4 m) boom head (0.6 m) and 19.6 t counterweight + 4.5 t add. counterweight.
All systems are ready.

with 700 mm flat track shoes	93.3 t – 1.26 kg/cm²
with 800 mm flat track shoes	94.3 t – 1.11 kg/cm²
with 900 mm flat track shoes	95.3 t – 1.00 kg/cm²
with 1000 mm flat track shoes	96.4 t – 0.91 kg/cm²
with 700 mm 3-web shoes	91.5 t – 1.23 kg/cm²
with 800 mm 3-web shoes	92.3 t – 1.09 kg/cm²
with 900 mm 3-web shoes	93.1 t – 0.97 kg/cm²
with 1000 mm 3-web shoes	93.9 t – 0.88 kg/cm²

LIEBHERR
The Better Machine



*) including stay ropes

Basic machine

with HD undercarriage, V-8-Liebherr diesel engine,
2 x 25 t winches with change gear box,
without counterweight, boom foot and A-frame

3-web shoes	mm	700	800	900	1000
Width	mm	4000	4000	4000	4000
Weight	t	61.2	62.0	62.8	63.6
L Length	mm	8270	8270	8270	8240
H Height	mm	3580	3580	3580	3580

Counterweight

		Basic	Additional
Width	mm	720	690
Weight	kg	19600	4500
L Length	mm	3200	3200
H Height	mm	2200	585

A-frame

		short	long
Width	mm	1100	1410
Weight	kg	1895	2175
L Length	mm	5730	6930
H Height	mm	1440	1440

Boom foot

		Basic
Width	mm	1460
Weight	kg	1955
L Length	mm	4200
H Height	mm	1550

Tubular boom extension

		3 m	6 m	9 m
Width	mm	1460	1460	1460
Weight*	kg	725	1120	1500
L Length	mm	3170	6170	9170
H Height	mm	1450	1450	1450

Boom head section

Width	mm	1460
Weight*	kg	1150
L Length	mm	6530
H Height	mm	1450

Boom head

		A	B
Width	mm	780	1060
Weight	kg	1500	1775
L Length	mm	2665	2820
H Height	mm	1800	1170

Transport dimensions and weights

Engine

Water cooled, V-8-cylinder Liebherr diesel engine, turbo charged with intercooler, model D 9408 TI-E, power rating according to ISO 9249, 340 kW (462 hp) at 1900 rpm.
Option:
Water cooled, V-12-cylinder Mecedes Benz diesel engine, turbo charged with intercooler, type OM 444 LA, power rating according to DIN ISO 3046 IFN, 448 kW (609 hp) at 1900 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: 920 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 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 500 l/min. each.
Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 396 l/min.
Swing gear: Axial piston displacement pump (swash plate design) with 283 l/min.
Boom hoist: Axial piston displacement pump (swash plate design) with 200 l/min.
Max. working pressure: 350 bar.
Hydraulic oil tank capacity: 1100 l
The hydraulic oil is cleaned through electro- nically controlled pressure and return filters.
Possible contamination is signaled in the cabin. The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:

Line pull (nom. load)	160 kN	200 kN	250 kN
Rope diameter :	26 mm	30 mm	34 mm
Drum diameter :	550 mm	630 mm	750 mm
Rope speed m/min	0–106	0–85	0–69
With change gear box			0–154
Rope capacity 1st layer	46.5 m	46.5 m	45.9 m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 160 kN (16 t) – without clutch, but with multi- disc holding brake.

Noise emission

Special sound proofing results in a very low noise pressure level of 78 dB (A) at 16 m radius.

Equipment

Lattice boom of tubular construction up to 50 m, universal boom head with interchangeable rope pulleys. Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot, which minimizes rope angle to drum, which results in lower rope wear.

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. A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 0 – 3.7 rpm continuously variable.

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.
Flat or 3 – web track shoes. Drive speed 0 – 1.6 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature 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.
A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake.
An additional option is also 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.
On request, Liebherr also offers special custom designed control systems for free fall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
Options:

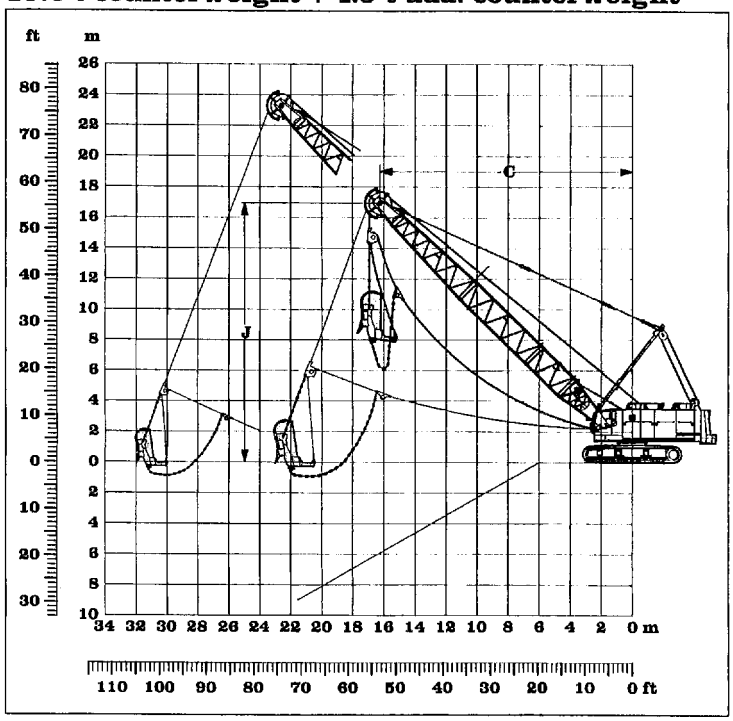
- Both main winches with double-T levers
- Special demolition control system
- MDE: Machine data recording
- PDE: Process data recording

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 2x 70 kN. Rope diameter: 20 mm
Max. line speed: 23 m/min.
Two speed boom hoist option

Technical description

19.6 t counterweight + 4.5 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- Second swing drive with free swing
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

Capacities in metric tons for boom lengths from 15 m to 30 m: Counterweight 24.1 t

	15 m			18 m			21 m			24 m			27 m			30 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	12.6	12.7	20.4	14.7	14.8	16.3	16.9	16.9	13.1	19.0	19.0	11.2	21.1	21.2	9.5	23.2	23.3	8.1
40	13.5	11.7	18.7	15.8	13.6	14.6	18.1	15.6	12.0	20.4	17.6	10.2	22.7	19.4	8.6	25.0	21.3	7.2
35	14.3	10.7	17.3	16.8	12.4	13.3	19.2	14.1	11.2	21.7	15.8	9.4	24.1	17.5	7.8	26.6	19.3	6.5
30	15.0	9.6	16.0	17.6	11.1	12.4	20.2	12.6	10.2	22.8	14.1	8.5	25.4	15.6	7.0	28.0	17.1	5.8
25	15.6	8.4	15.0	18.3	9.7	11.8	21.0	10.9	9.2	23.8	12.2	7.6	26.5	13.5	6.3	29.2	14.7	5.2

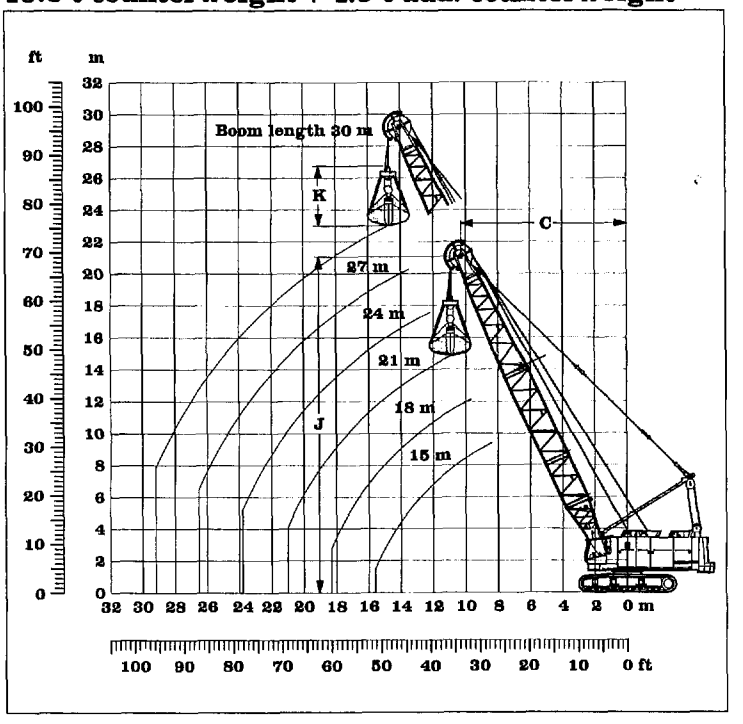
Max. capacities in metric tons do not exceed 75 % of tipping load

Optimal boom configuration for boom lengths between 11 m to 50 m:

	Length	Amount of boom extensions													
Boom foot	4.0 m	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		
Boom extension	9.0 m				1	1	1	2	2	2	3	3	3	4	4
Boom head extension	6.4 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom head	0.6 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length in (m)		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

Dragline equipment

19.6 t counterweight + 4.5 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Tagline winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

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 boom lengths from 15 m to 30 m: Counterweight 24.1 t

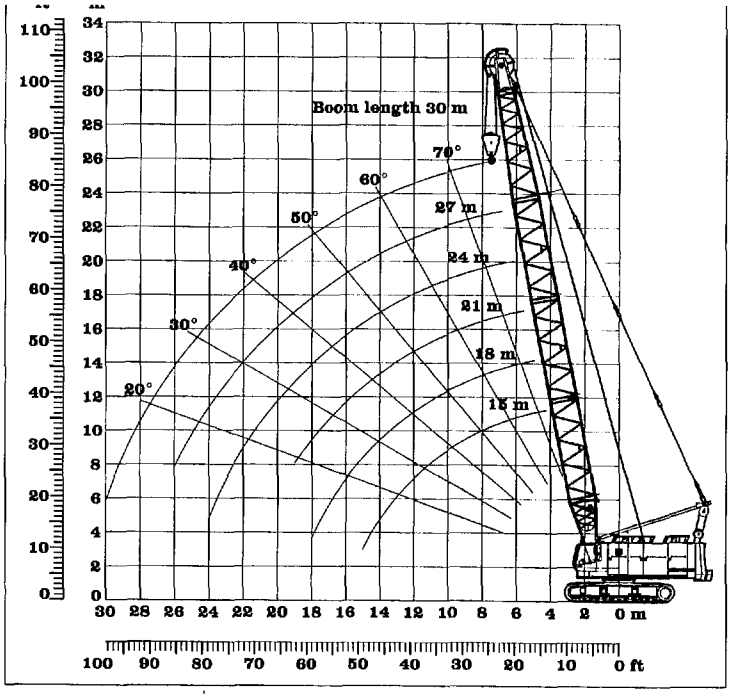
	15 m			18 m			21 m			24 m			27 m			30 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	8.4	15.6	28.0	9.6	18.4	23.5	10.9	21.1	20.3	12.2	23.8	17.6	13.4	26.5	15.3	14.7	29.2	13.4
60	9.5	15.0	26.5	11.0	17.6	21.4	12.5	20.2	18.2	14.0	22.8	15.4	15.5	25.4	13.2	17.0	28.0	11.4
55	10.6	14.3	23.0	12.4	16.8	18.7	14.1	19.3	15.5	15.8	21.7	13.1	17.5	24.2	11.2	19.2	26.6	9.6
50	11.7	13.5	20.3	13.6	15.8	16.4	15.5	18.1	13.6	17.4	20.4	11.4	19.4	22.7	9.6	21.3	25.0	8.2
45	12.6	12.7	18.2	14.7	14.8	14.7	16.9	16.9	12.1	19.0	19.0	10.1	21.1	21.2	8.5	23.2	23.3	7.2
40	13.5	11.7	16.6	15.8	13.6	13.3	18.1	15.6	10.9	20.4	17.5	9.1	22.7	19.4	7.6	25.0	21.3	6.4
35	14.3	10.7	15.3	16.8	12.4	12.3	19.2	14.1	10.1	21.7	15.8	8.3	24.1	17.5	6.9	26.6	19.3	5.7
30	15.0	9.6	14.4	17.6	11.1	11.5	20.2	12.6	9.4	22.8	14.1	7.7	25.4	15.6	6.4	28.0	17.1	5.3
25	15.6	8.4	13.5	18.3	9.7	10.8	21.0	10.9	8.8	23.8	12.2	7.2	26.5	13.5	5.9	29.2	14.7	4.9

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

Load diagram restricted by safety factors of standard ropes:

Winches	160 kN	200 kN	250 kN
Rope diameter	26 mm	30 mm	34 mm
Calc. breaking load	613 kN	820 kN	1051 kN
1-rope clamshell	11.1 t	14.8 t	19.0 t
2-rope clamshell	16.8 t	22.5 t	28.9 t

Clamshell equipment



- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Corresponding ropes optional
- Hoist limit switch
- Load moment limitation
- Corresponding hook block optional

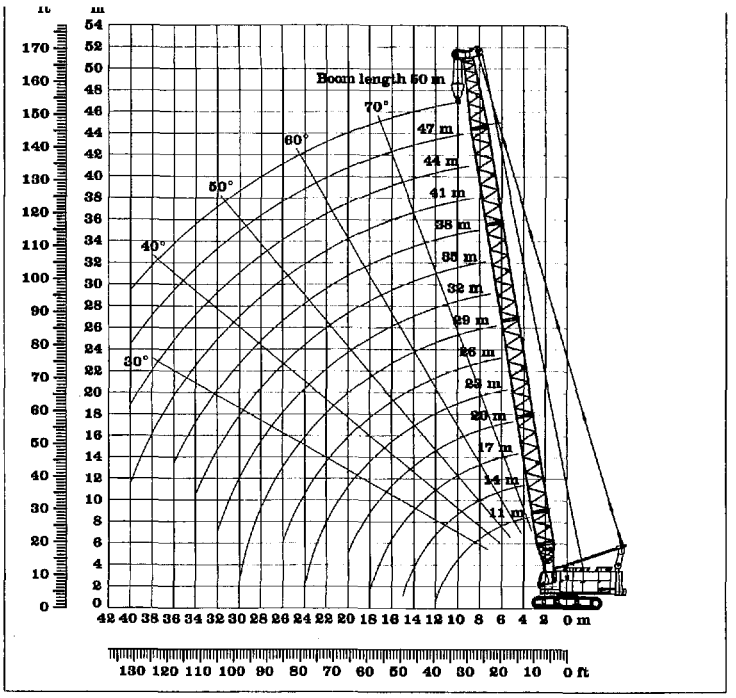
Remarks:

1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75% of tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees)
4. The weight of the lifting device must be deducted to arrive at the 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, load under slew and stop/go movements.

Capacities in metric tons for boom lengths from 15 m to 30 m: Counterweight 24.1 t

Boom length	15 m	18 m	21 m	24 m	27 m	30 m
Radius in (m)	t	t	t	t	t	t
5	40.4					
5.5	39.3	35.4				
6	38.3	34.6	31.3			
6.5	37.4	33.7	30.6	28.0		
7	36.4	33.0	30.0	27.4	23.7	
7.5	35.5	32.2	29.3	26.8	23.2	21.4
8	34.7	31.5	28.7	24.7	22.8	21.0
9	32.4	30.0	27.5	23.8	21.9	20.2
10	28.0	27.9	26.3	22.8	21.1	19.5
11	24.6	24.5	23.8	22.0	20.3	18.8
12	21.9	21.8	21.6	21.1	19.5	18.1
13	21.7	19.6	19.4	19.2	18.8	17.4
14	19.7	17.7	17.5	17.3	17.1	16.8
15	17.8	16.1	16.0	15.8	15.6	15.4
16	16.2	14.8	14.6	14.4	14.2	14.0
17		13.6	13.4	13.3	13.1	12.9
18		12.6	12.4	12.2	12.0	11.8
19			11.5	11.3	11.1	10.9
20				10.5	10.3	10.1
22				9.2	9.0	8.8
24				8.0	7.9	7.7
26					6.9	6.7
28						5.9
30						5.2

Lifting capacity with dragline boom head



- Basic machine with corresponding track shoes
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Corresponding ropes optional
- Hoist limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

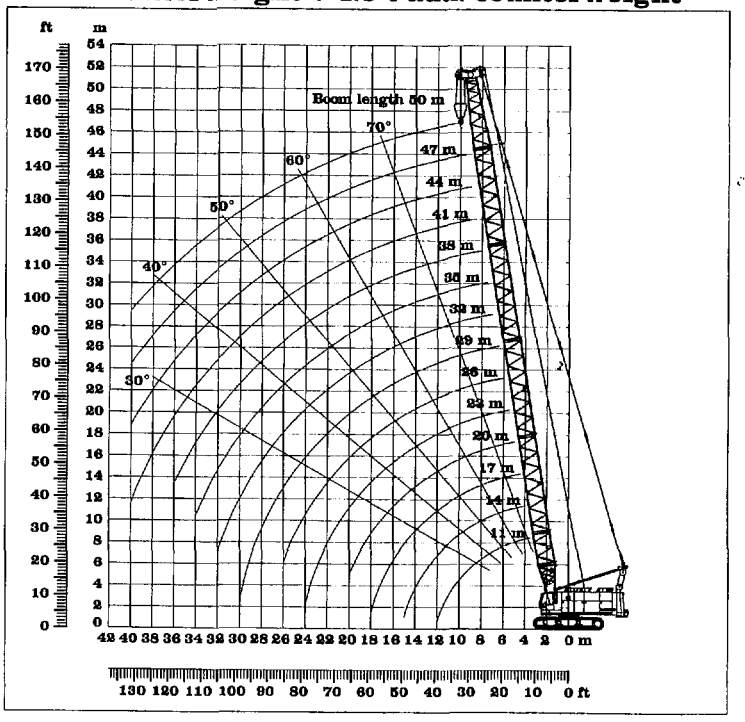
1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75% of tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees)
4. The weight of the lifting device must be deducted to arrive at the lifting capacity.
5. Working 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, load under slew and stop/go movements.

Capacities in metric tons for boom lengths from 11 m to 50 m: Counterweight 19.6 t

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
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t
4	90.0													
4.5	80.0	71.3												
5	71.8	68.6	64.2											
5.5	61.1	64.1	61.0	58.2										
6	53.1	53.0	53.0	52.9	52.7									
6.5	46.8	46.8	46.7	46.6	46.5	46.4								
7	41.9	41.9	41.8	41.6	41.5	41.4	41.2	40.5						
7.5	37.8	37.8	37.7	37.6	37.4	37.3	37.1	37.0	36.8					
8	34.4	34.4	34.3	34.2	34.0	33.9	33.7	33.6	33.4	33.2				
9	29.1	29.1	29.0	28.9	28.7	28.6	28.4	28.2	28.0	27.8	27.7	20.6		
10	25.1	25.1	25.0	24.9	24.7	24.6	24.4	24.2	24.0	23.8	23.6	19.0	15.1	12.2
11	22.0	22.0	21.9	21.8	21.6	21.5	21.3	21.1	20.9	20.7	20.5	17.5	13.9	11.2
12	19.4	19.5	19.4	19.3	19.2	19.0	18.8	18.6	18.4	18.2	18.0	16.2	12.8	10.4
13		17.5	17.4	17.3	17.1	16.9	16.8	16.6	16.4	16.2	16.0	15.0	12.0	9.6
14		15.8	15.7	15.6	15.4	15.3	15.1	14.9	14.7	14.5	14.3	13.9	11.2	8.9
15		14.3	14.3	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.6	10.4	8.2
16			13.0	12.9	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	9.7	7.6
17			11.9	11.9	11.7	11.5	11.3	11.1	10.9	10.7	10.5	10.3	9.1	7.1
18			11.0	10.9	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	8.5	6.6
19				10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.8	8.6	8.0	6.1
20				9.3	9.2	9.0	8.9	8.7	8.5	8.2	8.0	7.8	7.5	5.7
22					7.9	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.3	4.9
24					6.9	6.7	6.6	6.4	6.2	6.0	5.7	5.5	5.2	4.2
26						5.9	5.7	5.5	5.3	5.1	4.8	4.6	4.3	3.6
28							5.0	4.8	4.5	4.3	4.0	3.8	3.5	3.0
30							4.2	4.1	3.8	3.6	3.4	3.1	2.9	2.5
32								3.5	3.3	3.0	2.8	2.5	2.3	2.0
34									2.7	2.5	2.3	2.0	1.8	1.5
36										2.1	1.8	1.6	1.3	1.1
38											1.4	1.2	0.9	0.7

Lifting capacity with multi sheave HD boom head

19.6 t counterweight + 4.5 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Corresponding ropes optional
- Hoist limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75% of tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees)
4. The weight of the lifting device must be deducted to arrive at the 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, load under slew and stop/go movements.

Capacities in metric tons for boom lengths from 11 m to 50 m: Counterweight 24.1 t

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
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t
4	100.0													
4.5	86.0	71.3												
5	73.6	68.2	64.2											
5.5	68.1	66.2	62.0	58.2										
6	59.2	59.2	59.1	56.3	52.9									
6.5	52.3	52.3	52.2	52.1	51.3	46.9								
7	46.8	46.8	46.7	46.6	46.4	45.6	43.0	40.5						
7.5	42.3	42.3	42.2	42.0	41.9	41.7	41.6	39.4	37.1					
8	38.5	38.5	38.4	38.3	38.1	38.0	37.8	37.6	36.2	34.1				
9	32.6	32.6	32.5	32.4	32.2	32.1	31.9	31.7	31.5	31.3	28.4	20.6		
10	28.2	28.2	28.1	27.9	27.8	27.6	27.4	27.3	27.1	26.9	23.6	19.0	15.1	12.2
11	24.7	24.7	24.6	24.5	24.3	24.2	24.0	23.8	23.6	23.4	21.9	17.5	13.9	11.2
12	21.9	22.0	21.9	21.8	21.6	21.4	21.2	21.1	20.9	20.7	20.4	16.2	12.8	10.4
13		19.7	19.6	19.5	19.3	19.2	19.0	18.8	18.6	18.4	18.2	15.0	12.0	9.6
14		17.8	17.8	17.6	17.5	17.3	17.1	16.9	16.7	16.5	16.3	13.9	11.2	8.9
15		16.1	16.2	16.0	15.9	15.7	15.5	15.3	15.1	14.9	14.7	13.0	10.4	8.2
16			14.8	14.7	14.5	14.3	14.2	14.0	13.8	13.6	13.3	12.2	9.7	7.6
17			13.6	13.5	13.3	13.2	13.0	12.8	12.6	12.4	12.2	11.5	9.1	7.1
18			12.5	12.4	12.3	12.1	11.9	11.7	11.5	11.3	11.1	10.8	8.5	6.6
19				11.5	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	8.0	6.1
20				10.7	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.2	7.5	5.7
22					9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	6.6	4.9
24					8.0	7.9	7.7	7.5	7.3	7.1	6.9	6.7	5.8	4.2
26						6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.1	3.6
28							5.9	5.7	5.5	5.3	5.0	4.8	4.5	3.0
30							5.1	5.0	4.8	4.5	4.3	4.0	3.8	2.5
32								4.3	4.1	3.9	3.7	3.4	3.1	2.1
34									3.6	3.3	3.1	2.8	2.6	1.7
36										2.8	2.6	2.3	2.1	1.3
38											2.1	1.9	1.6	1.0
40											1.7	1.5	1.2	0.7

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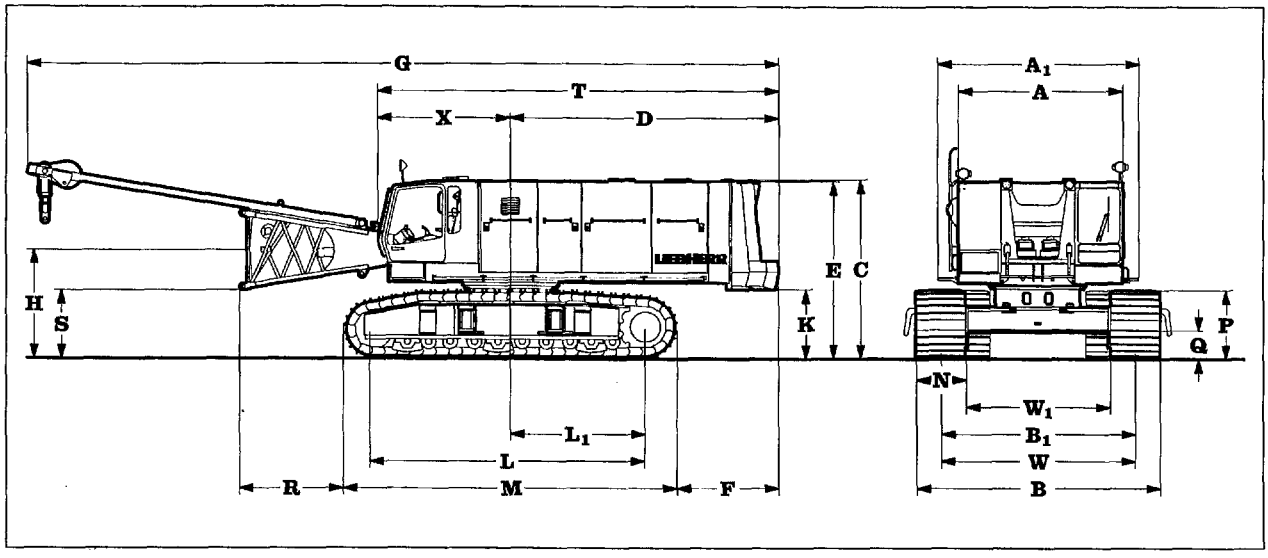
Technical Data
Hydraulic crawler crane

HS 883 HD
Litronic®

Basic machine with undercarriage



Dimensions		mm
A	Width of superstructure	3300/3480
A_1	Width of superstructure with walk way	4040
C	Height of basic machine	3660
D	Tail reach	5460
	Tail swing radius	5510
E	Height over counterweight	3650
F	Distance between rear end of crawler and outside of counterweight	2070
G	Overall length of superstructure with lowered A-frame	15200
H	Ground clearance of boom foot pivot	2210
K	Ground clearance of superstructure	1420
L	Wheel base (centre idler to centre tumbler)	5490
L_1	Distance from centre of rotation to centre of tumbler	2725
M	Length of crawlers	6750
P	Height of crawlers	1400
Q	Ground clearance of crawler	550
R	Distance from edge of horizontal boom foot to crawler	2100
S	Ground clearance of horizontal boom foot	1390
T	Length of superstructure	8120

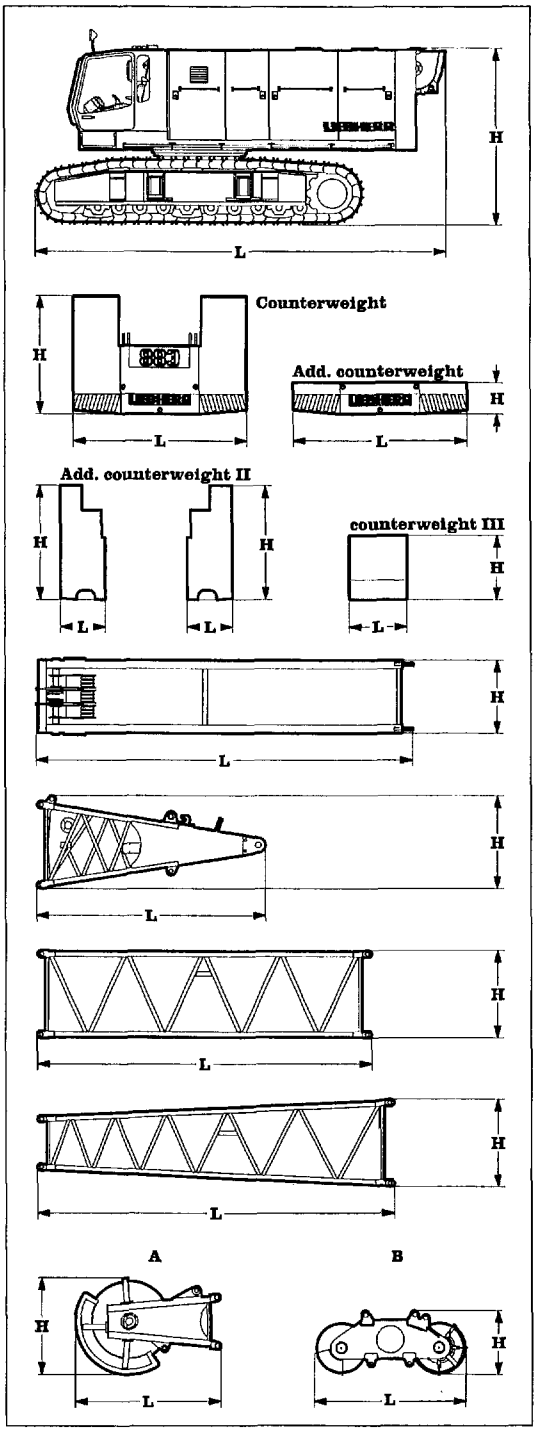
				mm
X	Distance from centre of rotation to end of cab			2685
N	Width of track shoes	800	900	1000
W_1	Track width retracted	2920	2920	2920
W	Track width extended	3920	3920	3920
B	Crawler width extended	4720	4820	4920
B_1	Crawler width retracted	4000	4000	4000

Operating Weight and Ground Pressure

The operating weight includes the basic unit with B9s crawler tracks, 2 main winches 30 t with speed change gear and 11 m boom, consisting of A-frame, boom foot (4 m), boom head section (6.5 m) boom head (0.5 m) and 24.1 t counterweight + 8.4 t add. counterweight.
All systems are ready.

with 800 mm flat track shoes	107.7 t – 1.24 kg/cm²
with 900 mm flat track shoes	108.5 t – 1.11 kg/cm²
with 1000 mm flat track shoes	109.4 t – 1.00 kg/cm²
with 800 mm 3-web shoes	105.1 t – 1.21 kg/cm²
with 900 mm 3-web shoes	105.9 t – 1.08 kg/cm²
with 1000 mm 3-web shoes	106.8 t – 0.98 kg/cm²

LIEBHERR
The Better Machine



*) including stay ropes

Basic machine

with HD undercarriage, V-8-Liebherr diesel engine, 2 x 30 t winches with change gear box, without counterweight, boom foot and A-frame

2-web shoes	mm	800	900	1000
Width	mm	4000	4000	4000
Weight	t	68.5	69.3	70.2
L Length	mm	8400	8400	8400
H Height	mm	3660	3660	3660

Counterweight

		Basic	Additional
Width	mm	720	690
Weight	kg	19600	4500
L Length	mm	3200	3200
H Height	mm	2200	585

Add. counterweight

		II	III
Width	mm	340	375
Weight	kg	2x 2600	3200
L Length	mm	835	1070
H Height	mm	2150	1420

A-frame

		long
Width	mm	1410
Weight	kg	2195
L Length	mm	6930
H Height	mm	1440

Boom foot

		Basic
Width	mm	1660
Weight	kg	2070
L Length	mm	4220
H Height	mm	1750

Tubular boom extension

		3 m	6 m	9 m	12 m
Width	mm	1660	1660	1660	1660
Weight*	kg	770	1240	1670	2120
L Length	mm	3170	6170	6170	12170
H Height	mm	1630	1630	1630	1630

Boom head section

Width	mm	1660
Weight*	kg	1310
L Length	mm	6570
H Height	mm	1630

Boom head

		A	B
Width	mm	780	1070
Weight	kg	1500	1800
L Length	mm	2665	2820
H Height	mm	1800	1210

Transport dimensions and weights

Engine

Water cooled, V-8-cylinder Liebherr diesel engine, turbo charged with intercooler, model D 9408 TI-E, power rating according to ISO 9249, 340 kW (448 hp) at 1800 rpm.
Option:
Water cooled, V-12-cylinder Mecedes Benz diesel engine, turbo charged with intercooler,type OM 444 LA, power rating according to DIN ISO 3046 IFN, 448 kW (609 hp) at 1900 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: 920 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 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 500 l/min. each.
Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 396 l/min.
Swing gear: Axial piston displacement pump (swash plate design) with 283 l/min.
Boom hoist: Axial piston displacement pump (swash plate design) with 200 l/min.
Max. working pressure: 350 bar.
Hydraulic oil tank capacity: 1100 l
The hydraulic oil is cleaned through electronically controlled pressure and return filters.
Possible contamination is signaled in the cabin. The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:

Line pull (nom. load)	200 kN	250 kN	300 kN
Rope diameter :	30 mm	34 mm	36 mm
Drum diameter :	630 mm	750 mm	820 mm
Rope speed m/min	0–85	0–69	0–55
With change gear box		0–154	0–154
Rope capacity 1st layer	46.5 m	45.9 m	45.9 m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 160 kN (16 t) – without clutch, but with multi-disc holding brake.

Noise emission

Special sound proofing results in a very low noise pressure level of 78 dB (A) at 16 m radius.

Equipment

Lattice boom of tubular construction up to 74 m, universal boom head with interchangeable rope pulleys.
Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot, which minimizes rope angle to drum, which results in lower rope wear.

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. A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 0 – 3.6 rpm continuously variable.

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.
Flat or 3 – web track shoes. Drive speed 0 – 1.3 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature 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.
A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake.
An additional option is also 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.
On request, Liebherr also offers special custom designed control systems for free fall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
Options:

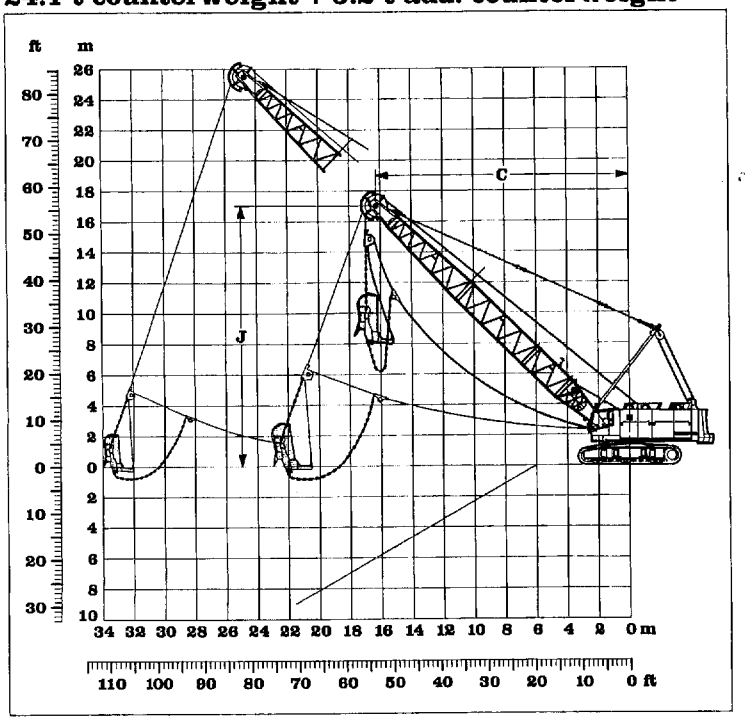
- Both main winches with double-T levers
- Special demolition control system
- MDE: Machine data recording
- PDE: Process data recording

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 2x 70 kN. Rope diameter: 20 mm
Max. line speed: 23 m/min.
Two speed boom hoist option

Technical Description

24.1 t counterweight + 5.2 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 5.2 t
- Second swing drive with free swing
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

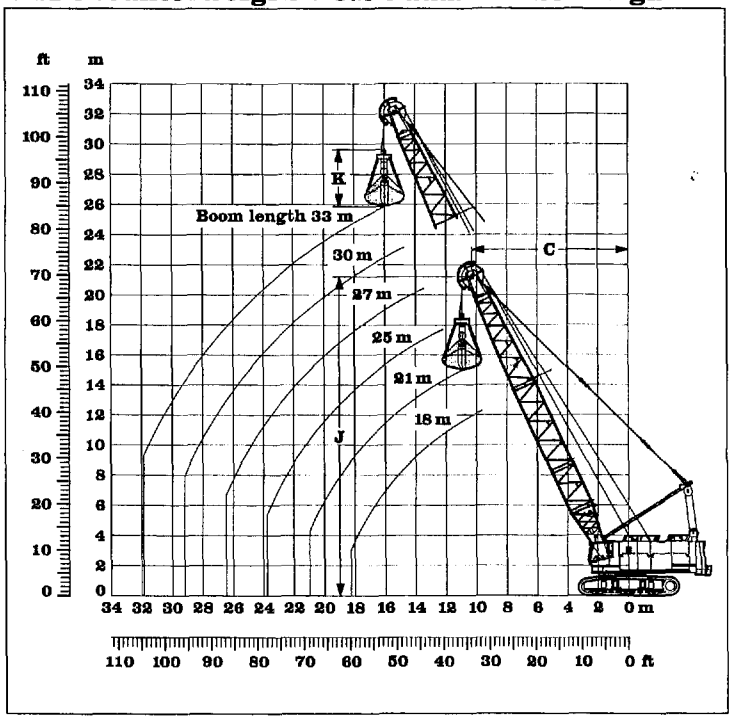
Capacities in metric tons for boom lengths from 18 m – 33 m: Counterweight 29.3 t

	18 m			21 m			24 m			27 m			30 m			33 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	14.7	14.9	18.0	16.9	17.0	14.4	19.0	19.1	11.9	21.1	21.3	10.2	23.3	23.4	8.9	25.3	25.6	8.5
40	15.8	13.7	16.2	18.1	15.7	12.8	20.4	17.6	10.9	22.7	19.5	9.4	25.0	21.4	8.1	27.3	23.4	7.6
35	16.8	12.5	14.8	19.2	15.2	12.0	21.7	15.9	10.1	24.1	17.6	8.6	26.6	19.4	7.2	29.1	21.2	6.8
30	17.6	11.2	13.3	20.2	12.7	10.9	22.8	14.2	9.0	25.4	15.7	7.5	28.0	17.2	6.3	30.6	18.7	6.2
25	18.3	9.8	11.9	21.0	11.0	9.7	23.8	12.3	8.2	26.5	13.6	6.8	29.2	14.8	5.7	31.9	16.2	5.6

Max. capacities in metric tons do not exceed 75% of tipping load.

Dragline equipment

24.1 t counterweight + 5.2 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 5.2 t
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.4 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Tagline winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

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 boom lengths from 18 m – 33 m: Counterweight 29.3 t

	18 m			21 m			24 m			27 m			30 m			33 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	9.6	18.5	30.9	10.9	21.2	26.6	12.2	23.9	22.4	13.4	26.6	19.6	14.7	29.3	17.0	16.0	32.1	14.6
60	11.0	17.7	26.2	12.5	20.3	22.0	14.0	22.9	18.7	15.5	25.5	15.9	17.0	28.1	13.5	18.5	30.8	11.8
55	12.4	16.9	22.5	14.1	19.4	18.8	15.8	21.8	15.7	17.5	24.3	13.1	19.2	26.7	11.4	21.0	29.3	10.1
50	13.6	15.9	19.8	15.5	18.2	16.4	17.4	20.5	13.5	19.4	22.8	11.6	21.3	25.1	10.1	23.2	27.5	8.7
45	14.7	14.9	17.7	16.9	17.0	14.4	19.0	19.1	12.0	21.1	21.3	10.4	23.2	23.4	8.9	25.3	25.6	7.6
40	15.8	13.7	16.1	18.1	15.7	12.9	20.4	17.6	11.1	22.7	19.5	9.4	25.0	21.4	7.9	27.3	23.4	6.7
35	16.8	12.5	14.8	19.2	14.2	12.1	21.7	15.9	10.1	24.1	17.9	8.5	26.6	19.4	7.1	29.1	21.2	6.0
30	17.6	11.2	13.3	20.2	12.7	10.9	22.8	14.2	9.0	25.4	15.7	7.6	28.0	17.2	6.3	30.6	18.7	5.2
25	18.3	9.8	11.9	21.0	11.0	9.7	23.8	12.3	8.0	26.5	13.6	6.7	29.2	14.8	5.5	31.9	16.2	4.5

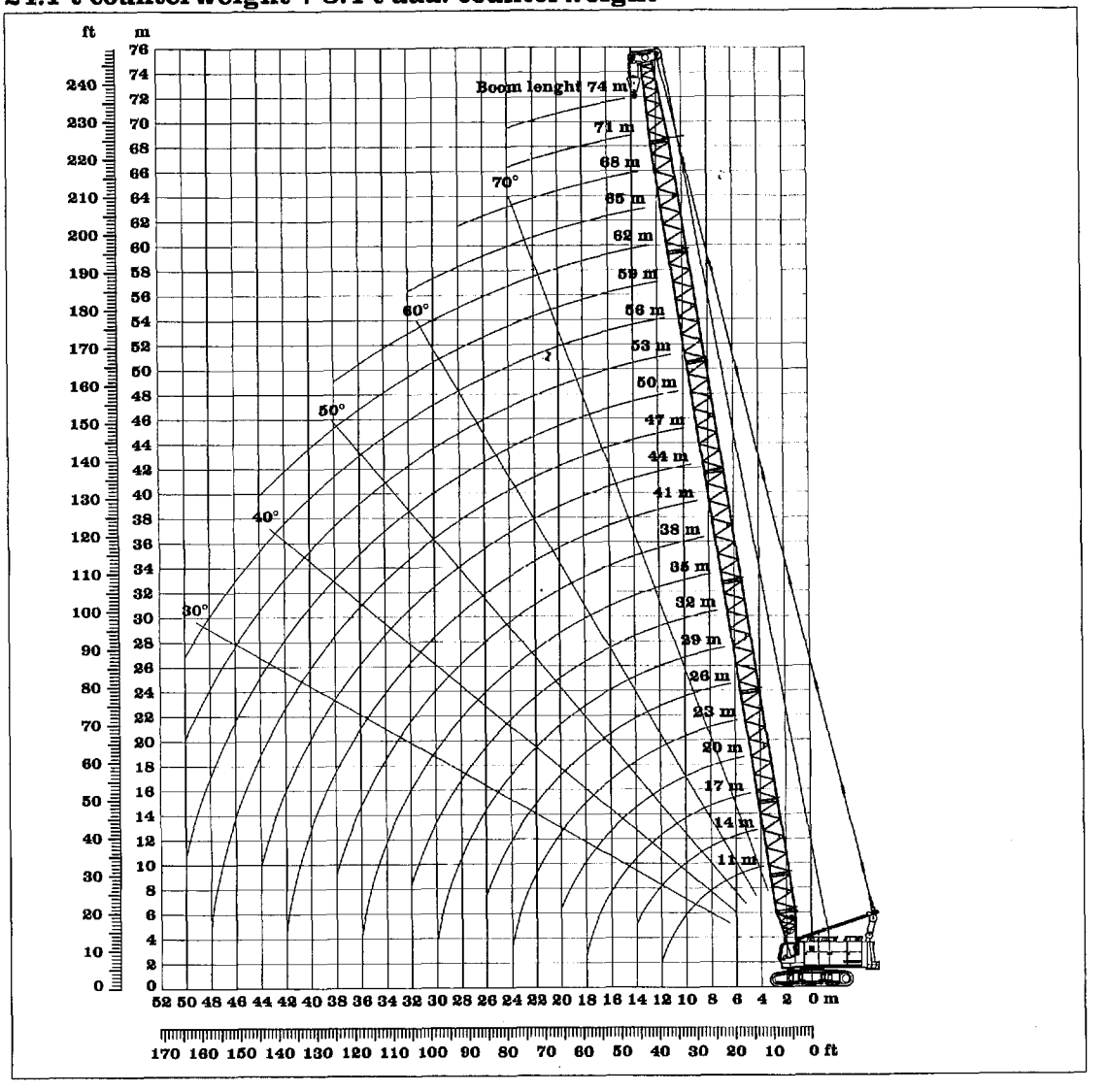
Max. capacities in metric tons do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches	200 kN	250 kN	300 kN
Rope diameter	30 mm	34 mm	36 mm
Calc. breaking load	820 kN	1051 kN	1184 kN
1-rope clamshell	14.5 t	19.0 t	21.5 t
2-rope clamshell	22.5 t	28.9 t	32.5 t

Clamshell equipment

24.1 t counterweight + 8.4 t add. counterweight



Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 8.4 t
- A-frame
- Pulley block
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head 0.5 m with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoisting limit switch
- Load moment limitation
- Corresponding hook block optional

Remarks:

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 indicated in metric tons with unlimited swing (360 degrees).
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, load under slew and stop/go movements.

Crane configuration

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	68 m	71 m	74 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t
4.0	120.0																					
4.5	120.0	120.0																				
5.0	101.7	101.6	100.9																			
5.5	86.5	86.5	86.5	86.4																		
6.0	75.1	75.1	75.0	75.0	74.9	74.8																
7.0	59.2	59.2	59.1	59.1	59.0	58.9	58.7	58.7	57.8													
8.0	48.7	48.7	48.6	48.6	48.4	48.3	48.1	48.1	48.0	47.9	45.1											
9.0	41.2	41.2	41.1	41.1	40.9	40.8	40.6	40.6	40.5	40.3	40.2	37.4	33.4									
10.0	35.7	35.6	35.5	35.5	35.3	35.2	35.0	35.0	34.9	34.7	34.6	34.4	32.4	29.3	27.0	22.0	18.5					
11.0	31.3	31.2	31.2	31.1	31.0	30.8	30.7	30.7	30.5	30.3	30.2	30.0	29.9	27.6	25.9	21.0	17.5	14.8				
12.0	28.8	27.7	27.7	27.6	27.5	27.3	27.2	27.2	27.0	26.9	26.7	26.5	26.4	25.9	24.8	20.0	16.5	14.4	12.9	10.5	6.2	
13.0		24.9	24.8	24.8	24.7	24.5	24.3	24.3	24.2	24.0	23.8	23.7	23.5	23.3	23.2	19.2	15.5	13.7	12.2	10.0	5.8	5.3
14.0		22.5	22.4	22.4	22.3	22.1	22.0	22.0	21.8	21.6	21.5	21.3	21.1	20.9	20.8	18.4	14.4	13.0	11.4	9.5	5.5	4.7
16.0			18.8	18.7	18.6	18.4	18.2	18.2	18.1	17.9	17.7	17.6	17.4	17.2	17.0	16.9	12.9	11.4	10.0	8.3	4.8	3.9
18.0			16.0	15.9	15.8	15.6	15.4	15.5	15.3	15.1	15.0	14.8	14.6	14.4	14.2	14.1	11.6	10.2	9.1	7.4	4.1	3.2
20.0				13.7	13.6	13.4	13.3	13.3	13.1	13.0	12.8	12.6	12.4	12.2	12.1	11.9	10.4	9.2	8.2	6.5	3.3	2.5
22.0					11.8	11.7	11.5	11.6	11.4	11.2	11.0	10.9	10.7	10.5	10.3	10.1	9.7	8.2	7.3	5.6	2.5	1.8
24.0					10.3	10.3	10.1	10.1	10.0	9.8	9.6	9.4	9.3	9.1	8.9	8.7	8.5	7.2	6.5	4.6	1.8	1.1
26.0						9.0	8.9	8.9	8.8	8.6	8.4	8.3	8.1	7.9	7.7	7.5	7.3	6.5	5.7	3.7		
28.0							7.9	7.9	7.8	7.6	7.4	7.3	7.1	6.9	6.6	6.4	6.2	5.7	4.9	2.8		
30.0							7.0	7.1	6.9	6.7	6.6	6.4	6.1	5.9	5.7	5.5	5.3	4.9	4.0			
32.0								6.3	6.2	6.0	5.8	5.6	5.3	5.1	4.9	4.7	4.5	4.1	3.1			
34.0									5.4	5.3	5.1	4.9	4.6	4.4	4.2	4.0	3.8	3.3				
36.0									4.8	4.6	4.4	4.2	4.0	3.8	3.6	3.4	3.2	2.6				
38.0										4.0	3.9	3.7	3.5	3.3	3.1	2.8	2.6	1.5				
40.0											3.4	3.2	3.0	2.8	2.6	2.3	2.1					
42.0											2.9	2.7	2.5	2.3	2.1	1.9	1.7					
44.0												2.3	2.1	1.9	1.7	1.5	1.3					
46.0													1.7	1.5	1.3	1.1						
48.0													1.4	1.2	1.0	0.8						
50.0														0.9	0.7	0.5						

Up to 65 m of boom length self erection is possible.
The necessary hoistrope reeving arrangement has to be provided according to the load diagram in the cabin.

Optimal boom configuration for boom lengths between 11 m to 74 m:

	Length	Amount of boom extensions																					
Boom foot	4.0 m	1	1	1	1	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				1
Boom extension	6.0 m			1				1				1				1				1			
Boom extension	9.0 m				1				1				1				1				1		
Boom extension	12.0 m				1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
Boom head extension	6.4 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom head	0.6 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length in (m)		11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59	62	65	68	71	74

Load diagram for crane configuration

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Technical Data
Hydraulic Crawler Crane

HS 895 HD
Litronic®

Basic machine with undercarriage

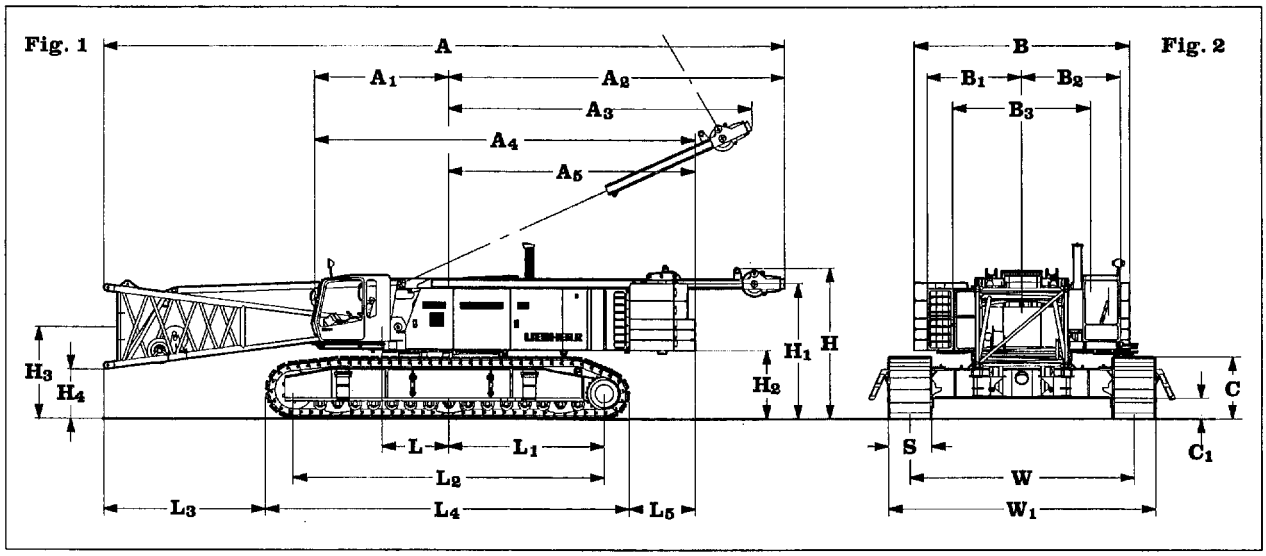


Fig. 1: Dimensions in mm

A	Overall length of superstructure with lowered A-frame and boom foot	17500
A_1	Centre of rotation – front edge of cabin	3240
A_2	Centre of rotation – lowered A-frame	8560
A_3	Tail reach– A-frame in working position	7750
A_4	Length of superstructure	9610
A_5	Tail swing radius	6370
H	Height over lowered A-frame	3900
H_1	Height over counterweight	3530
H_2	Ground clearance of superstructure	1710
H_3	Ground clearance of boom foot pivot	2350
H_4	Ground clearance of horizontal boom foot	1270
L	Centre of rotation – boom foot pivot	1700
L_1	Centre of rotation – centre of tumbler	3970
L_2	Wheel base (centre idler to centre tumbler)	7950
L_3	Distance from edge of horizontal boom foot to crawler	4100
L_4	Length of crawlers	9330
L_5	Distance between rear end of crawler and outside of counterweight	1740

Fig. 2: Dimensions in mm

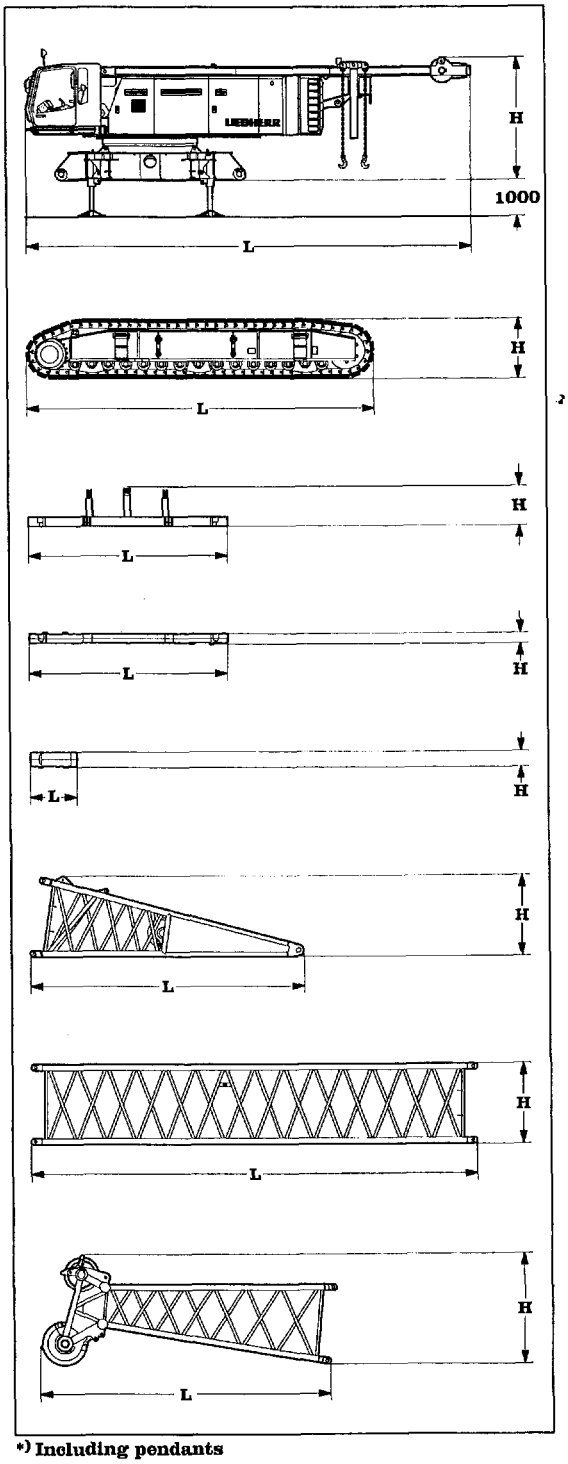
B	Width of counterweight	5480
B_1	Centre of rotation – outside of superstructure	1750
B_2	Centre of rotation – outside of cabin in working position	2500
B_3	Width of superstructure	3500
C	Height of crawlers	1590
C_1	Ground clearance of undercarriage	530
S	Width of pads	1100
W	Track width of undercarriage	5700
W_1	Width of undercarriage	6800

Operating weight and ground pressure

The operating weight includes the basic machine with crawlers, 2 main winches 35 t including wire ropes (150 m) and 20 m main boom, consisting of A-frame, boom foot (7 m), boom head (7 m), boom extension (6 m), and 55.1 t basic counterweight

with 1100 mm flat pads 169.2 t – 0.97 kg/cm²

LIEBHERR
The Better Machine



*) Including pendants

Basic machine

with A-frame and 2x 35 t winches including wire ropes (150m), without boom foot, basic counterweight, and crawlers

Width	mm	3500
Weight	kg	55000
L Length	mm	12860
H Height	mm	3300

Crawler

		2x
Width	mm	1220
Weight	kg	25000
L Length	mm	9330
H Height	mm	1590

Counterweight

		1x
Width	mm	1660
Weight	kg	13500
L Length	mm	5480
H Height	mm	1100

Counterweight

		2x
Width	mm	1660
Weight	kg	10600
L Length	mm	5480
H Height	mm	340

Counterweight

		4x
Width	mm	1360
Weight	kg	5100
L Length	mm	1480
H Height	mm	500

Boom foot (HPT)

Width	mm	2420
Weight	kg	3550
L Length	mm	7350
H Height	mm	2200

Tubular boom section (HPT)

		6 m	11.7 m
Width	mm	2420	2420
Weight*	kg	1915	2850
L Length	mm	6250	11950
H Height	mm	2340	2340

Boom head (HPT)

Width	mm	2420
Weight*	kg	3600
L Length	mm	8500
H Height	mm	3060

Transport dimensions and weights

Engine

Water cooled, V-12-cylinder Mercedes Benz diesel engine, turbo charged with intercooler,type OM 444 LA, power rating according to ISO 3046 IFN, 605 kW (811 hp) at 1900 rpm.
The automatic load limiting 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: 950 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 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 550 l/min each
Crawlers: Axial piston displacement pumps (swash plate design) with 2 x 396 l/min
Swing gear: Axial piston displacement pump (swash plate design) with 405 l/min
Boom hoist: Axial piston displacement pump (swash plate design) with 490 l/min
Max. working pressure: 350 bar
Hydraulic oil tank capacity: 1100 l
The hydraulic oil is cleaned through electronically controlled pressure and return filters.
Possible contamination is signaled in the cabin. The use of synthetic environmentally friendly oils is possible.
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, auger drills etc.

Winches

Winch options:				
Line pull (nom. load)	200 kN	250 kN	300 kN	350 kN
Rope diameter	30 mm	34 mm	36 mm	36 mm
Drum diameter	630 mm	750 mm	820 mm	830 mm
Rope speed m/min	0–85	0–69	0–55	0–58
With change gear box		0–154	0–154	0–116
Rope capacity				
1st layer	46.5 m	45.9 m	46.3 m	54.7 m

The winches are outstanding in 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 freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The dragline and hoist winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Working with 2 rope clamshell, the oil motors distribute the load to both winches providing speed compensation, even when working in different rope layers.
Option:
Crane winch 160 kN (16 t) – without clutch, but with multi-disc holding brake.

Noise emission

Noise emissions correspond with 2000/14/EC directive on noise emission by equipment used autdoors.

Equipment

Lattice boom of tubular construction up to 84.2 m, universal boom head with interchangeable rope pulleys.
Modular designed equipment for operation as crane, dragline or clamshell.
For dragline operation, a rotating fairlead is fitted into the boom foot, which minimizes rope angle to drum, which results in lower rope wear.

Swing Drive

Consists of roller slewing ring 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. A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 0 – 3.0 rpm continuously variable.

Crawler

Propulsion through axial piston motor, hydraulically released spring loaded multi-disc brake, maintenance free crawler tracks, hydraulic chain tensioning device.
Flat track shoes. Drive speed 0 – 1.4 km/h.
Option:
2 speed hydraulic motor for higher travel speed.

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature 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.
A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake.
An additional option is also 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.
On request, Liebherr also offers special custom designed control systems for free fall winches.
The crane is operated with 2 multi-directional joysticks, right for winch I and boom hoist drive, left for winch II and slewing gear. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.
Options:

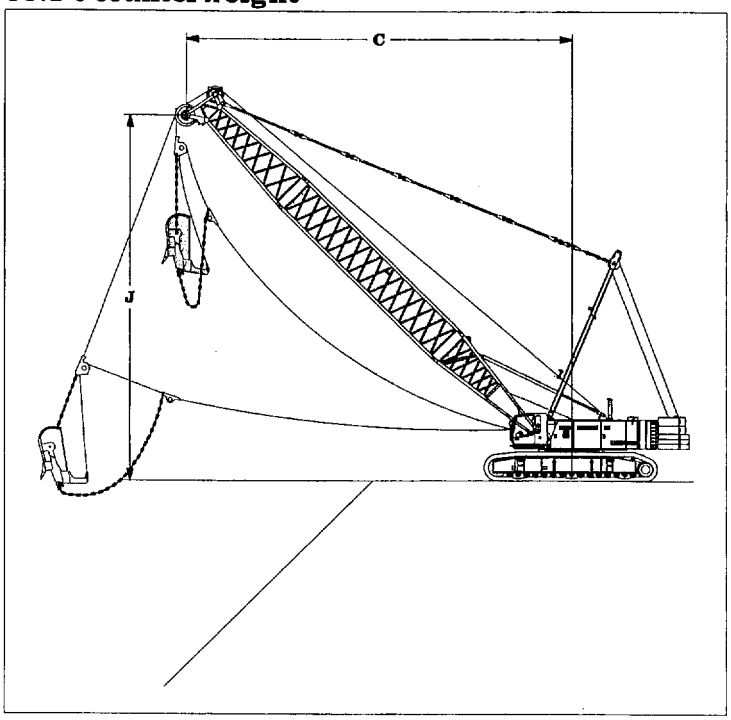
- MDE: Machine data recording
- PDE: Process data recording
- GSM – Service modem

Boom hoist drive

Drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi-disc brake.
Max. line pull: 150 kN
Rope diameter: 24 mm
Max. line speed: 85 m/min

Technical Description

55.1 t counterweight



Scope of delivery:

- Superstructure 600 kW diesel engine
- Undercarriage 895 HD – B9HD
- Crawler pads B9HD, 1100 mm flat
- Main winches 35 t with free fall
- Boom A-frame
- Boom foot 7 m
- Boom head 7 m, 2+3 sheaves, 180 t
- Boom section 11,7 m incl. pendants
- Boom section 6 m incl. pendants

Accessory:

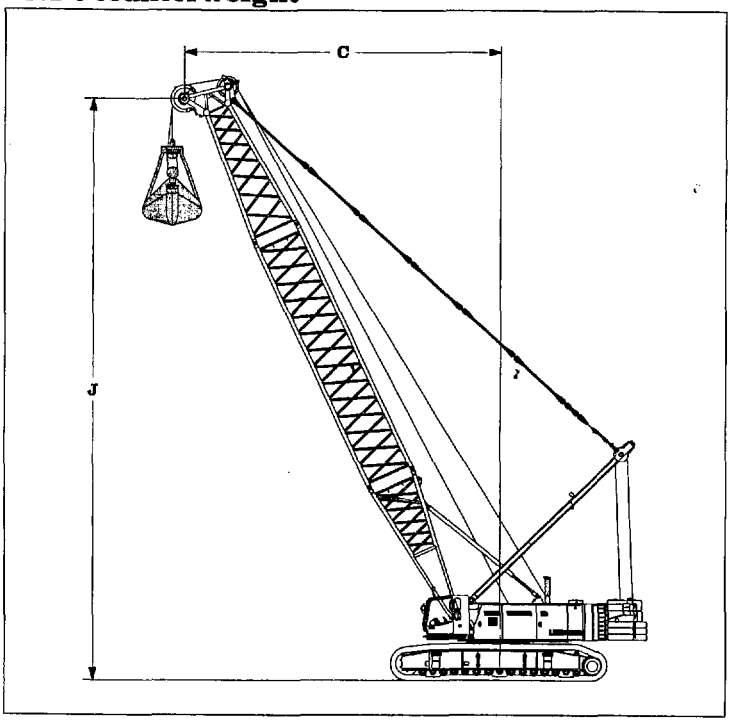
- Litronic back-up control system
- Litronic GSM service-modem
- Self assembly system
- Fair lead
- Corresponding wire ropes
- Corresponding dragline bucket

Capacities in metric tons for boom lengths from 25.7 m – 55.1 m:																		Counterweight 55.1 t
	25.7 m			31.7 m			37.4 m			43.4 m			49.1 m			55.1 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
45	21.1	19.7	29.2	25.3	24.0	22.4	29.3	28.0	18.1	33.6	32.3	14.3	37.6	36.3	11.6	41.8	40.5	9.2
40	22.5	18.2	26.6	27.1	22.0	20.3	31.5	25.7	16.3	36.1	29.5	12.8	40.4	33.2	10.2	45.0	37.1	7.8
35	23.8	16.5	24.6	28.7	19.9	18.7	33.4	23.2	14.8	38.3	26.6	11.6	43.0	29.9	9.2	47.9	33.3	6.8
30	24.9	14.7	23.0	30.1	17.7	17.4	35.0	20.5	13.7	40.2	23.5	10.6	45.2	26.4	8.3	50.4	29.4	6.0
25	25.9	12.8	21.3	31.3	15.3	16.2	36.5	17.7	12.5	41.9	20.2	9.6	47.1	22.6	7.3	52.5	25.2	5.2

Max. capacities in metric tons do not exceed 75% of tipping load.

Dragline equipment

55.1 t counterweight



Scope of delivery:

- Superstructure 600 kW diesel engine
- Undercarriage 895 HD – B9HD
- Crawler pads B9HD, 1100 mm flat
- Main winch with free fall,
- Boom A-frame
- Boom foot 7 m
- Boom head 7 m, 2+3 sheaves, 180 t
- Boom section 11,7 m incl. pendants
- Boom section 6 m incl. pendants

Accessory:

- Anti-two block
- Litronic back-up control system
- Litronic GSM service-modem
- Litronic working depth indicator
- Self assembly system
- Tagline winch 3.0 t free fall
- Corresponding wire ropes
- Corresponding grab

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)

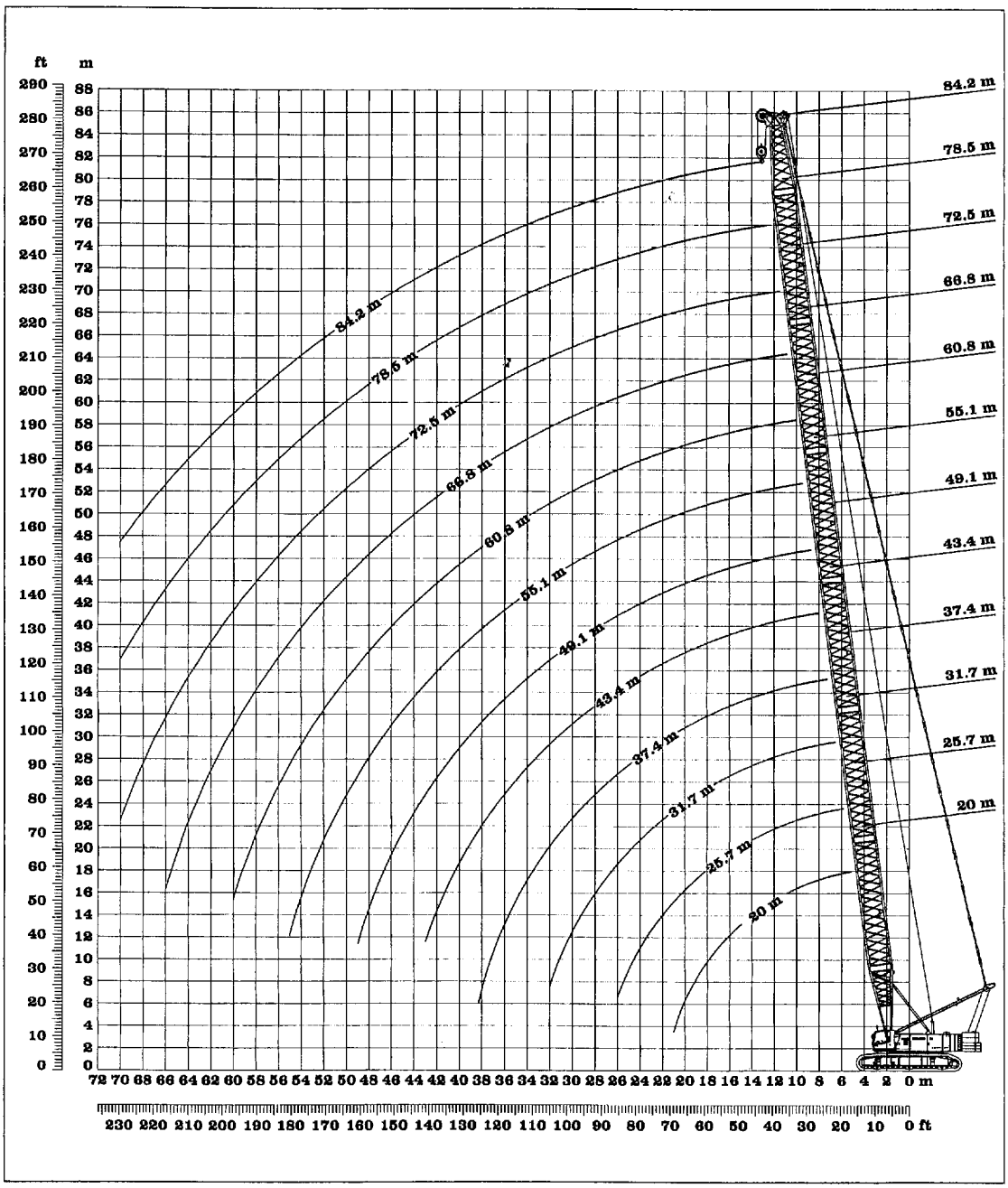
Capacities in metric tons for boom lengths from 25.7 m – 55.1 m:																		Counterweight 55.1 t
	25.7 m			31.7 m			37.4 m			43.4 m			49.1 m			55.1 m		
	C	J		C	J		C	J		C	J		C	J		C	J	
α	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t	m	m	t
65	14.0	24.7	32.5	16.5	30.1	32.5	18.9	35.3	29.5	21.4	40.7	24.5	23.8	45.9	20.9	26.4	51.3	17.6
60	15.9	23.7	32.5	18.9	28.9	29.7	21.8	33.8	24.3	24.8	39.0	20.0	27.6	43.9	16.9	30.6	49.1	14.0
55	17.7	22.5	32.4	21.2	27.4	25.4	24.5	32.1	20.6	27.9	37.0	16.8	31.2	41.7	13.9	34.6	46.6	11.4
50	19.5	21.2	28.6	23.3	25.8	22.2	27.0	30.2	17.9	30.8	34.8	14.4	34.5	39.1	11.8	38.4	43.7	9.5
45	21.1	19.7	25.7	25.3	24.0	19.8	29.3	28.0	15.9	33.6	32.3	12.6	37.6	36.3	10.3	41.8	40.5	8.2
40	22.5	18.2	23.4	27.1	22.0	17.9	31.5	25.7	14.3	36.1	29.5	11.2	40.4	33.2	9.0	45.0	37.1	7.1
35	23.8	16.5	21.7	28.7	19.9	16.5	33.4	23.2	13.0	38.3	26.6	10.2	43.0	29.9	8.1	47.9	33.3	6.2
30	24.9	14.7	20.2	30.1	17.7	15.3	35.0	20.5	12.0	40.2	23.5	9.3	45.2	26.4	7.4	50.4	29.4	5.5
25	25.9	12.8	18.8	31.3	15.3	14.1	36.5	17.7	10.9	41.9	20.2	8.4	47.1	22.6	6.7	52.5	25.2	4.8

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

Load diagram restricted by safety factors of standard ropes:

Winches	200 kN	250 kN	300 kN	350 kN
Rope diameter	30 mm	34 mm	36 mm	36 mm
Calc. breaking load	820 kN	1051 kN	1184 kN	1487 kN
1-rope clamshell	14.5 t	19.0 t	21.5 t	26.9 t
2-rope clamshell	20.0 t	25.0 t	30.0 t	32.5 t

Clamshell equipment



Working range – main boom

Capacities in metric tons for boom length between 20 m and 84.2 m:
75.3 t counterweight and 27.0 t carbody counterweight

Boom length (HPT)	20.0 m	25.7 m	31.7 m	37.4 m	43.4 m	49.1 m	55.1 m	60.8 m	66.8 m	72.5 m	78.5 m	84.2 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t
5	*200.0											
6	180.0	155.9										
7	171.9	151.3	130.0	111.9								
8	146.2	136.6	124.4	107.5	92.9	80.7						
9	126.7	119.5	112.2	103.6	89.5	77.6	68.8					
10	108.0	106.2	100.2	95.1	86.4	74.9	66.5	56.6	50.1			
11	94.0	94.3	90.4	86.1	81.6	72.4	64.4	54.8	48.4	41.5	37.5	
12	83.1	83.3	82.2	78.6	74.8	69.9	62.3	52.9	46.7	39.9	36.5	25.5
13	74.4	74.6	74.4	72.2	68.9	65.9	60.3	51.1	45.0	38.3	35.5	25.2
14	67.2	67.4	67.2	66.7	63.7	61.1	58.0	49.2	43.4	36.9	34.5	24.8
15	61.2	61.4	61.2	61.1	59.2	56.9	54.4	47.5	41.7	35.5	33.6	24.6
16	56.1	56.3	56.2	56.0	55.3	53.1	50.9	45.9	40.1	34.1	32.8	24.6
17	51.7	52.0	51.8	51.7	51.3	49.8	47.7	44.5	38.7	32.8	31.9	24.5
18	47.9	48.2	48.0	47.8	47.5	46.8	44.8	42.8	37.5	31.6	31.1	24.5
19	44.5	44.9	44.7	44.5	44.2	44.0	42.3	40.7	36.3	30.6	30.3	24.4
20	41.5	41.9	41.8	41.6	41.3	41.0	40.0	38.5	35.2	29.6	29.5	24.3
21	38.8	39.3	39.1	39.0	38.7	38.4	37.8	36.4	34.0	28.6	28.8	24.0
22		37.0	36.8	36.7	36.3	36.0	35.7	34.5	32.8	27.6	28.1	23.4
23		34.8	34.7	34.5	34.2	33.9	33.6	32.8	31.3	26.6	27.3	22.9
24		32.9	32.8	32.6	32.3	32.0	31.6	31.2	29.8	25.6	26.6	22.4
25		31.1	31.0	30.9	30.6	30.3	29.9	29.6	28.4	24.7	25.7	21.9
26		29.5	29.4	29.3	29.0	28.7	28.3	28.0	27.1	24.1	24.7	21.4
27			28.0	27.9	27.5	27.2	26.8	26.5	25.8	23.5	23.5	20.9
28			26.6	26.5	26.2	25.9	25.5	25.2	24.7	22.8	22.5	20.3
29			25.4	25.3	24.9	24.7	24.3	23.9	23.5	22.2	21.4	19.8
30			24.2	24.1	23.8	23.5	23.1	22.8	22.4	21.6	20.5	19.2
31			23.1	23.0	22.7	22.5	22.0	21.7	21.3	20.6	19.6	18.6
32			22.1	22.0	21.7	21.5	21.0	20.7	20.3	19.8	18.7	17.9
33				21.1	20.8	20.5	20.1	19.8	19.3	18.9	17.9	17.1
34				20.2	19.9	19.7	19.2	18.9	18.5	18.1	17.1	16.3
35				19.4	19.1	18.8	18.4	18.1	17.7	17.3	16.4	15.6
36				18.6	18.3	18.1	17.7	17.3	16.9	16.5	15.7	14.9
37				17.8	17.6	17.3	16.9	16.6	16.2	15.8	15.0	14.3
38				17.1	16.9	16.7	16.3	15.9	15.5	15.1	14.4	13.7
39					16.2	16.0	15.6	15.3	14.8	14.5	13.8	13.1
40					15.6	15.4	15.0	14.7	14.2	13.9	13.3	12.5
41					15.0	14.8	14.4	14.1	13.6	13.3	12.7	12.0
42					14.5	14.3	13.9	13.5	13.1	12.7	12.2	11.5
43					13.9	13.7	13.3	13.0	12.6	12.2	11.7	11.0
44						13.2	12.8	12.5	12.1	11.7	11.2	10.5
45						12.7	12.4	12.0	11.6	11.2	10.7	10.1
46						12.3	11.9	11.6	11.1	10.8	10.3	9.6
47						11.8	11.5	11.2	10.7	10.3	9.8	9.2
48						11.4	11.0	10.7	10.3	9.9	9.4	8.8
49						11.0	10.6	10.3	9.9	9.5	8.9	8.4
50							10.3	10.0	9.5	9.1	8.5	8.1
51							9.9	9.6	9.1	8.7	8.1	7.7
52							9.5	9.2	8.7	8.3	7.8	7.4
53							9.2	8.9	8.4	7.9	7.4	7.0
54							8.8	8.5	8.0	7.6	7.1	6.7
55							8.5	8.2	7.7	7.3	6.7	6.4
56								7.8	7.4	6.9	6.4	6.0
57								7.5	7.0	6.6	6.1	5.7
58								7.2	6.7	6.3	5.8	5.4
59								6.9	6.5	6.0	5.5	5.1
60								6.6	6.2	5.8	5.2	4.9
61									5.9	5.5	5.0	4.6
62									5.6	5.2	4.7	4.3
63									5.4	5.0	4.5	4.1
64									5.1	4.7	4.2	3.8
65									4.9	4.5	4.0	3.6
66									4.6	4.3	3.7	3.4
67										4.0	3.5	3.1
68										3.8	3.3	2.9
69										3.6	3.1	2.7
70										3.4	2.9	2.5
71										3.2	2.7	2.3
72										3.0	2.5	2.1
Hoist rope reeving minimum	6	5	4	4	3	3	3	2	2	2	2	1

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.
*** With HD–boom head.**

Lifting capacities – main boom

Capacities in metric tons for boom length between 20 m and 84.2 m:												65.1 t counterweight
Boom length (HPT)	20.0 m	25.7 m	31.7 m	37.4 m	43.4 m	49.1 m	55.1 m	60.8 m	66.8 m	72.5 m	78.5 m	* 84.2 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t
5	180.0											
6	158.3	150.3										
7	137.9	133.5	123.4	109.2								
8	122.7	114.6	106.8	100.1	92.6	80.7						
9	106.3	100.1	94.0	88.7	83.5	77.1	68.8					
10	90.7	88.9	83.8	79.4	75.1	71.4	66.1	56.6	50.1			
11	78.9	79.1	75.4	71.8	68.0	64.9	61.6	54.8	48.4	41.5	37.5	
12	69.6	69.8	68.6	65.4	62.2	59.3	56.5	52.9	46.7	39.9	36.5	25.5
13	62.2	62.4	62.3	60.0	57.1	54.6	52.0	49.7	45.0	38.3	35.5	25.2
14	56.1	56.4	56.2	55.4	52.7	50.5	48.2	46.1	43.3	36.9	34.5	24.8
15	51.1	51.3	51.1	51.0	49.0	46.9	44.8	42.9	40.9	35.5	33.6	24.6
16	46.7	47.0	46.8	46.7	45.6	43.8	41.8	40.0	38.2	34.1	32.8	24.6
17	43.0	43.3	43.1	43.0	42.6	40.9	39.1	37.5	35.7	32.8	31.8	24.5
18	39.8	40.1	39.9	39.7	39.4	38.4	36.7	35.2	33.5	31.5	30.5	24.5
19	36.9	37.3	37.1	36.9	36.6	36.1	34.5	33.1	31.5	30.1	28.7	24.4
20	34.4	34.8	34.6	34.5	34.1	33.9	32.5	31.2	29.7	28.4	27.0	24.3
21	32.1	32.5	32.4	32.2	31.9	31.6	30.7	29.4	28.0	26.8	25.5	23.8
22		30.6	30.4	30.3	29.9	29.6	29.1	27.9	26.5	25.3	24.0	23.0
23		28.7	28.6	28.5	28.1	27.9	27.5	26.4	25.1	24.0	22.7	21.8
24		27.1	27.0	26.8	26.5	26.2	25.8	25.0	23.8	22.7	21.5	20.6
25		25.6	25.5	25.4	25.0	24.8	24.4	23.8	22.6	21.5	20.3	19.5
26		24.2	24.2	24.0	23.7	23.4	23.0	22.6	21.4	20.4	19.3	18.4
27			22.9	22.8	22.4	22.2	21.8	21.5	20.4	19.4	18.3	17.5
28			21.8	21.6	21.3	21.0	20.6	20.3	19.4	18.4	17.4	16.5
29			20.7	20.6	20.3	20.0	19.6	19.3	18.5	17.5	16.5	15.7
30			19.7	19.6	19.3	19.0	18.6	18.3	17.6	16.7	15.7	14.9
31			18.7	18.7	18.4	18.1	17.7	17.4	16.8	15.9	14.9	14.1
32			17.9	17.8	17.5	17.3	16.9	16.5	16.0	15.2	14.2	13.4
33				17.0	16.7	16.5	16.1	15.7	15.3	14.5	13.5	12.7
34				16.3	16.0	15.7	15.3	15.0	14.5	13.8	12.8	12.1
35				15.6	15.3	15.0	14.6	14.3	13.9	13.2	12.2	11.5
36				14.9	14.6	14.4	14.0	13.6	13.2	12.6	11.6	10.9
37				14.3	14.0	13.8	13.4	13.0	12.6	12.0	11.0	10.4
38				13.6	13.4	13.2	12.8	12.4	12.0	11.4	10.5	9.8
39					12.9	12.6	12.2	11.9	11.5	10.9	10.0	9.3
40					12.3	12.1	11.7	11.4	10.9	10.4	9.5	8.9
41					11.8	11.6	11.2	10.9	10.4	9.9	9.1	8.4
42					11.3	11.1	10.7	10.4	10.0	9.5	8.6	8.0
43					10.9	10.7	10.3	10.0	9.5	9.1	8.2	7.5
44						10.3	9.9	9.5	9.0	8.6	7.8	7.1
45						9.8	9.5	9.1	8.6	8.2	7.4	6.8
46						9.4	9.1	8.7	8.2	7.8	7.0	6.4
47						9.1	8.7	8.3	7.8	7.4	6.7	6.0
48						8.7	8.3	7.9	7.4	7.0	6.3	5.7
49						8.3	7.9	7.6	7.1	6.6	6.0	5.4
50							7.6	7.2	6.7	6.3	5.7	5.0
51							7.3	6.9	6.4	6.0	5.4	4.7
52							6.9	6.6	6.1	5.6	5.1	4.4
53							6.6	6.3	5.8	5.3	4.8	4.2
54							6.3	6.0	5.5	5.0	4.5	3.9
55							6.0	5.7	5.2	4.8	4.2	3.6
56								5.4	4.9	4.5	4.0	3.4
57								5.1	4.6	4.2	3.7	3.1
58								4.9	4.4	4.0	3.4	2.9
59								4.6	4.1	3.7	3.2	2.6
60								4.3	3.9	3.5	3.0	2.4
61									3.7	3.3	2.7	2.2
62									3.4	3.0	2.5	2.0
63									3.2	2.8	2.3	1.8
64									3.0	2.6	2.1	1.6
65									2.8	2.4	1.9	1.4
66									2.6	2.2	1.7	1.2
67										2.0	1.5	1.0
68										1.8	1.3	
69										1.6	1.1	
70										1.4		
71										1.3		
72										1.1		
Hoist rope reeving minimum	6	5	4	4	3	3	3	2	2	2	2	1

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.
*** Rig-up with outriggers.**

Lifting capacities – main boom

Capacities in metric tons for boom length between 20 m and 84.2 m:												55.1 t counterweight
Boom length (HPT)	20.0 m	25.7 m	31.7 m	37.4 m	43.4 m	49.1 m	55.1 m	60.8 m	66.8 m	72.5 m	78.5 m	* 84.2 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t
5	180.0											
6	158.3	144.2										
7	130.4	120.6	111.3	98.4								
8	110.7	103.3	96.3	90.2	83.6	72.7						
9	95.8	90.3	84.6	79.9	75.1	71.1	63.5					
10	81.9	80.1	75.4	71.4	67.5	64.0	60.6	56.3	49.7			
11	71.1	71.3	67.8	64.5	61.1	58.2	55.1	52.4	48.3	41.5	37.5	
12	62.7	62.9	61.6	58.7	55.7	53.1	50.5	48.1	45.6	39.9	36.5	25.5
13	56.0	56.2	56.0	53.8	51.2	48.8	46.5	44.4	42.1	38.3	35.5	25.2
14	50.5	50.7	50.5	49.6	47.2	45.1	43.0	41.0	39.0	37.0	34.3	24.8
15	45.9	46.1	45.9	45.8	43.8	41.9	39.9	38.1	36.3	34.6	32.8	24.6
16	42.0	42.2	42.0	41.9	40.7	39.0	37.1	35.5	33.8	32.3	30.6	24.6
17	38.6	38.8	38.7	38.5	38.0	36.4	34.7	33.2	31.6	30.1	28.6	24.5
18	35.6	35.9	35.7	35.6	35.3	34.1	32.5	31.1	29.5	28.2	26.7	24.4
19	33.1	33.4	33.2	33.0	32.7	32.1	30.5	29.2	27.7	26.4	25.0	23.8
20	30.7	31.1	30.9	30.8	30.5	30.1	28.7	27.5	26.1	24.9	23.5	22.5
21	28.6	29.1	28.9	28.8	28.4	28.2	27.1	25.9	24.6	23.4	22.1	21.2
22		27.3	27.1	27.0	26.6	26.4	25.6	24.5	23.2	22.1	20.8	19.9
23		25.6	25.5	25.3	25.0	24.7	24.2	23.1	21.9	20.8	19.6	18.7
24		24.1	24.0	23.9	23.5	23.3	22.9	21.9	20.7	19.6	18.5	17.7
25		22.8	22.7	22.5	22.2	21.9	21.5	20.8	19.6	18.6	17.5	16.6
26		21.5	21.4	21.3	21.0	20.7	20.3	19.7	18.6	17.6	16.5	15.7
27			20.3	20.2	19.9	19.6	19.2	18.7	17.6	16.7	15.6	14.8
28			19.3	19.2	18.8	18.5	18.1	17.8	16.7	15.8	14.8	14.0
29			18.3	18.2	17.9	17.6	17.2	16.9	15.9	15.0	14.0	13.2
30			17.4	17.3	17.0	16.7	16.3	16.0	15.1	14.2	13.2	12.5
31			16.5	16.5	16.1	15.9	15.5	15.1	14.4	13.5	12.5	11.8
32			15.7	15.7	15.4	15.1	14.7	14.4	13.7	12.8	11.8	11.1
33				15.0	14.7	14.4	14.0	13.6	13.0	12.2	11.2	10.5
34				14.3	14.0	13.7	13.3	13.0	12.4	11.6	10.6	9.9
35				13.6	13.3	13.1	12.7	12.3	11.8	11.0	10.1	9.4
36				13.0	12.7	12.5	12.1	11.8	11.2	10.4	9.5	8.8
37				12.4	12.2	11.9	11.5	11.2	10.7	9.9	9.0	8.3
38				11.9	11.6	11.4	11.0	10.7	10.2	9.4	8.5	7.9
39					11.1	10.9	10.5	10.2	9.7	8.9	8.1	7.4
40					10.6	10.4	10.0	9.7	9.2	8.5	7.6	7.0
41					10.2	10.0	9.6	9.2	8.7	8.1	7.2	6.6
42					9.7	9.5	9.1	8.8	8.3	7.7	6.8	6.2
43					9.3	9.1	8.7	8.4	7.8	7.3	6.4	5.8
44						8.7	8.3	7.9	7.4	6.9	6.0	5.4
45						8.4	7.9	7.5	7.0	6.5	5.7	5.1
46						8.0	7.5	7.2	6.7	6.2	5.4	4.7
47						7.6	7.2	6.8	6.3	5.8	5.0	4.4
48						7.2	6.8	6.5	6.0	5.5	4.7	4.1
49						6.9	6.5	6.1	5.6	5.2	4.4	3.8
50							6.2	5.8	5.3	4.9	4.1	3.5
51							5.9	5.5	5.0	4.6	3.8	3.2
52							5.6	5.2	4.7	4.3	3.6	3.0
53							5.3	4.9	4.4	4.0	3.3	2.7
54							5.0	4.7	4.2	3.7	3.0	2.4
55							4.7	4.4	3.9	3.5	2.8	2.2
56								4.1	3.7	3.2	2.6	2.0
57								3.9	3.4	3.0	2.3	1.7
58								3.6	3.2	2.8	2.1	1.5
59								3.4	2.9	2.5	1.9	1.3
60								3.2	2.7	2.3	1.7	1.1
61									2.5	2.1	1.5	
62									2.3	1.9	1.3	
63									2.1	1.7	1.1	
64									1.9	1.5		
65									1.7	1.3		
66									1.5	1.1		
Hoist rope reeving minimum	6	5	4	4	3	3	3	2	2	2	2	1

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.
***Rig-up with outriggers.**

Lifting capacities – main boom

Scope of delivery:

- Superstructure 600 kW diesel engine
- Superstructure add. counterweight 10 t
- Undercarriage 895 HD – B9HD
- Crawler pads B9HD, 1100 flat
- Main winches 35 t with free fall
- Boom A-frame
- Boom foot 7 m
- Boom head 7 m, 2+5 sheaves
- Boom head runner 35 t
- Boom section 11.7 m, incl. pendants
- Boom section 6 m, incl. pendants

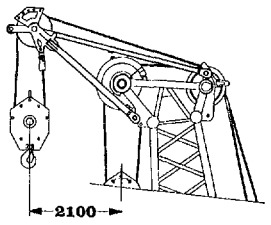
Accessory:

- Anti-two block
- Litronic back-up control system
- Litronic GSM service-modem
- Litronic LMI/LML
- Litronic load indicator
- Litronic working depth indicator
- Self assembly system
- Corresponding wire ropes
- Corresponding hook block

Remarks:

1. The lifting capacities stated are valid for lifting operation only (corresponds 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. The lifting capacities stated do not exceed 75% of the tipping load.
6. For max. wind speed please refer to lift chart in operator's cab or manual.
7. The slewing speed of the load must not exceed 90 m/min.
8. Working radii are measured from centre of swing to center of load.
9. The lifting capacities are valid for 360 degrees of swing.
10. Calculation of stability under load is based on DIN 15019 / part 2 / chart 1.
11. The structures are calculated according to DIN 15018 / part 3.

Runner 35 t



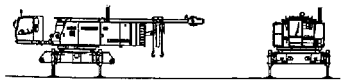
The lifting capacity of the runner is equal to that of the main boom (HPT) at the same working radius, but must not exceed the maximum lifting capacity of 35 t.

Transport dimensions and weights Runner

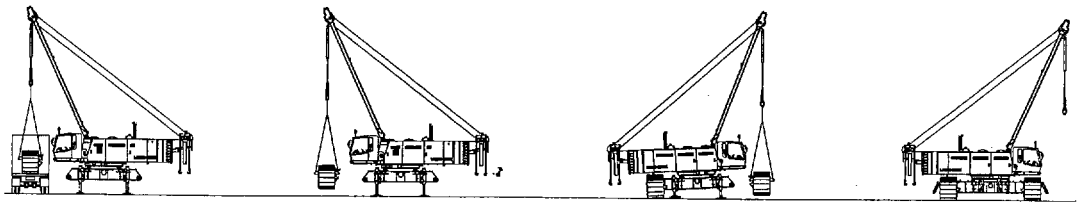
Width	mm	1260
Length	mm	3300
Height	mm	1600
Weight	kg	450

Main boom configuration (HPT) for boom lengths between 20 m and 84.5 m:													
Boom	Length	Amount of boom extensions											
Foot	7.0 m	1	1	1	1	1	1	1	1	1	1	1	1
Extension	6.0 m	1	0	1	0	1	0	1	0	1	0	1	0
Extension	11.7 m	0	1	1	2	2	3	3	4	4	5	5	6
Head	7.0 m	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (m)		20	25.7	31.7	37.4	43.4	49.1	55.1	60.8	66.8	72.5	78.5	84.5

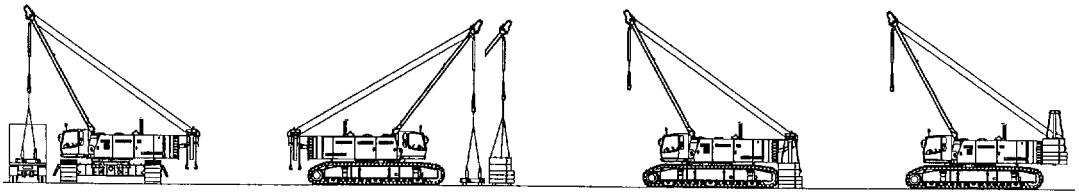
Assembly main boom



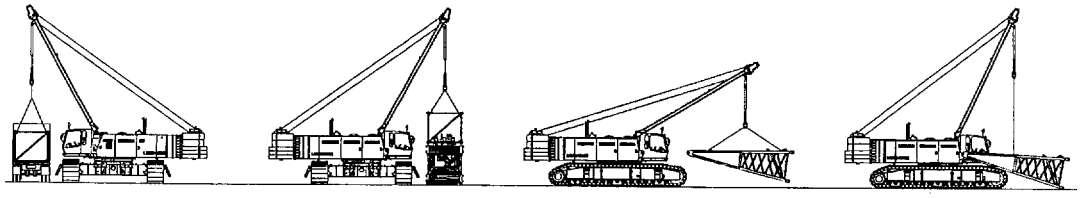
Unloading of basic machine and swinging out of cabin



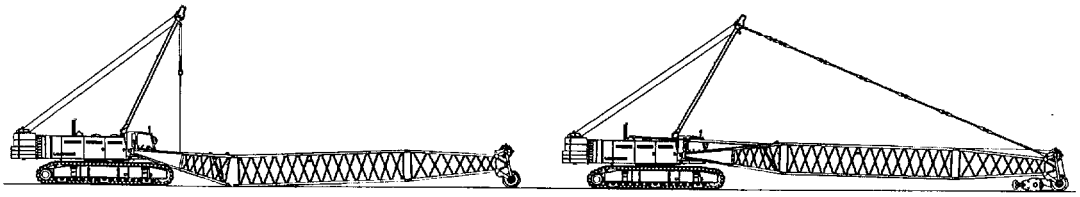
Unloading and assembly of crawlers



Unloading and assembly of counterweight

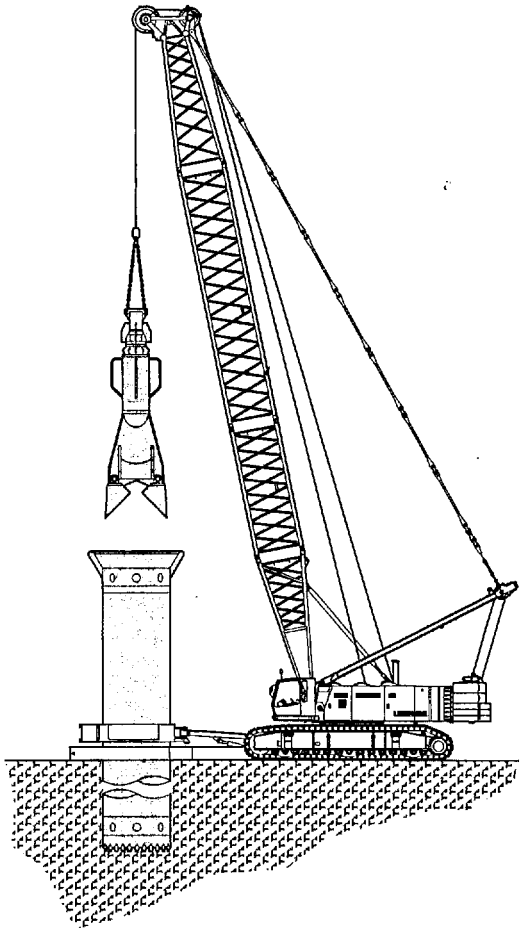


Unloading and assembly of boom – Assembly of boom foot



Assembly of boom and reeving of hoist and jib ropes

Self assembly system



Casing oscillator

Winch options	2 x 350	kN	Free fall winches with maintenance free, spring loaded multi disc brake working in an oil bath.
Line pull 2 x	700	kN	Simultaneous working of both winches is assured through our hydraulic system.
Line speed 1st layer (second gear)	0–58 0–116	m/min m/min	Hydraulic supply for casing oscillator q = 2 x 400 l/min.
Drilling diameter	3300	mm	P = 300 bar max.
Chisel weight	18	t	Mechanical connection casing oscillator on undercarriage.
Max. capacity with boom position in longitudinal direction of undercarriage with 31.7 m main boom at 10 m radius (at 75% tipping load)	75.4	t	Automatic operation for one and two rope grabs. (optional) Hoisting speed will have priority over the casing oscillator while main winches are activated.

8900 269 14 – 03/2001 Subject to change without notice.

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Crawler Crane LR 1160
Technical Data

Litronic®

Basic machine with undercarriage

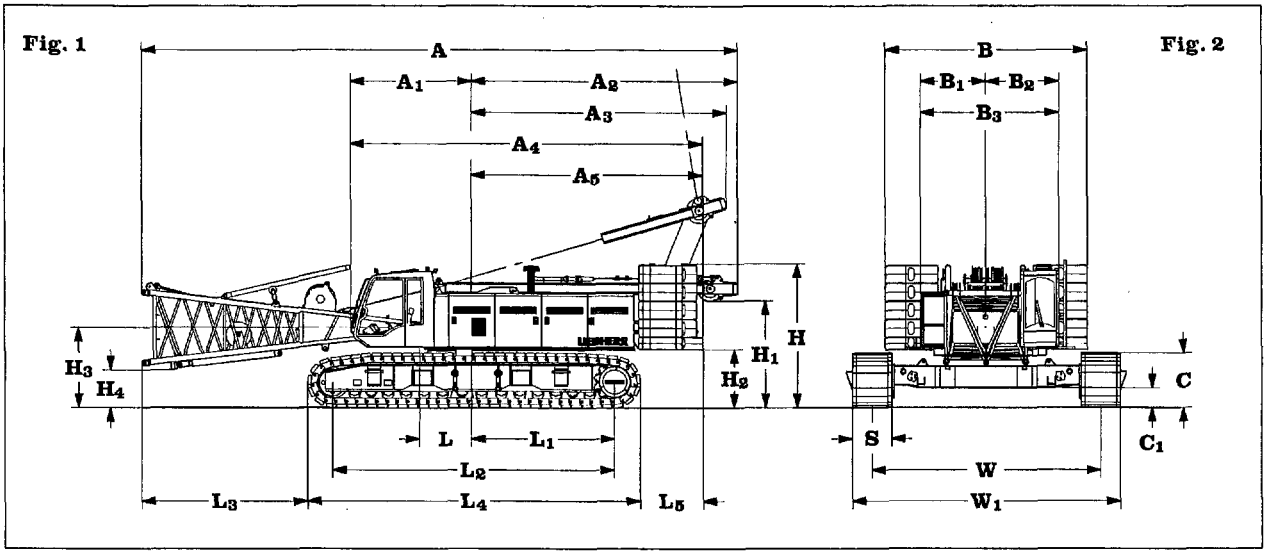


Fig. 1: Dimensions in mm

A	Overall length of superstructure with lowered A-frame and boom foot	15200
A_1	Centre of rotation – front edge of cabin	3175
A_2	Centre of rotation – lowered A-frame	6770
A_3	Tail reach– A-frame in working position 15°	6540
A_4	Length of superstructure	8975
A_5	Tail swing radius	5880
H	Height of basic machine	3680
H_1	Ground clearance of lowered A-frame	2730
H_2	Ground clearance of superstructure	1500
H_3	Ground clearance of boom foot pivot	2050
H_4	Ground clearance of horizontal boom foot	960
L	Centre of rotation – boom foot pivot	1330
L_1	Centre of rotation – centre of tumbler	3625
L_2	Wheel base (centre idler to centre tumbler)	7180
L_3	Distance from edge of horizontal boom foot to crawler	4200
L_4	Length of crawlers	8470
L_5	Distance between rear end of crawler and outside of counterweight	1600

Fig. 2: Dimensions in mm

B	Width of counterweight	5100
B_1	Centre of rotation – outside of superstructure	1650
B_2	Centre of rotation – outside of cabin in working position	1850
B_3	Width of superstructure	3500
C	Height of crawlers	1400
C_1	Ground clearance of undercarriage	500
S	Width of pads	1000
W	Track width of undercarriage	5800
W_1	Width of undercarriage	6800

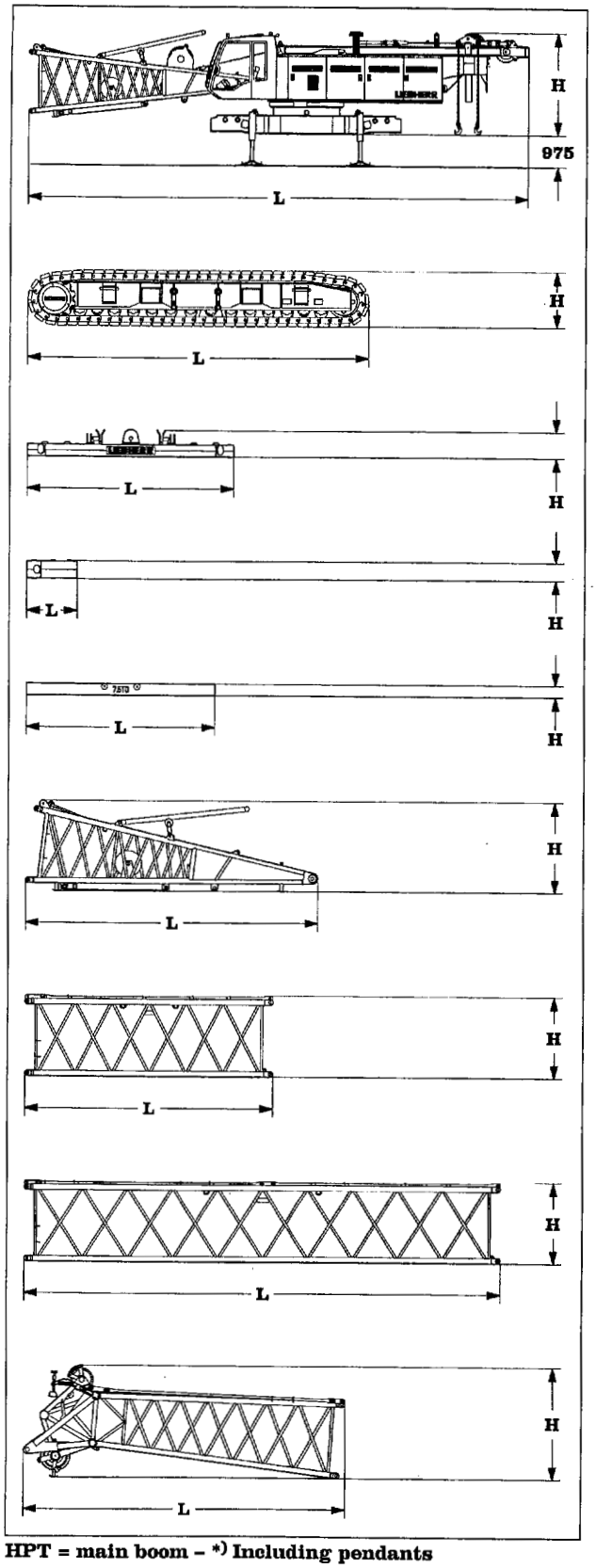
Operating weight and ground pressure

The operating weight includes the basic machine with crawlers, 2 main winches 120 kN and 20 m main boom, consisting of A-frame, boom foot (7 m), boom head (7 m), boom extension (6 m), 55.1 t basic counterweight, 15.0 t carbody counterweight and 140 t hook block.

with 1000 mm flat pads 156.0 t – 1.09 kg/cm²

LIEBHERR

The Better Machine



HPT = main boom – *) Including pendants

Basic machine

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

Width	mm	3500
Weight	kg	38500
L Length	mm	15200
H Height	mm	3100

Crawler 2x

Width	mm	1050
Weight	kg	18800
L Length	mm	8470
H Height	mm	1400

Counterweight 1x

Width	mm	1630
Weight	kg	14300
L Length	mm	5100
H Height	mm	700

Counterweight 8x

Width	mm	1360
Weight	kg	5100
L Length	mm	1480
H Height	mm	500

Carbody counterweight 2x

Width	mm	700
Weight	kg	7500
L Length	mm	4670
H Height	mm	290

Boom foot (HPT) without winches

Width	mm	2420
Weight	kg	3200
L Length	mm	7300
H Height	mm	2260

Tubular boom section (HPT) 6 m

Width	mm	2280
Weight*	kg	1100
L Length	mm	6050
H Height	mm	2020

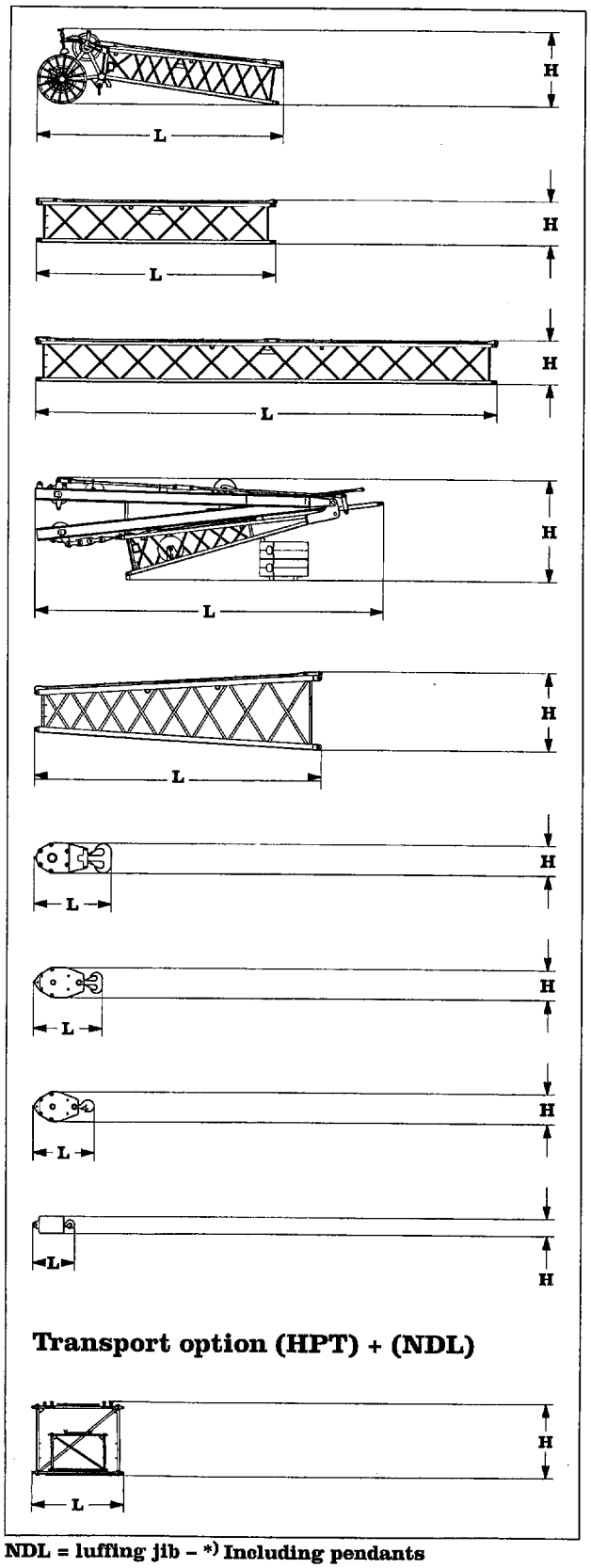
Tubular boom section (HPT) 11.7 m

Width	mm	2280
Weight*	kg	1900
L Length	mm	11850
H Height	mm	2020

Boom head (HPT)

Width	mm	2280
Weight*	kg	2700
L Length	mm	7900
H Height	mm	2700

Transport dimensions and weights



Transport option (HPT) + (NDL)

NDL = luffing jib – *) Including pendants

Jib head (NDL)

Width	mm	1500
Weight*	kg	1135
L Length	mm	6300
H Height	mm	1950

Tubular jib section (NDL) 6 m

Width	mm	1500
Weight*	kg	520
L Length	mm	6100
H Height	mm	1150

Tubular jib section (NDL) 11.7 m

Width	mm	1500
Weight*	kg	960
L Length	mm	11800
H Height	mm	1150

Jib foot (NDL) with A-frames

Width	mm	1700
Weight*	kg	4800
L Length	mm	8900
H Height	mm	2600

Boom section tapered (HPT) 7.2 m

Width	mm	2280
Weight*	kg	1225
L Length	mm	7350
H Height	mm	2020

140 t hook block – 7 sheaves

Width	mm	850
Weight	kg	2500
L Length	mm	2000
H Height	mm	800

80 t hook block – 3 sheaves

Width	mm	560
Weight	kg	2000
L Length	mm	1750
H Height	mm	800

40 t hook block – 1 sheave

Width	mm	500
Weight	kg	1500
L Length	mm	1550
H Height	mm	800

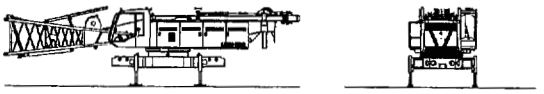
12 t single hook

Width	mm	400
Weight	kg	600
L Length	mm	970
H Height	mm	400

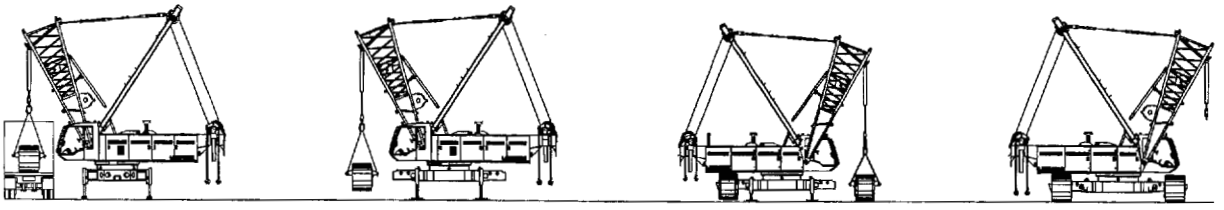
Boom – jib transport option
11.7 m boom – and 11.7 m jib extension
6 m boom – and 6 m jib extension

HPT/NDL	m	6.0/6.0	11.7/11.7
Width	mm	2280	2280
Weight*	kg	1740	3160
L Length	mm	6300	12000
H Height	mm	2020	2020

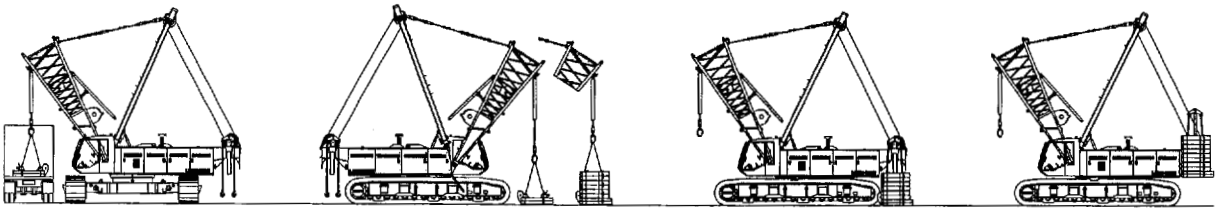
Transport dimensions and weights



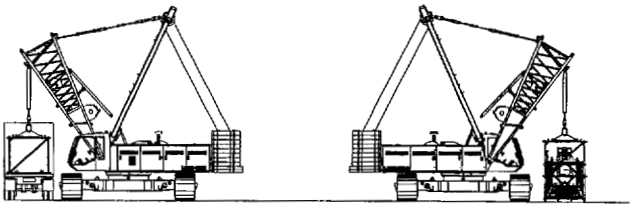
Unloading of basic machine



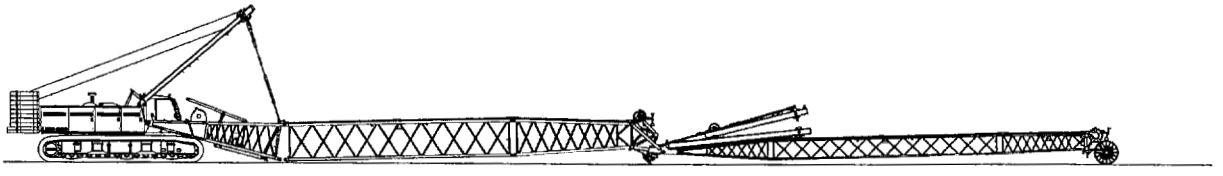
Unloading and assembly of crawlers



Unloading and assembly of counterweight

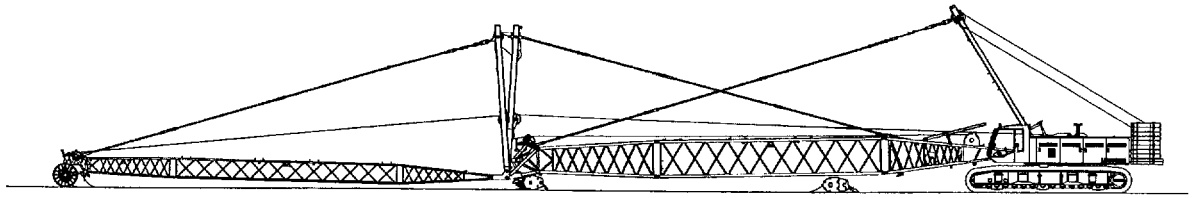


Unloading and assembly of boom

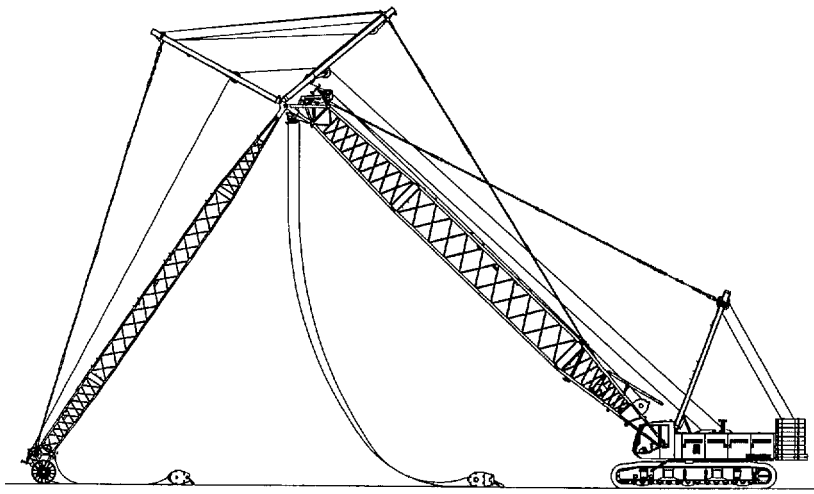


Assembly of boom and reeving of hoist and jib ropes

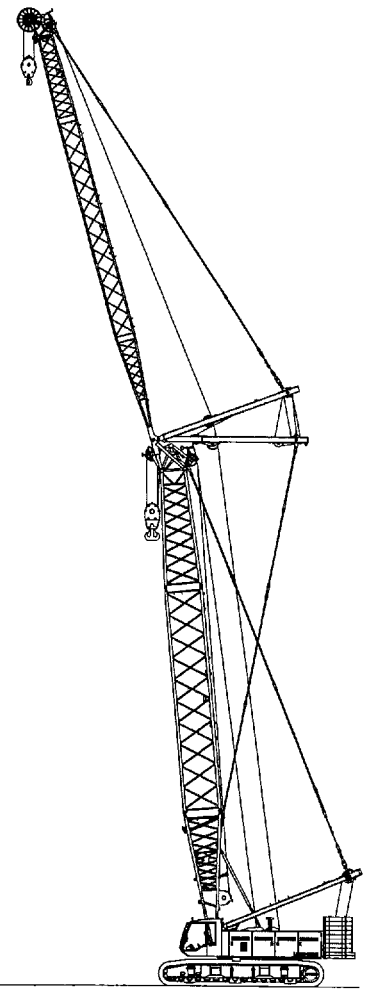
Self assembly system



Luffing of boom

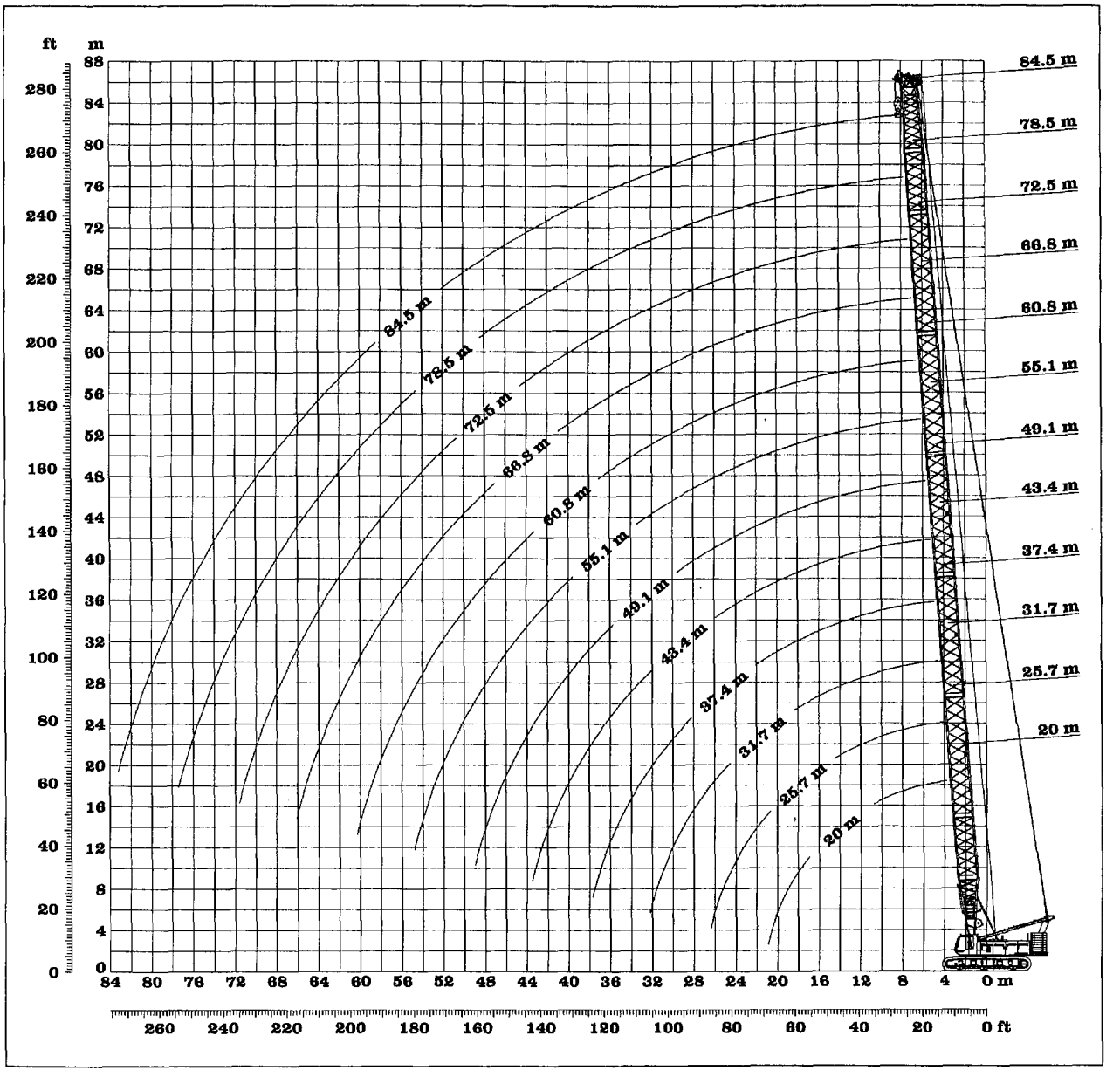


Luffing of jib



Working position

Booming up – crane in working position

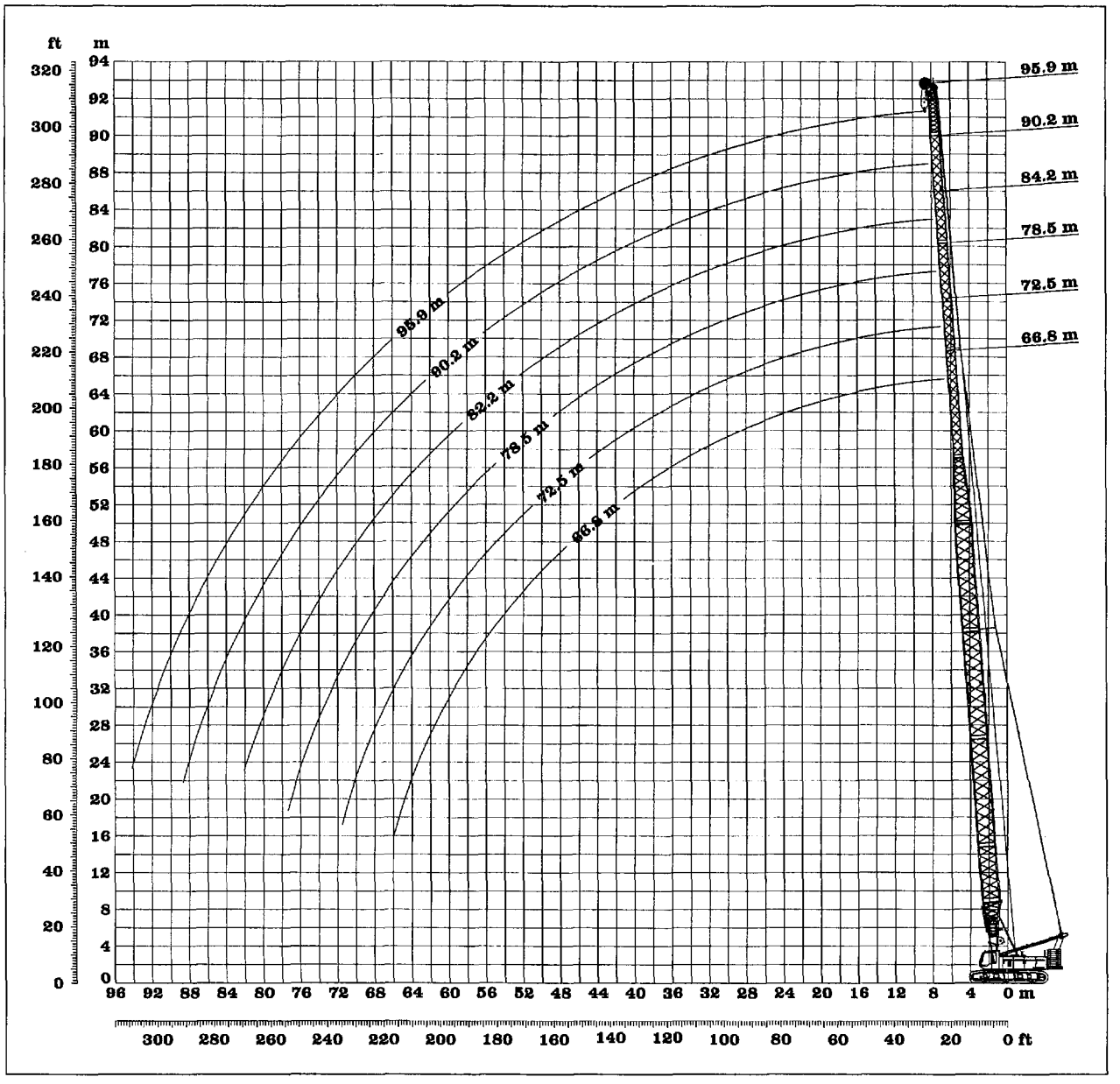


Working range – main boom

Capacities in metric tons for boom length (HPT) between 20 m and 84.5 m: 55.1 t counterweight and 15 t carbody counterweight												
Boom length	20.0 m	25.7 m	31.7 m	37.4 m	43.4 m	49.1 m	55.1 m	60.8 m	66.8 m	72.5 m	78.5 m	84.5 m
Radius in (m)	t	t	t	t	t	t	t	t	t	t	t	t
3.7	*160.0											
4.0	*160.0	*160.0										
5.0	140.0	137.0	136.8	121.0								
6.0	138.7	130.8	121.0	111.5	95.3	77.8						
7.0	120.3	110.9	102.4	95.4	88.8	75.9	64.2	52.9	41.4			
8.0	102.1	95.1	88.6	83.2	78.0	72.7	61.5	51.7	41.2	33.8	27.2	20.9
9.0	88.6	83.2	78.0	73.7	69.5	65.8	58.9	49.6	40.3	33.3	27.0	20.9
10.0	78.2	73.8	69.6	66.0	62.5	59.4	56.4	47.6	39.4	32.7	26.5	20.6
11.0	69.4	66.3	62.8	59.7	56.7	54.1	51.5	45.6	38.0	32.1	26.0	20.2
12.0	61.2	60.1	57.1	54.5	51.9	49.6	47.3	43.6	36.3	31.5	25.5	19.8
13.0	54.7	54.8	52.3	50.0	47.7	45.7	43.7	41.5	34.7	30.8	25.1	19.5
14.0	49.4	49.5	48.2	46.2	44.2	42.3	40.5	38.9	33.0	30.2	24.6	19.1
15.0	45.0	45.0	44.7	42.9	41.0	39.4	37.7	36.2	31.4	29.6	24.2	18.8
16.0	41.2	41.3	41.1	40.0	38.3	36.8	35.3	33.9	30.2	28.9	23.7	18.5
17.0	37.9	38.0	37.9	37.4	35.9	34.5	33.1	31.8	29.1	28.1	23.3	18.2
18.0	35.1	35.2	35.1	34.9	33.7	32.4	31.1	29.9	27.9	27.3	22.8	17.8
19.0	32.6	32.8	32.6	32.5	31.7	30.6	29.3	28.2	26.7	26.0	22.3	17.6
20.0	30.4	30.6	30.5	30.3	30.0	28.9	27.7	26.7	25.5	24.6	21.9	17.3
21.0		28.7	28.6	28.4	28.2	27.3	26.2	25.2	24.2	23.3	21.4	17.0
22.0		26.9	26.8	26.7	26.4	25.9	24.9	23.9	23.0	22.1	20.9	16.8
23.0		25.4	25.3	25.1	24.9	24.6	23.6	22.8	21.8	20.9	20.0	16.5
24.0		24.0	23.9	23.7	23.5	23.2	22.5	21.6	20.7	19.9	19.0	16.2
25.0		22.6	22.6	22.4	22.2	22.0	21.4	20.6	19.8	19.0	18.1	16.0
26.0		21.4	21.4	21.3	21.0	20.8	20.5	19.7	18.8	18.1	17.3	15.7
27.0			20.3	20.2	19.9	19.7	19.4	18.8	18.0	17.2	16.4	15.4
28.0			19.3	19.2	18.9	18.7	18.4	18.0	17.2	16.5	15.7	14.9
29.0			18.4	18.3	18.0	17.8	17.5	17.2	16.4	15.7	15.0	14.2
30.0			17.5	17.4	17.2	17.0	16.7	16.4	15.7	15.0	14.3	13.6
31.0			16.7	16.6	16.4	16.2	15.9	15.6	15.1	14.4	13.7	13.0
32.0			16.0	15.9	15.7	15.4	15.1	14.9	14.4	13.8	13.1	12.4
33.0				15.2	15.0	14.8	14.5	14.2	13.8	13.2	12.5	11.8
34.0				14.6	14.3	14.1	13.8	13.6	13.2	12.7	12.0	11.3
35.0				14.0	13.7	13.5	13.2	13.0	12.6	12.2	11.5	10.8
36.0				13.4	13.2	12.9	12.7	12.4	12.1	11.7	11.0	10.4
37.0				12.8	12.6	12.4	12.1	11.9	11.5	11.2	10.6	9.9
38.0					12.1	11.9	11.6	11.4	11.0	10.7	10.1	9.5
39.0					11.6	11.4	11.1	10.9	10.6	10.3	9.7	9.1
40.0					11.2	11.0	10.7	10.4	10.1	9.8	9.3	8.7
42.0					10.3	10.1	9.9	9.6	9.3	9.0	8.6	8.0
44.0						9.4	9.1	8.8	8.5	8.2	7.9	7.3
46.0						8.7	8.4	8.2	7.8	7.6	7.2	6.7
48.0						8.0	7.8	7.5	7.2	6.9	6.6	6.2
50.0							7.2	7.0	6.6	6.4	6.0	5.6
52.0							6.7	6.4	6.1	5.8	5.5	5.2
54.0							6.2	5.9	5.6	5.4	5.0	4.7
56.0								5.5	5.2	4.9	4.6	4.2
58.0								5.1	4.8	4.5	4.2	3.8
60.0								4.7	4.4	4.1	3.8	3.4
62.0									4.0	3.7	3.4	3.1
64.0									3.6	3.4	3.1	2.7
66.0									3.3	3.1	2.7	2.4
68.0										2.8	2.4	2.1
70.0										2.5	2.2	1.8
72.0											1.9	1.5
74.0											1.6	1.3
76.0											1.4	1.1
77.0											1.3	
Reeving	12	12	12	11	10	8	7	6	5	4	4	3

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.
*** Capacities over 140 t require a special heavy duty boom head.**

Lifting capacities – main boom

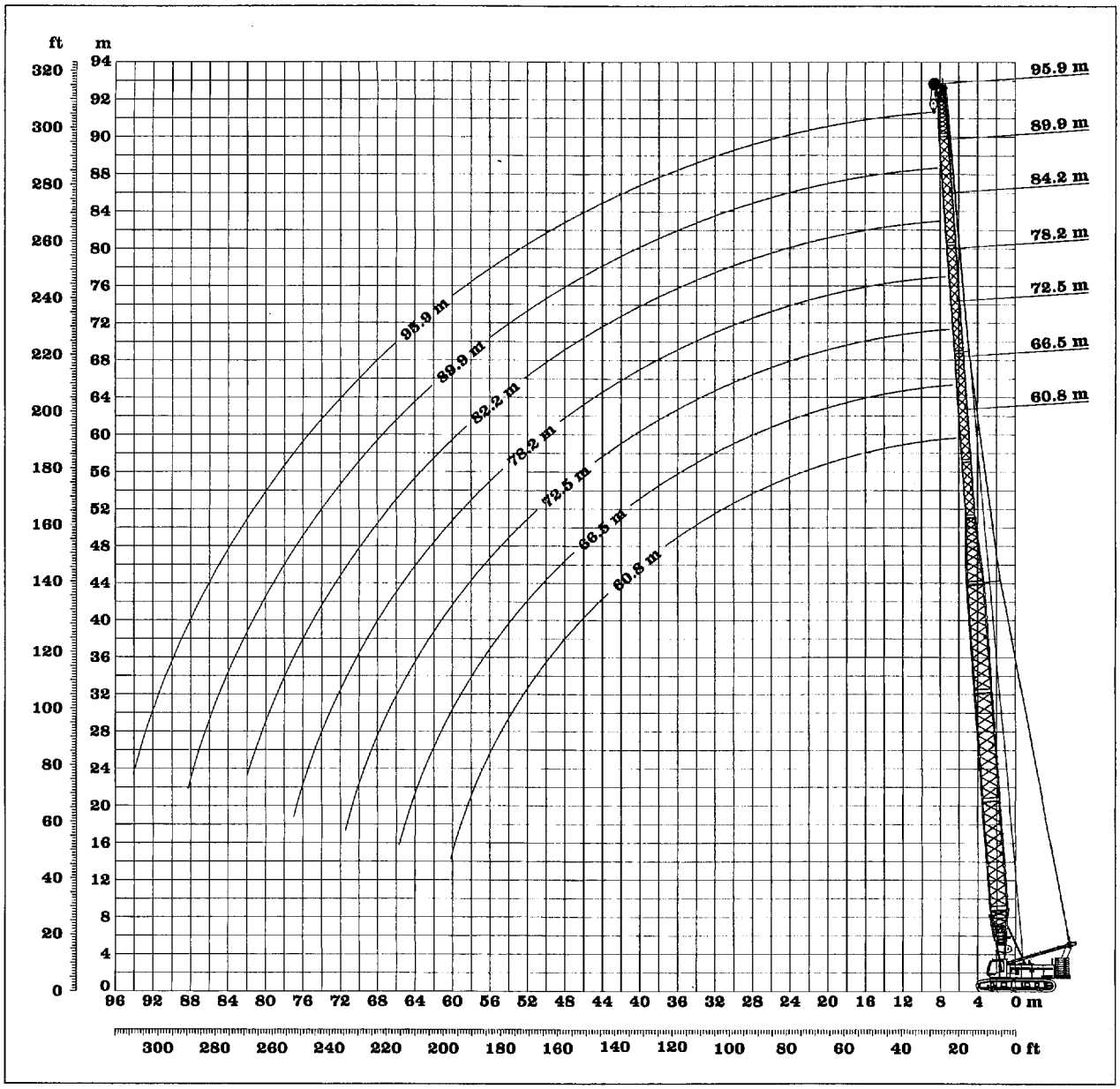


L – boom high reach
41.1 m tubular boom sections (HPT)

Capacities in metric tons for high reach boom between 66.8 m and 95.9 m: 55.1 t counterweight and 15 t carbody counterweight						
Boom length	66.8 m	72.5 m	78.5 m	84.2 m	90.2 m	95.9 m
Radius in (m)	t	t	t	t	t	t
7.0	24.0	24.0				
8.0	24.0	24.0	20.8	15.3		
9.0	24.0	24.0	20.1	15.1	10.8	7.3
10.0	24.0	24.0	19.3	14.5	10.4	7.0
11.0	24.0	23.9	18.5	14.0	10.1	6.8
12.0	24.0	23.8	17.9	13.5	9.7	6.5
13.0	24.0	23.7	17.3	13.0	9.4	6.2
14.0	24.0	23.5	16.6	12.5	9.1	6.0
15.0	23.7	23.4	16.0	12.0	8.9	5.8
16.0	23.3	22.8	15.3	11.6	8.6	5.6
17.0	23.0	22.1	14.8	11.1	8.3	5.4
18.0	22.6	21.4	14.4	10.7	8.0	5.2
19.0	22.2	20.7	14.0	10.4	7.8	5.0
20.0	21.9	20.0	13.6	10.2	7.6	4.9
22.0	20.8	18.5	12.7	9.6	7.2	4.7
24.0	19.3	17.3	11.9	9.0	6.9	4.5
26.0	17.8	16.3	11.4	8.4	6.5	4.2
28.0	16.3	15.2	10.9	8.1	6.1	4.0
30.0	14.8	14.1	10.5	7.7	5.9	3.8
32.0	13.8	13.0	10.1	7.4	5.6	3.6
34.0	13.0	12.1	9.6	7.1	5.4	3.4
36.0	12.1	11.5	9.2	6.7	5.1	3.3
38.0	11.3	10.8	8.8	6.4	4.9	3.1
40.0	10.4	10.2	8.5	6.2	4.6	2.9
42.0	9.6	9.5	8.2	6.0	4.4	2.7
44.0	9.0	8.8	7.9	5.9	4.3	2.5
46.0	8.6	8.1	7.6	5.7	4.2	2.5
48.0	8.1	7.7	7.2	5.5	4.1	2.4
50.0	7.7	7.3	6.9	5.4	4.0	2.3
52.0	7.2	7.0	6.6	5.2	3.8	2.3
54.0	6.7	6.6	6.3	5.0	3.7	2.2
56.0	6.2	6.2	6.0	4.8	3.6	2.1
58.0	5.9	5.8	5.7	4.7	3.5	2.0
60.0	5.6	5.3	5.3	4.5	3.4	2.0
62.0	5.3	5.1	5.0	4.3	3.3	1.9
64.0	5.0	4.9	4.6	4.2	3.3	1.9
66.0		4.6	4.3	4.0	3.2	1.8
68.0		4.3	4.1	3.8	3.1	1.8
70.0		4.0	3.9	3.6	3.0	1.8
72.0			3.6	3.4	3.0	1.7
74.0			3.4	3.3	2.9	1.7
76.0			3.2	3.1	2.8	1.6
78.0				2.8	2.6	1.6
80.0				2.6	2.5	1.5
82.0				2.4	2.3	1.5
84.0					2.1	1.4
86.0					1.9	1.4
88.0					1.7	1.3
90.0						1.3
92.0						1.2
94.0						1.1
Hoist rope reeving	2	2	2	2	2	2

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

Lifting capacities for L – boom high reach 41.1 m tubular boom sections (HPT)



L – boom high reach
35.1 m tubular boom sections (HPT)

Capacities in metric tons for high reach boom between 60.8 m and 95.9 m: 55.1 t counterweight and 15 t carbody counterweight							
Boom length	60.8 m	66.5 m	72.5 m	78.2 m	84.2 m	89.9 m	95.9 m
Radius in (m)	t	t	t	t	t	t	t
6.1	24.0						
7.0	24.0	24.0	24.0				
8.0	24.0	24.0	23.8	18.3	13.2	9.8	
9.0	24.0	24.0	23.4	17.9	12.9	9.7	7.3
10.0	24.0	24.0	23.0	17.4	12.6	9.4	7.1
11.0	24.0	24.0	22.4	17.0	12.2	9.1	6.9
12.0	24.0	24.0	21.7	16.4	11.8	8.9	6.7
13.0	24.0	24.0	20.9	15.9	11.5	8.6	6.4
14.0	24.0	24.0	20.2	15.4	11.1	8.4	6.3
15.0	24.0	23.5	19.5	14.9	10.8	8.1	6.1
16.0	24.0	23.0	18.9	14.3	10.4	7.9	5.9
17.0	24.0	22.4	18.4	13.9	10.1	7.6	5.8
18.0	24.0	21.9	17.9	13.6	9.8	7.3	5.6
19.0	24.0	21.3	17.4	13.2	9.5	7.2	5.4
20.0	23.5	20.8	16.9	12.8	9.3	7.0	5.3
22.0	21.9	19.7	15.8	12.1	8.8	6.7	5.0
24.0	20.3	18.5	15.1	11.3	8.3	6.3	4.8
26.0	18.6	17.3	14.4	10.9	7.8	6.0	4.5
28.0	17.0	16.2	13.8	10.5	7.4	5.6	4.3
30.0	15.9	15.0	13.2	10.0	7.1	5.4	4.1
32.0	14.9	14.0	12.5	9.6	6.8	5.2	3.9
34.0	13.8	13.2	11.9	9.1	6.5	5.0	3.7
36.0	12.7	12.4	11.3	8.7	6.2	4.7	3.5
38.0	11.6	11.5	10.7	8.5	5.9	4.5	3.3
40.0	10.8	10.7	10.2	8.3	5.7	4.3	3.2
42.0	10.3	9.8	9.6	8.1	5.6	4.1	3.0
44.0	9.7	9.2	8.9	7.8	5.4	4.0	2.8
46.0	9.2	8.8	8.3	7.6	5.3	3.9	2.7
48.0	8.6	8.4	7.9	7.3	5.1	3.8	2.6
50.0	7.9	7.9	7.6	7.1	5.0	3.7	2.6
52.0	7.5	7.4	7.2	6.8	4.8	3.6	2.5
54.0	7.1	6.9	6.8	6.5	4.7	3.5	2.4
56.0	6.8	6.4	6.4	6.2	4.6	3.4	2.3
58.0	6.4	6.2	6.0	5.8	4.5	3.3	2.2
60.0	5.8	5.9	5.5	5.5	4.4	3.2	2.1
62.0		5.6	5.3	5.1	4.2	3.1	2.1
64.0		5.2	5.1	4.8	4.1	3.1	2.0
66.0			4.8	4.5	4.0	3.0	2.0
68.0			4.5	4.3	3.9	3.0	1.9
70.0			4.2	4.1	3.7	2.9	1.9
72.0				3.9	3.6	2.8	1.9
74.0				3.6	3.4	2.7	1.8
76.0				3.4	3.3	2.7	1.8
78.0					3.0	2.6	1.7
80.0					2.8	2.5	1.7
82.0					2.6	2.3	1.6
84.0						2.2	1.6
86.0						2.1	1.5
88.0						1.9	1.5
90.0							1.4
92.0							1.3
94.0							1.2
Hoist rope reeving	2	2	2	2	2	2	2

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

Lifting capacities for L – boom high reach 35.1 m tubular boom sections (HPT)

Scope of delivery:

Basic machine LR 1160 consisting of:

- Superstructure
- 2 main winches, 120 kN each, no free fall
- A – frame 1
- Main boom (HPT), including pendants corresponding length
- Main boom luffing winch 1 x 150 kN including ropes
- Basic counterweight 55.1 t
- Electronic load moment limiter LMI/LML (patent pending)
- Back-up control system
- Hoisting limit switch
- Undercarriage
- Flat pads 1000 mm wide
- Carbody counterweight 2 x 7.5 t
- Ropes for main winches
- Corresponding hook block
- Standard tool set

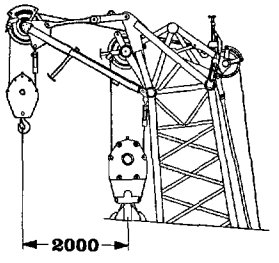
Options:

- Free fall for main winches
- Auxiliary jib for main boom top, capacity 24 t
- Cab tilting device hydraulic (20°)
- Cab elevation hydraulic
- Cab air conditioning
- Flat pads 1200 mm wide
- Self assembly system
- Track shifting hydraulic
- Diesel refuelling pump electric
- Reeving winch
- GSM service modem
- MDE Machine data recording
- PDE Process data recording

Remarks:

1. The lifting capacities stated are valid for lifting operation only (corresponds 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. The slewing speed of the load must not exceed 90 m/min.
7. Working radii are measured from centre of swing and under load.
8. The lifting capacities are valid for 360 degrees of swing.
9. Calculation of stability under load is based on DIN 15019 / part 2 / chart 1 and ISO 4305 Tab1 + 2, Tipping angle 4°.
10. The structures are calculated according to F.E.M. 1.001.

Auxiliary jib 24 t



The lifting capacity of the auxiliary jib is equal to that of the main boom (HPT) at the same working radius, but must not exceed the maximum lifting capacity of 24 t.
Max. boom length 78.5m – 1 fall operation.
Max. boom length 66.8m – 2 fall operation.

Transport dimensions and weights Auxiliary jib

Width	mm	1430
Length	mm	2750
Height	mm	1900
Weight	kg	600

Reeving chart depending on maximum load:													
Reeving		1	2	3	4	5	6	7	8	9	10	11	12
Max. load in	t	12	23.9	35.5	47.0	58.3	69.5	80.4	91.2	101.3	112.4	122.7	140
Single hook	12 t												
Hook block	40 t												
Hook block	80 t												
Hook block	140 t												

Main boom configuration (HPT) for boom lengths between 20 m and 84.5 m:													
Boom	Length	Amount of boom extensions											
foot	7.0 m	1	1	1	1	1	1	1	1	1	1	1	1
extension	6.0 m	1	0	1	0	1	0	1	0	1	0	1	2
extension	11.7 m	0	1	1	2	2	3	3	4	4	5	5	5
head	7.0 m	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (m)		20	25.7	31.7	37.4	43.4	49.1	55.1	60.8	66.8	72.5	78.5	84.5
Reeving		12	12	12	11	10	8	7	6	5	4	4	3

Scope of delivery and assembly of main boom

Scope of delivery:

Basic machine LR 1160 consisting of:

- Superstructure
- 2 main winches, 120 kN each, no free fall
- A – frame 1
- Main boom (HPT), including pendants corresponding length
- Main boom luffing winch 1 x 150 kN including ropes
- Basic counterweight 55.1 t
- Electronic load moment limiter LMI/LML (patent pending)
- Back–up control system
- Hoisting limit switch
- Undercarriage
- Flat pads 1000 mm wide
- Carbody counterweight 2 x 7.5 t
- Ropes for main winches
- Corresponding hook block
- Jib (NDL) including pendants corresponding length
- Jib luffing winch 1 x 105 kN with ropes
- Standard tool set

Options:

- Free fall for main winches
- Auxiliary jib for main boom top, capacity 24 t
- Cab tilting device hydraulic (20°)
- Cab elevation hydraulic
- Cab air conditioning
- Flat pads 1200 mm wide
- Self assembly system
- Track shifting hydraulic
- Diesel refuelling pump electric
- Reeving winch
- GSM service modem
- MDE Machine data recording
- PDE Process data recording

Remarks:

1. The lifting capacities stated are valid for lifting operation only (corresponds 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. The slewing speed of the load must not exceed 90 m/min.
7. Working radii are measured from centre of swing and under load.
8. The lifting capacities are valid for 360 degrees of swing.
9. Calculation of stability under load is based on DIN 15019 / part 2 / chart 1 and ISO 4305 Tab1 + 2, Tipping angle 4°.
10. The structures are calculated according to F.E.M. 1.001.

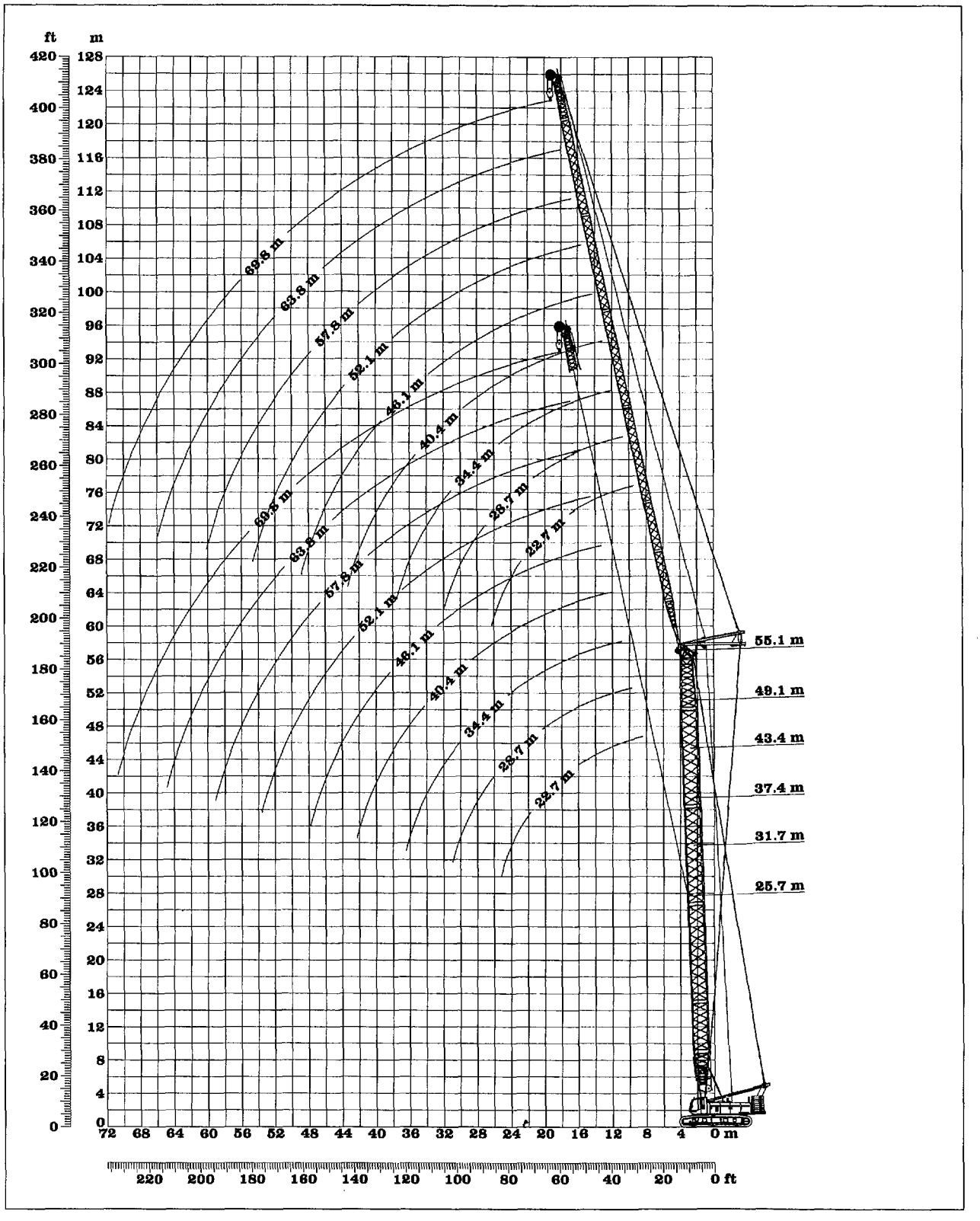
Main boom configuration (HPT) for lengths between 25.7 m and 55.1 m:

Boom	Length	Amount of boom extensions						
Foot	7.0 m	1	1	1	1	1	1	1
Extension	6.0 m	0	1	0	1	0	1	0
Extension	11.7 m	1	1	2	2	3	3	4
Head	7.0m	1	1	1	1	1	1	1
Boom length (m)		25.7	31.7	37.4	43.4	49.1	55.1	60.8

Jib configuration (NDL) for lengths between 22.7 m and 69.8 m:

	Length	Amount of boom extensions								
Boom foot	5.5 m	1	1	1	1	1	1	1	1	1
Boom ext.	6.0 m	0	1	0	1	0	1	0	1	2
Boom ext.	11.7 m	1	1	2	2	3	3	4	4	4
Boom head	5.5 m	1	1	1	1	1	1	1	1	1
Jib length (m)		22.7	28.7	34.4	40.4	46.1	52.1	57,8	63.8	69.8
Reeving		4	4	4	3	3	3	3	3	2

Scope of delivery and assembly of main boom and luffing jib



Working range – luffing jib main boom 88°

Main boom (HPT) 25.7 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
9.0	47.6								
10.0	46.9	37.1							
11.0	44.9	36.3	28.8						
12.0	42.4	35.4	28.4	20.1					
13.0	39.7	34.1	27.6	19.9					
14.0	34.8	32.7	26.6	19.3	16.4				
15.0	31.8	30.5	25.6	18.7	16.1	12.3			
16.0	29.3	28.2	24.6	18.2	15.7	12.0	10.1		
17.0	26.7	25.8	23.5	17.7	15.4	11.7	9.9	8.2	
18.0	24.1	24.0	22.3	17.3	15.0	11.4	9.7	8.1	
19.0	22.6	22.4	21.1	16.9	14.7	11.1	9.5	7.9	5.5
20.0	21.0	20.7	19.9	16.5	14.4	10.9	9.3	7.8	5.5
21.0	19.3	18.9	18.8	16.1	14.1	10.6	9.1	7.7	5.4
22.0	17.4	17.4	17.7	15.7	13.9	10.3	8.9	7.6	5.3
23.0	16.7	16.6	15.3	15.2	13.6	10.2	8.7	7.4	5.2
24.0	15.8	15.7	14.1	14.6	13.3	10.0	8.5	7.3	5.1
25.0	14.7	14.8	13.4	14.0	13.1	9.8	8.4	7.2	5.1
26.0		13.9	12.9	13.4	12.7	9.7	8.3	7.1	5.0
27.0		12.9	12.5	12.7	12.3	9.5	8.2	7.0	4.9
28.0		12.6	12.0	12.0	11.8	9.3	8.1	6.9	4.8
29.0		12.2	11.4	11.4	11.3	9.2	8.0	6.8	4.8
30.0		11.7	10.9	11.0	10.9	9.0	7.9	6.7	4.7
31.0		11.1	10.4	10.6	10.4	8.9	7.7	6.7	4.6
32.0			10.2	10.3	9.9	8.7	7.6	6.6	4.6
33.0			9.9	9.9	9.5	8.5	7.5	6.5	4.5
34.0			9.6	9.5	9.2	8.4	7.4	6.4	4.4
35.0			9.2	9.1	8.9	8.2	7.3	6.3	4.4
36.0				8.7	8.6	8.0	7.2	6.2	4.3
37.0				8.4	8.3	7.8	7.1	6.2	4.2
38.0				8.2	8.0	7.6	6.9	6.1	4.2
39.0				8.0	7.7	7.4	6.8	6.0	4.2
40.0				7.8	7.4	7.2	6.7	5.9	4.1
41.0				7.5	7.0	7.0	6.5	5.8	4.1
42.0				7.2	6.8	6.7	6.4	5.8	4.0
43.0					6.7	6.5	6.2	5.7	4.0
44.0					6.5	6.2	6.0	5.6	3.9
45.0					6.3	6.0	5.8	5.5	3.9
46.0					6.1	5.7	5.6	5.3	3.8
47.0					5.9	5.5	5.4	5.2	3.8
48.0						5.4	5.2	5.0	3.7
49.0						5.3	5.0	4.8	3.7
50.0						5.1	4.7	4.7	3.6
52.0						4.8	4.4	4.3	3.4
54.0							4.2	3.9	3.3
56.0							4.0	3.6	3.1
58.0							3.7	3.4	2.9
60.0								3.2	2.7
62.0								3.0	2.6
64.0								2.7	2.4
66.0									2.2
68.0									2.0
70.0									1.8
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 31.7 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
9.0	44.6								
10.0	43.8	34.4							
11.0	41.4	33.8	26.8						
12.0	38.3	33.1	26.6						
13.0	35.3	31.7	26.0	19.0					
14.0	32.1	30.4	25.2	18.5	15.4				
15.0	29.3	28.3	24.4	18.0	15.4	11.8			
16.0	27.2	26.2	23.6	17.6	15.1	11.6	9.7		
17.0	25.1	24.0	22.4	17.1	14.8	11.3	9.6	7.8	
18.0	22.8	22.2	21.1	16.7	14.5	11.0	9.4	7.8	
19.0	21.3	20.8	19.8	16.2	14.2	10.8	9.2	7.7	5.3
20.0	19.9	19.4	18.5	15.7	13.9	10.6	9.0	7.6	5.3
21.0	18.5	17.9	17.4	15.3	13.5	10.3	8.8	7.4	5.2
22.0	16.9	16.4	16.5	14.8	13.2	10.1	8.6	7.3	5.1
23.0	16.0	15.7	15.5	14.3	12.8	9.9	8.4	7.2	5.0
24.0	15.2	15.0	14.5	13.7	12.5	9.7	8.3	7.1	5.0
25.0	14.3	14.2	13.5	13.2	12.1	9.6	8.1	7.0	4.9
26.0		13.4	12.7	12.6	11.7	9.4	8.0	6.9	4.8
27.0		12.5	12.3	12.0	11.3	9.3	7.9	6.8	4.8
28.0		12.1	11.8	11.4	11.0	9.1	7.8	6.7	4.7
29.0		11.7	11.4	10.8	10.6	8.9	7.7	6.7	4.6
30.0		11.3	10.9	10.4	10.2	8.7	7.6	6.6	4.6
31.0		10.8	10.5	10.1	9.7	8.6	7.5	6.5	4.5
32.0			10.0	9.8	9.3	8.4	7.4	6.4	4.4
33.0			9.7	9.4	8.9	8.2	7.3	6.3	4.4
34.0			9.5	9.1	8.6	8.0	7.1	6.2	4.3
35.0			9.2	8.7	8.4	7.8	7.0	6.1	4.3
36.0			8.9	8.4	8.1	7.5	6.8	6.0	4.2
37.0				8.0	7.9	7.3	6.7	5.9	4.2
38.0				7.8	7.6	7.1	6.5	5.8	4.1
39.0				7.6	7.3	6.9	6.4	5.7	4.1
40.0				7.4	7.1	6.7	6.2	5.6	4.0
41.0				7.2	6.7	6.5	6.1	5.5	4.0
42.0				6.9	6.5	6.3	5.9	5.4	3.9
43.0					6.4	6.1	5.8	5.3	3.9
44.0					6.2	5.9	5.6	5.1	3.8
45.0					6.1	5.6	5.4	5.0	3.8
46.0					5.9	5.4	5.2	4.9	3.8
47.0					5.7	5.2	5.1	4.7	3.7
48.0					5.4	5.1	4.9	4.6	3.7
49.0						5.0	4.7	4.5	3.6
50.0						4.9	4.5	4.3	3.5
52.0						4.6	4.2	4.0	3.3
54.0							4.0	3.7	3.1
56.0							3.8	3.3	2.9
58.0							3.5	3.2	2.7
60.0								3.0	2.5
62.0								2.8	2.4
64.0								2.6	2.2
66.0									2.1
68.0									1.9
70.0									1.7
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 88°

Main boom (HPT) 37.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
9.0	39.9								
10.0	39.5	31.6							
11.0	37.7	31.4	24.8						
12.0	34.7	30.7	24.7						
13.0	32.1	29.2	24.3	18.1					
14.0	29.6	27.6	23.7	17.7	14.4				
15.0	27.1	25.8	23.0	17.2	14.4	11.2			
16.0	25.3	24.1	22.3	16.8	14.2	11.1	9.3		
17.0	23.5	22.3	21.2	16.4	14.0	10.9	9.3		
18.0	21.6	20.7	19.9	16.0	13.8	10.7	9.1	7.5	
19.0	20.1	19.4	18.6	15.5	13.6	10.4	8.9	7.4	5.1
20.0	18.9	18.2	17.3	15.0	13.3	10.2	8.7	7.3	5.1
21.0	17.6	16.9	16.2	14.4	13.0	10.0	8.5	7.2	5.0
22.0	16.2	15.6	15.4	13.9	12.6	9.7	8.3	7.1	4.9
23.0	15.2	14.8	14.6	13.3	12.2	9.6	8.2	7.0	4.9
24.0	14.6	14.2	13.7	12.8	11.8	9.4	8.0	6.9	4.8
25.0	13.9	13.5	12.8	12.3	11.3	9.3	7.9	6.8	4.7
26.0		12.8	12.0	11.8	10.9	9.1	7.8	6.7	4.7
27.0		12.1	11.7	11.3	10.6	9.0	7.7	6.6	4.6
28.0		11.6	11.3	10.8	10.2	8.8	7.6	6.5	4.5
29.0		11.3	10.9	10.3	9.9	8.7	7.5	6.5	4.5
30.0		10.9	10.5	9.8	9.5	8.5	7.4	6.4	4.4
31.0		10.5	10.0	9.5	9.2	8.2	7.3	6.3	4.4
32.0			9.6	9.3	8.8	8.0	7.2	6.2	4.3
33.0			9.4	9.0	8.4	7.8	7.1	6.2	4.3
34.0			9.1	8.7	8.1	7.6	6.9	6.1	4.2
35.0			8.9	8.3	7.9	7.4	6.7	6.0	4.2
36.0			8.6	8.0	7.7	7.1	6.5	5.9	4.1
37.0				7.7	7.5	6.9	6.4	5.7	4.0
38.0				7.5	7.2	6.7	6.2	5.6	4.0
39.0				7.3	7.0	6.5	6.0	5.5	4.0
40.0				7.2	6.7	6.3	5.8	5.3	3.9
41.0				6.9	6.5	6.2	5.7	5.2	3.9
42.0				6.7	6.2	6.0	5.5	5.1	3.8
43.0					6.1	5.8	5.4	4.9	3.8
44.0					6.0	5.6	5.2	4.8	3.8
45.0					5.8	5.4	5.1	4.6	3.7
46.0					5.7	5.1	4.9	4.5	3.7
47.0					5.5	5.0	4.7	4.4	3.6
48.0					5.3	4.9	4.6	4.3	3.6
49.0						4.8	4.4	4.1	3.5
50.0						4.7	4.2	4.0	3.4
52.0						4.4	3.9	3.7	3.2
54.0						4.1	3.8	3.5	3.0
56.0							3.6	3.1	2.8
58.0							3.3	3.0	2.6
60.0								2.8	2.4
62.0								2.7	2.2
64.0								2.5	2.0
66.0									1.9
68.0									1.8
70.0									1.6
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 43.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
9.0	35.1								
10.0	34.8								
11.0	33.6	28.1							
12.0	31.0	27.6	22.8						
13.0	28.8	26.4	22.4	16.7					
14.0	26.7	24.8	22.0	16.6	14.0				
15.0	24.6	23.2	21.1	16.3	13.9	10.7			
16.0	23.1	21.8	20.2	15.9	13.6	10.7			
17.0	21.6	20.4	19.2	15.6	13.4	10.4	8.8		
18.0	20.1	18.9	18.1	15.2	13.2	10.2	8.7	7.0	
19.0	18.7	17.9	17.0	14.8	12.9	10.0	8.5	7.0	4.8
20.0	17.7	16.9	15.9	14.2	12.7	9.8	8.3	6.9	4.8
21.0	16.6	15.8	15.0	13.5	12.4	9.6	8.2	6.8	4.7
22.0	15.4	14.7	14.3	12.9	12.0	9.3	8.0	6.7	4.7
23.0	14.4	13.9	13.5	12.3	11.5	9.1	7.9	6.7	4.6
24.0	13.9	13.3	12.8	11.7	11.0	9.0	7.7	6.6	4.6
25.0	13.3	12.8	12.1	11.3	10.6	8.9	7.5	6.5	4.5
26.0		12.2	11.3	10.9	10.1	8.8	7.5	6.4	4.4
27.0		11.5	10.9	10.5	9.7	8.6	7.4	6.4	4.4
28.0		11.0	10.6	10.0	9.4	8.5	7.3	6.3	4.3
29.0		10.7	10.3	9.6	9.1	8.4	7.2	6.2	4.3
30.0		10.4	9.9	9.2	8.8	8.2	7.2	6.2	4.2
31.0		10.1	9.5	8.9	8.5	7.9	7.1	6.1	4.2
32.0			9.1	8.7	8.2	7.7	7.0	6.0	4.1
33.0			8.9	8.4	7.9	7.4	6.8	5.9	4.1
34.0			8.7	8.1	7.6	7.2	6.6	5.9	4.0
35.0			8.5	7.9	7.4	6.9	6.4	5.8	4.0
36.0			8.2	7.6	7.2	6.7	6.2	5.6	3.9
37.0			7.9	7.3	7.0	6.4	6.0	5.5	3.9
38.0				7.1	6.8	6.2	5.8	5.3	3.8
39.0				6.9	6.6	6.1	5.6	5.2	3.8
40.0				6.8	6.3	5.9	5.4	5.0	3.7
41.0				6.6	6.1	5.7	5.2	4.9	3.7
42.0				6.4	5.9	5.6	5.1	4.7	3.6
43.0					5.7	5.4	4.9	4.6	3.6
44.0					5.6	5.2	4.8	4.4	3.5
45.0					5.5	5.0	4.7	4.2	3.5
46.0					5.4	4.8	4.5	4.1	3.4
47.0					5.2	4.7	4.4	4.0	3.4
48.0					5.0	4.6	4.3	3.9	3.3
49.0						4.5	4.1	3.8	3.2
50.0						4.4	4.0	3.7	3.2
52.0						4.1	3.7	3.4	3.0
54.0						3.8	3.5	3.2	2.8
56.0							3.3	2.9	2.6
58.0							3.1	2.7	2.4
60.0								2.6	2.2
62.0								2.4	2.0
64.0								2.3	1.8
66.0									1.7
68.0									1.6
70.0									1.4
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 88°

Main boom (HPT) 49.1 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
9.0	30.7								
10.0	30.5								
11.0	29.7	25.0							
12.0	27.7	24.5	20.4						
13.0	25.8	23.7	20.0	14.9					
14.0	24.1	22.3	19.9	14.9	13.0				
15.0	22.4	20.9	19.2	14.7	13.0				
16.0	21.1	19.8	18.3	14.6	12.7	10.1			
17.0	19.8	18.6	17.3	14.4	12.5	9.9	8.3		
18.0	18.5	17.4	16.4	14.2	12.3	9.7	8.3	6.6	
19.0	17.3	16.4	15.5	14.0	12.1	9.5	8.1	6.6	4.5
20.0	16.4	15.5	14.6	13.3	11.9	9.3	7.9	6.5	4.5
21.0	15.5	14.6	13.7	12.7	11.7	9.1	7.8	6.4	4.5
22.0	14.5	13.7	13.1	12.0	11.3	8.9	7.6	6.4	4.4
23.0	13.5	12.9	12.5	11.4	10.8	8.7	7.5	6.3	4.4
24.0	13.0	12.4	11.9	10.8	10.3	8.5	7.4	6.2	4.3
25.0	12.5	11.9	11.3	10.4	9.8	8.4	7.2	6.2	4.3
26.0	11.9	11.4	10.7	10.1	9.3	8.2	7.1	6.1	4.2
27.0		10.9	10.2	9.7	8.9	8.0	7.0	6.0	4.2
28.0		10.3	10.0	9.3	8.7	7.8	6.9	5.9	4.1
29.0		10.1	9.6	8.9	8.4	7.6	6.7	5.9	4.1
30.0		9.9	9.3	8.6	8.1	7.4	6.6	5.8	4.0
31.0		9.5	9.0	8.3	7.9	7.2	6.5	5.7	4.0
32.0			8.6	8.1	7.6	7.0	6.4	5.6	3.9
33.0			8.3	7.9	7.3	6.8	6.2	5.5	3.9
34.0			8.2	7.6	7.0	6.6	6.0	5.5	3.8
35.0			8.0	7.4	6.9	6.4	5.9	5.4	3.8
36.0			7.8	7.1	6.7	6.1	5.7	5.2	3.7
37.0			7.5	6.8	6.5	5.9	5.5	5.1	3.7
38.0				6.6	6.3	5.7	5.3	4.9	3.6
39.0				6.5	6.1	5.6	5.2	4.8	3.6
40.0				6.4	5.9	5.4	5.0	4.6	3.5
41.0				6.2	5.7	5.3	4.8	4.5	3.5
42.0				6.0	5.5	5.1	4.7	4.3	3.4
43.0				5.8	5.4	5.0	4.5	4.2	3.3
44.0					5.3	4.8	4.4	4.0	3.2
45.0					5.1	4.7	4.3	3.9	3.2
46.0					5.0	4.5	4.2	3.7	3.1
47.0					4.9	4.3	4.1	3.6	3.0
48.0					4.7	4.2	3.9	3.5	3.0
49.0						4.2	3.8	3.4	2.9
50.0						4.1	3.7	3.3	2.8
52.0						3.9	3.4	3.1	2.6
54.0						3.6	3.2	2.9	2.5
56.0							3.1	2.7	2.3
58.0							2.9	2.5	2.1
60.0								2.4	1.9
62.0								2.2	1.7
64.0								2.1	1.6
66.0									1.5
68.0									1.4
70.0									1.2
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 55.1 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
10.0	26.4								
11.0	25.6	21.9							
12.0	24.2	21.5	18.4						
13.0	22.8	20.7	18.2	14.4					
14.0	21.5	19.7	17.8	14.4					
15.0	20.1	18.6	17.1	14.1	11.7				
16.0	18.9	17.6	16.3	13.8	11.7	9.3			
17.0	17.9	16.7	15.4	13.4	11.5	9.2	7.7		
18.0	16.8	15.7	14.7	13.0	11.3	9.1	7.7	6.1	
19.0	15.7	14.8	13.9	12.6	11.0	8.9	7.6	6.1	4.2
20.0	15.0	14.1	13.2	12.0	10.8	8.7	7.5	6.0	4.2
21.0	14.2	13.3	12.4	11.5	10.5	8.5	7.3	6.0	4.2
22.0	13.4	12.5	11.9	10.9	10.1	8.4	7.2	5.9	4.1
23.0	12.5	11.8	11.4	10.3	9.7	8.2	7.1	5.8	4.1
24.0	12.1	11.4	10.9	9.7	9.3	8.0	7.0	5.8	4.0
25.0	11.7	11.0	10.3	9.4	8.9	7.8	6.8	5.7	4.0
26.0	11.2	10.6	9.8	9.1	8.4	7.6	6.7	5.6	3.9
27.0		10.1	9.4	8.8	8.1	7.4	6.5	5.6	3.9
28.0		9.6	9.1	8.5	7.8	7.1	6.4	5.5	3.9
29.0		9.4	8.9	8.2	7.6	6.9	6.2	5.4	3.8
30.0		9.2	8.6	7.8	7.4	6.7	6.0	5.3	3.8
31.0		8.9	8.3	7.6	7.1	6.5	5.9	5.2	3.7
32.0		8.6	8.0	7.4	6.9	6.3	5.7	5.1	3.7
33.0			7.7	7.2	6.6	6.1	5.5	5.0	3.6
34.0			7.6	7.0	6.4	6.0	5.4	4.9	3.6
35.0			7.4	6.8	6.2	5.8	5.2	4.8	3.5
36.0			7.2	6.6	6.1	5.6	5.1	4.6	3.5
37.0			7.0	6.3	5.9	5.4	4.9	4.5	3.5
38.0				6.1	5.8	5.2	4.8	4.4	3.4
39.0				6.0	5.6	5.1	4.6	4.3	3.3
40.0				5.9	5.4	4.9	4.5	4.1	3.3
41.0				5.8	5.2	4.8	4.3	4.0	3.2
42.0				5.6	5.1	4.7	4.2	3.8	3.1
43.0				5.4	4.9	4.5	4.1	3.7	3.0
44.0					4.8	4.4	4.0	3.6	2.9
45.0					4.7	4.3	3.9	3.4	2.8
46.0					4.6	4.1	3.8	3.3	2.8
47.0					4.5	3.9	3.6	3.2	2.7
48.0					4.4	3.8	3.5	3.1	2.6
49.0						3.8	3.4	3.1	2.5
50.0						3.7	3.3	3.0	2.4
52.0						3.5	3.0	2.8	2.3
54.0						3.3	2.9	2.6	2.1
56.0							2.8	2.4	2.0
58.0							2.6	2.2	1.8
60.0							2.4	2.1	1.6
62.0								2.0	1.4
64.0								1.8	1.3
66.0									1.2
68.0									1.1
Reeving	4	4	4	3	3	3	3	3	2

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

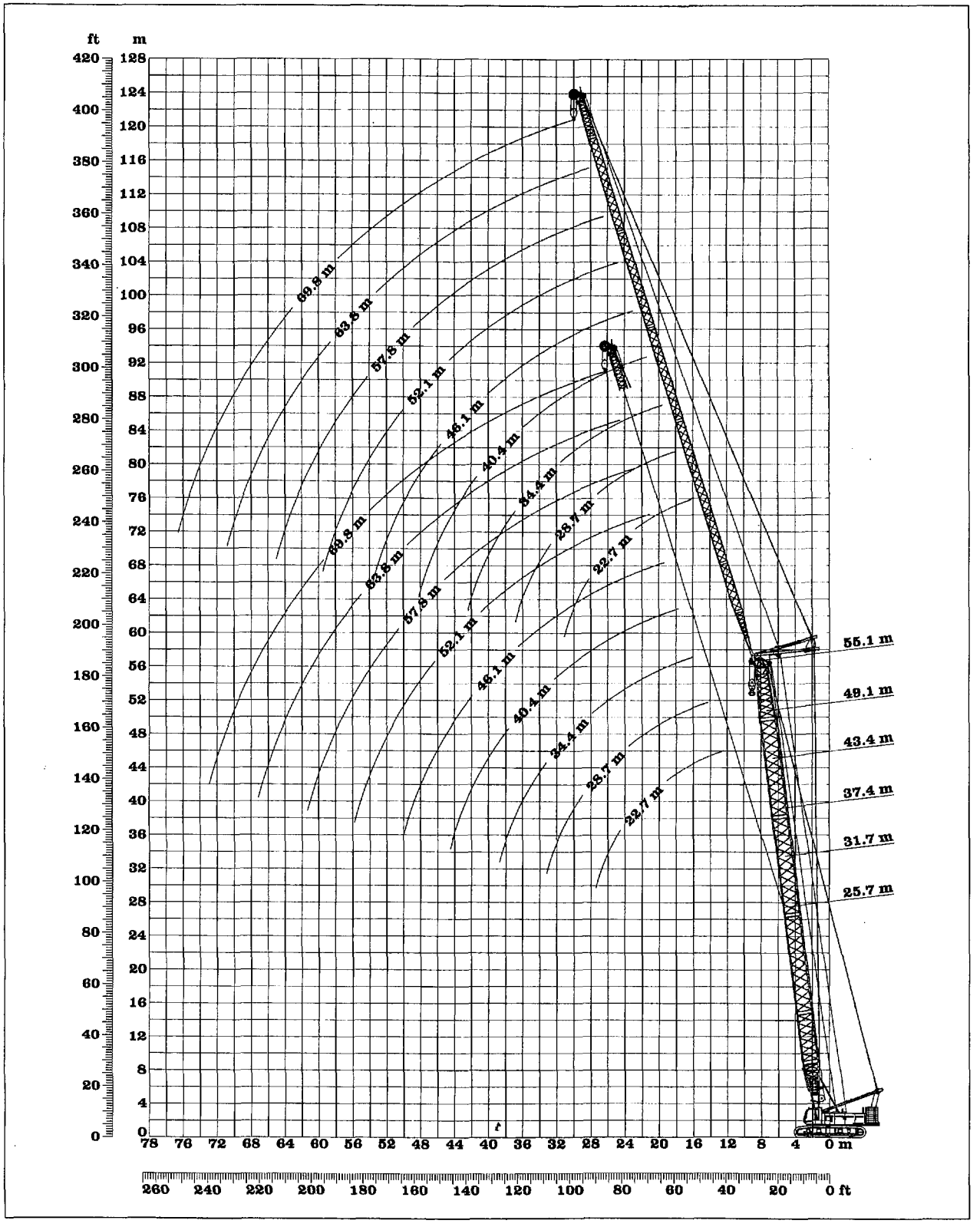
Lifting capacities – luffing jib main boom 88°

Main boom (HPT) 60.8 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 34.4 m 45.0 t counterweight			
	Jib length (m)		
	22.7	28.7	34.4
Radius in (m)	t	t	t
10.0	22.9		
11.0	22.2	19.1	
12.0	21.1	18.8	16.1
13.0	20.0	18.1	16.1
14.0	18.9	17.3	15.6
15.0	17.9	16.4	15.0
16.0	16.9	15.6	14.4
17.0	16.1	14.9	13.7
18.0	15.2	14.0	13.1
19.0	14.3	13.3	12.5
20.0	13.6	12.7	11.8
21.0	13.0	12.1	11.2
22.0	12.3	11.4	10.7
23.0	11.5	10.8	10.3
24.0	11.1	10.4	9.9
25.0	10.8	10.1	9.4
26.0	10.4	9.7	9.0
27.0		9.3	8.6
28.0		8.9	8.3
29.0		8.6	8.1
30.0		8.5	7.9
31.0		8.2	7.6
32.0		8.0	7.3
33.0			7.1
34.0			6.9
35.0			6.8
36.0			6.7
37.0			6.5
Reeving	4	4	4

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

Lifting capacities – luffing jib main boom 88°



Working range – luffing jib main boom 83°

Main boom (HPT) 25.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
13.0	45.4								
14.0	44.1								
15.0	41.4	34.2							
16.0	39.0	32.9	25.9						
17.0	36.8	31.6	25.8						
18.0	34.1	30.3	24.7	17.8					
19.0	30.9	29.0	23.8	17.5					
20.0	27.6	27.5	23.0	17.1	14.8				
21.0	25.7	25.7	22.2	16.7	14.5	10.7			
22.0	23.7	23.8	21.4	16.3	14.2	10.7			
23.0	21.5	21.9	20.6	16.0	14.0	10.5	8.8		
24.0	19.0	20.2	19.8	15.6	13.7	10.3	8.8		
25.0	18.3	19.2	19.0	15.3	13.6	10.0	8.6	7.5	
26.0	17.5	18.2	18.1	15.1	13.4	9.9	8.5	7.5	
27.0	16.4	17.2	17.2	14.9	13.2	9.8	8.4	7.3	5.2
28.0		16.1	16.5	14.7	13.0	9.6	8.3	7.2	5.1
29.0		15.0	15.8	14.5	12.9	9.5	8.2	7.1	5.0
30.0		14.5	15.1	14.3	12.7	9.4	8.1	7.0	4.9
31.0		13.9	14.4	14.1	12.6	9.2	8.0	6.9	4.8
32.0		13.3	13.7	13.6	12.4	9.2	7.9	6.8	4.8
33.0		12.5	12.8	13.1	12.3	9.1	7.8	6.8	4.7
34.0			12.2	12.6	12.1	9.0	7.7	6.7	4.6
35.0			11.8	12.1	11.9	8.9	7.6	6.6	4.6
36.0			11.4	11.5	11.5	8.7	7.6	6.5	4.5
37.0			11.0	11.0	11.1	8.6	7.5	6.4	4.4
38.0			10.4	10.4	10.7	8.5	7.4	6.3	4.4
39.0				10.0	10.3	8.4	7.3	6.3	4.3
40.0				9.7	9.9	8.3	7.3	6.2	4.3
41.0				9.4	9.5	8.1	7.2	6.2	4.2
42.0				9.1	9.0	8.0	7.1	6.1	4.2
43.0				8.7	8.6	7.9	7.0	6.0	4.1
44.0				8.3	8.3	7.7	6.9	5.9	4.1
45.0					8.1	7.6	6.8	5.9	4.0
46.0					7.8	7.4	6.7	5.8	4.0
47.0					7.6	7.2	6.6	5.8	3.9
48.0					7.3	7.1	6.5	5.7	3.9
49.0					7.0	6.9	6.4	5.6	3.8
50.0					6.6	6.7	6.3	5.6	3.8
52.0						6.3	6.1	5.5	3.7
54.0						5.8	5.8	5.3	3.7
56.0							5.5	5.2	3.6
58.0							5.1	5.0	3.5
60.0							4.6	4.7	3.5
62.0								4.4	3.4
64.0								4.1	3.3
66.0								3.7	3.1
68.0									3.0
70.0									2.8
72.0									2.5
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 31.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
14.0	41.6								
15.0	39.5	31.9							
16.0	37.2	31.5							
17.0	35.1	30.4	24.3						
18.0	32.9	29.3	23.8						
19.0	30.2	28.2	23.2	17.0					
20.0	27.3	27.0	22.4	16.7					
21.0	24.7	25.5	21.7	16.3	14.1				
22.0	23.1	23.7	21.0	15.9	13.9	10.3			
23.0	21.5	21.8	20.3	15.6	13.6	10.3			
24.0	19.7	19.9	19.4	15.3	13.3	10.1	8.5		
25.0	18.0	18.4	18.6	15.0	13.2	9.9	8.4		
26.0	17.3	17.6	17.7	14.7	13.0	9.7	8.3	7.3	
27.0	16.5	16.8	16.8	14.5	12.8	9.6	8.2	7.2	5.0
28.0	15.5	16.0	15.8	14.2	12.7	9.5	8.1	7.1	5.0
29.0		15.0	15.2	14.0	12.5	9.3	8.0	7.0	4.9
30.0		14.2	14.7	13.8	12.4	9.2	7.9	6.9	4.8
31.0		13.7	14.1	13.5	12.2	9.1	7.8	6.8	4.8
32.0		13.3	13.4	13.3	12.1	9.0	7.8	6.7	4.7
33.0		12.7	12.8	12.8	11.9	8.9	7.7	6.7	4.6
34.0		11.9	12.1	12.4	11.8	8.8	7.6	6.6	4.6
35.0			11.6	11.9	11.8	8.7	7.5	6.5	4.5
36.0			11.2	11.4	11.4	8.6	7.4	6.4	4.5
37.0			10.9	10.9	11.0	8.5	7.3	6.3	4.4
38.0			10.5	10.4	10.6	8.4	7.3	6.3	4.3
39.0			10.0	9.8	10.2	8.3	7.2	6.2	4.3
40.0				9.5	9.8	8.1	7.1	6.1	4.2
41.0				9.2	9.4	8.0	7.0	6.1	4.2
42.0				8.9	9.0	7.8	7.0	6.0	4.1
43.0				8.6	8.5	7.7	6.9	5.9	4.1
44.0				8.3	8.1	7.5	6.8	5.9	4.0
45.0				7.9	7.9	7.3	6.7	5.8	4.0
46.0					7.7	7.2	6.5	5.7	3.9
47.0					7.4	7.0	6.4	5.7	3.9
48.0					7.2	6.8	6.3	5.6	3.8
49.0					6.9	6.6	6.2	5.5	3.8
50.0					6.6	6.5	6.0	5.5	3.7
52.0						6.1	5.8	5.3	3.7
54.0						5.7	5.5	5.2	3.6
56.0						5.2	5.2	5.0	3.6
58.0							4.9	4.8	3.5
60.0							4.5	4.6	3.4
62.0							4.0	4.3	3.4
64.0								4.0	3.2
66.0								3.7	3.1
68.0									2.9
70.0									2.7
72.0									2.5
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 83°

Main boom (HPT) 37.4 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
14.0	37.7								
15.0	37.1								
16.0	35.5	29.3							
17.0	33.4	28.7							
18.0	30.7	27.8	22.6						
19.0	28.5	26.6	22.1						
20.0	26.2	25.3	21.5	16.2					
21.0	24.0	23.9	20.9	15.8	13.5				
22.0	22.1	22.5	20.3	15.4	13.4				
23.0	20.8	21.0	19.6	15.1	13.2	9.9			
24.0	19.5	19.5	18.9	14.8	12.9	9.8			
25.0	18.0	17.7	18.1	14.6	12.7	9.6	8.2		
26.0	16.8	17.0	17.2	14.3	12.6	9.5	8.1	7.1	
27.0	16.2	16.3	16.4	14.0	12.4	9.4	8.0	7.1	
28.0	15.5	15.5	15.5	13.7	12.3	9.2	7.9	7.0	4.8
29.0		14.8	14.6	13.4	12.1	9.1	7.8	6.9	4.8
30.0		14.0	14.1	13.1	11.9	9.0	7.7	6.8	4.7
31.0		13.3	13.5	12.8	11.7	8.9	7.7	6.7	4.7
32.0		12.9	13.0	12.5	11.5	8.8	7.6	6.6	4.6
33.0		12.5	12.5	12.1	11.3	8.7	7.5	6.5	4.6
34.0		11.9	11.9	11.7	11.1	8.6	7.4	6.5	4.5
35.0			11.2	11.3	10.9	8.5	7.3	6.4	4.4
36.0			10.9	10.9	10.6	8.4	7.3	6.3	4.4
37.0			10.6	10.5	10.3	8.3	7.2	6.2	4.3
38.0			10.3	10.0	10.0	8.2	7.1	6.1	4.3
39.0			9.9	9.6	9.7	8.1	7.0	6.1	4.2
40.0			9.4	9.1	9.4	8.0	7.0	6.0	4.1
41.0				8.9	9.0	7.8	6.9	6.0	4.1
42.0				8.7	8.6	7.7	6.8	5.9	4.1
43.0				8.4	8.3	7.5	6.8	5.8	4.0
44.0				8.1	7.9	7.3	6.6	5.8	4.0
45.0				7.8	7.5	7.2	6.5	5.7	3.9
46.0				7.4	7.4	7.0	6.4	5.6	3.9
47.0					7.2	6.8	6.2	5.5	3.8
48.0					7.0	6.6	6.1	5.5	3.8
49.0					6.8	6.4	6.0	5.4	3.8
50.0					6.5	6.2	5.8	5.3	3.7
52.0						5.9	5.5	5.1	3.6
54.0						5.6	5.2	4.9	3.6
56.0						5.2	5.0	4.7	3.5
58.0							4.7	4.5	3.4
60.0							4.4	4.3	3.4
62.0							4.0	4.0	3.3
64.0								3.8	3.2
66.0								3.5	3.0
68.0								3.1	2.9
70.0									2.7
72.0									2.5
74.0									2.2
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 43.4 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
15.0	32.5								
16.0	31.6								
17.0	30.1	25.9							
18.0	28.2	25.4							
19.0	26.2	24.6	20.7						
20.0	24.5	23.4	20.2	15.2					
21.0	22.8	22.1	19.6	15.1					
22.0	20.9	20.7	19.0	14.8	12.7				
23.0	19.7	19.6	18.3	14.5	12.6				
24.0	18.7	18.5	17.5	14.2	12.4	9.4			
25.0	17.6	17.3	16.8	14.0	12.2	9.2	7.8		
26.0	16.3	16.0	16.1	13.7	12.0	9.1	7.8		
27.0	15.6	15.4	15.4	13.5	11.9	9.0	7.7	6.8	
28.0	15.0	14.8	14.6	13.2	11.7	8.9	7.6	6.8	
29.0	14.3	14.2	13.9	12.8	11.6	8.8	7.6	6.7	4.6
30.0		13.5	13.2	12.4	11.4	8.7	7.5	6.6	4.6
31.0		12.8	12.8	12.1	11.2	8.6	7.4	6.5	4.5
32.0		12.4	12.3	11.7	10.9	8.5	7.3	6.4	4.5
33.0		12.0	11.9	11.3	10.7	8.4	7.3	6.4	4.4
34.0		11.6	11.4	11.0	10.4	8.4	7.2	6.3	4.4
35.0		11.1	10.9	10.6	10.1	8.3	7.1	6.2	4.3
36.0			10.4	10.3	9.8	8.2	7.0	6.1	4.3
37.0			10.1	9.9	9.5	8.1	7.0	6.1	4.2
38.0			9.9	9.6	9.3	8.0	6.9	6.0	4.2
39.0			9.6	9.2	9.0	7.9	6.8	5.9	4.1
40.0			9.2	8.8	8.7	7.8	6.7	5.9	4.1
41.0				8.4	8.4	7.6	6.7	5.8	4.0
42.0				8.2	8.2	7.5	6.6	5.7	4.0
43.0				8.0	7.8	7.3	6.5	5.7	3.9
44.0				7.8	7.5	7.1	6.4	5.6	3.9
45.0				7.6	7.2	6.9	6.3	5.5	3.8
46.0				7.3	7.0	6.7	6.2	5.5	3.8
47.0					6.8	6.5	6.0	5.4	3.8
48.0					6.6	6.3	5.9	5.3	3.7
49.0					6.5	6.1	5.7	5.2	3.7
50.0					6.3	5.8	5.6	5.1	3.6
52.0					5.8	5.5	5.3	4.9	3.5
54.0						5.3	4.9	4.7	3.5
56.0						4.9	4.6	4.5	3.4
58.0						4.5	4.4	4.2	3.3
60.0							4.2	4.0	3.3
62.0							3.9	3.8	3.2
64.0								3.6	3.1
66.0								3.3	3.0
68.0								3.0	2.8
70.0									2.6
72.0									2.4
74.0									2.1
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 83°

Main boom (HPT) 49.1 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
16.0	27.5								
17.0	26.2	22.8							
18.0	25.0	22.5							
19.0	23.8	21.7	18.9						
20.0	22.5	20.9	18.7						
21.0	21.2	19.9	18.1	14.1					
22.0	19.7	18.9	17.6	14.0					
23.0	18.3	18.0	16.9	13.7	11.7				
24.0	17.5	17.1	16.1	13.4	11.6	8.9			
25.0	16.6	16.2	15.4	13.2	11.5	8.9			
26.0	15.7	15.3	14.8	13.0	11.4	8.8	7.4		
27.0	14.7	14.4	14.2	12.8	11.2	8.7	7.4		
28.0	14.2	13.9	13.6	12.5	11.1	8.6	7.3	6.4	
29.0	13.8	13.4	13.0	12.2	11.0	8.5	7.2	6.4	4.4
30.0	13.1	12.8	12.4	11.8	10.8	8.4	7.2	6.3	4.4
31.0		12.3	11.9	11.4	10.7	8.3	7.1	6.2	4.4
32.0		11.7	11.5	11.0	10.4	8.2	7.0	6.2	4.3
33.0		11.4	11.1	10.6	10.1	8.1	7.0	6.1	4.2
34.0		11.1	10.7	10.1	9.8	8.0	6.9	6.0	4.2
35.0		10.7	10.3	9.8	9.5	7.9	6.8	6.0	4.1
36.0		10.2	9.9	9.5	9.1	7.8	6.7	5.9	4.1
37.0			9.5	9.3	8.8	7.7	6.7	5.8	4.1
38.0			9.3	9.0	8.5	7.6	6.6	5.8	4.0
39.0			9.1	8.6	8.3	7.5	6.5	5.7	4.0
40.0			8.8	8.3	8.0	7.4	6.5	5.7	3.9
41.0			8.5	8.0	7.8	7.2	6.4	5.6	3.9
42.0				7.7	7.6	7.1	6.3	5.5	3.8
43.0				7.5	7.3	6.9	6.2	5.5	3.8
44.0				7.4	7.1	6.7	6.2	5.4	3.8
45.0				7.2	6.8	6.5	6.1	5.3	3.7
46.0				6.9	6.5	6.3	6.0	5.3	3.7
47.0				6.7	6.3	6.1	5.8	5.2	3.6
48.0					6.2	5.9	5.6	5.1	3.6
49.0					6.1	5.7	5.5	5.1	3.6
50.0					5.9	5.5	5.3	5.0	3.5
52.0					5.5	5.1	5.0	4.7	3.4
54.0						4.9	4.6	4.5	3.3
56.0						4.6	4.2	4.2	3.2
58.0						4.3	4.0	3.9	3.1
60.0							3.8	3.6	3.0
62.0							3.6	3.4	2.9
64.0							3.3	3.2	2.8
66.0								3.0	2.6
68.0								2.8	2.5
70.0								2.5	2.3
72.0									2.1
74.0									1.9
76.0									
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 55.1 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
16.0	22.9								
17.0	22.5								
18.0	21.6	19.0							
19.0	20.7	18.6							
20.0	19.8	18.0	16.0						
21.0	18.9	17.4	15.7						
22.0	17.9	16.7	15.2	12.9					
23.0	16.9	16.0	14.7	12.7	10.7				
24.0	15.9	15.4	14.3	12.4	10.7				
25.0	15.3	14.7	13.8	12.1	10.5	8.3			
26.0	14.6	14.0	13.4	11.9	10.4	8.2			
27.0	13.9	13.3	12.9	11.6	10.3	8.2	7.0		
28.0	13.2	12.7	12.4	11.3	10.1	8.1	6.9	5.9	
29.0	12.8	12.3	11.9	11.1	10.0	8.0	6.8	5.9	
30.0	12.4	11.9	11.4	10.7	9.8	7.9	6.8	5.9	4.1
31.0	11.8	11.4	10.9	10.4	9.6	7.8	6.7	5.8	4.1
32.0		11.0	10.6	10.0	9.4	7.7	6.6	5.8	4.0
33.0		10.5	10.2	9.6	9.1	7.6	6.6	5.7	4.0
34.0		10.3	9.9	9.3	8.8	7.5	6.5	5.6	3.9
35.0		10.0	9.6	8.9	8.5	7.4	6.4	5.6	3.9
36.0		9.7	9.2	8.7	8.3	7.2	6.3	5.5	3.9
37.0			8.9	8.4	8.0	7.1	6.3	5.5	3.8
38.0			8.6	8.2	7.7	6.9	6.2	5.4	3.8
39.0			8.4	7.9	7.4	6.8	6.1	5.4	3.7
40.0			8.2	7.7	7.2	6.6	5.9	5.3	3.7
41.0			7.9	7.4	7.0	6.5	5.8	5.2	3.7
42.0			7.7	7.1	6.8	6.3	5.7	5.2	3.6
43.0				6.9	6.6	6.1	5.6	5.1	3.6
44.0				6.8	6.4	6.0	5.5	5.0	3.5
45.0				6.6	6.2	5.8	5.4	4.9	3.5
46.0				6.4	6.0	5.7	5.2	4.8	3.5
47.0				6.3	8.7	5.5	5.1	4.8	3.4
48.0				6.0	5.6	5.3	5.0	4.7	3.4
49.0					5.5	5.2	4.8	4.6	3.4
50.0					5.4	5.0	4.7	4.5	3.3
52.0					5.1	4.6	4.4	4.3	3.2
54.0						4.4	4.1	4.0	3.1
56.0						4.2	3.8	3.8	3.0
58.0						4.0	3.6	3.5	2.9
60.0							3.4	3.2	2.7
62.0							3.3	3.0	2.5
64.0							3.0	2.8	2.4
66.0								2.7	2.2
68.0								2.5	2.1
70.0								2.3	2.0
72.0									1.8
74.0									1.6
76.0									1.5
Reeving	4	4	4	3	3	3	3	3	2

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

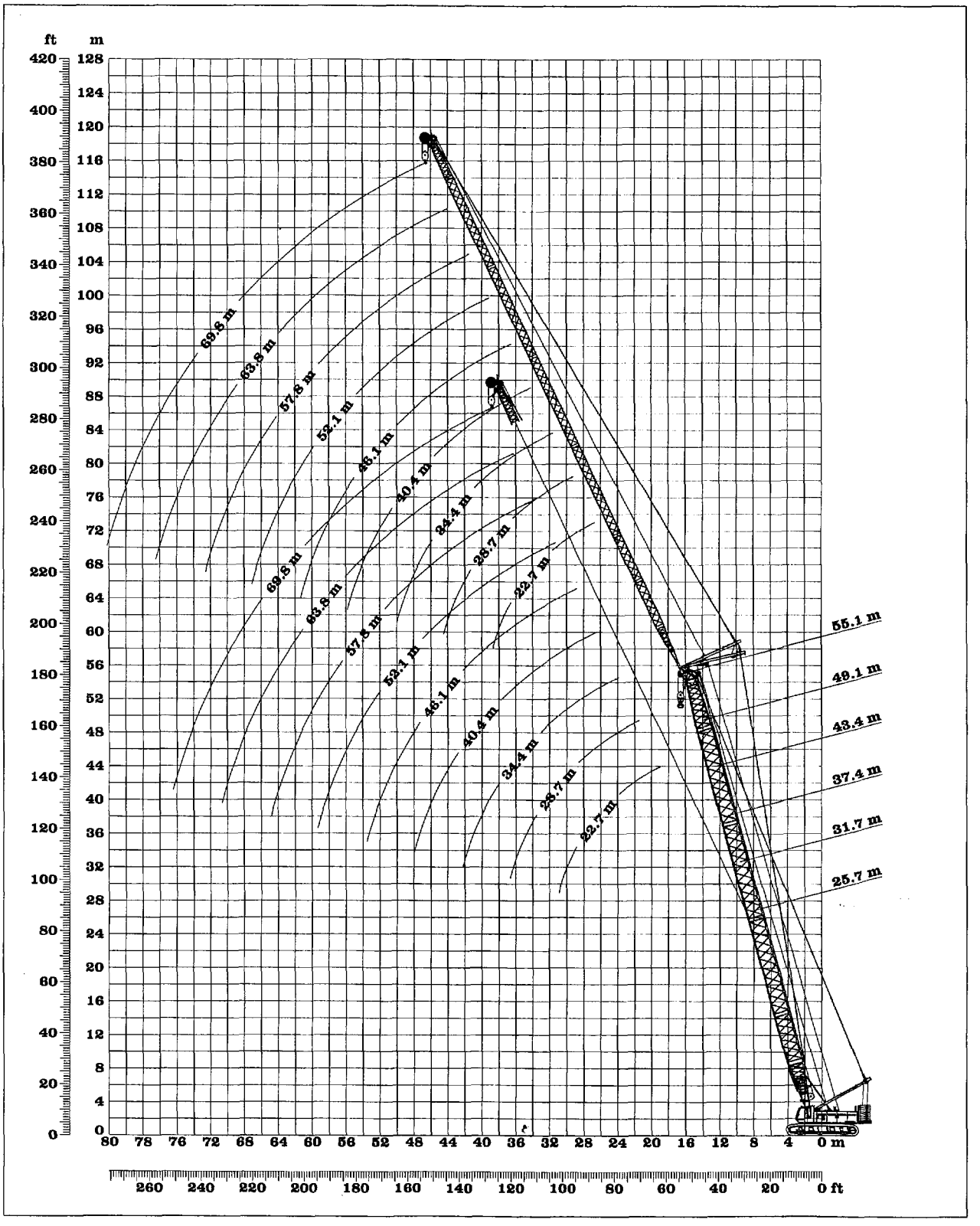
Lifting capacities – luffing jib main boom 83°

Main boom (HPT) 60.8 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 34.4 m 45.0 t counterweight			
	Jib length (m)		
	22.7	28.7	34.4
Radius in (m)	t	t	t
17.0	19.1		
18.0	18.6		
19.0	17.9	15.9	
20.0	17.2	15.5	
21.0	16.5	15.0	13.5
22.0	15.8	14.4	13.1
23.0	15.1	13.9	12.7
24.0	14.4	13.4	12.3
25.0	13.8	13.0	12.0
26.0	13.3	12.5	11.6
27.0	12.8	12.1	11.3
28.0	12.2	11.6	10.9
29.0	11.8	11.2	10.6
30.0	11.5	10.9	10.2
31.0	11.1	10.5	9.9
32.0		10.1	9.5
33.0		9.7	9.3
34.0		9.4	9.0
35.0		9.2	8.7
36.0		8.9	8.5
37.0		8.6	8.2
38.0			7.8
39.0			7.7
40.0			7.5
41.0			7.3
42.0			7.1
43.0			6.8
Reeving	4	4	4

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

Lifting capacities – luffing jib main boom 83°



Working range – luffing jib main boom 75°

Main boom (HPT) 25.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
19.0	31.1								
20.0	29.8								
21.0	28.4								
22.0	27.1	26.2							
23.0	26.0	25.0							
24.0	24.8	24.0	21.6						
25.0	23.6	23.1	21.5						
26.0	22.5	22.2	21.0						
27.0	21.5	21.3	20.5	15.4					
28.0	20.6	20.4	19.9	15.3					
29.0	19.7	19.5	19.2	15.1	13.1				
30.0	18.9	18.7	18.5	14.9	13.1				
31.0	18.1	18.0	17.8	14.7	13.0				
32.0		17.3	17.1	14.6	12.9	9.4			
33.0		16.6	16.5	14.4	12.7	9.3			
34.0		16.0	15.9	14.3	12.6	9.2	7.9		
35.0		15.5	15.3	14.1	12.5	9.1	7.9		
36.0		14.9	14.6	13.8	12.4	9.0	7.8		
37.0			13.8	13.4	12.2	8.9	7.7	6.7	
38.0			13.4	12.9	12.1	8.8	7.6	6.6	
39.0			13.0	12.5	12.0	8.8	7.5	6.5	4.5
40.0			12.7	12.0	11.6	8.7	7.5	6.4	4.5
41.0			12.2	11.6	11.3	8.6	7.4	6.3	4.4
42.0			11.7	11.0	11.0	8.5	7.3	6.2	4.3
43.0				10.8	10.6	8.4	7.3	6.2	4.3
44.0				10.5	10.2	8.3	7.2	6.1	4.2
45.0				10.3	9.9	8.2	7.1	6.1	4.1
46.0				10.0	9.5	8.1	7.1	6.0	4.1
47.0				9.6	9.1	8.0	7.0	5.9	4.1
48.0				9.2	8.9	7.9	6.9	5.9	4.0
49.0					8.7	7.8	6.9	5.8	4.0
50.0					8.5	7.7	6.8	5.8	3.9
52.0					8.0	7.5	6.7	5.7	3.8
54.0						7.2	6.5	5.6	3.7
56.0						6.9	6.4	5.5	3.7
58.0						6.5	6.2	5.4	3.6
60.0							5.9	5.3	3.6
62.0							5.6	5.2	3.5
64.0							5.3	5.0	3.5
66.0								4.8	3.4
68.0								4.5	3.4
70.0								4.3	3.3
72.0									3.3
74.0									3.2
76.0									3.1
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 31.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
21.0	26.8								
22.0	25.6								
23.0	24.5	23.4							
24.0	23.5	22.7							
25.0	22.6	21.8							
26.0	21.8	21.0	20.3						
27.0	21.0	20.2	19.5						
28.0	20.1	19.5	18.8	14.9					
29.0	19.3	18.8	18.2	14.9					
30.0	18.5	18.2	17.6	14.7					
31.0	17.7	17.5	17.0	14.5	12.7				
32.0	17.0	16.9	16.5	14.4	12.6				
33.0		16.2	15.9	14.2	12.5	9.2			
34.0		15.7	15.5	14.1	12.4	9.2			
35.0		15.1	14.9	14.0	12.3	9.0			
36.0		14.6	14.4	13.8	12.2	8.9	7.6		
37.0		14.1	13.9	13.6	12.1	8.8	7.6		
38.0		13.6	13.5	13.2	12.0	8.7	7.5	6.4	
39.0			13.0	12.8	11.9	8.7	7.4	6.4	
40.0			12.6	12.4	11.8	8.6	7.4	6.4	
41.0			12.2	12.0	11.7	8.5	7.3	6.3	4.4
42.0			11.8	11.6	11.4	8.4	7.2	6.2	4.3
43.0			11.5	11.3	11.0	8.3	7.2	6.1	4.2
44.0				10.9	10.7	8.3	7.1	6.1	4.2
45.0				10.6	10.4	8.2	7.1	6.0	4.1
46.0				10.3	10.0	8.1	7.0	6.0	4.1
47.0				10.0	9.7	8.1	6.9	5.9	4.0
48.0				9.8	9.3	8.0	6.9	5.8	4.0
49.0				9.5	9.0	7.9	6.8	5.8	4.0
50.0					8.9	7.8	6.8	5.7	3.9
52.0					8.5	7.7	6.7	5.6	3.8
54.0					8.0	7.5	6.6	5.5	3.8
56.0						7.2	6.5	5.5	3.7
58.0						6.9	6.3	5.4	3.6
60.0						6.5	6.1	5.3	3.6
62.0							5.9	5.2	3.5
64.0							5.6	5.1	3.5
66.0							5.2	4.9	3.4
68.0								4.7	3.4
70.0								4.5	3.3
72.0								4.2	3.3
74.0									3.2
76.0									3.2
78.0									3.1
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 75°

Main boom (HPT) 37.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
22.0	24.0								
23.0	23.2								
24.0	22.3								
25.0	21.4	20.6							
26.0	20.6	19.8							
27.0	19.8	19.1	18.4						
28.0	19.1	18.4	17.8						
29.0	18.5	17.8	17.2						
30.0	17.9	17.2	16.6	14.3					
31.0	17.3	16.7	16.1	14.2					
32.0	16.6	16.1	15.6	14.1	12.2				
33.0	16.0	15.6	15.1	13.9	12.2				
34.0	15.4	15.2	14.6	13.8	12.1				
35.0		14.7	14.2	13.6	12.0	8.8			
36.0		14.2	13.8	13.2	11.9	8.8			
37.0		13.7	13.4	12.9	11.8	8.7	7.4		
38.0		13.3	13.0	12.5	11.7	8.6	7.4		
39.0		12.8	12.7	12.2	11.6	8.5	7.3		
40.0			12.3	11.8	11.4	8.5	7.3	6.2	
41.0			11.9	11.5	11.1	8.4	7.2	6.2	
42.0			11.5	11.2	10.8	8.3	7.1	6.1	4.2
43.0			11.2	10.9	10.5	8.3	7.1	6.1	4.2
44.0			10.8	10.6	10.2	8.2	7.0	6.0	4.2
45.0			10.5	10.3	10.0	8.1	7.0	5.9	4.1
46.0				10.0	9.7	8.0	6.9	5.9	4.1
47.0				9.7	9.5	8.0	6.8	5.8	4.0
48.0				9.5	9.3	7.9	6.8	5.8	4.0
49.0				9.2	9.0	7.9	6.7	5.7	3.9
50.0				8.9	8.8	7.8	6.7	5.7	3.9
52.0					8.3	7.7	6.6	5.6	3.8
54.0					7.9	7.6	6.5	5.5	3.7
56.0					7.5	7.3	6.4	5.4	3.7
58.0						6.9	6.3	5.3	3.6
60.0						6.5	6.2	5.3	3.6
62.0						6.2	6.0	5.2	3.5
64.0							5.7	5.1	3.5
66.0							5.5	5.0	3.4
68.0							5.1	4.8	3.4
70.0								4.6	3.3
72.0								4.4	3.3
74.0									3.2
76.0									3.2
78.0									3.2
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 43.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
24.0	20.9								
25.0	20.1								
26.0	19.3	18.4							
27.0	18.6	17.9							
28.0	18.0	17.3							
29.0	17.4	16.7	16.1						
30.0	16.8	16.1	15.6						
31.0	16.3	15.6	15.1	13.6					
32.0	15.8	15.1	14.6	13.6					
33.0	15.3	14.7	14.1	13.4					
34.0	14.9	14.2	13.7	13.1	11.5				
35.0	14.4	13.8	13.3	12.7	11.5				
36.0		13.4	12.9	12.4	11.4	8.5			
37.0		13.1	12.6	12.0	11.4	8.5			
38.0		12.7	12.2	11.7	11.2	8.4			
39.0		12.4	11.9	11.4	10.9	8.3	7.1		
40.0		12.0	11.6	11.1	10.6	8.3	7.0		
41.0		11.6	11.3	10.8	10.3	8.2	7.0	6.0	
42.0			11.0	10.5	10.1	8.1	6.9	6.0	
43.0			10.7	10.2	9.8	8.1	6.9	6.0	
44.0			10.5	10.0	9.5	8.0	6.8	5.9	4.1
45.0			10.2	9.7	9.3	7.9	6.8	5.8	4.1
46.0			9.9	9.5	9.1	7.9	6.7	5.8	4.0
47.0				9.3	8.9	7.8	6.7	5.7	4.0
48.0				9.1	8.6	7.7	6.6	5.7	3.9
49.0				8.9	8.4	7.7	6.6	5.6	3.9
50.0				8.6	8.2	7.6	6.5	5.6	3.8
52.0				8.2	7.9	7.4	6.4	5.5	3.8
54.0					7.5	7.1	6.4	5.4	3.7
56.0					7.2	6.8	6.3	5.3	3.6
58.0					6.8	6.5	6.1	5.2	3.6
60.0						6.2	5.8	5.2	3.5
62.0						5.9	5.6	5.1	3.5
64.0						5.7	5.3	5.0	3.4
66.0							5.1	4.7	3.4
68.0							4.9	4.5	3.3
70.0								4.3	3.3
72.0								4.1	3.2
74.0								4.0	3.2
76.0									3.2
78.0									3.2
80.0									3.1
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 75°

Main boom (HPT) 49.1 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
25.0	18.7								
26.0	18.1								
27.0	17.5								
28.0	16.9	16.2							
29.0	16.3	15.6							
30.0	15.8	15.1	14.5						
31.0	15.3	14.6	14.1						
32.0	14.8	14.2	13.6						
33.0	14.3	13.7	13.2	12.6					
34.0	13.9	13.3	12.8	12.3					
35.0	13.5	12.9	12.4	11.9	10.7				
36.0	13.2	12.6	12.1	11.5	10.7				
37.0	12.8	12.2	11.7	11.2	10.7				
38.0		11.9	11.4	10.9	10.4	8.0			
39.0		11.6	11.1	10.6	10.1	8.0			
40.0		11.3	10.8	10.3	9.9	7.9	6.7		
41.0		11.0	10.5	10.0	9.6	7.9	6.7		
42.0		10.8	10.3	9.8	9.3	7.8	6.7		
43.0			10.0	9.5	9.1	7.7	6.6	5.7	
44.0			9.8	9.3	8.9	7.7	6.6	5.7	
45.0			9.5	9.1	8.6	7.6	6.5	5.7	3.9
46.0			9.3	8.8	8.4	7.6	6.5	5.6	3.9
47.0			9.1	8.6	8.2	7.5	6.4	5.6	3.9
48.0			8.9	8.4	8.0	7.5	6.4	5.5	3.8
49.0				8.2	7.8	7.4	6.4	5.5	3.8
50.0				8.0	7.6	7.2	6.3	5.4	3.8
52.0				7.7	7.3	6.9	6.2	5.4	3.7
54.0				7.4	7.0	6.5	6.1	5.3	3.6
56.0					6.7	6.2	5.9	5.2	3.6
58.0					6.4	6.0	5.6	5.1	3.5
60.0						5.7	5.3	4.9	3.4
62.0						5.5	5.1	4.7	3.4
64.0						5.2	4.9	4.5	3.3
66.0							4.7	4.3	3.3
68.0							4.5	4.1	3.2
70.0							4.3	3.9	3.2
72.0								3.7	3.1
74.0								3.5	3.1
76.0								3.4	3.0
78.0									2.9
80.0									2.7
82.0									2.6
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 55.1 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
27.0	16.2								
28.0	15.7								
29.0	15.1								
30.0	14.6	14.0							
31.0	14.2	13.6							
32.0	13.7	13.1	12.6						
33.0	13.3	12.7	12.2						
34.0	12.9	12.4	11.9	10.5					
35.0	12.6	12.0	11.5	10.4					
36.0	12.2	11.7	11.2	10.3					
37.0	11.9	11.3	10.9	10.1	8.9				
38.0	11.6	11.0	10.6	9.9	8.9				
39.0		10.7	10.3	9.8	8.8	7.4			
40.0		10.5	10.0	9.5	8.7	7.4			
41.0		10.2	9.7	9.2	8.5	7.4			
42.0		9.9	9.5	9.0	8.4	7.3	6.1		
43.0		9.7	9.2	8.8	8.3	7.2	6.1		
44.0		9.5	9.0	8.5	8.1	7.1	6.1	5.3	
45.0			8.8	8.3	7.9	7.0	6.1	5.3	
46.0			8.6	8.1	7.7	6.9	6.0	5.3	
47.0			8.4	7.9	7.5	6.9	6.0	5.2	3.6
48.0			8.2	7.7	7.3	6.8	5.9	5.2	3.7
49.0			8.0	7.6	7.2	6.6	5.9	5.2	3.6
50.0			7.9	7.4	7.0	6.5	5.8	5.1	3.6
52.0				7.0	6.7	6.2	5.6	5.0	3.5
54.0				6.7	6.4	5.9	5.5	4.9	3.5
56.0					6.1	5.7	5.3	4.8	3.4
58.0					5.8	5.4	5.0	4.6	3.4
60.0					5.6	5.1	4.8	4.4	3.3
62.0						4.9	4.6	4.2	3.2
64.0						4.7	4.4	4.0	3.2
66.0						4.5	4.2	3.8	3.2
68.0							4.0	3.6	3.1
70.0							3.8	3.4	3.0
72.0							3.6	3.2	2.9
74.0								3.1	2.7
76.0								2.9	2.6
78.0								2.8	2.4
80.0									2.3
82.0									2.2
84.0									2.1
Reeving	4	4	4	3	3	3	3	3	2

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

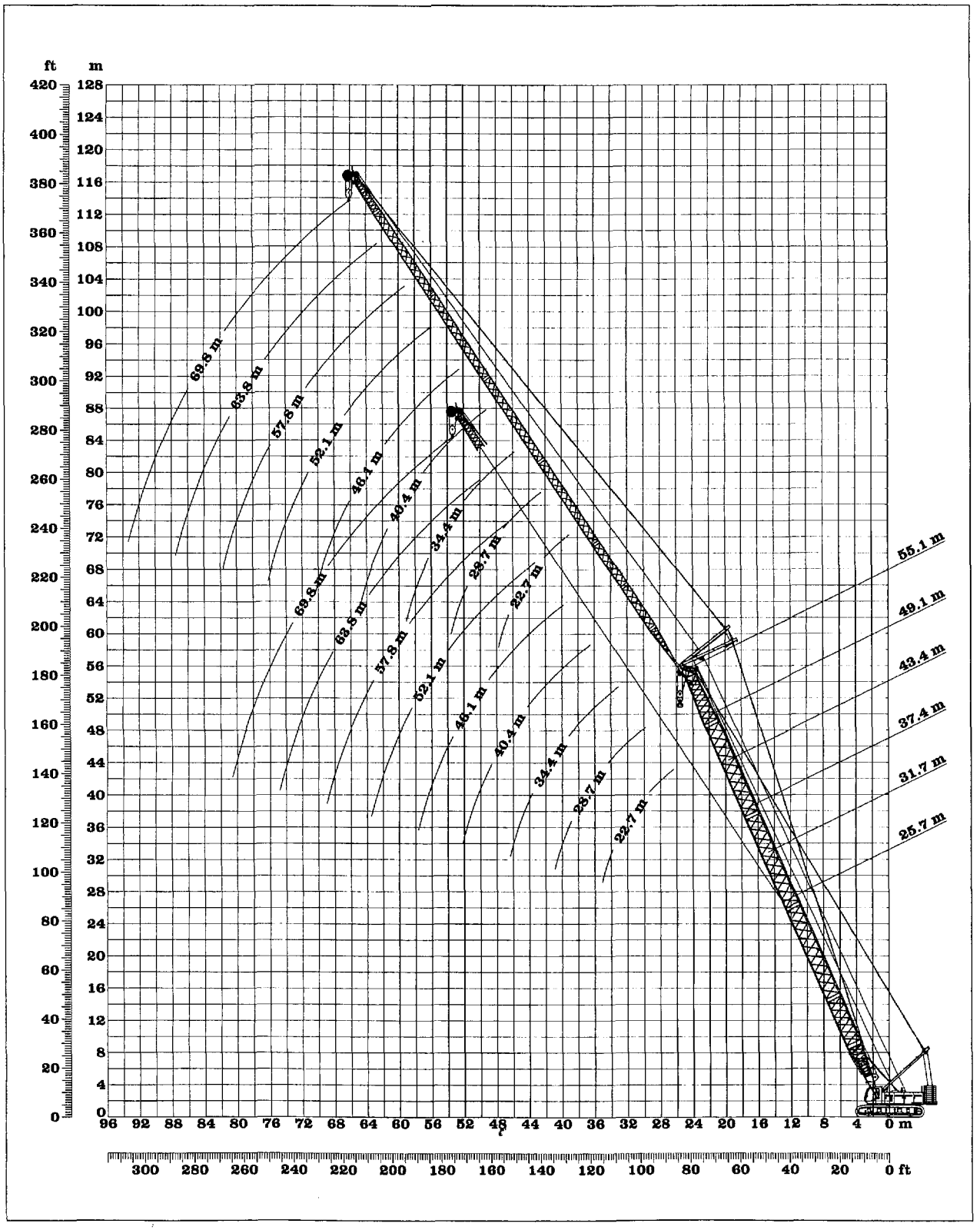
Lifting capacities – luffing jib main boom 75°

Main boom (HPT) 60.8 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 34.4 m 45.0 t counterweight			
	Jib length (m)		
	22.7m	28.7m	34.4m
Radius in (m)	t	t	t
28.0	13.7		
29.0	13.6		
30.0	13.2		
31.0	12.9	11.7	
32.0	12.6	11.5	
33.0	12.2	11.2	10.1
34.0	12.0	11.0	10.1
35.0	11.6	10.8	9.9
36.0	11.3	10.5	9.7
37.0	11.0	10.3	9.5
38.0	10.7	10.1	9.3
39.0	10.4	9.9	9.1
40.0	10.2	9.6	8.9
41.0		9.4	8.7
42.0		9.2	8.6
43.0		8.9	8.4
44.0		8.7	8.2
45.0		8.5	8.1
46.0			7.9
47.0			7.7
48.0			7.5
49.0			7.3
50.0			7.2
Reeving	4	4	4

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

Lifting capacities – luffing jib main boom 75°



Working range – luffing jib main boom 65°

Main boom (HPT) 25.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
27.0	20.2								
28.0	19.3								
29.0	18.5								
30.0	17.8	17.4							
31.0	17.1	16.8							
32.0	16.4	16.2							
33.0	15.8	15.6							
34.0	15.2	15.0	14.8						
35.0	14.7	14.5	14.3						
36.0		14.0	13.8						
37.0		13.5	13.3	13.0					
38.0		13.1	12.9	12.6					
39.0		12.6	12.5	12.2					
40.0		12.2	12.1	11.8	11.5				
41.0		11.8	11.7	11.4	11.2				
42.0			11.3	11.1	10.9				
43.0			11.0	10.8	10.5				
44.0			10.7	10.4	10.2	8.5			
45.0			10.3	10.1	9.9	8.4			
46.0			10.0	9.8	9.6	8.3			
47.0				9.6	9.4	8.3	7.0		
48.0				9.3	9.1	8.2	7.0		
49.0				9.0	8.8	8.1	7.0		
50.0				8.8	8.6	8.1	6.9		
52.0				8.3	8.1	7.9	6.8	5.7	
54.0					7.7	7.5	6.7	5.6	3.8
56.0					7.3	7.1	6.6	5.6	3.8
58.0						6.7	6.5	5.5	3.7
60.0						6.4	6.2	5.4	3.6
62.0						6.1	5.9	5.3	3.6
64.0							5.6	5.2	3.5
66.0							5.3	5.1	3.5
68.0							5.1	4.8	3.4
70.0								4.6	3.4
72.0								4.4	3.3
74.0								4.1	3.3
76.0									3.3
78.0									3.2
80.0									3.2
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 31.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
30.0	17.0								
31.0	16.3								
32.0	15.7								
33.0	15.1	14.9							
34.0	14.6	14.3							
35.0	14.1	13.8							
36.0	13.6	13.3	13.1						
37.0	13.1	12.9	12.7						
38.0		12.5	12.2						
39.0		12.1	11.8						
40.0		11.7	11.5	11.2					
41.0		11.3	11.1	10.8					
42.0		11.0	10.8	10.5					
43.0		10.6	10.4	10.2	9.9				
44.0			10.1	9.9	9.6				
45.0			9.8	9.6	9.4				
46.0			9.6	9.3	9.1				
47.0			9.3	9.0	8.8	8.2			
48.0			9.0	8.8	8.6	8.2			
49.0			8.8	8.5	8.3	8.1			
50.0				8.3	8.1	7.8	6.8		
52.0				7.9	7.7	7.4	6.8		
54.0				7.5	7.3	7.0	6.7	5.6	
56.0					6.9	6.6	6.4	5.5	
58.0					6.5	6.3	6.1	5.4	3.7
60.0					6.2	6.0	5.8	5.4	3.6
62.0						5.7	5.5	5.2	3.6
64.0						5.4	5.2	4.9	3.5
66.0						5.1	4.9	4.7	3.5
68.0							4.7	4.5	3.4
70.0							4.5	4.2	3.4
72.0								4.0	3.3
74.0								3.8	3.3
76.0								3.6	3.3
78.0									3.2
80.0									3.0
82.0									2.8
84.0									
86.0									
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 65°

Main boom (HPT) 37.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
32.0	14.9								
33.0	14.4								
34.0	13.9								
35.0	13.4	13.0							
36.0	12.9	12.6							
37.0	12.5	12.2							
38.0	12.1	11.8							
39.0	11.7	11.4	11.1						
40.0	11.3	11.1	10.8						
41.0		10.7	10.5						
42.0		10.4	10.2	9.8					
43.0		10.1	9.9	9.5					
44.0		9.8	9.6	9.3					
45.0		9.5	9.3	9.0	8.6				
46.0		9.2	9.0	8.8	8.4				
47.0			8.8	8.5	8.2				
48.0			8.5	8.3	8.0				
49.0			8.3	8.0	7.8	7.3			
50.0			8.1	7.8	7.6	7.1			
52.0				7.4	7.2	6.8	6.4		
54.0				7.0	6.8	6.5	6.1		
56.0				6.7	6.4	6.2	5.8	5.4	
58.0					6.1	5.9	5.5	5.1	
60.0					5.8	5.6	5.2	4.8	3.6
62.0					5.5	5.3	5.0	4.6	3.5
64.0						5.0	4.8	4.4	3.5
66.0						4.8	4.5	4.2	3.4
68.0						4.5	4.3	4.0	3.4
70.0							4.1	3.8	3.4
72.0							3.9	3.6	3.2
74.0							3.7	3.4	3.1
76.0								3.3	2.9
78.0								3.1	2.7
80.0								2.9	2.6
82.0									2.5
84.0									2.3
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 43.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
35.0	12.4								
36.0	12.0								
37.0	11.7								
38.0	11.4	10.8							
39.0	11.0	10.5							
40.0	10.7	10.2							
41.0	10.3	10.0	9.5						
42.0	10.0	9.7	9.3						
43.0		9.5	9.0						
44.0		9.2	8.8						
45.0		8.9	8.6	8.1					
46.0		8.6	8.4	7.9					
47.0		8.4	8.1	7.7					
48.0		8.2	8.0	7.5	7.1				
49.0			7.7	7.3	6.9				
50.0			7.5	7.1	6.7				
52.0			7.1	6.8	6.4	6.0			
54.0			6.7	6.5	6.1	5.7			
56.0				6.2	5.8	5.4	5.0		
58.0				5.8	5.5	5.1	4.8	4.4	
60.0					5.3	4.9	4.5	4.1	
62.0					5.1	4.7	4.3	3.9	3.5
64.0					4.8	4.4	4.1	3.7	3.3
66.0						4.2	3.9	3.5	3.1
68.0						4.1	3.7	3.3	2.9
70.0						3.9	3.5	3.1	2.8
72.0							3.4	3.0	2.6
74.0							3.2	2.8	2.5
76.0							3.1	2.7	2.3
78.0								2.5	2.2
80.0								2.4	2.0
82.0								2.3	1.9
84.0									1.8
86.0									1.7
88.0									1.6
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 65°

Main boom (HPT) 49.1 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
37.0	10.6								
38.0	10.3								
39.0	10.0								
40.0	9.7	9.2							
41.0	9.5	9.0							
42.0	9.2	8.7							
43.0	9.0	8.5							
44.0	8.8	8.3	7.9						
45.0	8.5	8.1	7.7						
46.0		7.9	7.5						
47.0		7.7	7.3	6.8					
48.0		7.5	7.1	6.6					
49.0		7.3	6.9	6.5					
50.0		7.2	6.8	6.3	5.9				
52.0			6.4	6.0	5.6				
54.0			6.2	5.7	5.3	4.9			
56.0			5.9	5.4	5.1	4.6			
58.0				5.2	4.8	4.4	4.0		
60.0				5.0	4.6	4.2	3.8	3.4	
62.0				4.8	4.4	4.0	3.6	3.2	
64.0					4.2	3.8	3.4	3.0	2.6
66.0					4.0	3.6	3.3	2.9	2.5
68.0						3.4	3.1	2.7	2.3
70.0						3.3	2.9	2.5	2.2
72.0						3.1	2.8	2.4	2.0
74.0							2.6	2.2	1.9
76.0							2.5	2.1	1.7
78.0							2.4	2.0	1.6
80.0								1.9	1.5
82.0								1.7	1.4
84.0								1.6	1.3
86.0									1.2
88.0									1.1
90.0									
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 55.1 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

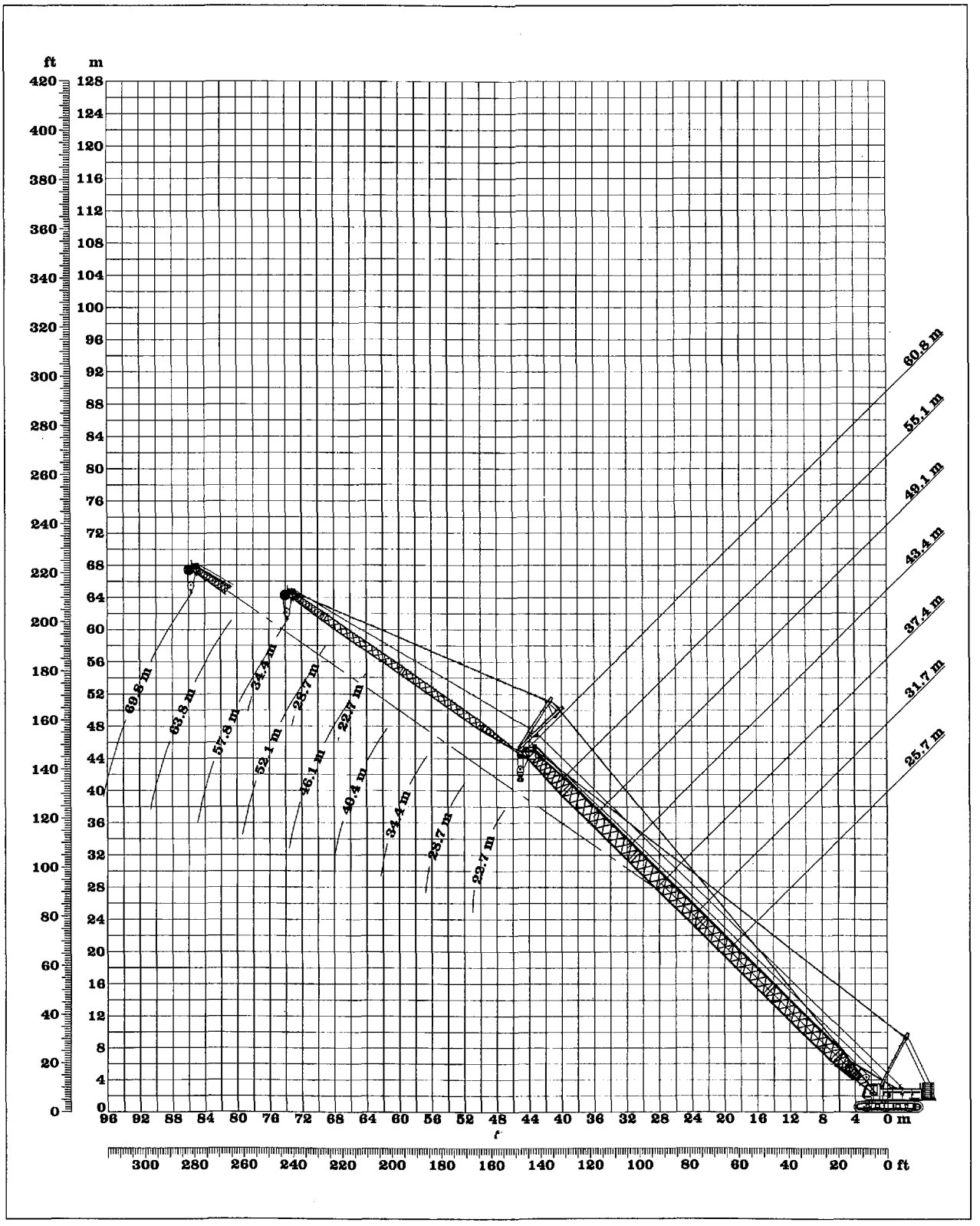
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
39.0	8.8								
40.0	8.6								
41.0	8.4								
42.0	8.2								
43.0	7.9	7.5							
44.0	7.7	7.3							
45.0	7.5	7.1							
46.0	7.4	6.9	6.5						
47.0	7.2	6.7	6.3						
48.0		6.5	6.1						
49.0		6.4	6.0						
50.0		6.2	5.8	5.4					
52.0		5.9	5.6	5.1					
54.0			5.3	4.9	4.5				
56.0			5.0	4.6	4.2				
58.0			4.8	4.4	4.0	3.6			
60.0				4.2	3.8	3.4	3.1		
62.0				4.0	3.6	3.2	2.9		
64.0				3.8	3.5	3.1	2.7	2.3	
66.0					3.3	2.9	2.5	2.1	1.7
68.0					3.1	2.7	2.4	2.0	1.6
70.0					3.0	2.6	2.2	1.9	1.5
72.0						2.4	2.1	1.7	1.3
74.0						2.3	2.0	1.6	1.2
76.0						2.2	1.9	1.5	1.1
78.0							1.7	1.4	
80.0							1.6	1.3	
82.0								1.2	
84.0								1.1	
86.0									
88.0									
90.0									
92.0									
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 60.8 m

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
42.0	7.1								
43.0	6.9								
44.0	6.7								
45.0	6.6	6.1							
46.0	6.4	5.9							
47.0	6.2	5.8							
48.0	6.1	5.6							
49.0	5.9	5.5	5.1						
50.0	5.8	5.3	5.0						
52.0		5.1	4.7						
54.0		4.8	4.5						
56.0		4.6	4.2						
58.0			4.0						
60.0			3.8						

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

Lifting capacities – luffing jib main boom 65°



Working range – luffing jib main boom 45°

Main boom (HPT) 25.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
40.0	11.0								
41.0	10.6								
42.0	10.3								
43.0									
44.0									
45.0		9.2							
46.0		8.9							
47.0		8.7							
48.0		8.4							
49.0			8.0						
50.0			7.8						
51.0			7.6						
52.0			7.4						
53.0			7.2						
54.0			7.0	6.7					
55.0				6.6					
56.0				6.4					
57.0				6.2					
58.0				6.1					
59.0				5.9	5.7				
60.0					5.5				
61.0					5.4				
62.0					5.3				
63.0					5.1				
64.0					5.0	4.8			
65.0					4.9	4.6			
66.0						4.5			
67.0						4.4			
68.0						4.3			
69.0						4.2	4.0		
70.0						4.1	3.9		
71.0						4.0	3.8		
72.0							3.7		
73.0							3.6	3.3	
74.0							3.5	3.2	
75.0							3.4	3.1	
76.0							3.3	3.0	
77.0								3.0	
78.0								2.9	2.6
79.0								2.8	2.5
80.0								2.7	2.5
81.0								2.6	2.4
82.0								2.6	2.3
83.0									2.2
84.0									2.2
85.0									2.1
86.0									2.0
87.0									2.0
88.0									1.9
Reeving	4	4	4	3	3	3	3	3	2

Main boom (HPT) 31.7 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
44.0	8.8								
45.0	8.6								
46.0	8.3								
47.0									
48.0									
49.0		7.4							
50.0		7.2							
51.0		7.0							
52.0		6.8							
53.0									
54.0			6.2						
55.0			6.1						
56.0			5.9						
57.0			5.8						
58.0			5.6						
59.0				5.2					
60.0				5.1					
61.0				4.8					
62.0				4.7					
63.0				4.6	4.5				
64.0					4.4				
65.0					4.2				
66.0					4.1				
67.0					4.0				
68.0					3.9	3.7			
69.0					3.8	3.6			
70.0						3.5			
71.0						3.4			
72.0						3.3			
73.0						3.2	3.0		
74.0						3.1	2.9		
75.0						3.0	2.8		
76.0							2.7		
77.0							2.6		
78.0							2.6	2.3	
79.0							2.5	2.2	
80.0							2.4	2.2	
81.0								2.1	
82.0								2.0	
83.0								1.9	1.7
84.0								1.9	1.6
85.0								1.8	1.6
86.0								1.8	1.5
87.0									1.4
88.0									1.4
89.0									1.3
90.0									1.3
91.0									1.2
92.0									1.2
Reeving	4	4	4	3	3	3	3	3	2

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

Lifting capacities – luffing jib main boom 45°

Main boom (HPT) 37.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
48.0	7.1								
49.0	6.9								
50.0	6.7								
51.0									
52.0									
53.0		5.9							
54.0		5.7							
55.0		5.6							
56.0		5.4							
57.0									
58.0			4.9						
59.0			4.8						
60.0			4.7						
61.0			4.5						
62.0			4.4						
63.0				4.0					
64.0				3.9					
65.0				3.8					
66.0				3.7					
67.0				3.6	3.4				
68.0				3.5	3.3				
69.0					3.2				
70.0					3.1				
71.0					3.0				
72.0					2.9	2.7			
73.0					2.9	2.6			
74.0						2.5			
75.0						2.4			
76.0						2.4			
77.0						2.3	2.1		
78.0						2.2	2.0		
79.0						2.2	1.9		
80.0							1.9		
81.0							1.8		
82.0							1.7	1.4	
83.0							1.7	1.3	
84.0							1.6	1.3	
85.0								1.2	
86.0								1.2	
87.0								1.1	
88.0								1.1	
89.0								1.0	
Reeving	4	4	4	3	3	3	3	3	

Main boom (HPT) 43.4 m

Capacities in metric tons with luffing jib (NDL)
Jib length between 22.7 m and 69.8 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
Radius (m)	t	t	t	t	t	t	t	t	t
52.0	5.5								
53.0	5.3								
54.0	5.2								
55.0	5.0								
56.0									
57.0		4.5							
58.0		4.4							
59.0		4.2							
60.0		4.1							
61.0		4.0							
62.0			3.7						
63.0			3.6						
64.0			3.5						
65.0			3.4						
66.0			3.3						
67.0				2.9					
68.0				2.8					
69.0				2.7					
70.0				2.6					
71.0				2.5					
72.0					2.3				
73.0					2.2				
74.0					2.1				
75.0					2.1				
76.0					2.0	1.6			
77.0					1.9	1.6			
78.0						1.5			
79.0						1.4			
80.0						1.4			
81.0						1.3	1.0		
82.0						1.3			
83.0						1.2			
84.0									
85.0									
86.0									
87.0									
88.0									
89.0									
90.0									
91.0									
92.0									
94.0									
Reeving	4	4	4	3	3	3	3		

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

Lifting capacities – luffing jib main boom 45°

Main boom (HPT) 49.1 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
56.0	4.1								
57.0	4.0								
58.0	3.9								
59.0	3.7								
60.0									
61.0		3.3							
62.0		3.2							
63.0		3.1							
64.0		3.0							
65.0		2.9							
66.0			2.5						
67.0			2.5						
68.0			2.4						
69.0			2.3						
70.0			2.2						
71.0				1.8					
72.0				1.7					
73.0				1.7					
74.0				1.6					
75.0				1.6					
76.0				1.5	1.2				
77.0					1.1				
78.0					1.1				
79.0					1.0				
Reeving	4	4	4	3	3				

Main boom (HPT) 55.1 m

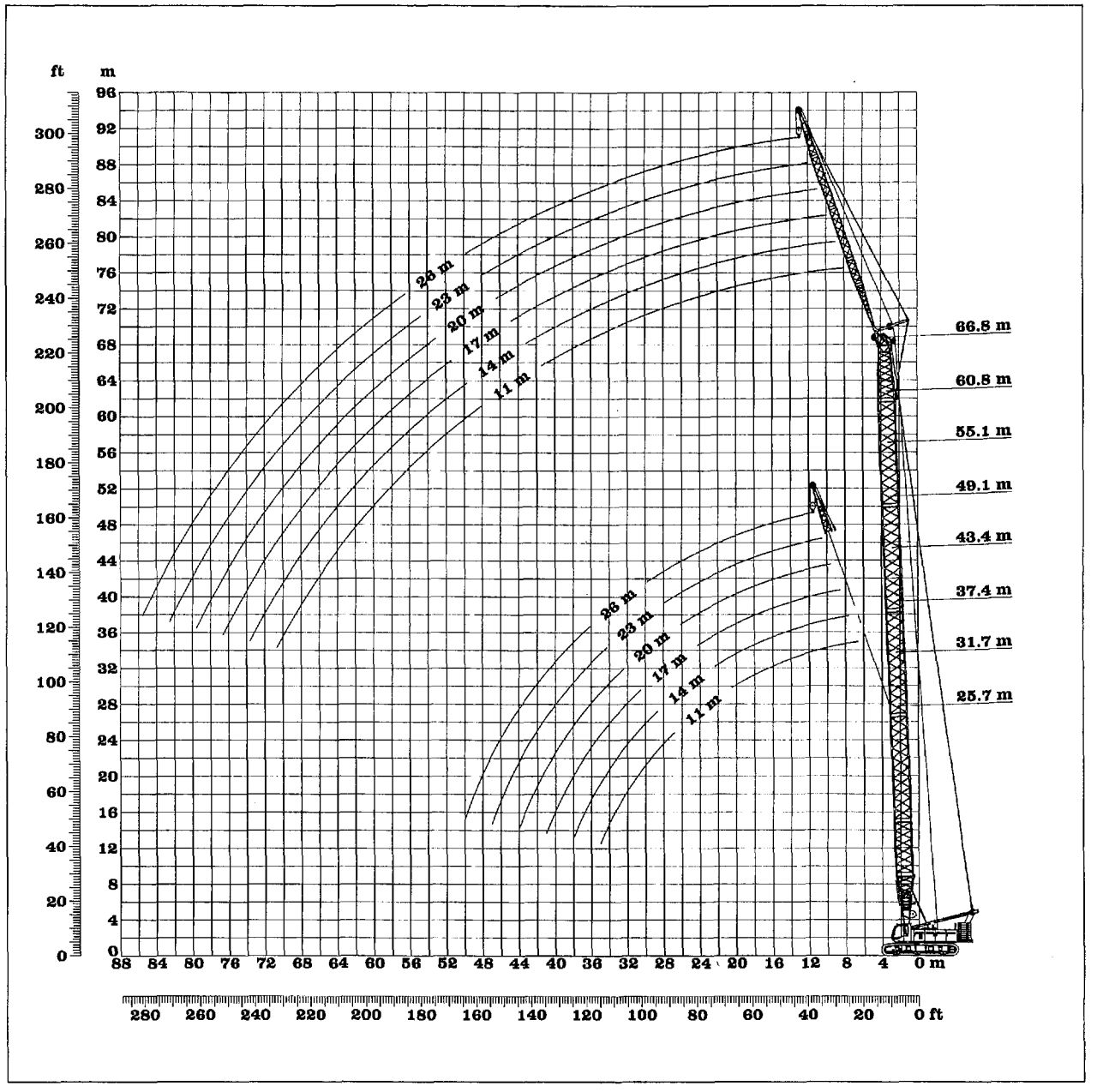
Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
61.0	2.6								
62.0	2.5								
63.0	2.4								
64.0									
65.0		1.9							
66.0		1.9							
67.0		1.8							
68.0		1.7							
69.0		1.7							
70.0			1.3						
71.0			1.2						
72.0			1.1						
73.0			1.1						
74.0			1.1						
Reeving	4	4	4						

Main boom (HPT) 60.8 m

Capacities in metric tons with luffing jib (NDL) Jib length between 22.7 m and 69.8 m 55.1 t counterweight + 15 t carbody counterweight									
	Jib length (m)								
	22.7	28.7	34.4	40.4	46.1	52.1	57.8	63.8	69.8
65.0	1.3								
66.0	1.3								
67.0	1.2								
Reeving	4								

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

Lifting capacities – luffing jib main boom 45°



Working range – fixed jib 15°

Main boom (HPT) 25.7 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
6.0	35.9					
7.0	35.9	35.9				
8.0	35.9	35.9	32.3			
9.0	35.9	35.1	30.4			
10.0	35.9	34.1	28.5	24.7		
11.0	35.9	32.2	27.1	23.1	20.6	
12.0	35.9	29.8	25.7	22.0	19.3	17.5
13.0	35.4	27.3	24.7	21.0	18.5	16.5
14.0	34.8	25.5	23.6	20.2	17.7	15.8
15.0	34.3	25.2	22.6	19.4	17.0	15.2
16.0	33.7	24.9	21.7	18.6	16.4	14.6
17.0	33.2	24.6	21.0	17.9	15.8	14.1
18.0	32.7	24.3	20.3	17.3	15.2	13.7
19.0	32.2	24.0	19.6	16.8	14.7	13.2
20.0	30.5	23.7	18.9	16.3	14.3	12.8
21.0	28.6	23.4	18.5	15.7	13.9	12.4
22.0	26.8	23.1	18.3	15.2	13.5	12.1
23.0	25.2	22.8	18.1	14.9	13.0	11.8
24.0	23.8	22.4	18.0	14.8	12.6	11.4
25.0	22.5	22.1	17.8	14.7	12.4	11.1
26.0	21.3	21.6	17.6	14.6	12.4	10.8
27.0	20.2	20.5	17.5	14.6	12.3	10.7
28.0	19.2	19.5	17.2	14.5	12.3	10.7
29.0	18.3	18.5	16.9	14.4	12.2	10.6
30.0	17.4	17.7	16.6	14.2	12.2	10.6
31.0	16.6	16.9	16.3	14.0	12.2	10.6
32.0	15.9	16.1	16.0	13.7	12.0	10.5
33.0	15.2	15.4	15.6	13.5	11.9	10.5
34.0	14.5	14.8	15.0	13.2	11.7	10.4
35.0	13.9	14.1	14.4	13.0	11.5	10.3
36.0		13.5	13.8	12.7	11.3	10.1
37.0		13.0	13.2	12.5	11.1	9.9
38.0		12.5	12.7	12.3	10.8	9.8
39.0			12.2	12.1	10.6	9.6
40.0			11.7	11.9	10.4	9.4
41.0			11.3	11.4	10.3	9.2
42.0				11.0	10.1	9.0
43.0				10.6	10.0	8.9
44.0				10.2	9.8	8.8
45.0					9.7	8.6
46.0					9.5	8.5
47.0						8.4
48.0						8.3
49.0						8.1
Reeving	3	3	3	3	3	3

Main boom (HPT) 31.7 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
6.0	35.9					
7.0	35.9	35.9				
8.0	35.9	35.9				
9.0	35.9	35.9	35.3			
10.0	35.9	35.9	34.2	29.3		
11.0	35.9	35.9	32.8	27.8	23.6	
12.0	35.9	35.6	31.5	26.7	22.8	19.2
13.0	35.9	35.3	30.3	25.7	22.1	18.8
14.0	35.9	34.9	29.4	24.7	21.4	18.3
15.0	35.9	34.6	28.4	23.9	20.8	17.8
16.0	35.9	33.8	27.4	23.2	20.2	17.3
17.0	35.9	32.8	26.5	22.5	19.6	16.9
18.0	33.8	31.9	25.8	21.7	19.1	16.5
19.0	31.8	30.9	25.2	21.1	18.6	16.2
20.0	30.0	29.9	24.5	20.6	18.0	15.8
21.0	28.3	28.3	23.8	20.1	17.6	15.4
22.0	26.5	26.8	23.1	19.6	17.1	15.0
23.0	25.0	25.2	22.4	19.0	16.7	14.7
24.0	23.5	23.8	21.9	18.5	16.2	14.4
25.0	22.2	22.5	21.3	18.0	15.8	14.0
26.0	21.0	21.3	20.7	17.6	15.3	13.7
27.0	19.9	20.2	20.1	17.2	14.9	13.3
28.0	18.9	19.2	19.4	16.7	14.6	13.0
29.0	18.0	18.2	18.5	16.3	14.3	12.7
30.0	17.2	17.4	17.6	15.9	13.9	12.4
31.0	16.4	16.6	16.8	15.4	13.6	12.2
32.0	15.6	15.8	16.0	15.0	13.3	11.9
33.0	14.9	15.1	15.3	14.7	12.9	11.6
34.0	14.3	14.5	14.7	14.4	12.6	11.3
35.0	13.6	13.8	14.1	14.1	12.3	11.1
36.0	13.1	13.3	13.5	13.6	12.1	10.8
37.0	12.5	12.7	12.9	13.1	11.9	10.5
38.0	12.0	12.2	12.4	12.6	11.7	10.3
39.0	11.5	11.7	11.9	12.1	11.4	10.2
40.0	11.0	11.2	11.4	11.6	11.2	10.0
41.0		10.8	11.0	11.1	11.0	9.8
42.0		10.4	10.6	10.7	10.8	9.6
43.0		10.0	10.2	10.3	10.5	9.5
44.0			9.8	9.9	10.1	9.3
45.0			9.4	9.6	9.7	9.1
46.0			9.1	9.2	9.4	8.9
47.0				8.9	9.0	8.7
48.0				8.5	8.7	8.6
49.0				8.2	8.4	8.5
50.0					8.1	8.2
52.0					7.5	7.6
54.0						7.1
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 15°

Main boom (HPT) 37.4 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
6.0	35.9					
7.0	35.9					
8.0	35.9	35.9				
9.0	35.9	35.9	34.4			
10.0	35.9	35.9	33.8	28.7		
11.0	35.9	35.9	33.1	28.0	22.7	
12.0	35.9	35.9	32.2	27.3	22.3	18.6
13.0	35.9	35.3	31.4	26.6	21.8	18.3
14.0	35.9	34.6	30.5	25.9	21.3	17.9
15.0	35.7	34.0	29.6	25.2	20.8	17.5
16.0	35.1	33.4	28.7	24.5	20.3	17.1
17.0	34.5	32.6	27.9	23.8	19.9	16.8
18.0	32.5	31.7	27.0	23.1	19.5	16.4
19.0	30.6	30.5	26.3	22.5	19.1	16.1
20.0	28.9	28.8	25.6	21.8	18.7	15.7
21.0	27.3	27.2	24.9	21.2	18.2	15.4
22.0	25.7	25.8	24.2	20.6	17.8	15.0
23.0	24.6	24.5	23.5	20.0	17.4	14.7
24.0	23.3	23.4	22.7	19.4	16.9	14.4
25.0	22.0	22.2	22.1	18.8	16.5	14.2
26.0	20.8	21.0	21.2	18.2	16.0	13.9
27.0	19.7	19.9	20.2	17.7	15.6	13.6
28.0	18.7	18.9	19.2	17.4	15.1	13.4
29.0	17.8	18.0	18.2	17.0	14.8	13.1
30.0	16.9	17.1	17.3	16.6	14.5	12.8
31.0	16.1	16.3	16.5	16.2	14.2	12.6
32.0	15.4	15.6	15.8	15.9	13.9	12.3
33.0	14.7	14.9	15.1	15.2	13.6	12.1
34.0	14.0	14.2	14.4	14.6	13.3	11.9
35.0	13.4	13.6	13.8	14.0	13.0	11.6
36.0	12.8	13.0	13.2	13.4	12.7	11.4
37.0	12.3	12.5	12.7	12.8	12.4	11.1
38.0	11.8	11.9	12.1	12.3	12.1	10.9
39.0	11.3	11.5	11.7	11.8	12.0	10.6
40.0	10.8	11.0	11.2	11.3	11.5	10.4
41.0	10.4	10.6	10.7	10.9	11.0	10.2
42.0	10.0	10.1	10.3	10.5	10.6	10.1
43.0	9.6	9.7	9.9	10.1	10.2	9.9
44.0	9.2	9.4	9.5	9.7	9.8	9.8
45.0	8.8	9.0	9.2	9.3	9.5	9.6
46.0		8.6	8.8	9.0	9.1	9.2
47.0		8.3	8.5	8.6	8.8	8.9
48.0		8.0	8.2	8.3	8.5	8.5
49.0			7.9	8.0	8.1	8.2
50.0			7.6	7.7	7.8	7.9
52.0				7.1	7.3	7.4
54.0				6.6	6.8	6.9
56.0					6.3	6.4
58.0						5.9
60.0						5.5
Reeving	3	3	3	3	3	3

Main boom (HPT) 43.4 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
7.0	35.9					
8.0	35.9	35.9				
9.0	35.9	35.9	32.8			
10.0	35.9	35.9	32.3	27.3		
11.0	35.9	35.8	31.7	27.0	21.6	
12.0	35.9	35.8	31.0	26.5	21.4	
13.0	35.9	35.7	30.4	25.9	21.0	17.7
14.0	35.9	34.6	29.7	25.4	20.6	17.4
15.0	35.9	33.6	28.9	24.8	20.2	17.1
16.0	35.4	32.5	28.1	24.3	19.8	16.7
17.0	33.2	31.4	27.2	23.7	19.4	16.4
18.0	31.2	30.4	26.4	23.1	19.0	16.1
19.0	29.3	29.3	25.6	22.5	18.7	15.8
20.0	27.7	27.6	24.9	21.8	18.3	15.5
21.0	26.2	26.2	24.3	21.2	18.0	15.2
22.0	24.8	24.8	23.8	20.7	17.6	14.9
23.0	23.6	23.5	23.2	20.3	17.3	15.6
24.0	22.4	22.4	22.4	19.8	17.0	14.3
25.0	21.3	21.3	21.3	19.4	16.6	14.1
26.0	20.3	20.3	20.4	18.9	16.3	13.9
27.0	19.4	19.4	19.5	18.5	16.0	13.7
28.0	18.4	18.6	18.6	18.0	15.6	13.5
29.0	17.4	17.7	17.8	17.6	16.3	13.3
30.0	16.6	16.8	17.1	17.1	15.0	13.1
31.0	15.8	16.0	16.2	16.4	14.7	12.9
32.0	15.0	15.3	15.5	15.7	14.4	12.7
33.0	14.3	14.5	14.8	14.9	14.1	12.5
34.0	13.7	13.9	14.1	14.3	13.9	12.2
35.0	13.1	13.3	13.5	13.6	13.6	12.0
36.0	12.5	12.7	12.9	13.1	13.2	11.8
37.0	12.0	12.1	12.4	12.5	12.7	11.6
38.0	11.4	11.6	11.8	12.0	12.1	11.4
39.0	11.0	11.1	11.3	11.5	11.6	11.2
40.0	10.5	10.7	10.9	11.0	11.2	11.0
41.0	10.1	10.2	10.4	10.6	10.7	10.7
42.0	9.6	9.8	10.0	10.1	10.3	10.4
43.0	9.2	9.4	9.6	9.7	9.9	10.0
44.0	8.9	9.0	9.2	9.4	9.5	9.6
45.0	8.5	8.7	8.9	9.0	9.1	9.3
46.0	8.2	8.3	8.5	8.6	8.8	8.9
47.0	7.8	8.0	8.2	8.3	8.5	8.6
48.0	7.5	7.7	7.9	8.0	8.1	8.2
49.0	7.2	7.4	7.6	7.7	7.8	7.9
50.0	6.9	7.1	7.3	7.4	7.5	7.6
52.0		6.5	6.7	6.8	7.0	7.1
54.0			6.2	6.3	6.5	6.6
56.0			5.7	5.8	6.0	6.1
58.0				5.4	5.5	5.6
60.0					5.1	5.2
62.0					4.7	4.8
64.0						4.4
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 15°

Main boom (HPT) 49.1 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
7.0	35.9					
8.0	35.9	35.9				
9.0	35.9	35.9	30.7			
10.0	35.9	35.9	30.5	25.8		
11.0	35.9	35.2	30.0	25.6		
12.0	35.9	34.3	29.4	25.2	20.5	
13.0	35.6	33.4	28.8	24.7	20.1	17.1
14.0	35.3	32.5	28.2	24.3	19.8	16.8
15.0	35.0	31.7	27.5	23.8	19.4	16.5
16.0	34.0	30.9	26.8	23.4	19.1	16.2
17.0	31.9	30.0	26.2	22.9	18.7	15.9
18.0	30.0	29.2	25.5	22.3	18.3	15.6
19.0	28.2	28.2	24.8	21.8	18.1	16.3
20.0	26.6	26.6	24.1	21.2	17.8	15.1
21.0	25.2	25.2	23.4	20.7	17.5	14.9
22.0	23.9	23.9	22.9	20.1	17.2	14.6
23.0	22.7	22.7	22.4	19.7	16.9	14.4
24.0	21.5	21.5	21.6	19.3	16.6	14.2
25.0	20.5	20.5	20.5	19.0	16.4	13.9
26.0	19.5	19.5	19.6	18.7	16.2	13.7
27.0	18.6	18.7	18.7	18.4	15.9	13.6
28.0	17.8	17.8	17.9	17.9	15.7	13.4
29.0	17.0	17.0	17.1	17.1	15.4	13.3
30.0	16.3	16.3	16.4	16.4	15.2	13.1
31.0	15.5	15.6	15.7	15.7	15.0	13.0
32.0	14.8	15.0	15.0	15.1	14.7	12.8
33.0	14.1	14.3	14.4	14.4	14.5	12.6
34.0	13.4	13.6	13.8	13.9	13.9	12.5
35.0	12.8	13.0	13.2	13.3	13.4	12.3
36.0	12.2	12.4	12.6	12.8	12.9	12.1
37.0	11.7	11.9	12.1	12.2	12.4	12.0
38.0	11.2	11.3	11.6	11.7	11.9	11.8
39.0	10.7	10.9	11.1	11.2	11.4	11.5
40.0	10.2	10.4	10.6	10.7	10.9	11.0
41.0	9.8	10.0	10.2	10.3	10.5	10.6
42.0	9.4	9.5	9.7	9.9	10.0	10.1
43.0	9.0	9.1	9.3	9.5	9.6	9.7
44.0	8.6	8.8	9.0	9.1	9.2	9.4
45.0	8.2	8.4	8.6	8.7	8.9	9.0
46.0	7.9	8.1	8.2	8.4	8.5	8.6
47.0	7.6	7.7	7.9	8.0	8.2	8.3
48.0	7.3	7.4	7.6	7.7	7.9	8.0
49.0	7.0	7.1	7.3	7.4	7.6	7.7
50.0	6.7	6.8	7.0	7.1	7.3	7.4
52.0	6.1	6.3	6.4	6.6	6.7	6.8
54.0	5.6	5.8	5.9	6.1	6.2	6.3
56.0		5.3	5.5	5.6	5.7	5.8
58.0		4.9	5.0	5.1	5.3	5.4
60.0			4.6	4.7	4.8	4.9
62.0				4.3	4.5	4.5
64.0				3.9	4.1	4.2
66.0					3.7	3.8
68.0						3.5
70.0						3.2
Reeving	3	3	3	3	3	3

Main boom (HPT) 55.1 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
7.0	35.9					
8.0	35.9	33.3				
9.0	35.9	33.1	28.2			
10.0	35.6	32.5	28.2			
11.0	35.2	31.8	27.7	23.9		
12.0	34.8	31.0	27.2	23.6	19.2	
13.0	34.3	30.2	26.5	23.3	19.0	16.2
14.0	33.6	29.4	25.9	22.8	18.7	16.0
15.0	32.9	28.6	25.2	22.3	18.4	15.8
16.0	32.1	28.0	24.5	21.8	18.1	15.6
17.0	30.6	27.3	24.0	21.2	17.8	15.3
18.0	28.7	26.7	23.5	20.8	17.6	15.1
19.0	27.1	26.0	22.9	20.3	17.3	14.8
20.0	25.5	25.3	22.4	19.9	17.0	14.6
21.0	24.1	24.1	21.9	19.5	16.8	14.4
22.0	22.9	22.9	21.3	19.0	16.6	14.2
23.0	21.7	21.7	20.8	18.6	16.3	14.0
24.0	20.6	20.6	20.3	18.2	16.1	13.8
25.0	19.6	19.6	19.7	17.9	15.8	13.6
26.0	18.7	18.7	18.8	17.6	15.6	13.4
27.0	17.8	17.8	17.9	17.3	15.5	13.2
28.0	17.0	17.0	17.1	17.0	15.3	13.1
29.0	16.2	16.3	16.3	16.4	15.1	13.0
30.0	15.5	15.5	15.6	15.7	14.9	12.9
31.0	14.8	14.9	15.0	15.0	14.8	12.8
32.0	14.2	14.2	14.3	14.4	14.4	12.7
33.0	13.6	13.6	13.7	13.8	13.8	12.6
34.0	13.0	13.1	13.2	13.2	13.3	12.5
35.0	12.5	12.5	12.6	12.7	12.7	12.4
36.0	11.9	12.0	12.1	12.2	12.2	12.2
37.0	11.3	11.5	11.6	11.7	11.8	11.8
38.0	10.8	11.0	11.2	11.2	11.3	11.3
39.0	10.3	10.5	10.7	10.8	10.9	10.9
40.0	9.9	10.1	10.3	10.4	10.4	10.5
41.0	9.5	9.6	9.8	10.0	10.0	10.1
42.0	9.0	9.2	9.4	9.6	9.7	9.7
43.0	8.6	8.8	9.0	9.2	9.3	9.3
44.0	8.3	8.4	8.6	8.8	8.9	9.0
45.0	7.9	8.1	8.3	8.4	8.6	8.6
46.0	7.6	7.7	7.9	8.1	8.2	8.3
47.0	7.2	7.4	7.6	7.7	7.9	8.0
48.0	6.9	7.1	7.3	7.4	7.6	7.7
49.0	6.6	6.8	7.0	7.1	7.2	7.3
50.0	6.3	6.5	6.7	6.8	6.9	7.1
52.0	5.8	6.0	6.1	6.2	6.4	6.5
54.0	5.3	5.4	5.6	5.7	5.9	6.0
56.0	4.8	5.0	5.1	5.3	5.4	5.5
58.0	4.4	4.5	4.7	4.8	5.0	5.0
60.0	4.0	4.1	4.3	4.4	4.5	4.6
62.0		3.7	3.9	4.0	4.1	4.2
64.0			3.5	3.6	3.8	3.9
66.0			3.2	3.3	3.4	3.5
68.0				3.0	3.1	3.2
70.0					2.8	2.9
72.0					2.5	2.6
74.0						2.3
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 15°

Main boom (HPT) 60.8 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
7.0	33,6					
8.0	33,4					
9.0	32,9	28,9				
10.0	32,3	28,4	25,0			
11.0	31,6	27,8	24,6	21,6		
12.0	30,8	27,2	24,1	21,4	17,9	
13.0	30,1	26,6	23,7	21,0	17,7	15,2
14.0	29,3	26,0	23,2	20,6	17,5	15,2
15.0	28,7	25,3	22,6	20,2	17,3	15,0
16.0	28,1	24,8	22,1	19,8	17,0	14,8
17.0	27,4	24,2	21,6	19,3	16,8	14,6
18.0	26,8	23,7	21,2	18,9	16,6	14,4
19.0	26,0	23,2	20,7	18,5	16,3	14,1
20.0	24,5	22,7	20,3	18,2	16,1	13,9
21.0	23,2	22,2	19,8	17,8	15,9	13,7
22.0	22,0	21,6	19,4	17,5	15,6	13,6
23.0	20,8	20,9	19,0	17,1	15,4	13,4
24.0	19,8	19,8	18,5	16,8	15,2	13,3
25.0	18,8	18,9	18,1	16,4	14,9	13,1
26.0	17,9	17,9	17,7	16,1	14,7	13,0
27.0	17,0	17,1	17,2	15,9	14,5	12,8
28.0	16,2	16,3	16,4	15,6	14,3	12,7
29.0	15,5	15,6	15,7	15,4	14,1	12,5
30.0	14,8	14,9	15,0	15,0	13,9	12,4
31.0	14,1	14,2	14,3	14,4	13,8	12,3
32.0	13,5	13,6	13,7	13,7	13,6	12,2
33.0	12,9	13,0	13,1	13,2	13,2	12,1
34.0	12,4	12,5	12,6	12,6	12,7	12,0
35.0	11,8	11,9	12,0	12,1	12,2	11,9
36.0	11,3	11,4	11,5	11,6	11,7	11,7
37.0	10,9	11,0	11,1	11,1	11,2	11,2
38.0	10,4	10,5	10,6	10,7	10,7	10,8
39.0	10,0	10,1	10,2	10,2	10,3	10,3
40.0	9,6	9,7	9,8	9,8	9,9	9,9
41.0	9,2	9,3	9,4	9,4	9,5	9,5
42.0	8,7	8,9	9,0	9,1	9,1	9,2
43.0	8,3	8,5	8,6	8,7	8,8	8,8
44.0	8,0	8,1	8,3	8,4	8,4	8,5
45.0	7,6	7,8	8,0	8,0	8,1	8,1
46.0	7,3	7,4	7,6	7,7	7,8	7,8
47.0	6,9	7,1	7,3	7,4	7,5	7,5
48.0	6,6	6,8	7,0	7,1	7,2	7,2
49.0	6,3	6,5	6,7	6,8	6,9	6,9
50.0	6,1	6,2	6,4	6,5	6,6	6,7
52.0	5,5	5,7	5,8	6,0	6,1	6,2
54.0	5,0	5,2	5,3	5,4	5,6	5,7
56.0	4,6	4,7	4,9	5,0	5,1	5,2
58.0	4,1	4,3	4,4	4,5	4,7	4,8
60.0	3,7	3,9	4,0	4,1	4,2	4,3
62,0	3,3	3,5	3,6	3,7	3,9	3,9
64,0	3,0	3,1	3,3	3,4	3,5	3,6
66,0		2,8	2,9	3,0	3,2	3,2
68,0		2,5	2,6	2,7	2,8	2,9
70,0			2,3	2,4	2,5	2,6
72,0				2,1	2,2	2,3
74,0				1,8	2,0	2,0
76,0					1,7	1,8
78,0						1,5
80,0						1,3
Reeving	3	3	3	3	3	3

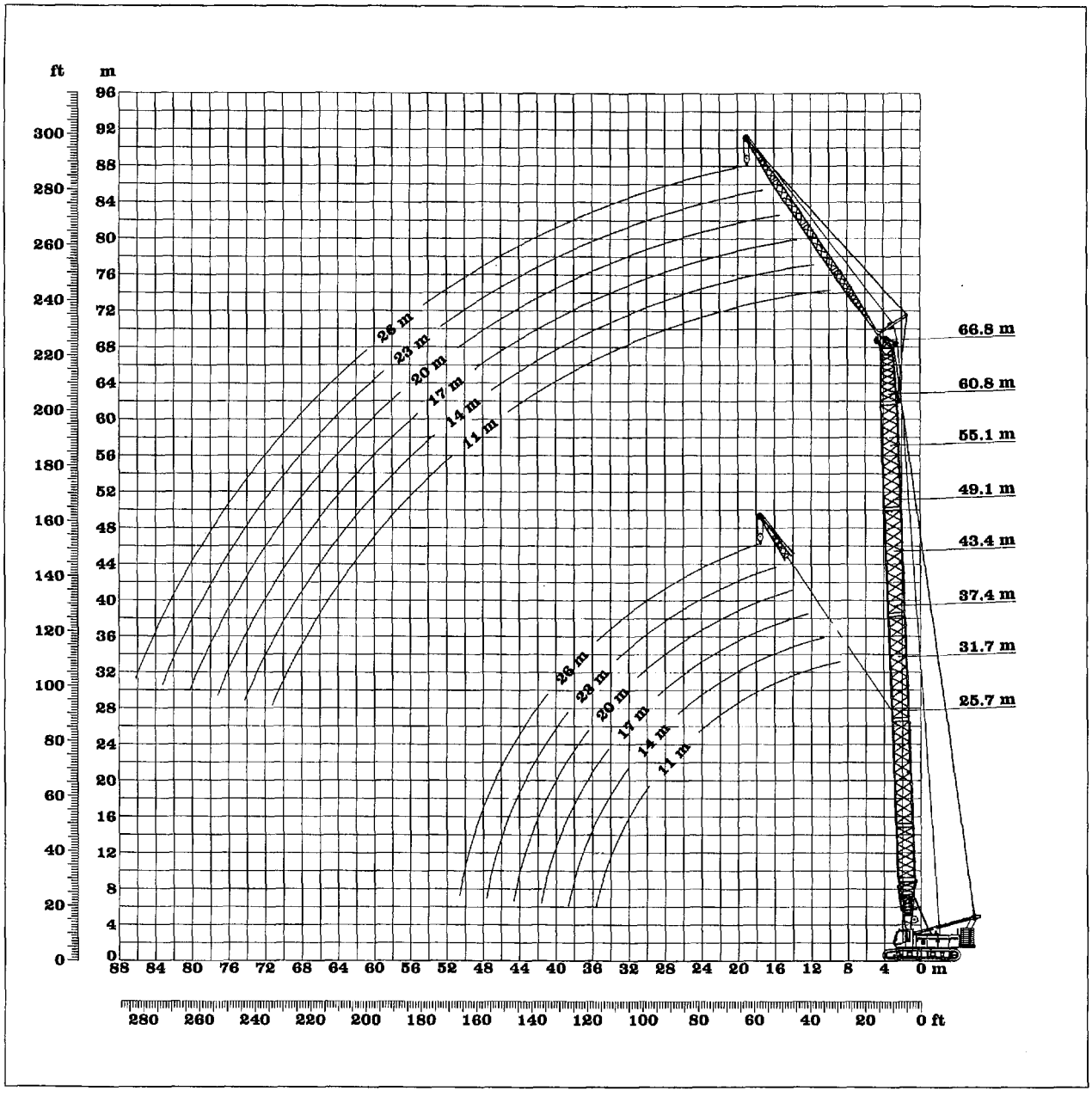
Main boom (HPT) 66.8 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
7.0	28,5					
8.0	28,4					
9.0	28,0	24,6				
10.0	27,6	24,3	21,5			
11.0	27,2	23,9	21,3	18,8		
12.0	26,7	23,5	21,0	18,7	16,4	
13.0	26,3	23,0	20,6	18,4	16,3	14,1
14.0	25,9	22,5	20,2	18,1	16,1	14,1
15.0	25,4	22,0	19,8	17,8	16,0	14,0
16.0	25,0	21,5	19,4	17,5	15,7	13,8
17.0	24,5	21,1	18,9	17,1	15,5	13,6
18.0	24,0	20,7	18,5	16,8	15,2	13,4
19.0	23,6	20,3	18,2	16,4	14,9	13,3
20.0	23,1	19,8	17,9	16,2	14,7	13,1
21.0	22,2	19,4	17,5	15,9	14,4	12,9
22.0	21,0	19,0	17,2	15,6	14,2	12,7
23.0	19,9	18,6	16,8	15,4	14,0	12,6
24.0	18,9	18,1	16,5	15,1	13,8	12,4
25.0	18,0	17,7	16,1	14,8	13,6	12,3
26.0	17,1	17,2	15,8	14,5	13,4	12,1
27.0	16,2	16,3	15,5	14,3	13,2	12,0
28.0	15,5	15,6	15,2	14,1	12,9	11,8
29.0	14,7	14,8	14,9	13,8	128	11,7
30.0	14,1	14,2	14,3	13,6	12,6	11,5
31.0	13,4	13,5	13,6	13,4	12,4	11,4
32.0	12,8	12,9	13,0	13,1	12,3	11,3
33.0	12,2	12,3	12,4	12,5	12,1	11,2
34.0	11,7	11,8	11,9	12,0	12,0	11,1
35.0	11,2	11,3	11,4	11,5	11,5	11,0
36.0	10,7	10,8	10,9	11,0	11,1	10,9
37.0	10,2	10,3	10,4	10,5	10,6	10,6
38.0	9,8	9,9	10,0	10,1	10,2	10,2
39.0	9,4	9,5	9,6	9,6	9,7	9,8
40.0	9,0	9,1	9,2	9,2	9,3	9,4
41.0	8,6	8,7	8,8	8,9	8,9	9,0
42.0	8,2	8,3	8,4	8,5	8,6	8,6
43.0	7,9	7,9	8,1	8,1	8,2	8,3
44.0	7,5	7,6	7,7	7,8	7,9	7,9
45.0	7,2	7,3	7,4	7,5	7,6	7,6
46.0	6,9	7,0	7,1	7,2	7,2	7,3
47.0	6,6	6,7	6,8	6,9	6,9	7,0
48.0	6,3	6,4	6,5	6,6	6,7	6,7
49.0	6,0	6,1	6,2	6,3	6,4	6,4
50.0	5,7	5,8	6,0	6,0	6,1	6,2
52.0	5,2	5,3	5,4	5,5	5,6	5,6
54.0	4,7	4,8	5,0	5,0	5,1	5,2
56.0	4,2	4,4	4,5	4,6	4,7	4,7
58.0	3,8	3,9	4,1	4,2	4,3	4,3
60.0	3,4	3,5	3,7	3,8	3,9	3,9
62.0	3,0	3,1	3,3	3,4	3,5	3,5
64.0	2,7	2,8	2,9	3,0	3,2	3,2
66,0	2,3	2,5	2,6	2,7	2,8	2,9
68,0	2,0	2,1	2,3	2,4	2,5	2,6
70,0	1,7	1,8	2,0	2,1	2,2	2,3
72,0		1,6	1,7	1,8	1,9	2,0
74,0			1,4	1,5	1,6	1,7
76,0			1,2	1,3	1,4	1,5
78,0				1,0	1,1	1,2
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 15°



Working range – fixed jib 30°

Main boom (HPT) 25.7 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
9.0	30.6					
10.0	29.0					
11.0	27.8	22.0				
12.0	26.8	21.0	17.7			
13.0	25.8	20.2	16.9			
14.0	24.9	19.5	16.3	14.3		
15.0	24.2	19.0	15.7	13.6		
16.0	23.6	18.4	15.2	13.1	11.7	
17.0	23.0	17.9	14.8	12.7	11.2	
18.0	22.5	17.4	14.4	12.3	10.8	9.8
19.0	22.0	17.0	14.0	12.0	10.5	9.3
20.0	22.0	16.6	13.7	11.7	10.2	9.1
21.0	21.9	16.1	13.3	11.3	9.9	8.8
22.0	21.9	16.0	13.0	11.1	9.7	8.6
23.0	21.9	16.1	12.7	10.9	9.4	8.4
24.0	21.8	16.1	12.4	10.7	9.2	8.2
25.0	21.5	16.1	12.5	10.4	9.1	8.0
26.0	21.2	16.2	12.6	10.2	8.9	7.9
27.0	20.5	16.2	12.7	10.2	8.8	7.7
28.0	19.5	16.0	12.8	10.3	8.7	7.6
29.0	18.5	15.7	12.9	10.3	8.6	7.5
30.0	17.6	15.5	12.8	10.4	8.6	7.4
31.0	16.8	15.2	12.7	10.5	8.7	7.3
32.0	16.0	15.0	12.5	10.5	8.7	7.3
33.0	15.3	14.7	12.3	10.5	8.8	7.4
34.0	14.6	14.6	12.1	10.3	8.8	7.4
35.0	14.0	14.3	11.9	10.2	8.8	7.4
36.0		13.7	11.7	10.0	8.8	7.5
37.0		13.1	11.6	9.9	8.6	7.5
38.0		12.5	11.5	9.7	8.5	7.5
39.0			11.4	9.6	8.4	7.4
40.0			11.4	9.5	8.3	7.3
41.0			11.3	9.5	8.2	7.2
42.0				9.4	8.0	7.1
43.0				9.3	8.0	7.0
44.0				9.3	7.9	6.9
45.0					7.9	6.8
46.0					7.9	6.8
47.0					7.8	6.8
48.0						6.7
49.0						6.7
50.0						6.7
52.0						
54.0						
Reeving	3	3	3	3	3	3

Main boom (HPT) 31.7 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
9.0	35.7					
10.0	34.8					
11.0	33.7	26.5				
12.0	32.6	25.3				
13.0	31.7	24.5	20.3			
14.0	31.0	23.8	19.5	16.7		
15.0	30.2	23.1	18.9	16.3		
16.0	29.4	22.6	18.4	15.6	13.8	
17.0	28.6	22.0	17.9	15.2	13.4	
18.0	27.9	21.4	17.5	14.8	12.9	11.6
19.0	27.1	20.9	17.1	14.5	12.6	11.2
20.0	26.3	20.4	16.7	14.2	12.3	10.8
21.0	25.5	19.8	16.3	13.9	12.0	10.6
22.0	25.0	19.3	16.0	13.6	11.8	10.3
23.0	24.4	18.8	15.6	13.3	11.6	10.1
24.0	23.9	18.4	15.3	13.0	11.4	10.0
25.0	22.6	18.0	14.9	12.8	11.1	9.8
26.0	21.4	17.7	14.6	12.5	10.9	9.7
27.0	20.3	17.3	14.3	12.2	10.7	9.5
28.0	19.2	17.0	14.1	12.0	10.5	9.4
29.0	18.3	16.6	13.8	11.8	10.3	9.2
30.0	17.4	16.2	13.6	11.6	10.1	9.0
31.0	16.6	16.0	13.3	11.4	9.9	8.8
32.0	15.8	15.8	13.0	11.2	9.8	8.7
33.0	15.1	15.4	12.8	11.0	9.6	8.5
34.0	14.4	14.7	12.6	10.8	9.5	8.4
35.0	13.8	14.1	12.5	10.6	9.3	8.2
36.0	13.2	13.5	12.3	10.4	9.1	8.1
37.0	12.6	12.9	12.2	10.3	9.0	8.0
38.0	12.1	12.4	12.0	10.2	8.8	7.9
39.0	11.6	11.9	11.8	10.1	8.7	7.7
40.0	11.1	11.4	11.6	9.9	8.6	7.6
41.0		10.9	11.2	9.8	8.5	7.5
42.0		10.5	10.7	9.7	8.4	7.4
43.0		10.0	10.3	9.5	8.3	7.3
44.0			9.9	9.5	8.2	7.2
45.0			9.5	9.4	8.1	7.2
46.0			9.1	9.4	8.0	7.1
47.0				9.0	8.0	7.0
48.0				8.7	7.9	6.9
49.0				8.3	7.9	6.8
50.0					7.9	6.8
52.0					7.6	6.7
54.0						6.7
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 30°

Main boom (HPT) 37.4 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
9.0	35.9					
10.0	35.4					
11.0	34.7	27.0				
12.0	33.8	26.1				
13.0	33.0	25.3	20.5			
14.0	32.1	24.6	19.9			
15.0	31.3	23.8	19.3	16.4		
16.0	30.4	23.2	18.8	16.0	13.8	
17.0	29.5	22.6	18.3	15.6	13.6	
18.0	28.8	22.0	17.9	15.2	13.3	11.7
19.0	28.1	21.4	17.5	14.8	13.0	11.5
20.0	27.4	20.9	17.1	14.5	12.7	11.2
21.0	26.7	20.4	16.7	14.2	12.4	11.0
22.0	26.0	20.0	16.3	13.9	12.1	10.8
23.0	25.1	19.5	16.0	13.6	11.9	10.5
24.0	23.7	19.1	15.7	13.3	11.6	10.3
25.0	22.4	18.6	15.4	13.1	11.4	10.1
26.0	21.2	18.2	15.1	12.8	11.2	9.9
27.0	20.1	18.0	14.8	12.6	11.0	9.7
28.0	19.0	17.7	14.5	12.4	10.8	9.5
29.0	18.1	17.4	14.2	12.1	10.6	9.4
30.0	17.2	17.1	14.0	11.9	10.4	9.2
31.0	16.4	16.7	13.8	11.7	10.2	9.1
32.0	15.6	15.9	13.6	11.5	10.0	8.9
33.0	14.9	15.2	13.4	11.4	9.8	8.7
34.0	14.2	14.5	13.1	11.2	9.7	8.6
35.0	13.6	13.9	12.9	11.0	9.6	8.4
36.0	13.0	13.3	12.7	10.9	9.4	8.3
37.0	12.5	12.7	12.6	10.7	9.3	8.2
38.0	11.9	12.2	12.4	10.5	9.2	8.1
39.0	11.4	11.7	11.9	10.4	9.0	8.0
40.0	10.9	11.2	11.5	10.3	8.9	7.9
41.0	10.5	10.7	11.0	10.2	8.7	7.8
42.0	10.1	10.3	10.6	10.1	8.7	7.6
43.0	9.6	9.9	10.1	10.0	8.6	7.5
44.0	9.3	9.5	9.7	9.9	8.5	7.4
45.0	8.9	9.1	9.4	9.6	8.4	7.4
46.0		8.7	9.0	9.2	8.3	7.3
47.0		8.4	8.6	8.8	8.3	7.2
48.0		8.0	8.3	8.5	8.2	7.2
49.0			8.0	8.2	8.1	7.1
50.0			7.7	7.9	8.0	7.0
52.0				7.3	7.5	6.9
54.0				6.7	6.9	6.7
56.0					6.4	6.5
58.0						6.0
60.0						5.6
62.0						
64.0						
Reeving	3	3	3	3	3	3

Main boom (HPT) 43.4 m

Capacities in metric tons with fixed jib (NDL) Fixed jib length between 11 m and 26 m 55.1 t counterweight + 15 t carbody counterweight						
	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
9.0	35.9					
10.0	35.8					
11.0	35.7	26.6				
12.0	34.7	26.1				
13.0	33.7	25.4	20.4			
14.0	32.7	24.7	19.9			
15.0	31.9	24.1	19.4	16.4		
16.0	31.1	23.4	18.9	16.0		
17.0	30.3	22.9	18.5	15.6	13.6	
18.0	29.5	22.4	18.0	15.3	13.3	
19.0	28.7	21.8	17.7	15.0	13.0	11.5
20.0	28.1	21.3	17.3	14.6	12.7	11.2
21.0	26.8	20.8	17.0	14.4	12.5	11.0
22.0	25.4	20.4	16.6	14.1	12.2	10.8
23.0	24.1	20.1	16.3	13.8	12.0	10.6
24.0	22.9	19.7	16.0	13.6	11.8	10.4
25.0	21.8	19.3	15.7	13.3	11.6	10.2
26.0	20.8	18.9	15.5	13.1	11.4	10.0
27.0	19.8	18.5	15.2	12.9	11.1	9.9
28.0	18.8	18.2	14.9	12.7	11.0	9.7
29.0	17.8	17.9	14.6	12.4	10.8	9.5
30.0	16.9	17.3	14.4	12.2	10.6	9.3
31.0	16.1	16.4	14.2	12.0	10.5	9.2
32.0	15.4	15.7	14.0	11.8	10.3	9.1
33.0	14.6	14.9	13.8	11.6	10.1	8.9
34.0	14.0	14.3	13.6	11.5	10.0	8.8
35.0	13.3	13.6	13.4	11.4	9.8	8.7
36.0	12.7	13.0	13.2	11.2	9.7	8.5
37.0	12.2	12.5	12.7	11.1	9.6	8.4
38.0	11.7	11.9	12.2	10.9	9.5	8.3
39.0	11.2	11.4	11.7	10.8	9.3	8.2
40.0	10.7	10.9	11.2	10.6	9.2	8.1
41.0	10.2	10.5	10.7	10.4	9.1	8.0
42.0	9.8	10.0	10.3	10.3	9.0	7.9
43.0	9.4	9.6	9.9	10.1	8.8	7.8
44.0	9.0	9.2	9.5	9.7	8.7	7.7
45.0	8.6	8.9	9.1	9.3	8.6	7.6
46.0	8.3	8.5	8.7	8.9	8.6	7.5
47.0	7.9	8.2	8.4	8.6	8.5	7.4
48.0	7.6	7.8	8.1	8.3	8.4	7.3
49.0	7.3	7.5	7.7	7.9	8.1	7.3
50.0	7.0	7.2	7.4	7.6	7.8	7.2
52.0		6.6	6.9	7.0	7.2	7.1
54.0			6.3	6.5	6.7	6.8
56.0			5.8	6.0	6.2	6.3
58.0				5.5	5.7	5.8
60.0					5.2	5.4
62.0					4.8	4.9
64.0						4.5
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 30°

Main boom (HPT) 49.1 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
9.0	34.4					
10.0	34.3					
11.0	33.7	26.3				
12.0	33.1	26.0				
13.0	32.5	25.4	20.1			
14.0	31.9	24.8	19.8			
15.0	31.3	24.2	19.4	16.2		
16.0	30.6	23.6	19.0	15.9		
17.0	30.0	23.0	18.6	15.6	13.5	
18.0	29.3	22.6	18.2	15.3	13.3	
19.0	28.6	22.1	17.8	15.0	13.0	11.4
20.0	27.4	21.7	17.5	14.7	12.8	11.2
21.0	25.9	21.2	17.2	14.4	12.5	11.0
22.0	24.5	20.7	16.8	14.2	12.3	10.8
23.0	23.3	20.4	16.5	14.0	12.1	10.6
24.0	22.1	20.0	16.2	13.7	11.9	10.5
25.0	21.0	19.7	15.9	13.5	11.7	10.3
26.0	20.0	19.4	15.7	13.2	11.5	10.1
27.0	19.1	19.0	15.5	13.0	11.3	9.9
28.0	18.2	18.4	15.2	12.8	11.1	9.8
29.0	17.4	17.6	15.0	12.7	10.9	9.6
30.0	16.7	16.8	14.8	12.5	10.8	9.5
31.0	15.9	16.1	14.5	12.3	10.6	9.3
32.0	15.1	15.4	14.3	12.1	10.5	9.2
33.0	14.4	14.7	14.1	11.9	10.3	9.1
34.0	13.7	14.0	13.9	11.7	10.2	9.0
35.0	13.1	13.4	13.7	11.6	10.0	8.8
36.0	12.5	12.8	13.1	11.5	9.9	8.7
37.0	11.9	12.2	12.5	11.3	9.7	8.6
38.0	11.4	11.7	12.0	11.2	9.6	8.5
39.0	10.9	11.2	11.5	11.1	9.5	8.3
40.0	10.4	10.7	11.0	10.9	9.4	8.2
41.0	10.0	10.2	10.5	10.7	9.3	8.2
42.0	9.6	9.8	10.1	10.3	9.2	8.1
43.0	9.2	9.4	9.7	9.9	9.1	8.0
44.0	8.8	9.0	9.3	9.5	9.0	7.9
45.0	8.4	8.6	8.9	9.1	8.9	7.8
46.0	8.1	8.3	8.5	8.7	8.8	7.7
47.0	7.7	7.9	8.2	8.4	8.6	7.6
48.0	7.4	7.6	7.8	8.0	8.2	7.5
49.0	7.1	7.3	7.5	7.7	7.9	7.4
50.0	6.8	7.0	7.2	7.4	7.6	7.3
52.0	6.2	6.4	6.6	6.8	7.0	7.2
54.0	5.7	5.9	6.1	6.3	6.5	6.6
56.0		5.4	5.6	5.8	6.0	6.1
58.0		4.9	5.1	5.3	5.5	5.6
60.0			4.7	4.8	5.0	5.2
62.0				4.4	4.6	4.8
64.0				4.0	4.2	4.3
66.0					3.8	4.0
68.0						3.6
70.0						3.2
72.0						
74.0						
Reeving	3	3	3	3	3	3

Main boom (HPT) 55.1 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
10.0	31.7					
11.0	31.2					
12.0	30.6	24.9				
13.0	29.9	24.5	19.8			
14.0	29.2	24.1	19.7			
15.0	28.4	23.7	19.3	16.0		
16.0	27.7	23.3	18.9	15.9		
17.0	27.2	23.0	18.6	15.6	13.3	
18.0	26.6	22.6	18.2	15.3	13.2	
19.0	26.0	22.2	17.9	15.0	13.0	11.3
20.0	25.5	21.8	17.5	14.8	12.8	11.2
21.0	24.9	21.3	17.3	14.5	12.5	11.0
22.0	23.6	20.9	17.0	14.2	12.3	10.8
23.0	22.3	20.5	16.7	14.0	12.1	10.7
24.0	21.2	20.1	16.4	13.8	11.9	10.5
25.0	20.2	19.7	16.2	13.6	11.7	10.3
26.0	19.2	19.2	15.9	13.4	11.6	10.1
27.0	18.3	18.5	15.7	13.2	11.4	10.0
28.0	17.5	17.7	15.5	13.0	11.2	9.9
29.0	16.7	16.9	15.3	12.8	11.1	9.7
30.0	15.9	16.1	15.0	12.6	10.9	9.6
31.0	15.2	15.4	14.8	12.5	10.7	9.4
32.0	14.6	14.8	14.6	12.3	10.6	9.3
33.0	14.0	14.1	14.3	12.2	10.5	9.2
34.0	13.4	13.6	13.8	12.0	10.4	9.1
35.0	12.8	13.0	13.2	11.8	10.2	9.0
36.0	12.2	12.5	12.7	11.7	10.1	8.8
37.0	11.7	11.9	12.2	11.5	10.0	8.7
38.0	11.1	11.4	11.7	11.4	9.8	8.6
39.0	10.6	10.9	11.2	11.3	9.7	8.5
40.0	10.2	10.4	10.7	10.9	9.6	8.4
41.0	9.7	10.0	10.2	10.5	9.5	8.3
42.0	9.3	9.5	9.8	10.0	9.4	8.2
43.0	8.9	9.1	9.4	9.6	9.3	8.1
44.0	8.5	8.7	9.0	9.2	9.2	8.0
45.0	8.1	8.4	8.6	8.8	9.1	8.0
46.0	7.8	8.0	8.2	8.5	8.7	7.9
47.0	7.4	7.7	7.9	8.1	8.3	7.8
48.0	7.1	7.3	7.6	7.8	8.0	7.7
49.0	6.8	7.0	7.2	7.4	7.7	7.6
50.0	6.5	6.7	6.9	7.1	7.3	7.5
52.0	5.9	6.1	6.4	6.5	6.8	6.9
54.0	5.4	5.6	5.8	6.0	6.2	6.4
56.0	4.9	5.1	5.3	5.5	5.7	5.8
58.0	4.5	4.7	4.9	5.0	5.2	5.4
60.0	4.1	4.2	4.4	4.6	4.8	4.9
62.0		3.8	4.0	4.2	4.4	4.5
64.0		3.4	3.6	3.8	4.0	4.1
66.0			3.3	3.4	3.6	3.7
68.0				3.1	3.2	3.4
70.0				2.7	2.9	3.0
72.0					2.6	2.7
74.0						2.4
76.0						2.1
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 30°

Main boom (HPT) 60.8 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
10.0	27,9					
11.0	27,6					
12.0	27,2	22,3				
13.0	26,7	22,2				
14.0	26,1	21,9	18,3			
15.0	25,6	21,6	18,1			
16.0	25,0	21,3	17,9	15,8		
17.0	24,5	21,0	17,7	15,5	13,2	
18.0	24,0	20,7	17,5	15,3	13,1	
19.0	23,5	20,3	17,4	15,0	12,9	11,2
20.0	23,0	20,0	17,2	14,8	12,7	11,1
21.0	22,5	19,6	17,0	14,5	12,5	11,0
22.0	22,1	19,2	16,7	14,3	12,3	10,8
23.0	21,5	18,9	16,5	14,1	12,1	10,6
24.0	20,4	18,5	16,3	13,9	12,0	10,5
25.0	19,4	18,1	16,1	13,7	11,8	10,3
26.0	18,5	17,8	15,9	13,5	11,6	10,2
27.0	17,6	17,4	15,7	13,3	11,5	10,0
28.0	16,8	17,0	15,4	13,1	11,3	9,9
29.0	16,0	16,2	15,2	12,9	11,2	9,8
30.0	15,3	15,5	15,0	12,8	11,0	9,6
31.0	14,6	14,8	14,8	12,6	10,8	9,5
32.0	14,0	14,2	14,4	12,5	10,7	9,4
33.0	13,4	13,5	13,8	12,3	10,6	9,2
34.0	12,8	13,0	13,2	12,2	10,5	9,1
35.0	12,2	12,4	12,6	12,0	10,3	9,0
36.0	11,7	11,9	12,1	11,9	10,2	8,9
37.0	11,2	11,4	11,6	11,7	10,1	8,8
38.0	10,8	10,9	11,1	11,3	10,0	8,7
39.0	10,3	10,5	10,7	10,8	9,9	8,6
40.0	9,9	10,1	10,3	10,4	9,8	8,5
41.0	9,5	9,7	9,9	10,0	9,6	8,4
42.0	9,0	9,3	9,5	9,6	9,5	8,3
43.0	8,6	8,9	9,1	9,2	9,4	8,2
44.0	8,2	8,5	8,7	8,9	9,0	8,1
45.0	7,9	8,1	8,4	8,5	8,7	8,1
46.0	7,5	7,7	8,0	8,2	8,3	8,0
47.0	7,2	7,4	7,7	7,9	8,0	7,9
48.0	6,8	7,1	7,3	7,5	7,7	7,8
49.0	6,5	6,8	7,0	7,2	7,4	7,5
50.0	6,2	6,5	6,7	6,9	7,1	7,2
52.0	5,7	5,9	6,1	6,3	6,5	6,7
54.0	5,2	5,4	5,6	5,8	6,0	6,1
56.0	4,7	4,9	5,1	5,3	5,5	5,6
58.0	4,2	4,4	4,6	4,8	5,0	5,1
60.0	3,8	4,0	4,2	4,4	4,5	4,7
62.0	3,4	3,6	3,8	3,9	4,1	4,3
64.0	3,1	3,2	3,4	3,6	3,7	3,9
66.0	2,7	2,9	3,0	3,2	3,4	3,5
68.0		2,5	2,7	2,8	3,0	3,1
70.0			2,4	2,5	2,7	2,8
72,0			2,0	2,2	2,4	2,5
74,0				1,9	2,1	2,2
76,0					1,8	1,9
78,0					1,5	1,6
80,0						1,3
Reeving	3	3	3	3	3	3

Main boom (HPT) 66.8 m

Capacities in metric tons with fixed jib (NDL)
Fixed jib length between 11 m and 26 m
55.1 t counterweight + 15 t carbody counterweight

	Jib length (m)					
	11.0	14.0	17.0	20.0	23.0	26.0
Radius (m)	t	t	t	t	t	t
10.0	24,0					
11.0	23,9					
12.0	23,6	20,0				
13.0	23,3	19,9				
14.0	22,8	19,7	16,8			
15.0	22,3	19,5	16,8			
16.0	21,9	19,1	16,6	14,3		
17.0	21,4	18,8	16,4	14,2		
18.0	21,0	18,4	16,2	14,0	12,2	
19.0	20,6	18,0	16,0	13,9	12,1	10,5
20.0	20,2	17,7	15,7	13,7	12,0	10,5
21.0	19,8	17,4	15,5	13,6	11,9	10,4
22.0	19,4	17,2	15,3	13,5	11,8	10,4
23.0	19,0	16,9	15,1	13,3	11,7	10,3
24.0	18,6	16,6	14,9	13,2	11,6	10,2
25.0	18,2	16,3	14,7	13,0	11,5	10,1
26.0	17,7	16,0	14,5	12,9	11,4	10,0
27.0	16,8	15,7	14,3	12,8	11,3	9,9
28.0	16,0	15,4	14,1	12,7	11,1	9,8
29.0	15,3	15,1	13,9	12,5	11,0	9,7
30.0	14,6	14,8	13,7	12,4	10,9	9,6
31.0	13,9	14,1	13,5	12,3	10,8	9,5
32.0	13,3	13,5	13,3	12,2	10,7	9,3
33.0	12,7	12,9	13,1	12,0	10,5	9,2
34.0	12,1	12,3	12,6	11,9	10,4	9,1
35.0	11,6	11,8	12,0	11,8	10,3	9,0
36.0	11,1	11,3	11,5	11,6	10,2	8,9
37.0	10,6	10,8	11,0	11,2	10,1	8,8
38.0	10,2	10,4	10,6	10,7	10,0	8,7
39.0	9,7	9,9	10,1	10,3	9,9	8,6
40.0	9,3	9,5	9,7	9,9	9,8	8,5
41.0	8,9	9,1	9,3	9,5	9,6	8,4
42.0	8,5	8,7	8,9	9,1	9,3	8,4
43.0	8,2	8,3	8,5	8,7	8,9	8,3
44.0	7,8	8,0	8,2	8,3	8,5	8,2
45.0	7,5	7,6	7,8	8,0	8,2	8,1
46.0	7,2	7,3	7,5	7,7	7,8	8,0
47.0	6,8	7,0	7,2	7,3	7,5	7,6
48.0	6,5	6,7	6,9	7,0	7,2	7,3
49.0	6,2	6,4	6,6	6,7	6,9	7,0
50.0	5,9	6,1	6,3	6,5	6,6	6,7
52.0	5,4	5,6	5,8	5,9	6,1	6,2
54.0	4,9	5,1	5,3	5,4	5,6	5,7
56.0	4,4	4,6	4,8	4,9	5,1	5,2
58.0	3,9	4,1	4,3	4,5	4,7	4,8
60.0	3,5	3,7	3,9	4,1	4,2	4,3
62.0	3,1	3,3	3,5	3,7	3,8	3,9
64.0	2,8	2,9	3,1	3,3	3,5	3,6
66.0	2,4	2,6	2,8	2,9	3,1	3,2
68.0	2,1	2,2	2,4	2,6	2,7	2,9
70.0	1,8	1,9	2,1	2,2	2,4	2,5
72.0		1,6	1,8	1,9	2,1	2,2
74.0		1,3	1,5	1,6	1,8	1,9
76,0			1,2	1,4	1,5	1,6
78,0				1,1	1,2	1,4
80,0						1,1
Reeving	3	3	3	3	3	3

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

Lifting capacities – fixed jib 30°

Engine

Water cooled, R 6 cylinder Liebherr diesel engine, turbo charged with intercooler, model D 926 TI-E, power rating according to ISO 9249, 240 kW (322 hp) at 2000 rpm.
The Litronic power limiter prevents overload of the diesel engine through the hydraulic system.
The cooling system is regulated thermostatically which saves energy and reduces the noise emission.
Fuel Tank: 780 l capacity with continuous level indicator and reserve warning at 40 l.

Hydraulic system

Axial piston displacement pumps work in 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 350 l/min each.
Crawlers: Axial piston displacement pumps (swash plate design) with 2x 300 l/min.
Swing gear: Axial piston displacement pump (swash plate design) with 240 l/min.
Boom hoist: Axial piston displacement pump (swash plate design) with 350 l/min.
Max. working pressure: 350 bar
Hydraulic oil tank capacity: 650 l
The hydraulic oil is cleaned through electronically controlled return filters.
Possible contamination is signaled in the cabin. The use of synthetic environmentally friendly oils is possible.

Winches

Winch options:

Line pull (1st layer)	175 kN
Line pull (7th layer)	120 kN
Rope diameter :	26 mm
Drum diameter :	580 mm
Rope speed m/min on average	0 – 136
Rope capacity 7 layers	470 m

The winches are outstanding in 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.
The main winches use pressure controlled, variable flow hydraulic motors. This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.
Option – winch with freefall system:
Clutch and braking functions on the freefall system are provided by a compact designed, low wear and maintenance free multi-disc brake.

Equipment

- Main boom HPT, max. length 84.5 m
- High reach 61 m – 96 m
- Jib NDL, max. length 69.8 m
- Max. combination 125 m
- Fixed jib 11 m – 26 m
- Auxiliary jib 24 t lifting capacity (optional: 36 t)
- Hook

Swing drive

Consists of rollerbearing with external teeth for lower tooth flank pressure, 2 swing drives with 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. A multi-disc holding brake acts automatically at zero swing motion.
Swing speed from 0 – 3 rpm continuously variable.

Crawler

Propulsion through axial piston motor, hydraulically released spring loaded multi-disc brake, crawler tracks, hydraulic chain tensioning device.

Flat track shoes	1000 mm
Drive speed	0 – 1.5 km/h

Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme environmental conditions such as temperature, vibration and electromagnetic interference and to meet all requirements that are needed in heavy duty crane operation.
Complete machine operation information is displayed on a high resolution display in the drivers cabin. No additional gauges are necessary.
Standard operational information is displayed by means of graphical symbols, fault indications are displayed in plain text (more than 10 languages available).
The cranes are equipped with proportional control for all main movements, which can be carried out simultaneously.
Optional available is a backup control system, which allows restricted operation of the machine in the event of a major failure in the electronics.
The crane is operated with 2 multi-directional joysticks, the right for winch I and boom hoisting, the left for winch II and slewing control.
The crawlers are activated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.

Boom luffing winch

Drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi-disc brake. Max. line pull: 150 kN
Rope diameter: 24 mm. Average line speed: 0 – 99 m/min

Jib luffing winch

Drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi-disc brake.
Max. line pull: 105 kN
Rope diameter: 20 mm
Average line speed: 0 – 108 m/min

Noise emission

Noise emissions correspond with 2000/14/EC directive on noise emission by equipment used outdoors.

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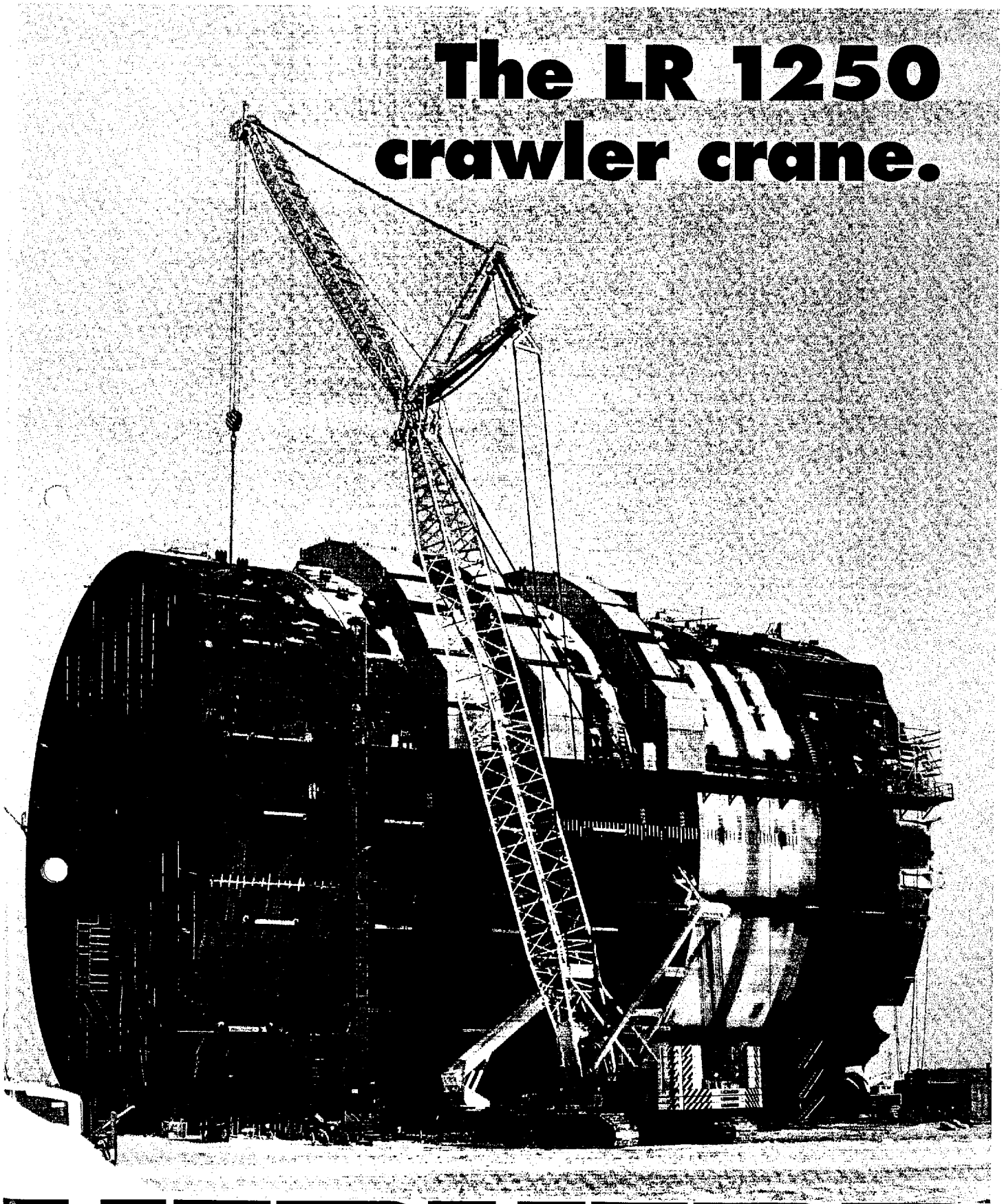
Presented by:

The LR 1250 crawler crane.



LIEBHERR

The Better Machine.

The new LR 1250 crawler crane was designed to offer high performance and economy at the same time. Liebherr's experience, based on decades of manufacturing high quality crawler cranes, made it possible to equip the new LR 1250 crawler crane with technologies vital for your success.

- Economical transport
- Self assembly including loading and unloading
- High utilization due to a wide range of attachments and applications
- Increased precision, speed and safety through state of the art controls and drive system
- High performance Liebherr diesel engine
- Extremely low maintenance due to specially designed components and easy access

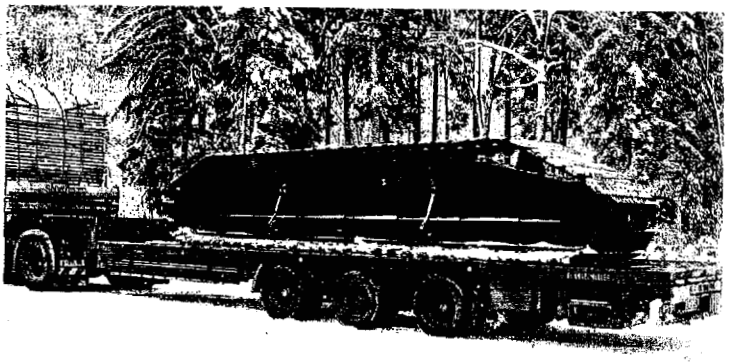
LR 1250: Increased efficiency thro

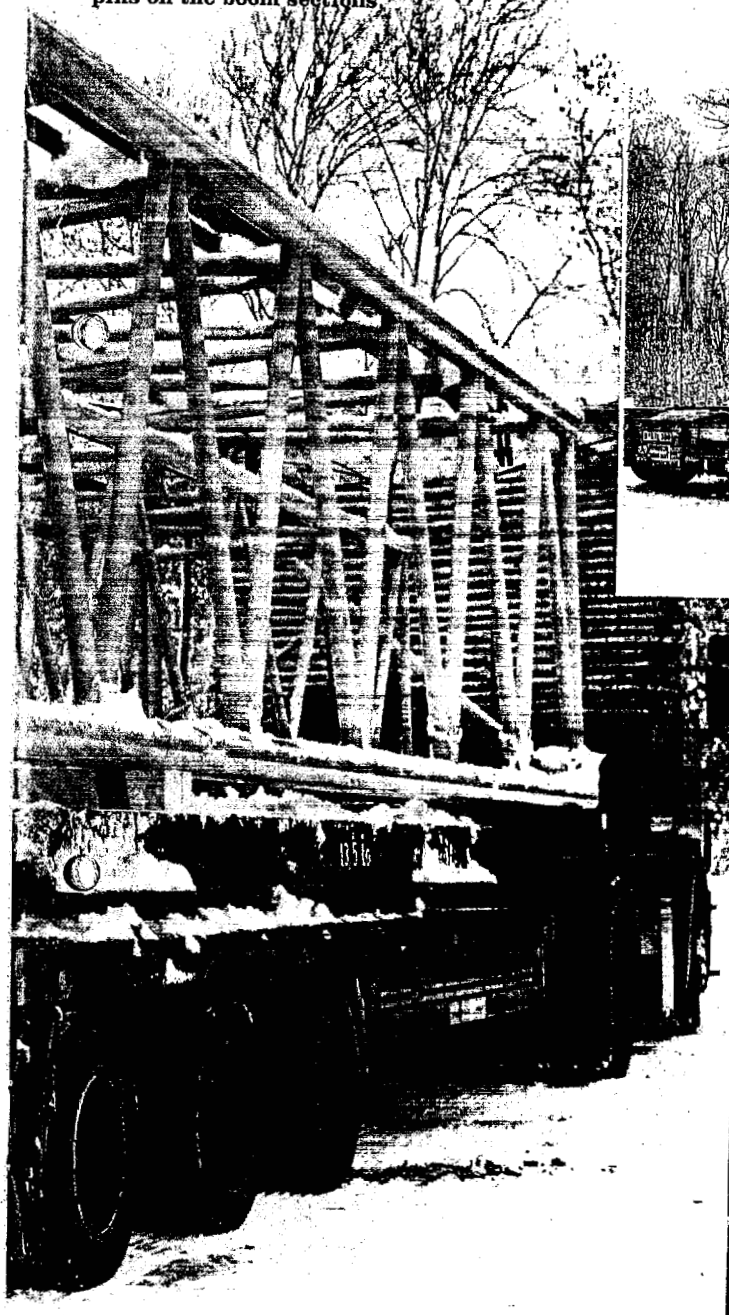
ugh advanced design principles.

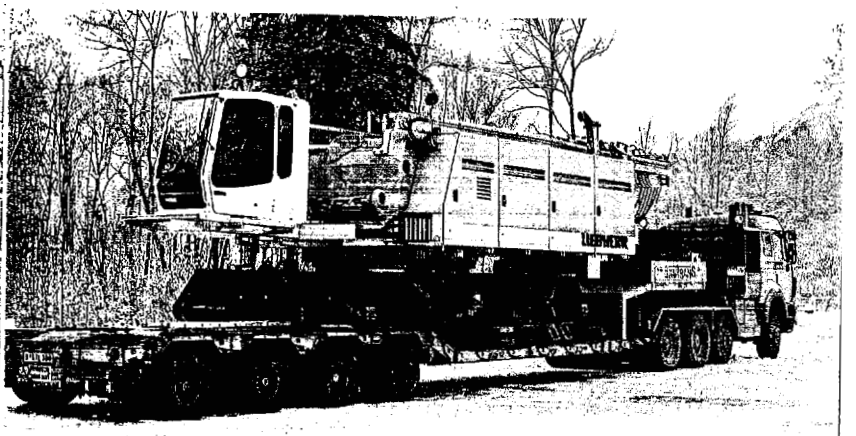
LR 1250: Economical transport fea

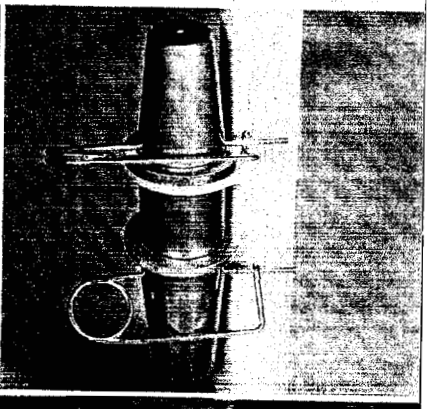
Already during transportation it becomes clear that the LR 1250 was designed with customer needs in mind. Special effort was made to save time and costs. Low transport weight of the main unit allows easy transport on all roads. Swiveling the operator's cab to the center of the superstructure minimizes the transport width of the main unit.

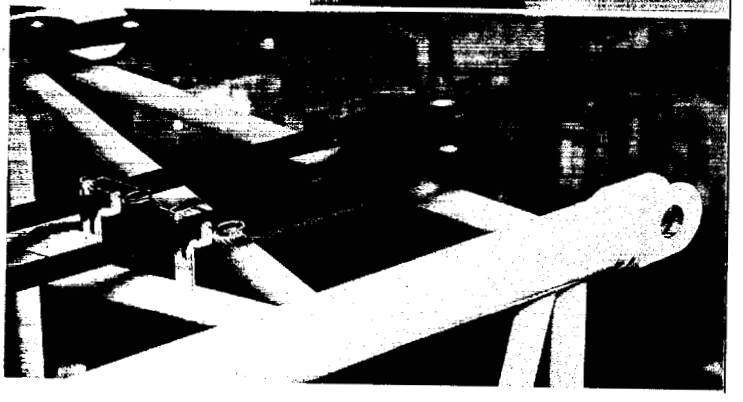
All other equipment can be transported on standard trucks or in standard containers. Further reduction of the transport volume is obtained by placing sections of the luffing jib into sections of the main boom. Due to their small volume, counterweight pieces can be placed below the boom sections for transportation. Specially designed brackets allow storage of the pendants and pins on the boom sections.











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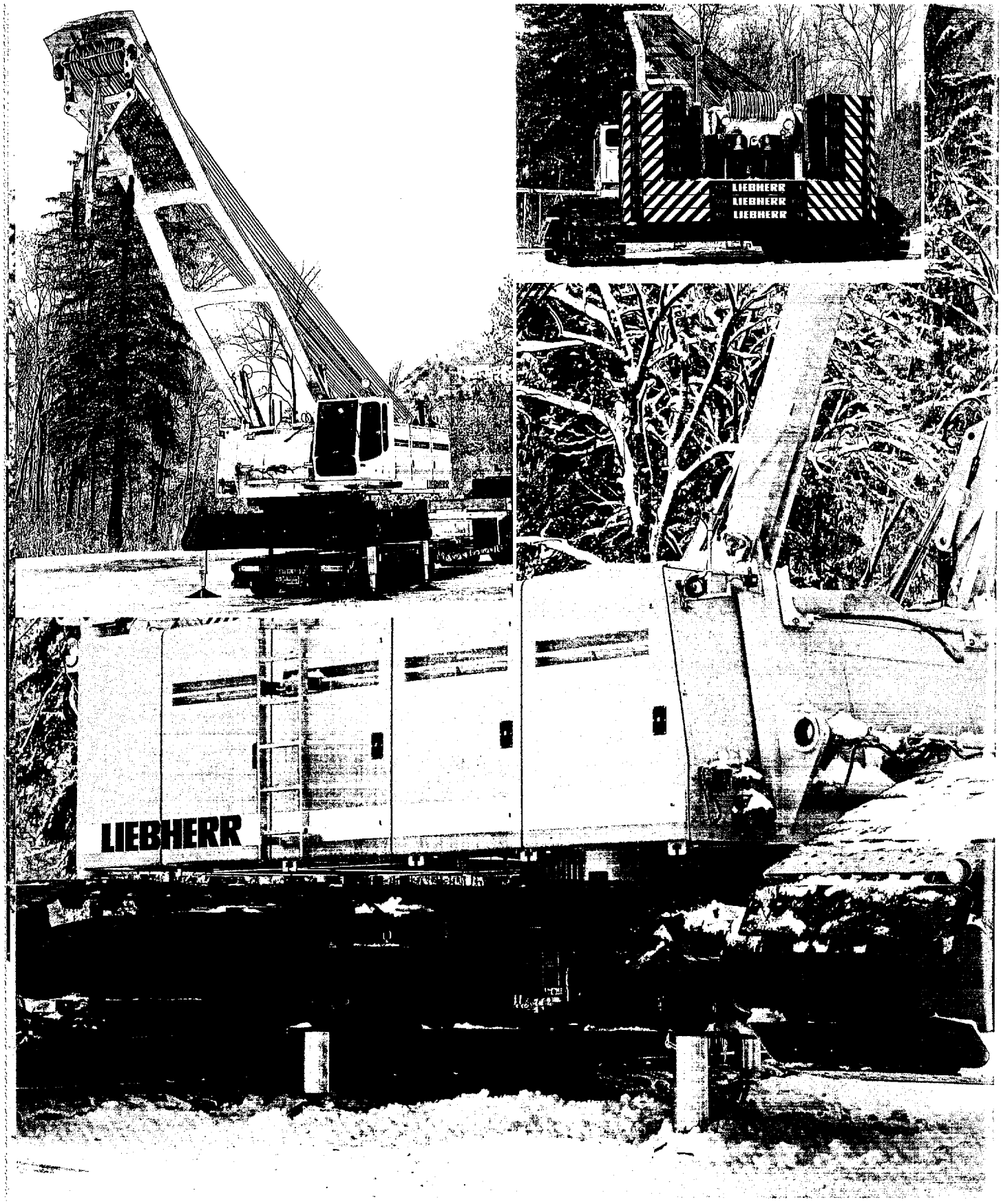
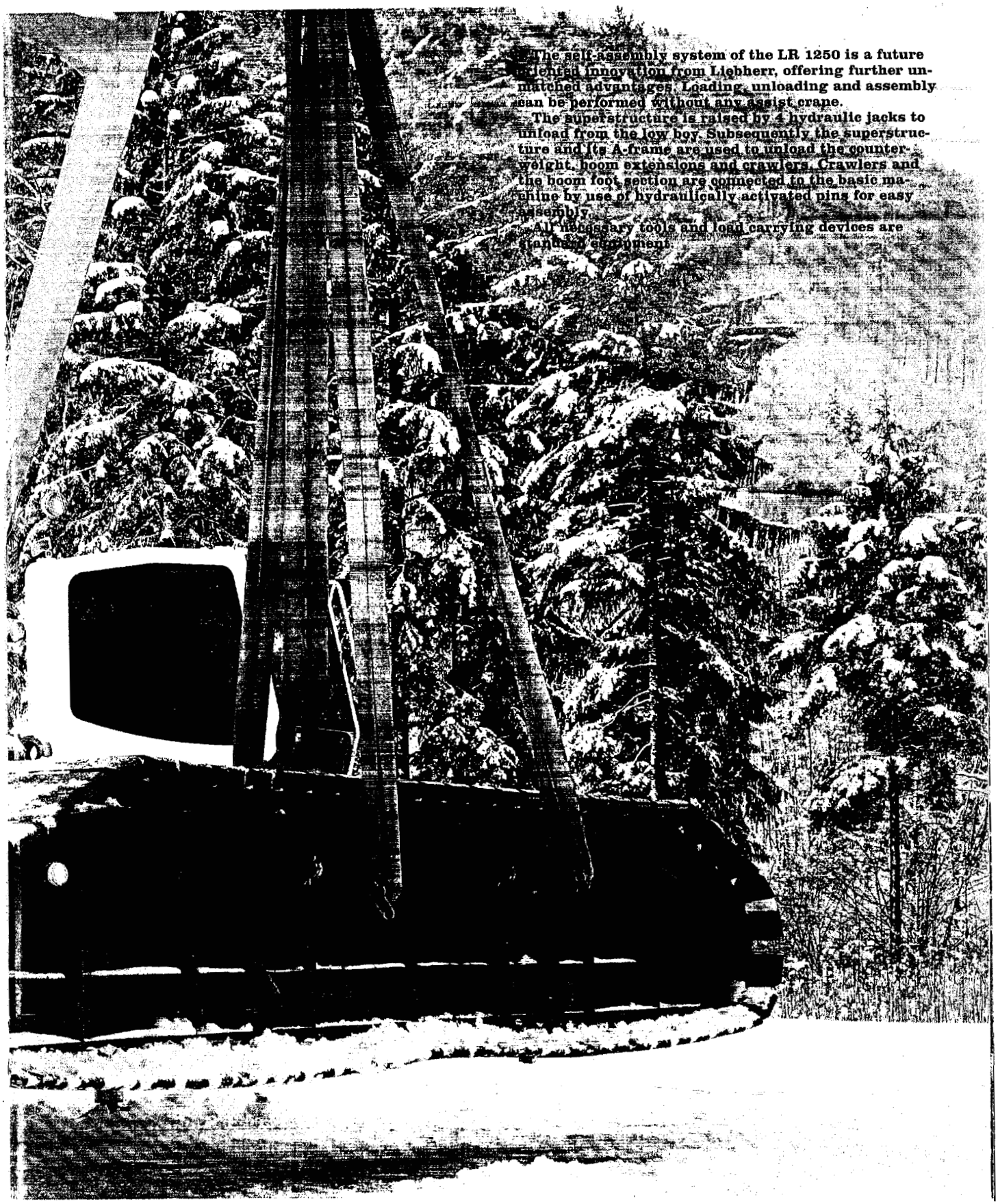


LR 1250: Liebherr system for self

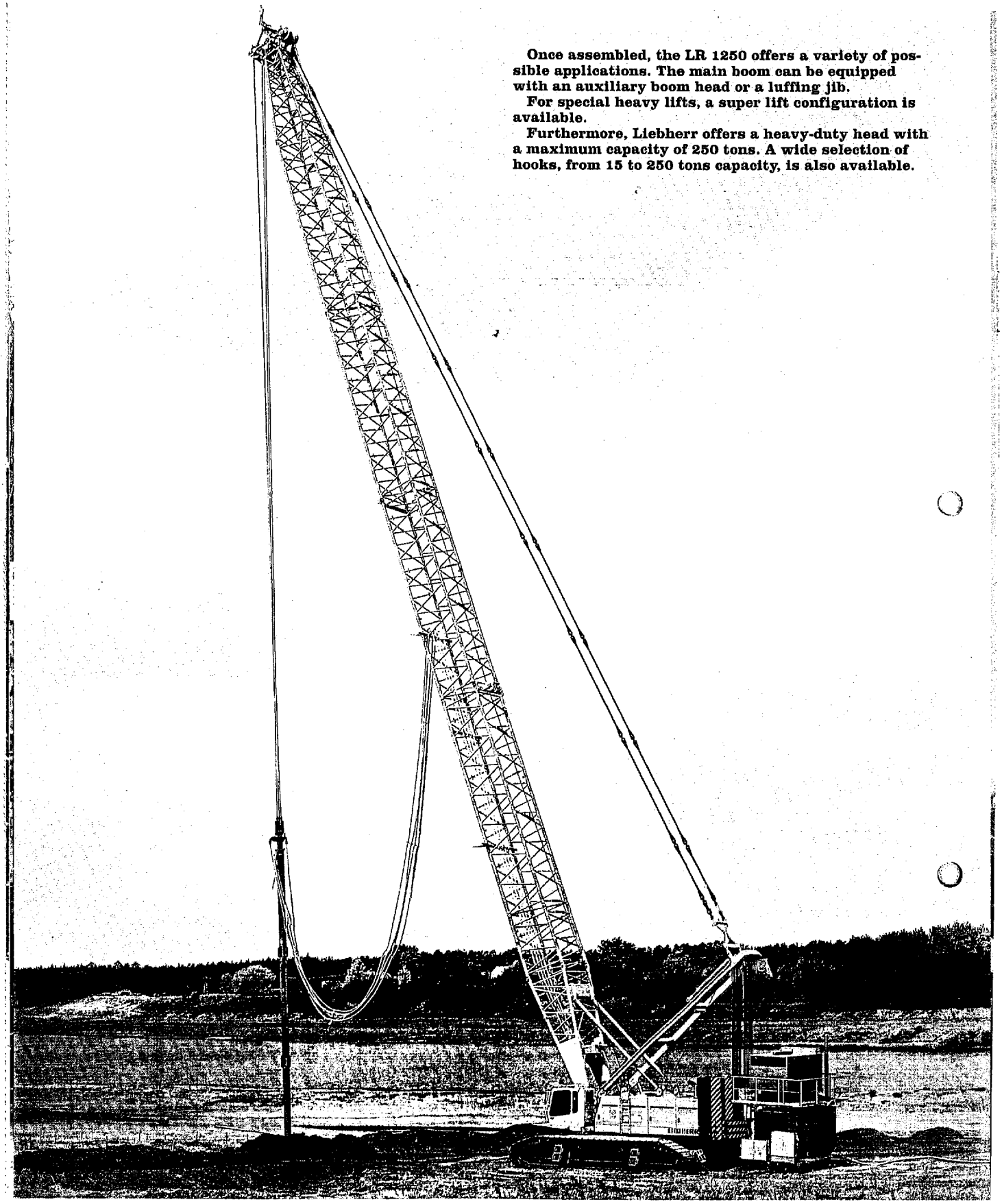


The self-assembly system of the LR 1250 is a future oriented innovation from Liebherr, offering further unmatched advantages. Loading, unloading and assembly can be performed without any assist crane.

The superstructure is raised by 4 hydraulic jacks to unload from the low boy. Subsequently the superstructure and its A-frame are used to unload the counterweight, boom extensions and crawlers. Crawlers and the boom foot section are connected to the basic machine by use of hydraulically activated pins for easy assembly.

All necessary tools and load carrying devices are standard equipment.

assembly, loading and unloading.



Once assembled, the LR 1250 offers a variety of possible applications. The main boom can be equipped with an auxiliary boom head or a luffing jib.

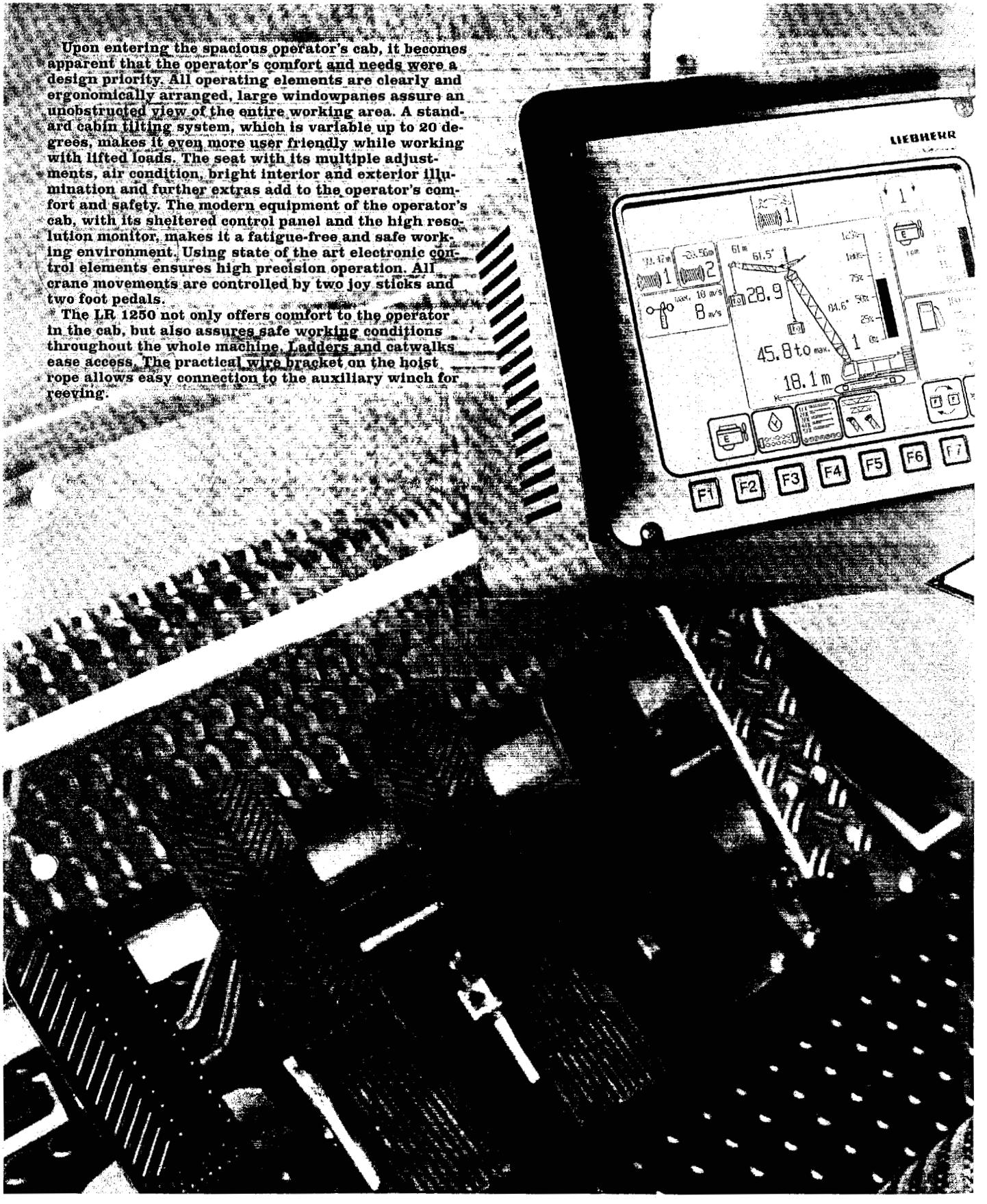
For special heavy lifts, a super lift configuration is available.

Furthermore, Liebherr offers a heavy-duty head with a maximum capacity of 250 tons. A wide selection of hooks, from 15 to 250 tons capacity, is also available.

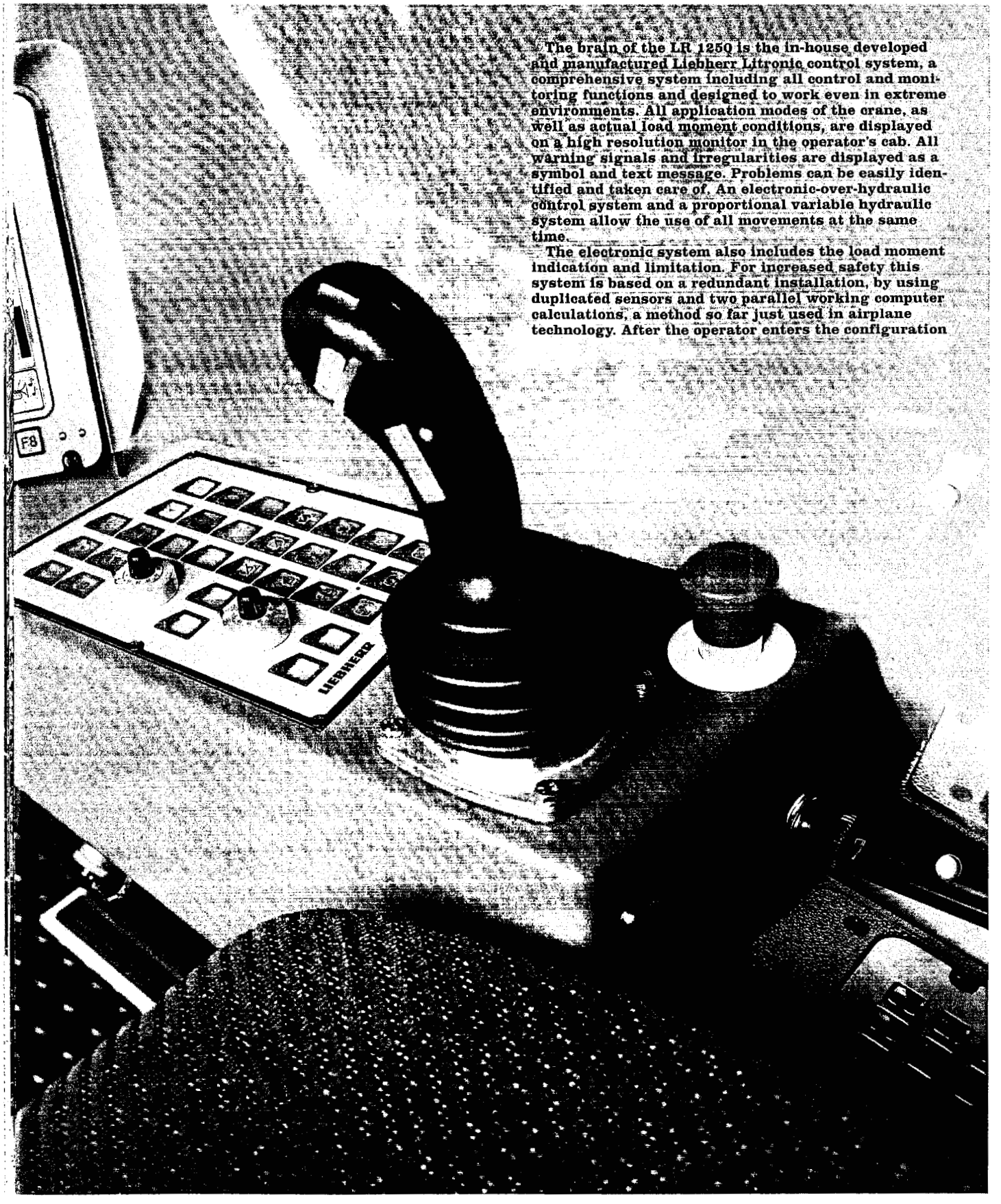
LR 1250: High utilization through attachments and applications.

Upon entering the spacious operator's cab, it becomes apparent that the operator's comfort and needs were a design priority. All operating elements are clearly and ergonomically arranged, large windowpanes assure an unobstructed view of the entire working area. A standard cabin tilting system, which is variable up to 20 degrees, makes it even more user friendly while working with lifted loads. The seat with its multiple adjustments, air condition, bright interior and exterior illumination and further extras add to the operator's comfort and safety. The modern equipment of the operator's cab, with its sheltered control panel and the high resolution monitor, makes it a fatigue-free and safe working environment. Using state of the art electronic control elements ensures high precision operation. All crane movements are controlled by two joy sticks and two foot pedals.

* The LR 1250 not only offers comfort to the operator in the cab, but also assures safe working conditions throughout the whole machine. Ladders and catwalks ease access. The practical wire bracket on the hoist rope allows easy connection to the auxiliary winch for reeving.



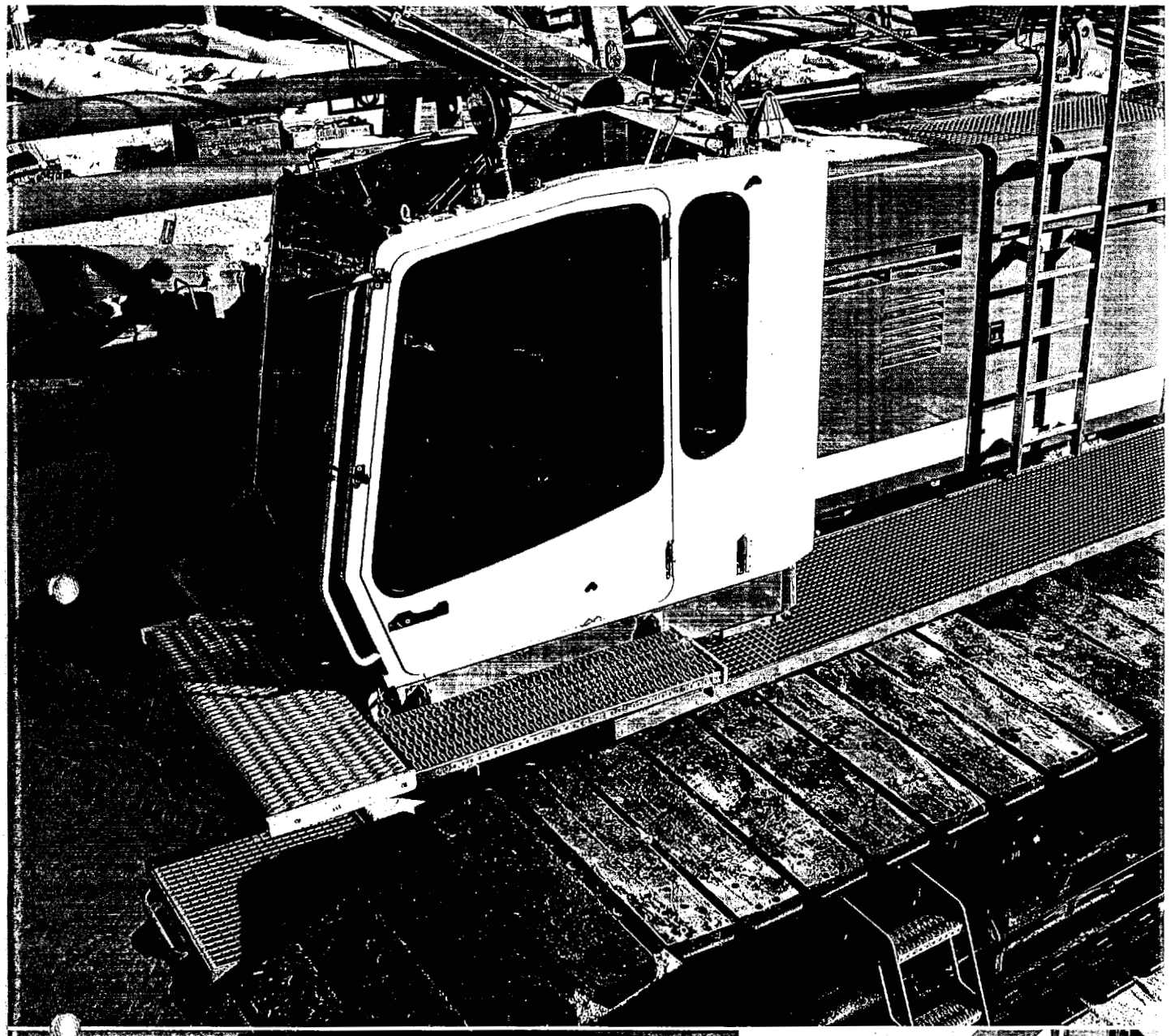
LR 1250: Increased precision, spee

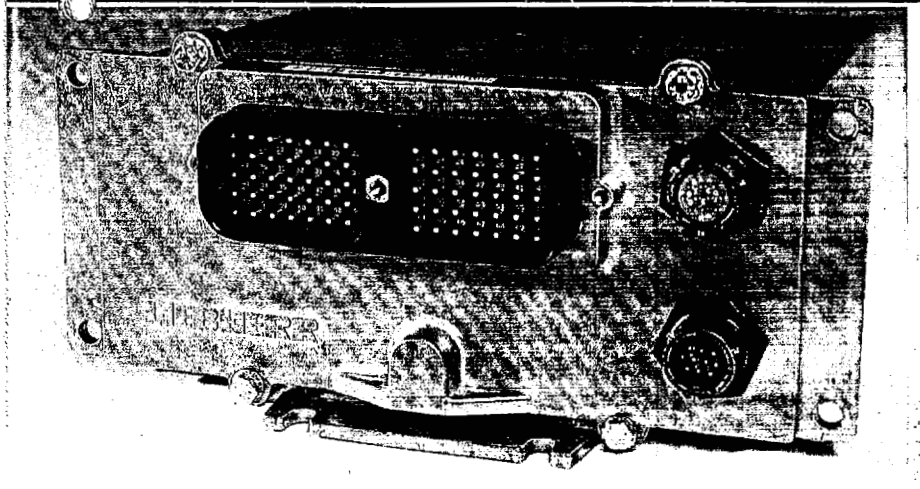


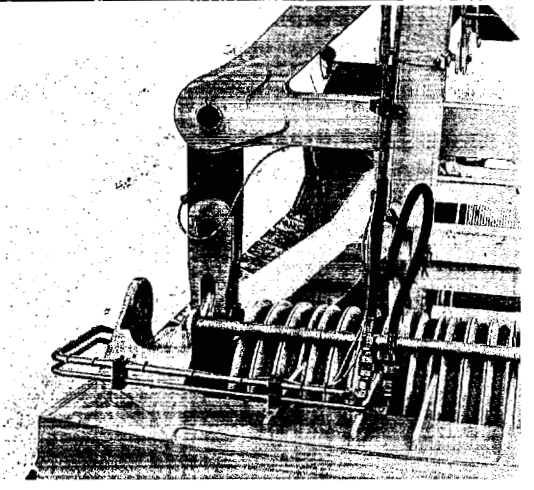
The brain of the LR 1250 is the in-house developed and manufactured Liebherr Litronic control system, a comprehensive system including all control and monitoring functions and designed to work even in extreme environments. All application modes of the crane, as well as actual load moment conditions, are displayed on a high resolution monitor in the operator's cab. All warning signals and irregularities are displayed as a symbol and text message. Problems can be easily identified and taken care of. An electronic-over-hydraulic control system and a proportional variable hydraulic system allow the use of all movements at the same time.

The electronic system also includes the load moment indication and limitation. For increased safety this system is based on a redundant installation, by using duplicated sensors and two parallel working computer calculations, a method so far just used in airplane technology. After the operator enters the configuration

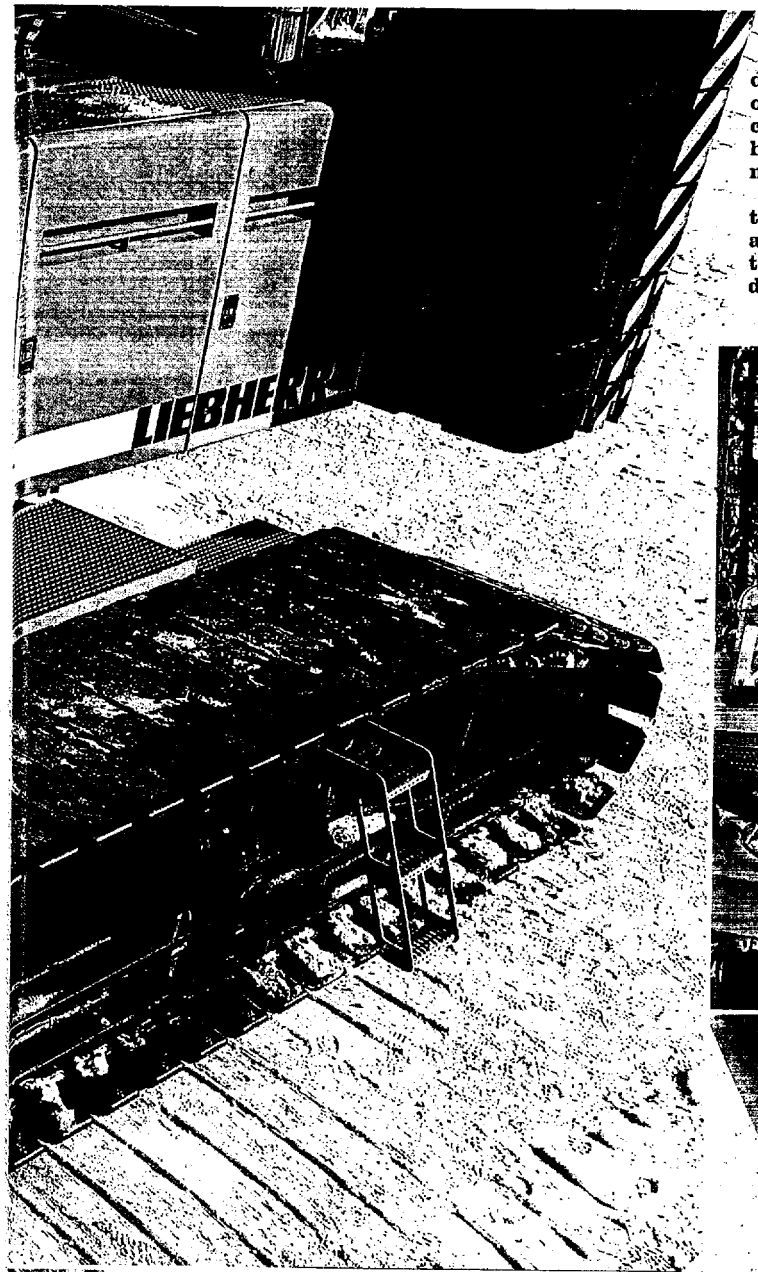
d and safety through state of the art





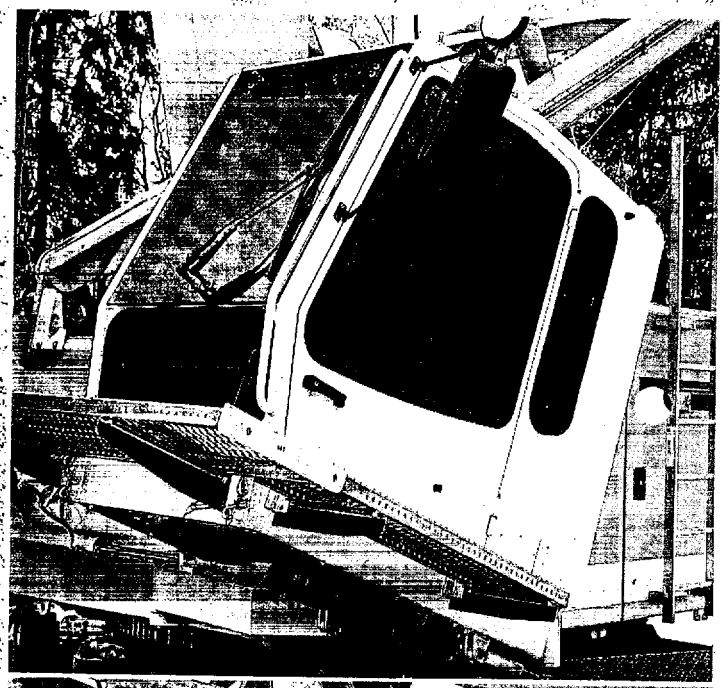


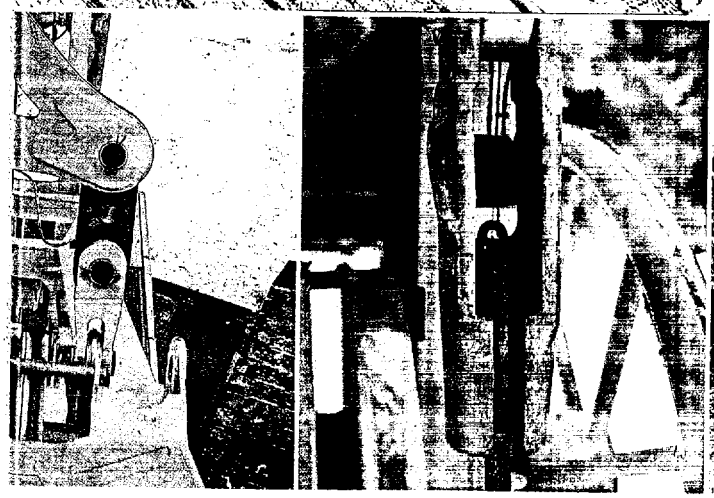
controls and drive system.

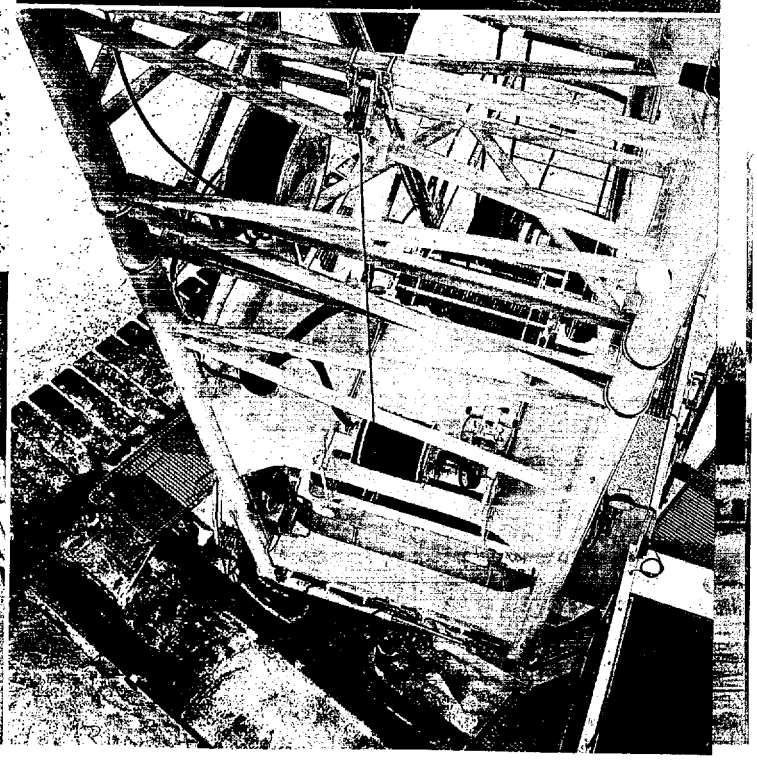


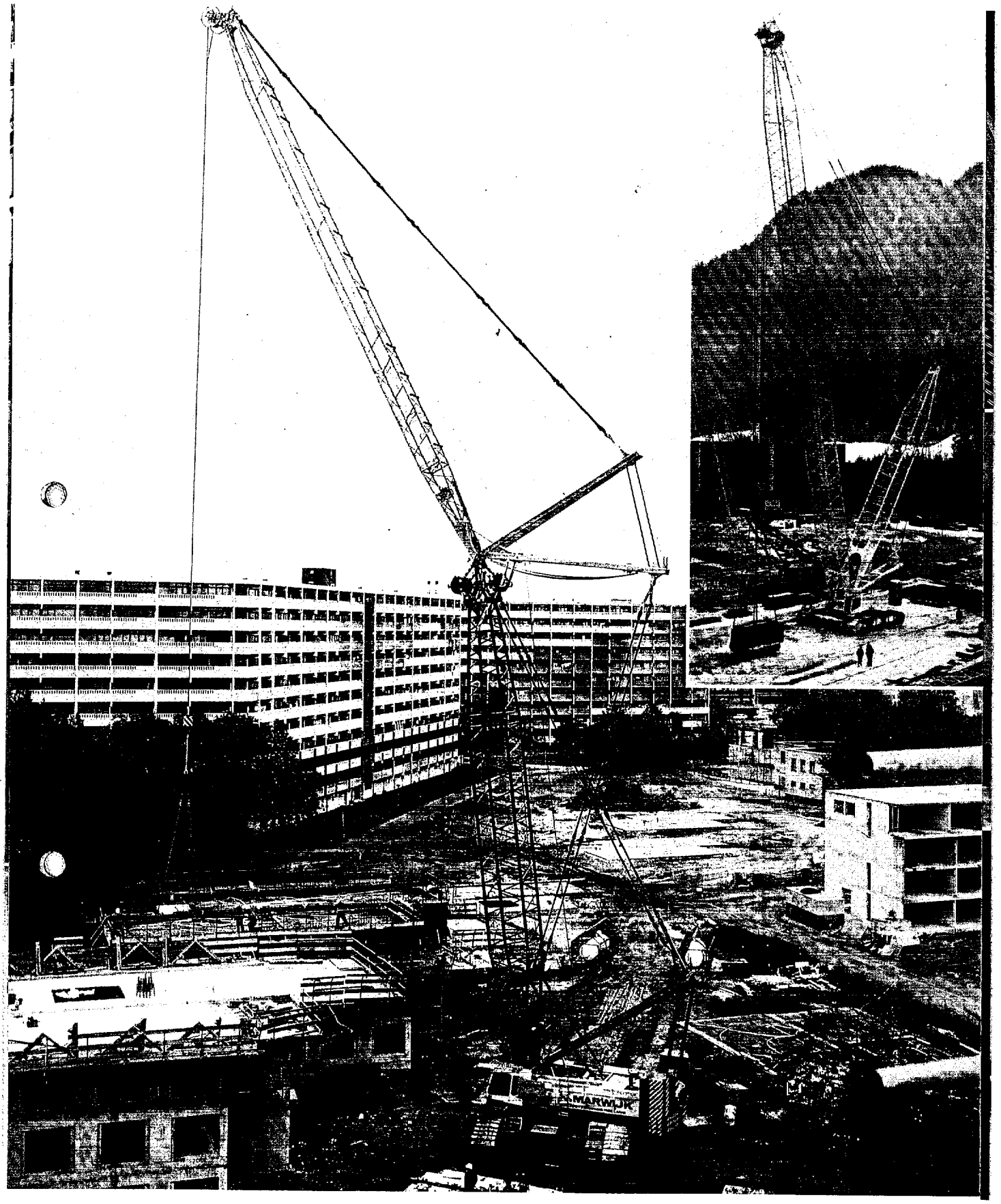
data, the Litronic displays the appropriate load chart on the monitor. Additionally, the operator can see the current data for wind speed, boom angle, radius, lift height, load on the hook and utilization of the load moment as well as the maximum allowable values.

Another feature included in the Litronic system is the Liebherr Electronic Diesel Control (LIDEC), which assures optimal motor management. Additionally there is an emergency back up system allowing a reduced operation if ever required.

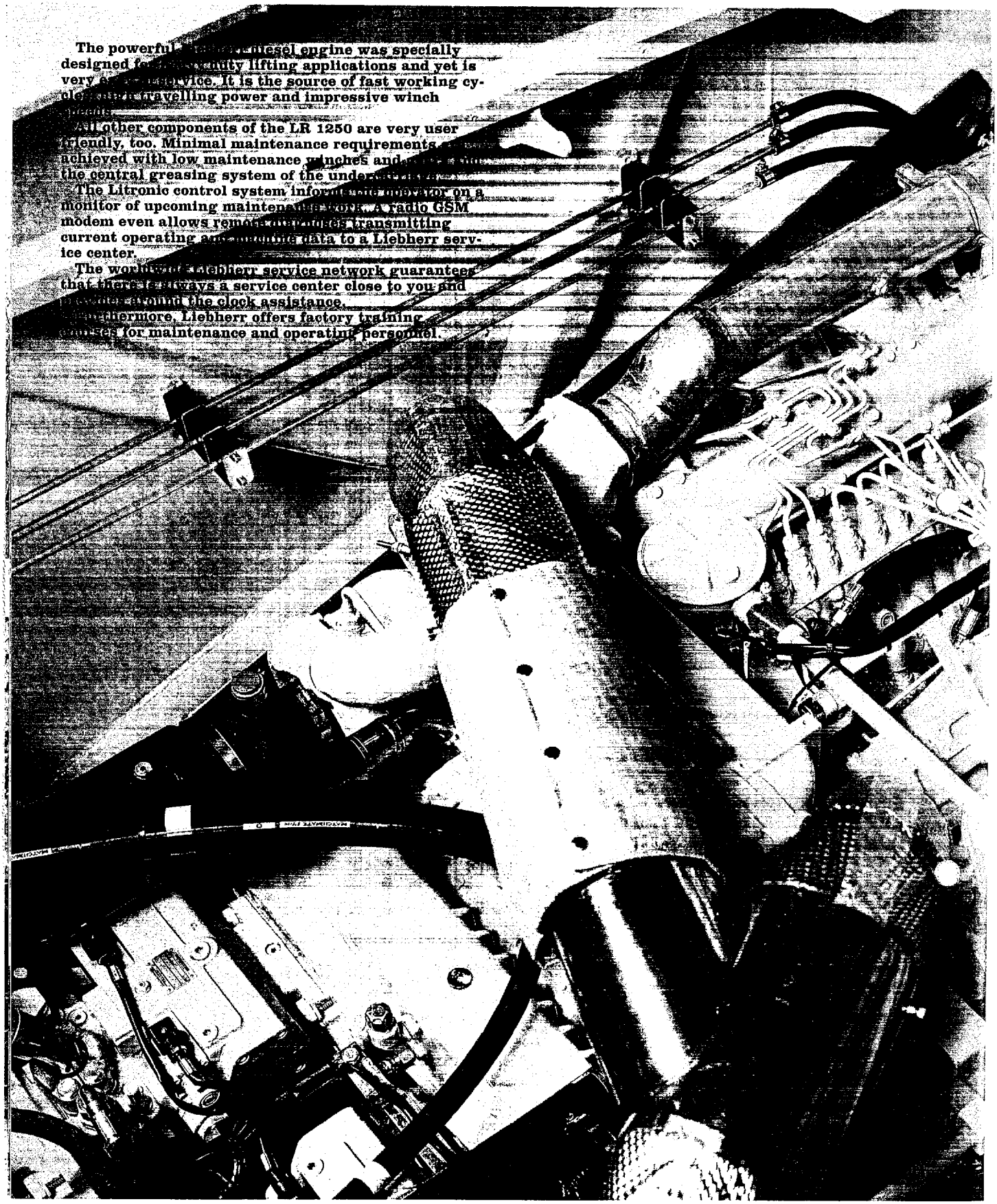








a variety of



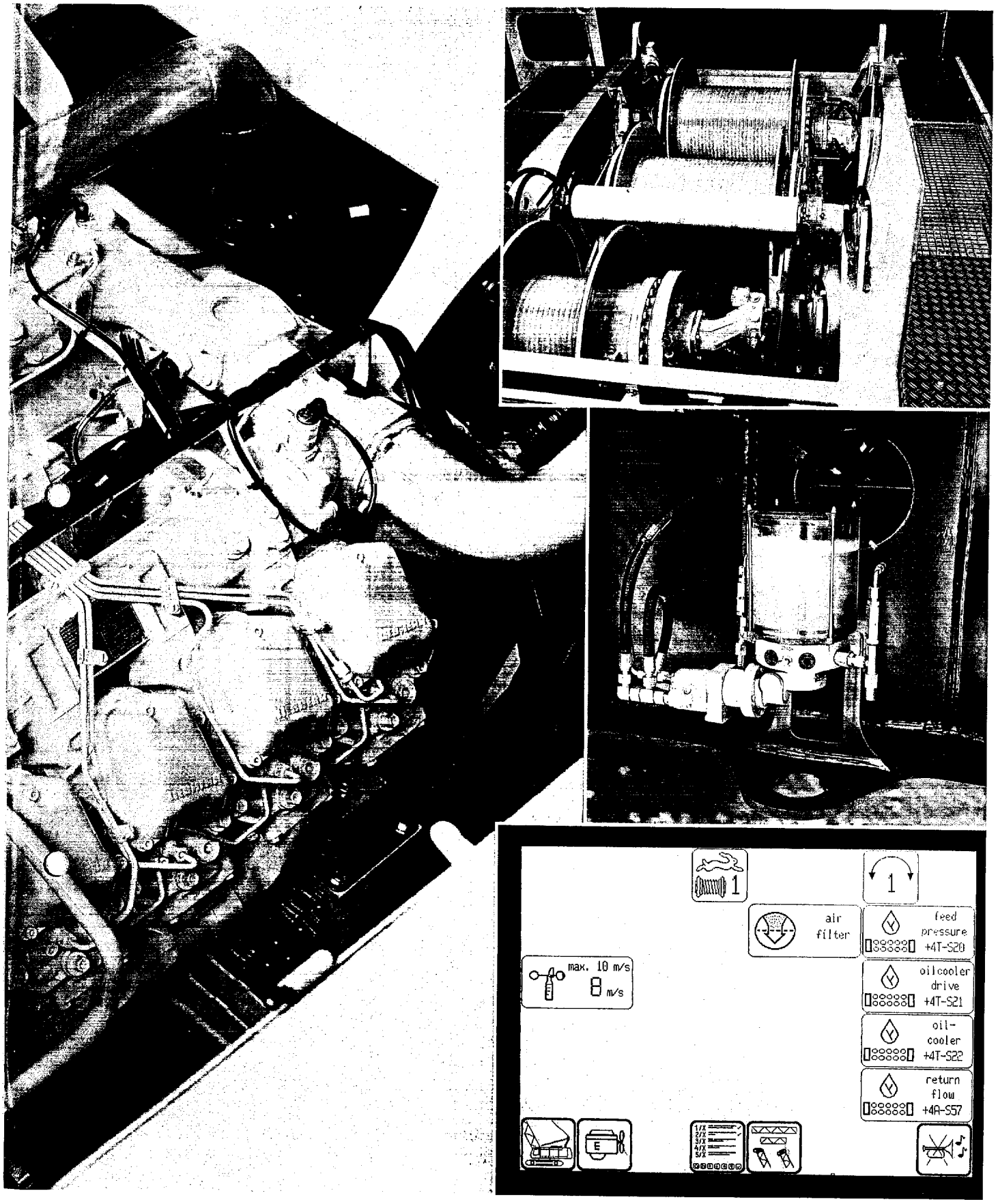
The powerful [illegible] diesel engine was specially designed for [illegible] duty lifting applications and yet is very [illegible] service. It is the source of fast working cycle [illegible] travelling power and impressive winch speeds.

All other components of the LR 1250 are very user friendly, too. Minimal maintenance requirements are achieved with low maintenance winches and [illegible] the central greasing system of the undercarriage.

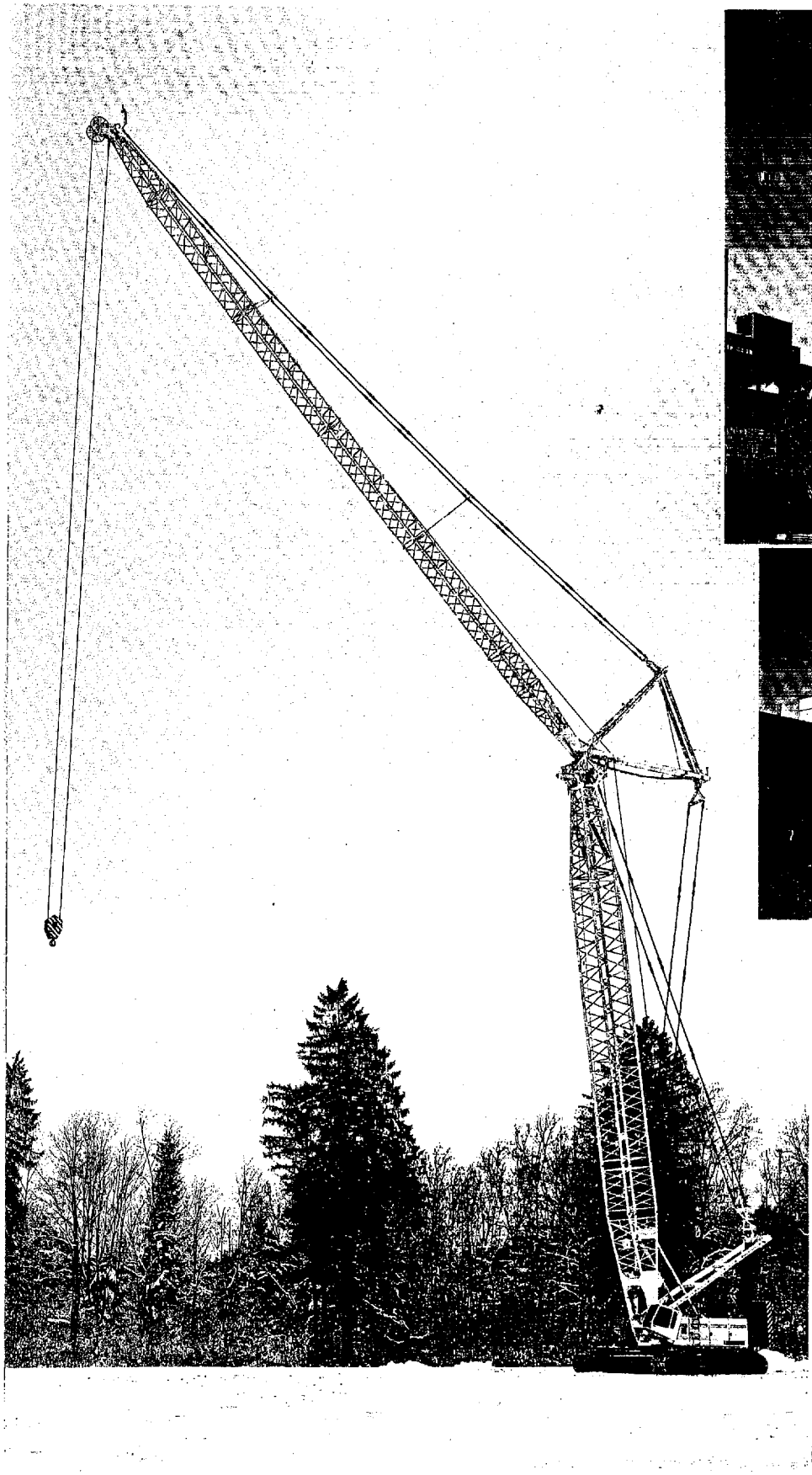
The Litronic control system inform[illegible] operator on a monitor of upcoming maintenance [illegible] A radio GSM modem even allows remote [illegible] transmitting current operating and [illegible] data to a Liebherr service center.

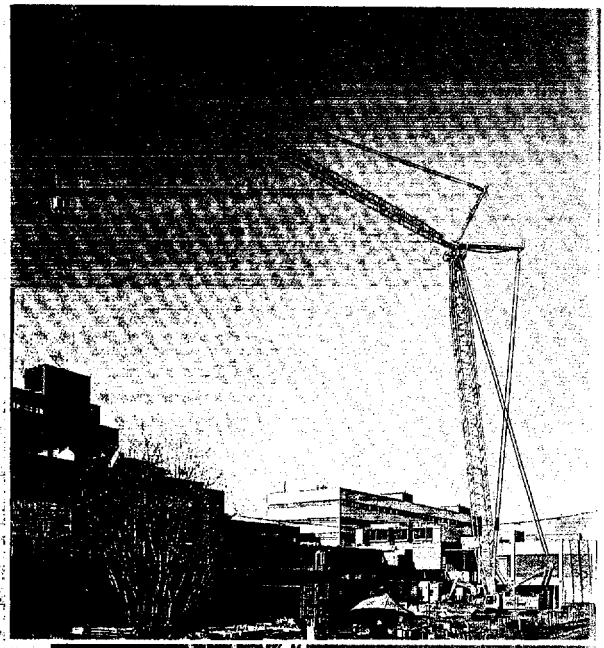
The worldwide Liebherr service network guarantees that there [illegible] always a service center close to you and [illegible] around the clock assistance. Furthermore, Liebherr offers factory training courses for maintenance and operating personnel.

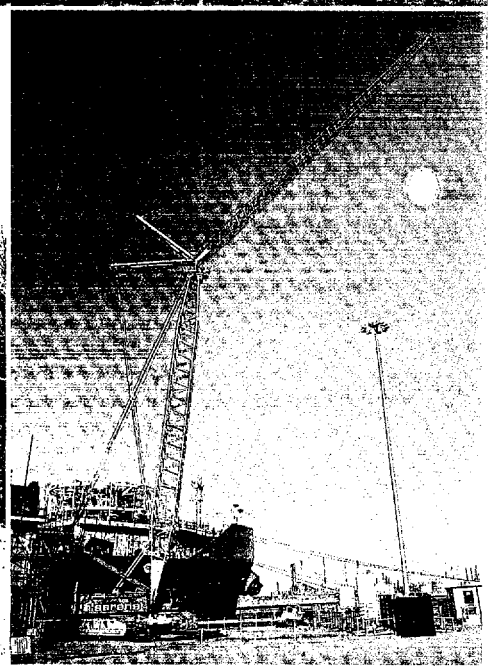
LR 1250: Extremely easy to servi[illegible] designed components.



e through specially







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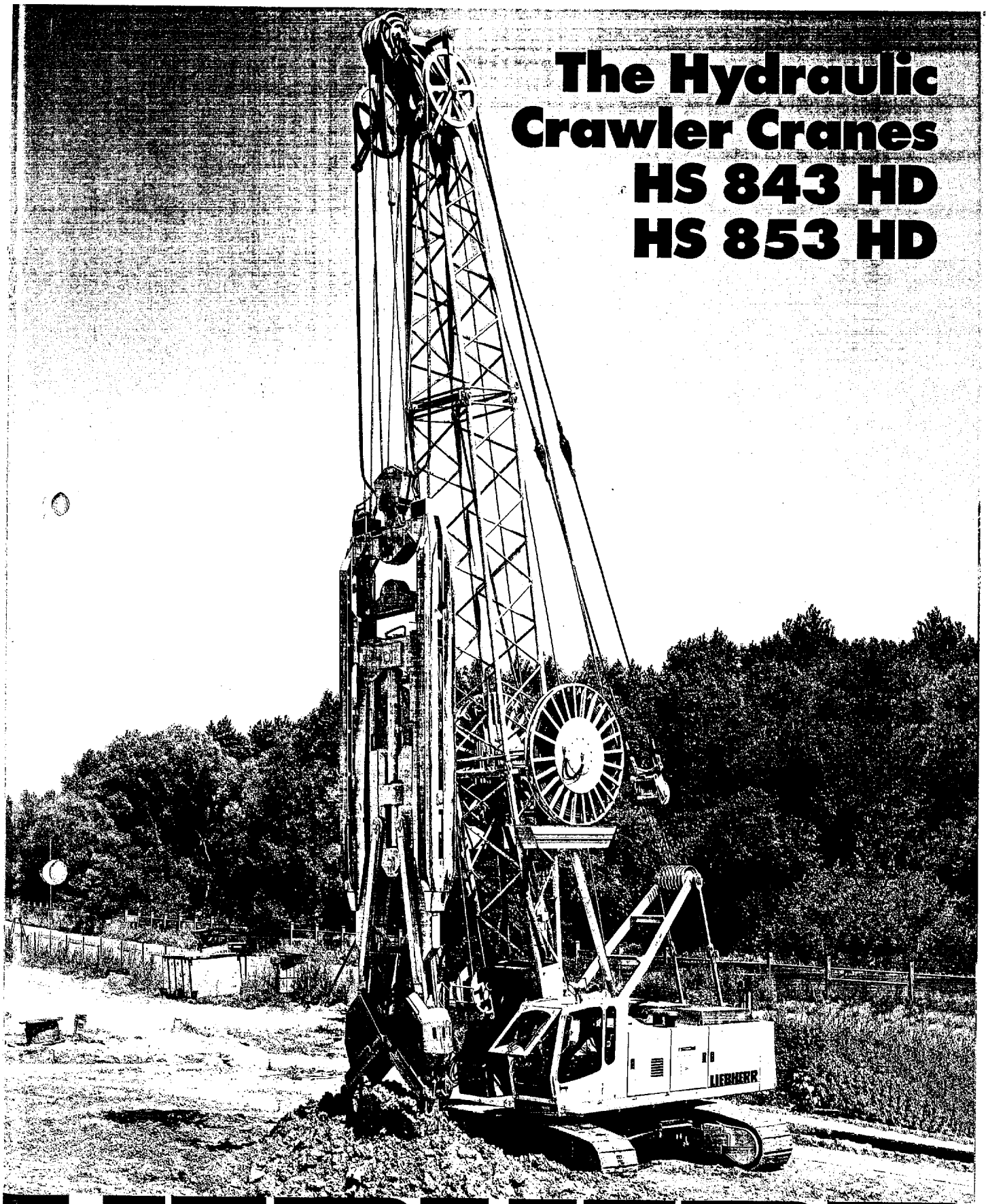
Email: lccrawler@aol.com

LOCAL DEALER:

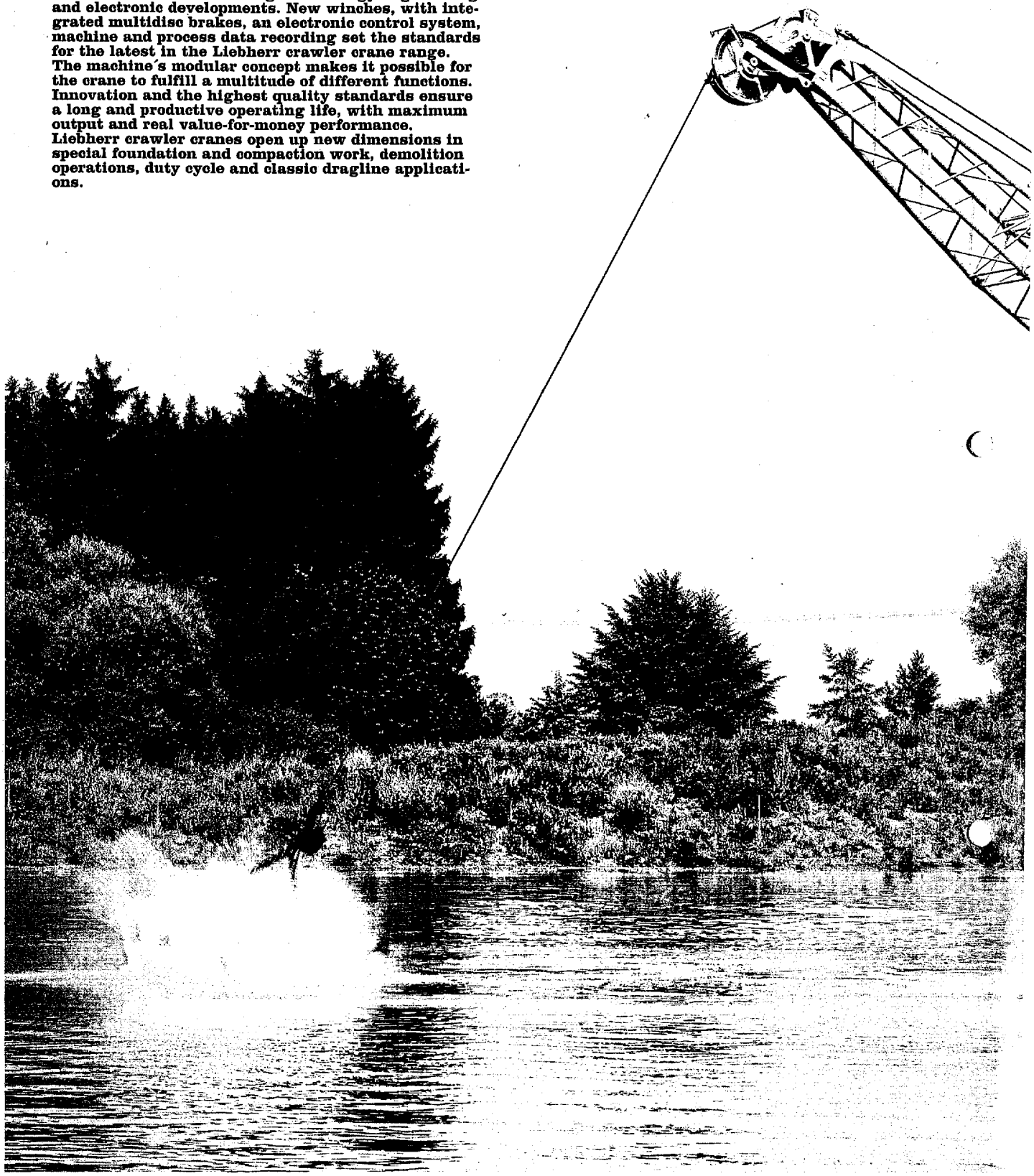
The Hydraulic Crawler Cranes HS 843 HD HS 853 HD



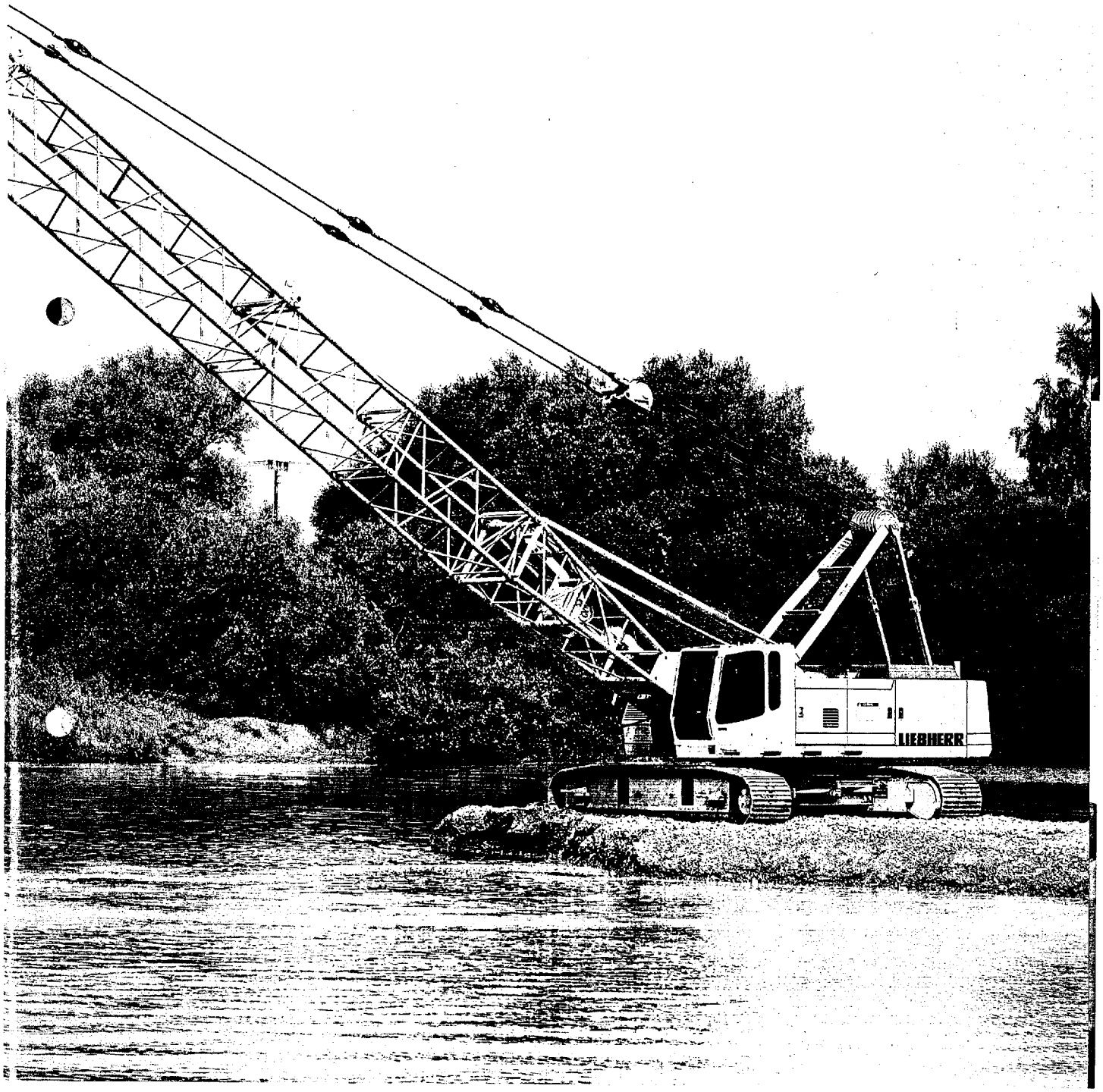
LIEBHERR

The Better Machine.

Liebherr hydraulic crawler cranes provide optimum performance, through operating efficiency and application of Liebherr´s own high technology engineering and electronic developments. New winches, with integrated multidisc brakes, an electronic control system, machine and process data recording set the standards for the latest in the Liebherr crawler crane range. The machine´s modular concept makes it possible for the crane to fulfill a multitude of different functions. Innovation and the highest quality standards ensure a long and productive operating life, with maximum output and real value-for-money performance. Liebherr crawler cranes open up new dimensions in special foundation and compaction work, demolition operations, duty cycle and classic dragline applications.

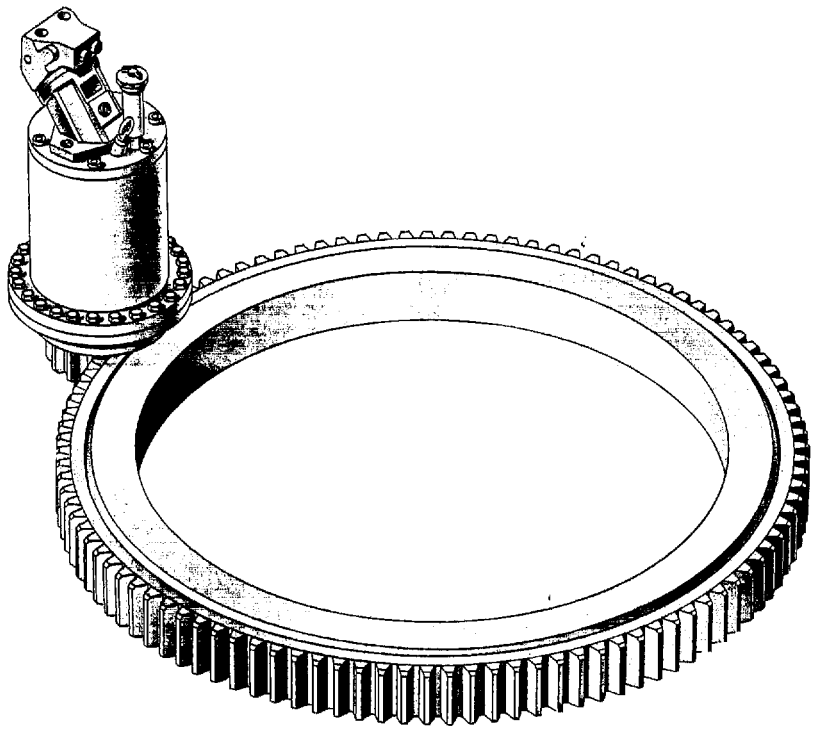


High Performance with Liebherr Crawler Cranes.


LIEBHERR

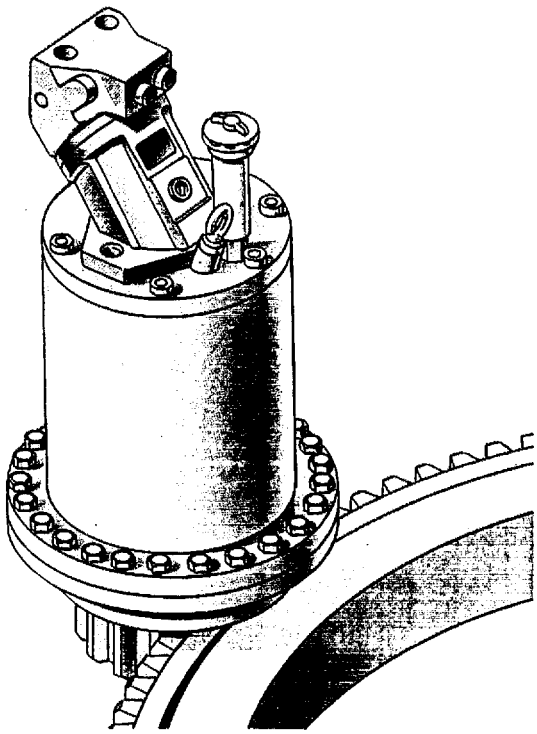
The high quality cab is specially designed, using the science of ergonomics for maximum output and minimum fatigue. The large window area and roof window provide total working visibility. The joystick control and fully adjustable operator's seat offer complete comfort and convenience. Additional integrated switches on the joystick allow specific functions to be executed on special applications and, if required, the right-hand joystick can be changed to a double T-shift configuration.

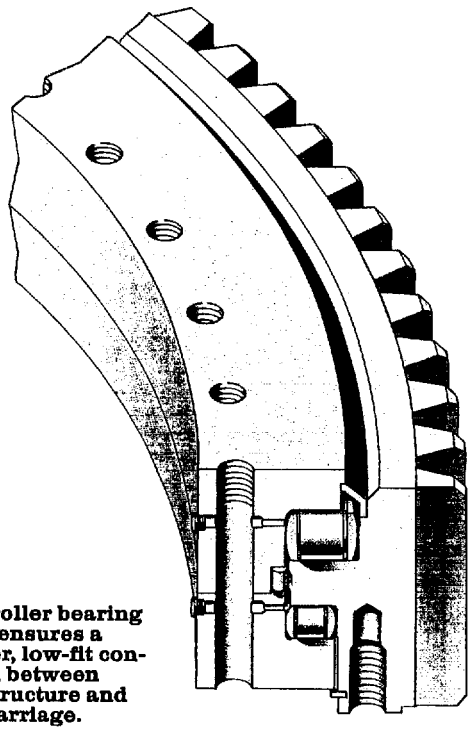
The operator's cab – unlimited comfort.



The heavy-duty slew ring has external, large dimension teeth for high torque with minimum wear and abrasion.

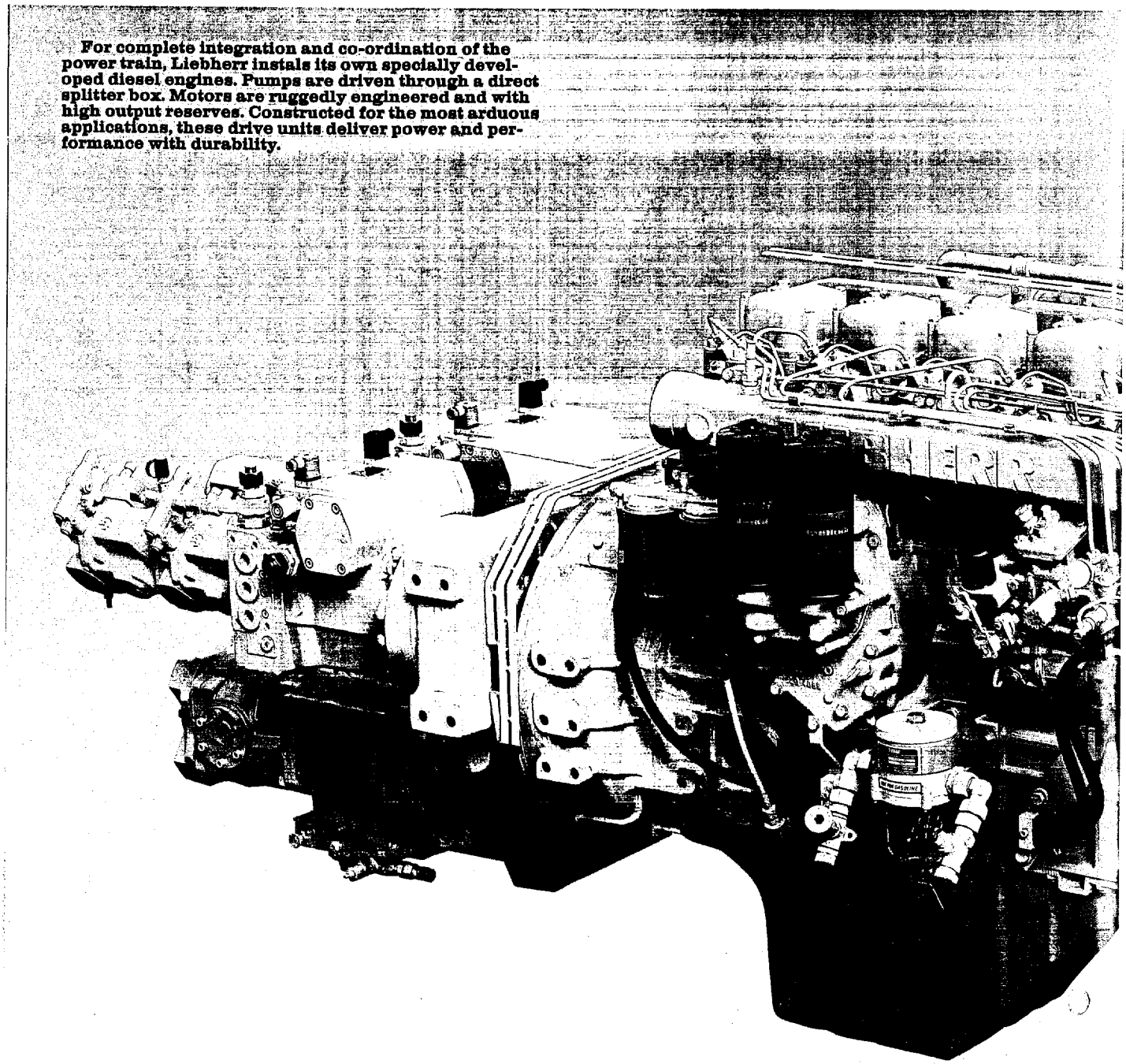
Swing drive position ensures high torque and low flank pressure with fast acceleration. For special operations such as auguring or dragline, installation of a second swing drive increases torque.





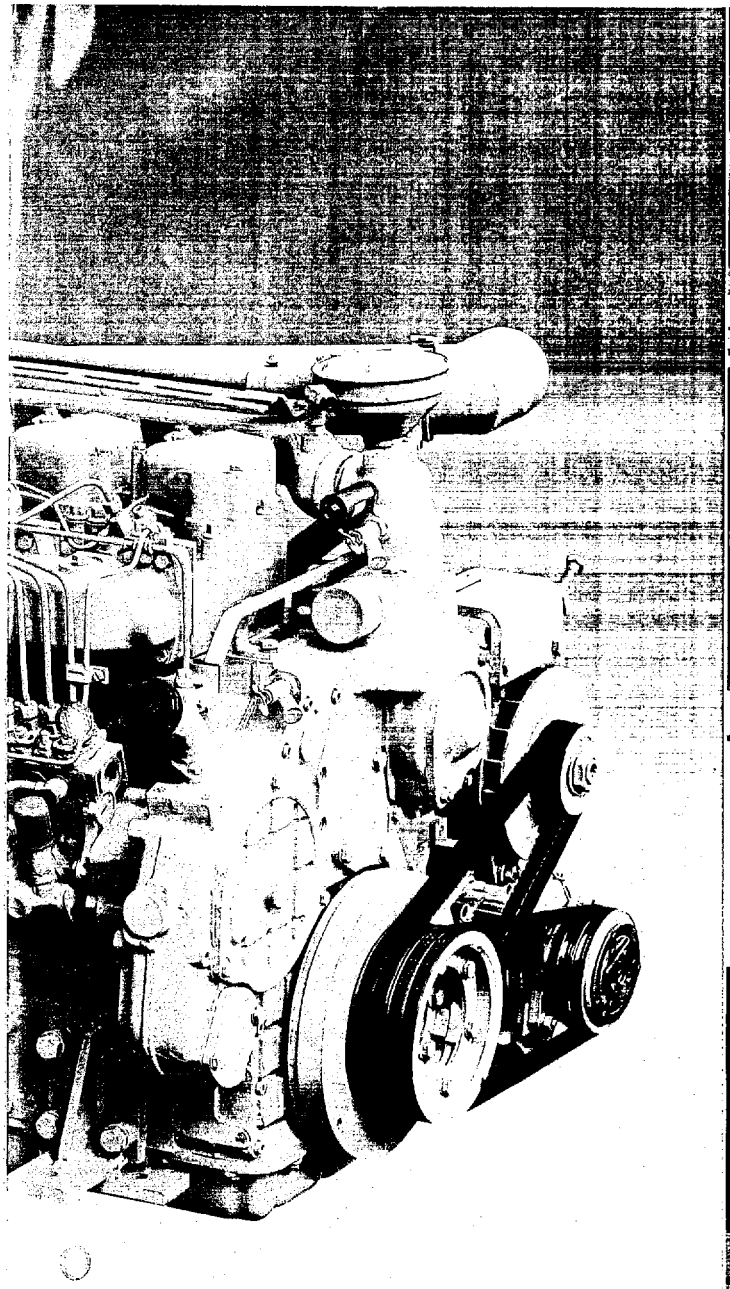
The roller bearing design ensures a superior, low-fit connection between superstructure and undercarriage.

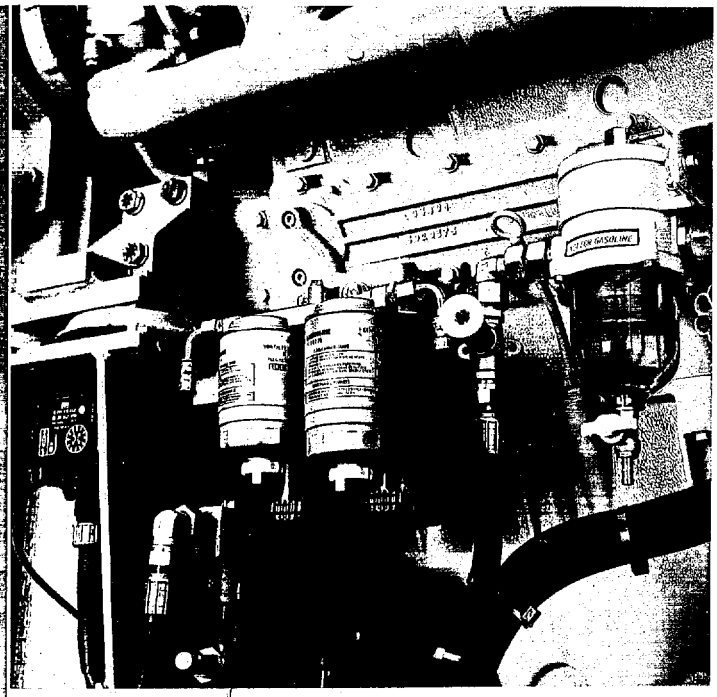
life.



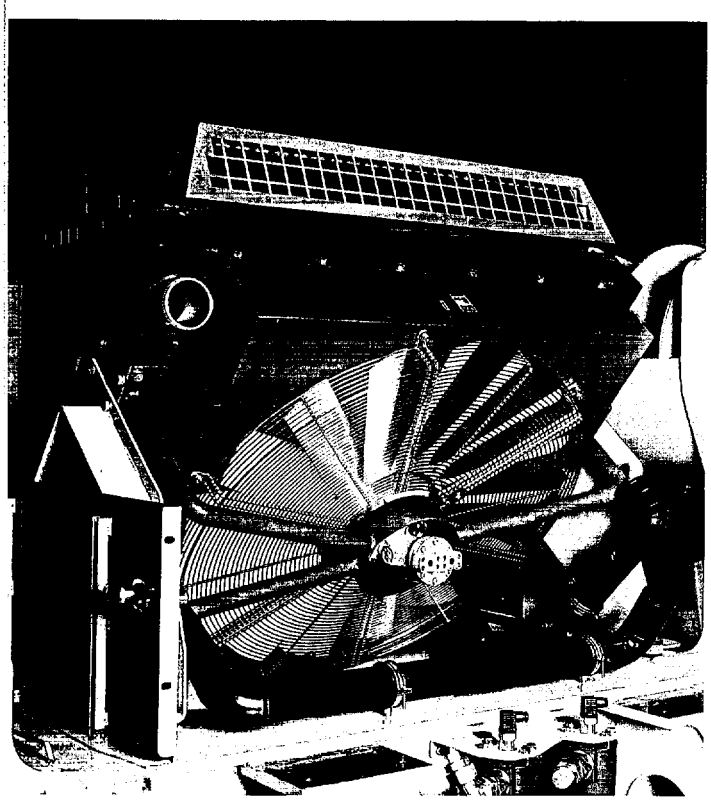
For complete integration and co-ordination of the power train, Liebherr instals its own specially developed diesel engines. Pumps are driven through a direct splitter box. Motors are ruggedly engineered and with high output reserves. Constructed for the most arduous applications, these drive units deliver power and performance with durability.

The power train — high performance with economy.

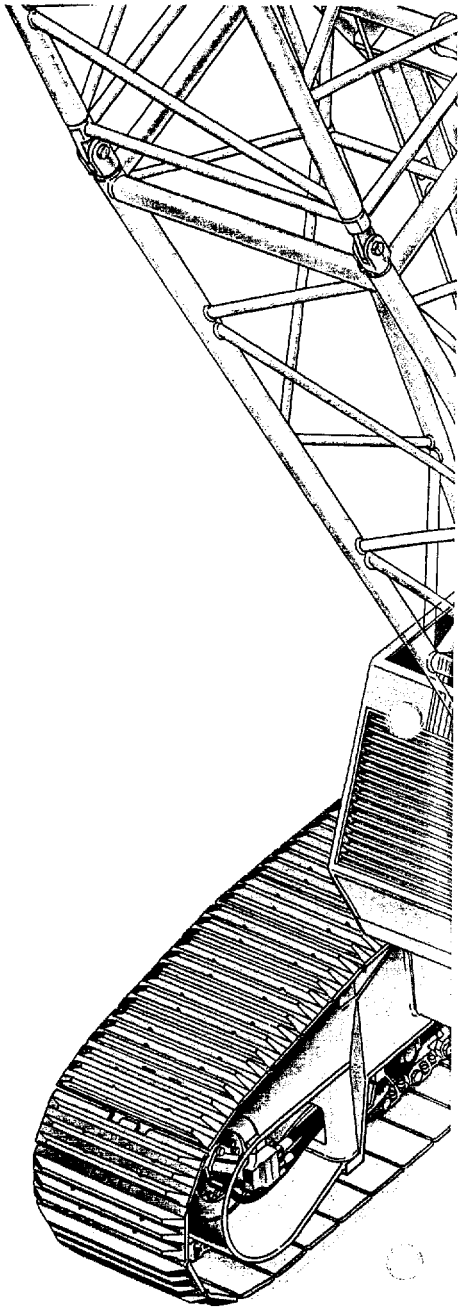




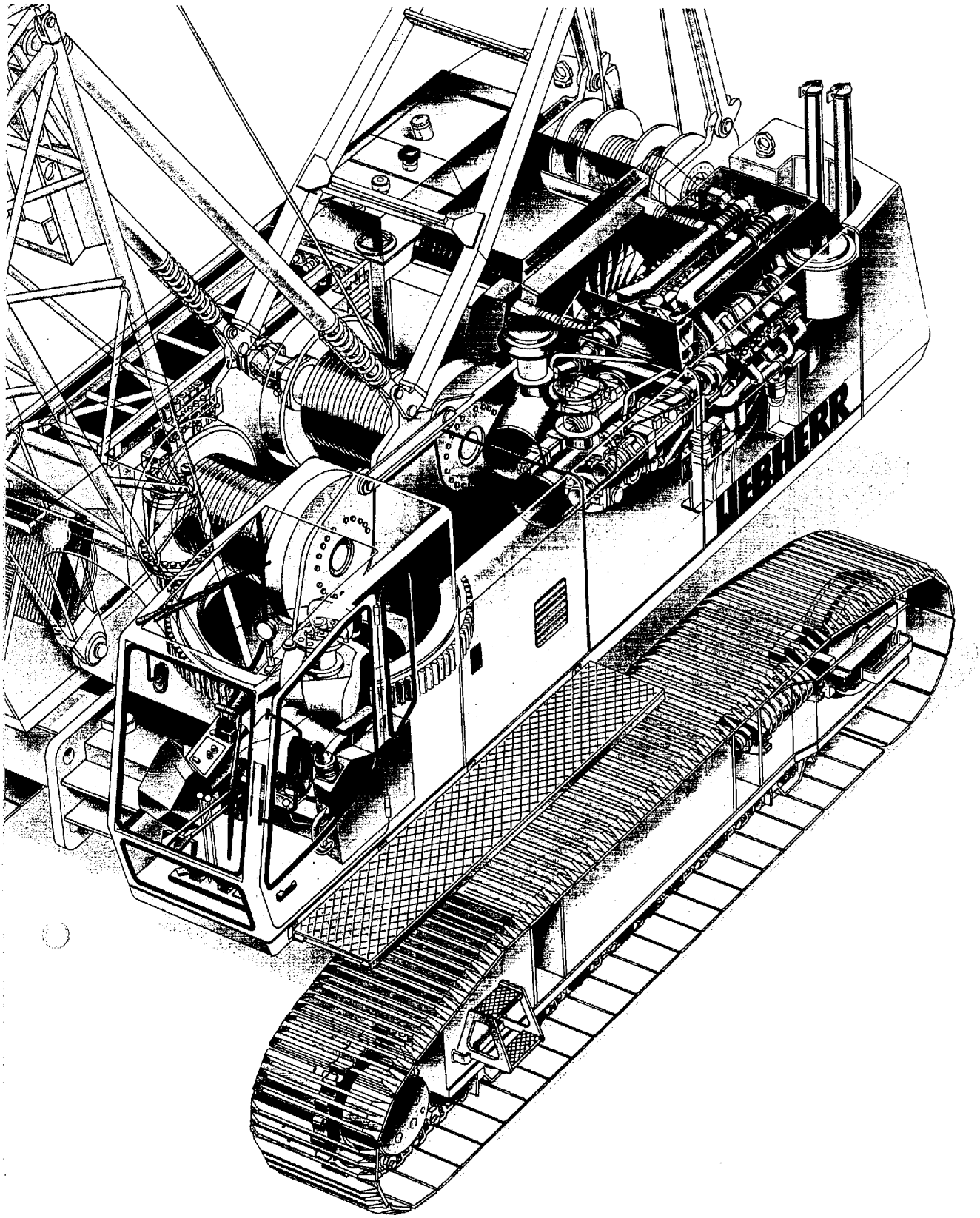
Liebherr engines are designed and built for long service intervals and easy of maintenance. All oil and water conduits are integrated into the crankcase; all pump and engine maintenance points are located on the left hand side of the engine for easy access and workability.



The large dimension radiator assures perfect temperature control – whatever the weather conditions. Fan speed is hydraulically regulated, resulting in additional energy savings.



The profitable solution – Liebherr Hydraulic Crawler Cran



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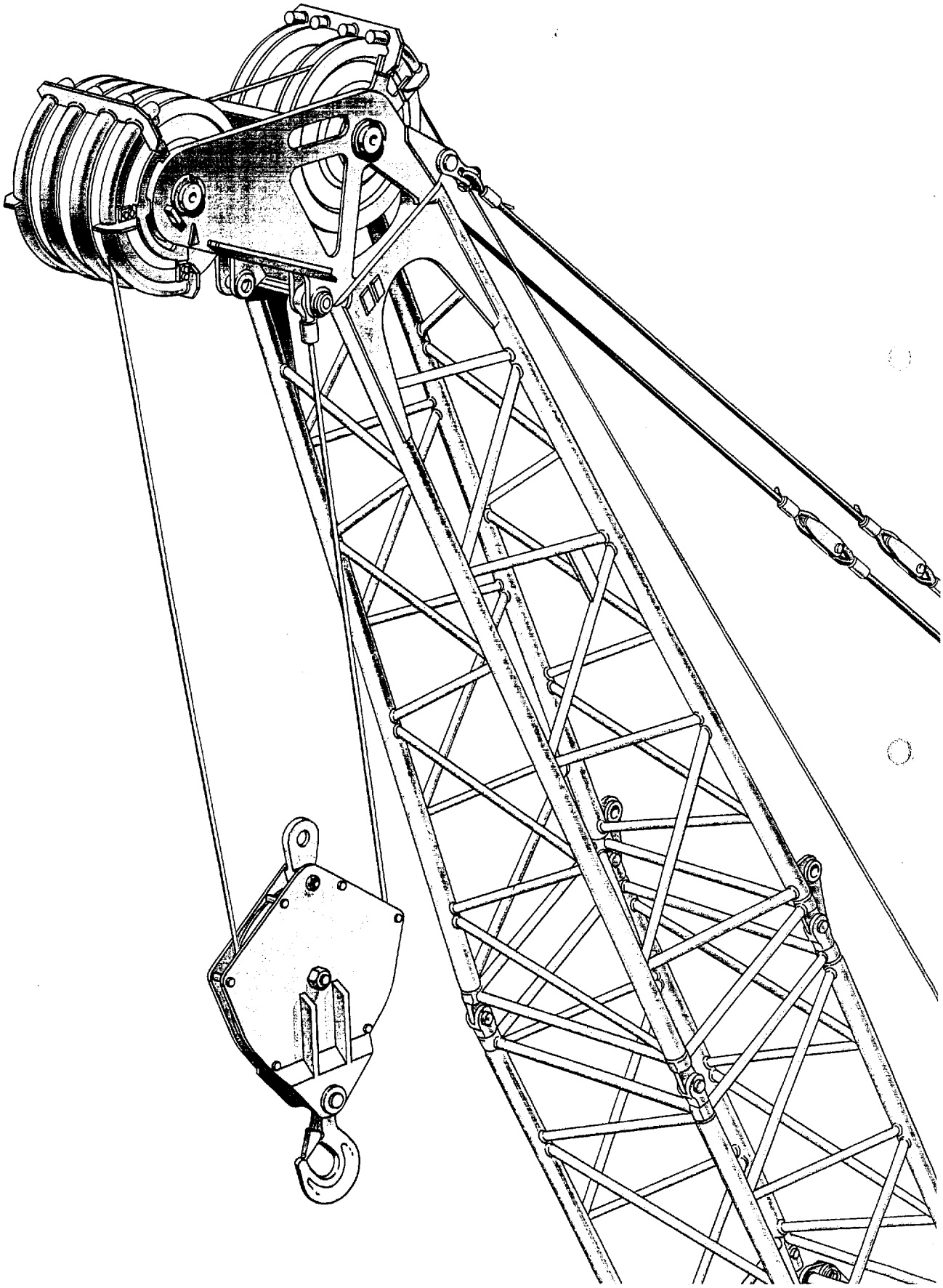
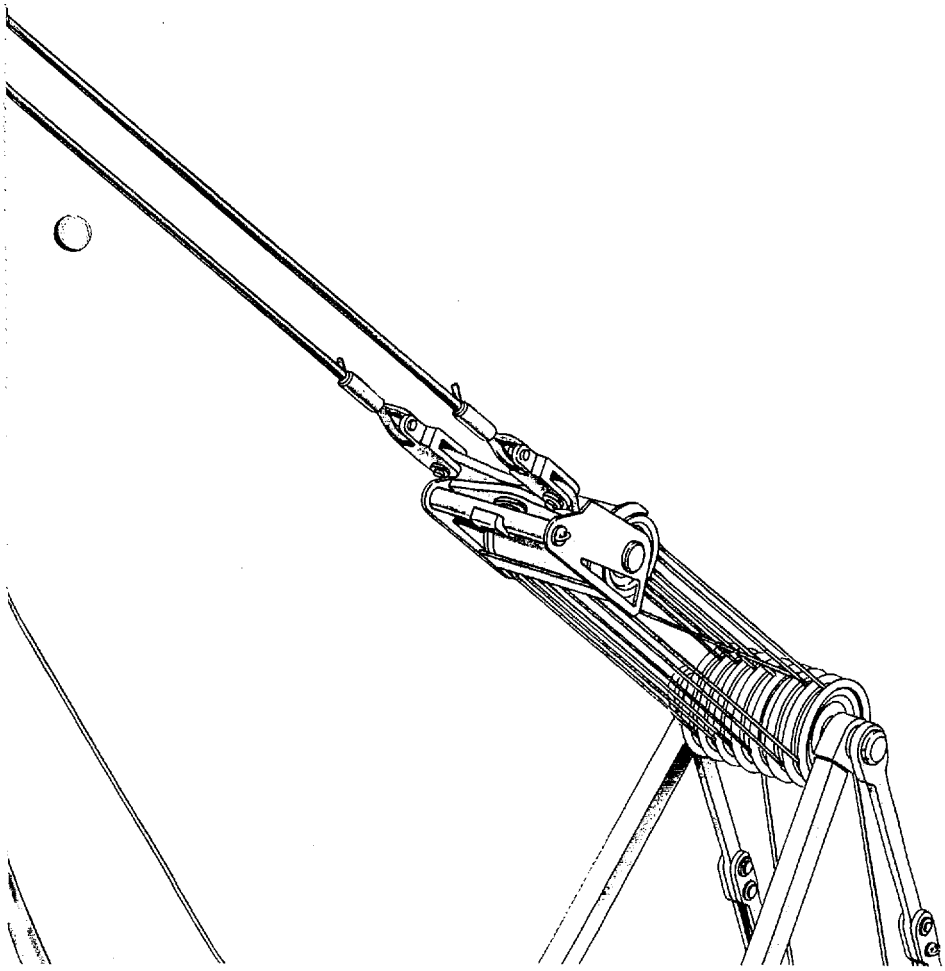
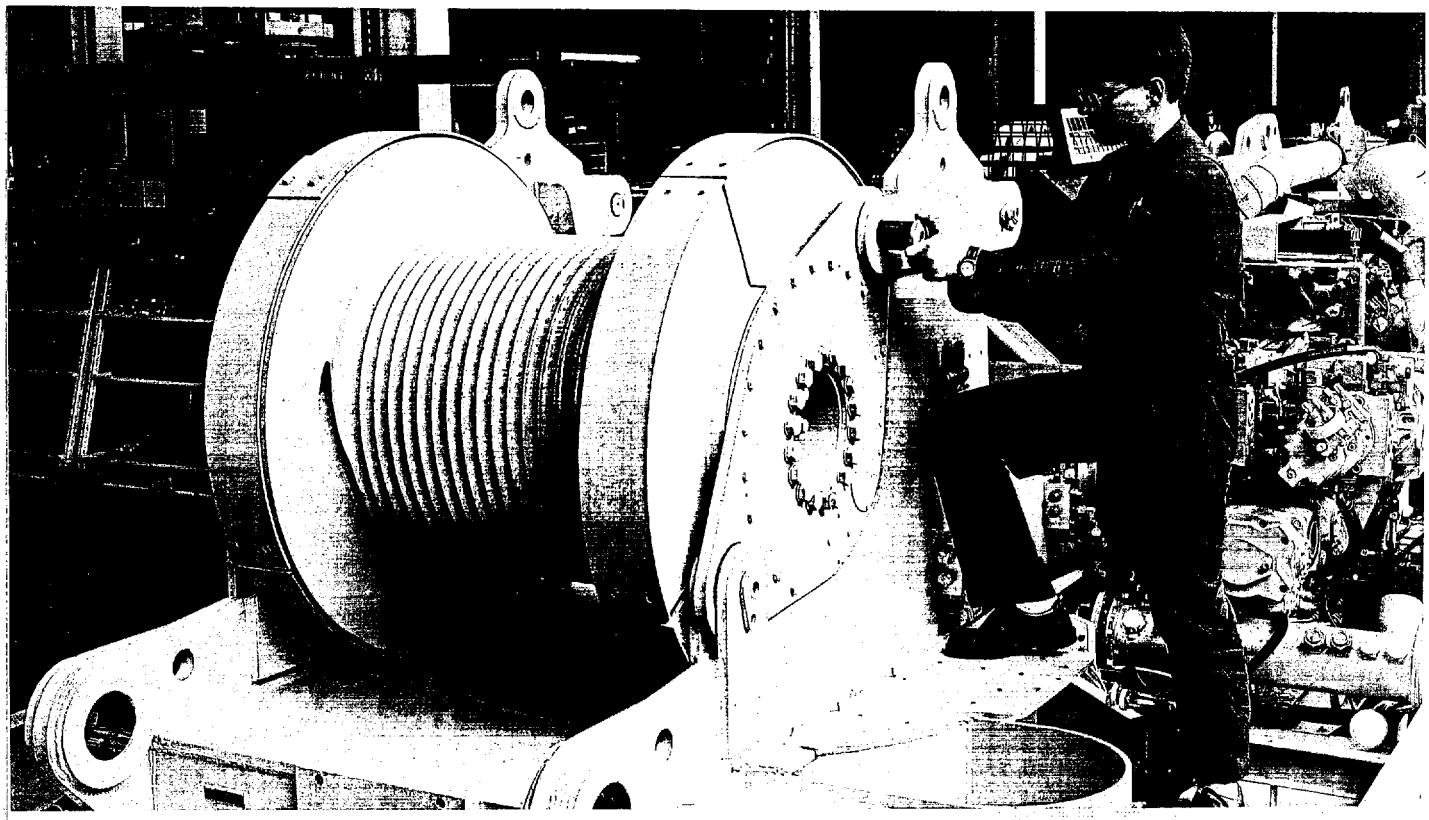
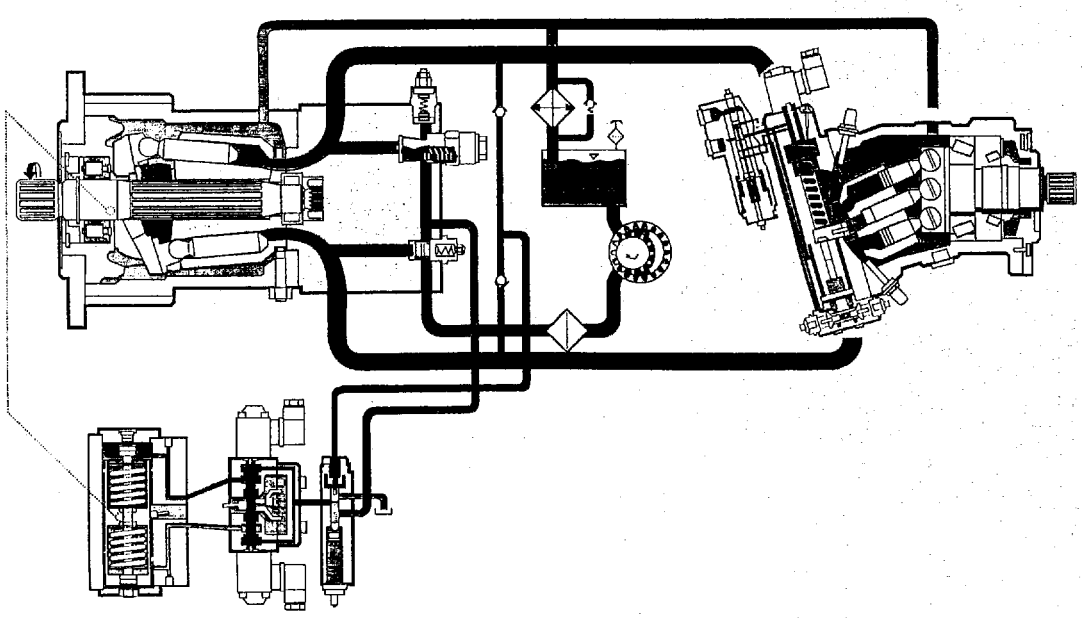




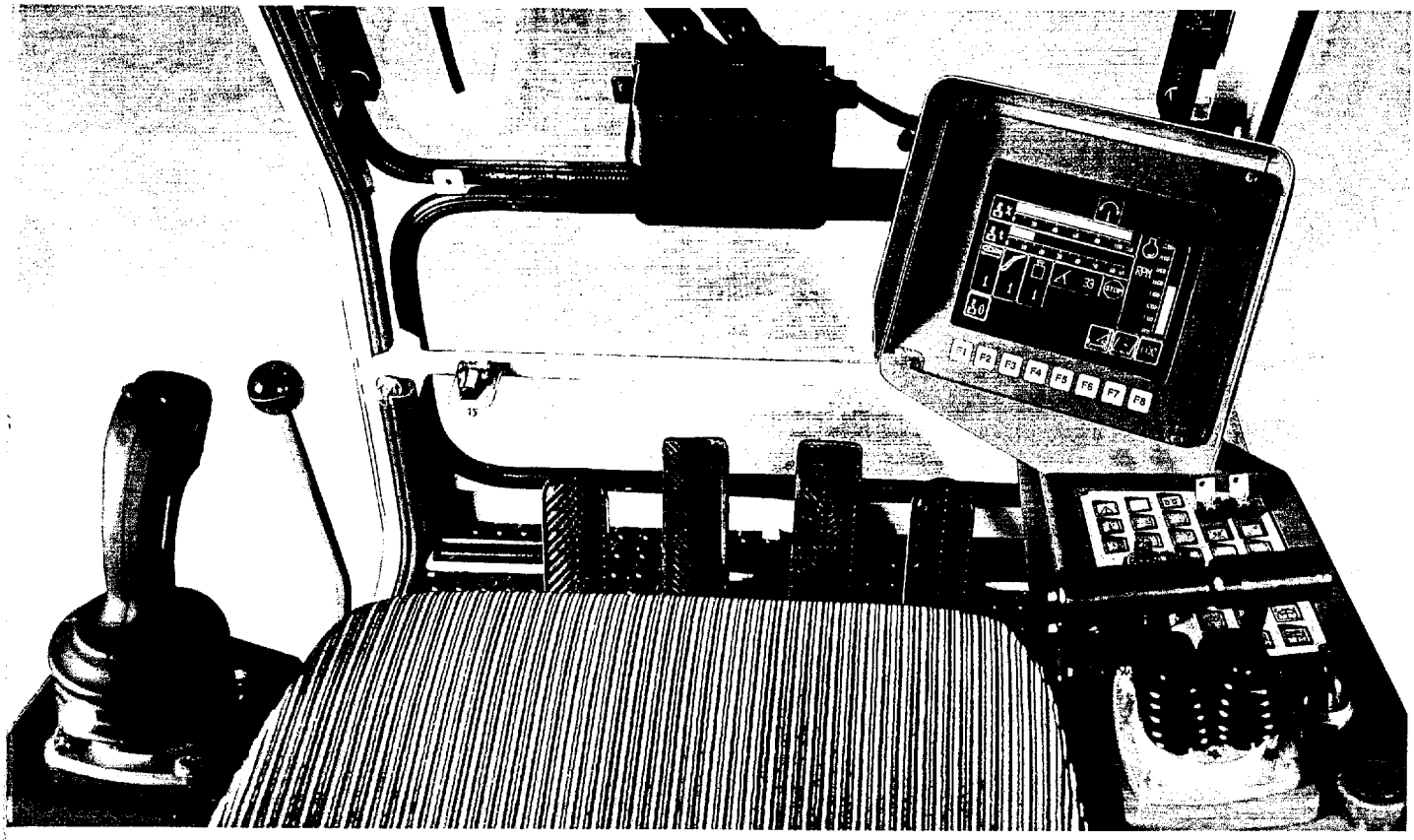


The newly developed free-fall winches are installed as complete units with bolt connections. The innovative design, with integrated drive and multi-disc free-fall brakes, allows increased drum width with the same outside dimensions, thereby increasing rope capacity on the first layer. This produces a longer rope life and reduced operating costs. The integrated free-fall winches prove their worth especially in difficult free-fall operations with heavy loads.

The main winches are driven via swash plate type pumps and variable flow oil motors. This design allows precise working cycles for all winch movements, optimized energy use in acceleration and braking, as well as reverse energy to the system when operating in the power lowering mode.

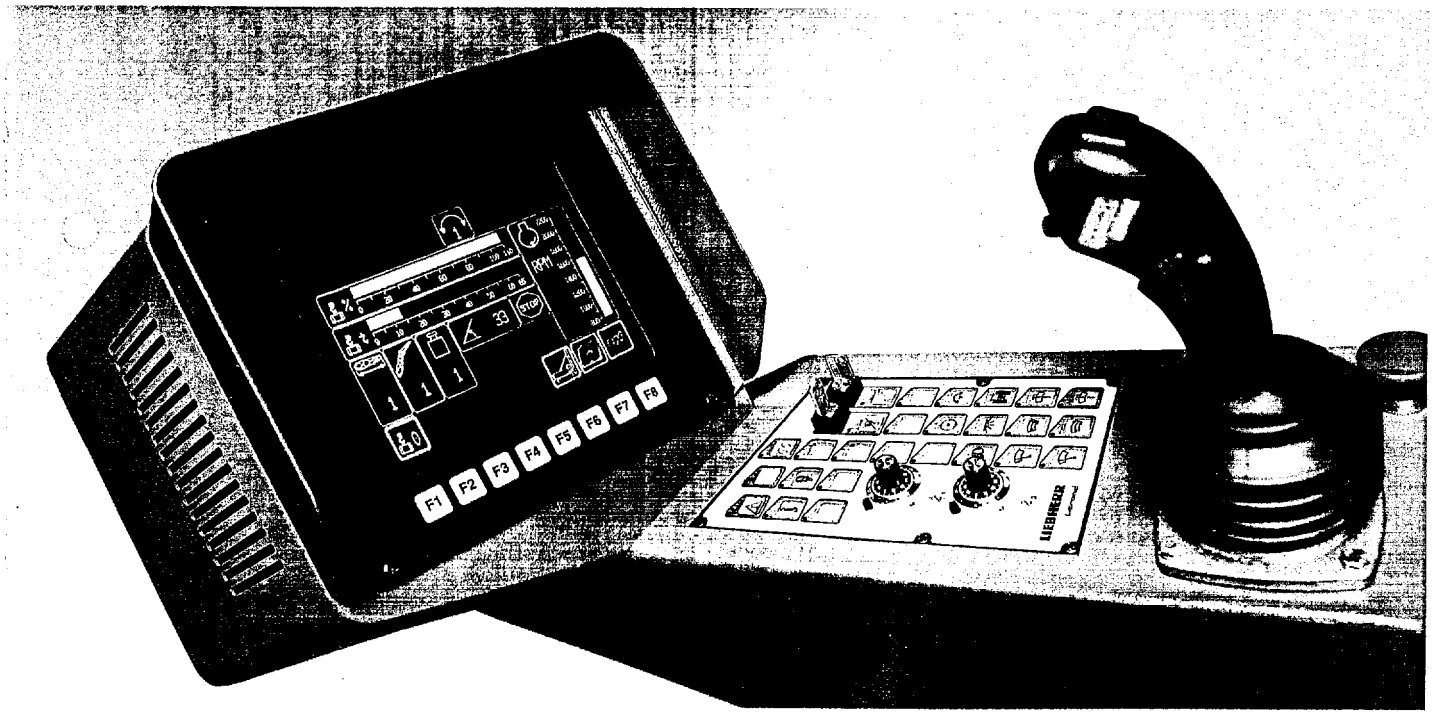


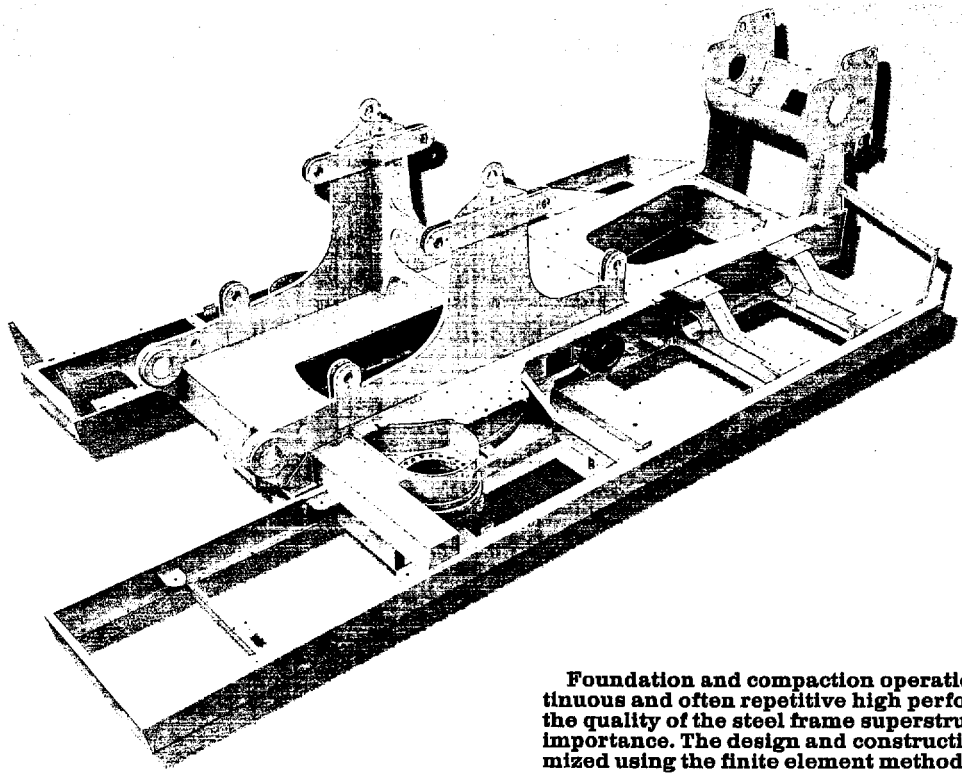
The Winches – successful and innovative engine



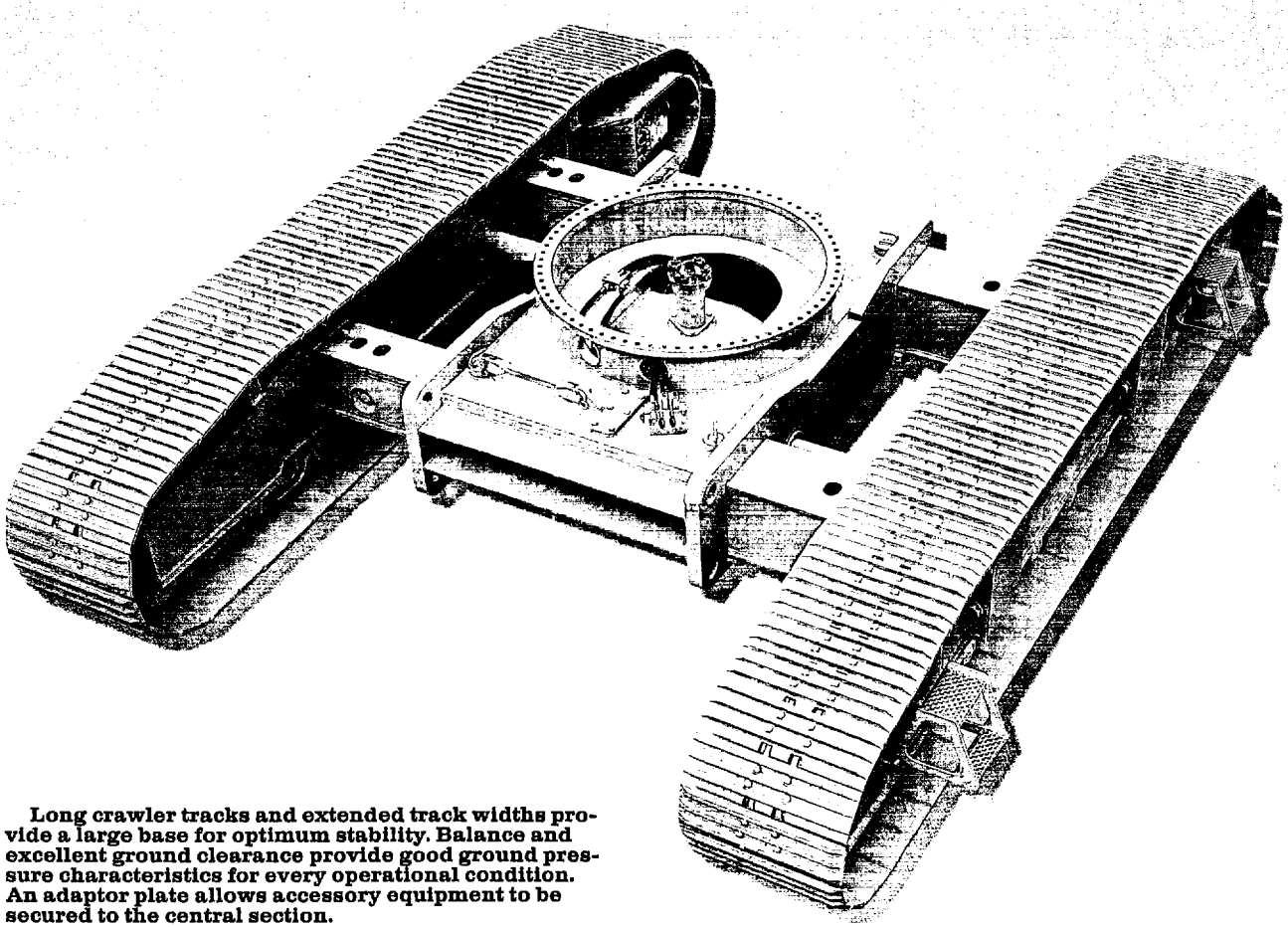
A single and clearly visible high contrast display unit provides the operator with all the necessary information. This includes the crane's operating condition and preselect options for special programmes, which can be selected on eight different keys.

The integrated programme keys on the monitor allow quick menu changes, with the different displays, showing operating conditions, very easy to access. As soon as the engine is started, the control system provides a complete status check and informs the operator of the machine's condition via the standard display monitor.





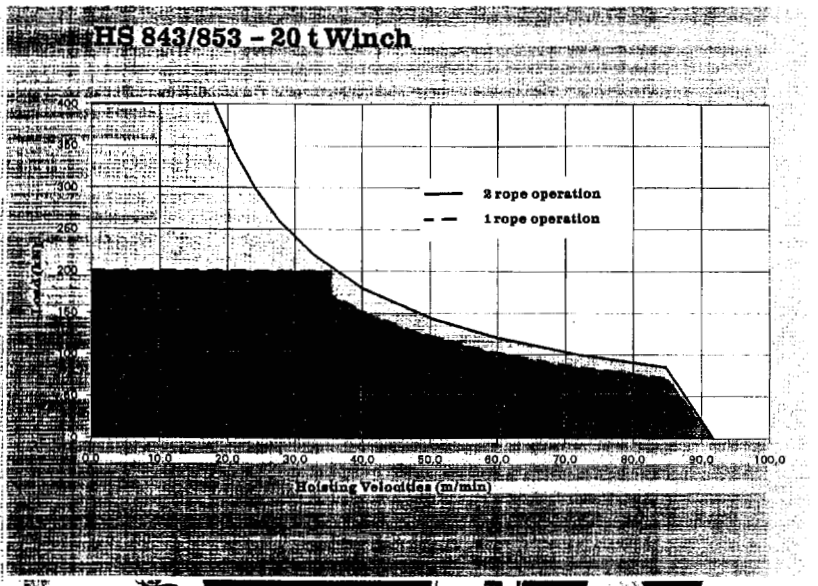
Foundation and compaction operations require continuous and often repetitive high performance. Here, the quality of the steel frame superstructure is of vital importance. The design and construction has been optimized using the finite element method.



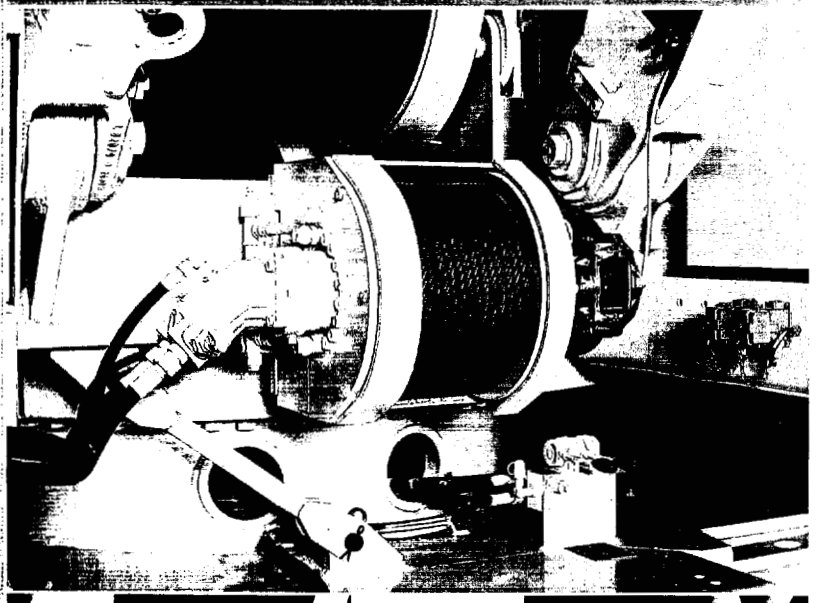
Long crawler tracks and extended track widths provide a large base for optimum stability. Balance and excellent ground clearance provide good ground pressure characteristics for every operational condition. An adaptor plate allows accessory equipment to be secured to the central section.

The Steel Frame – the guarantee for a long working

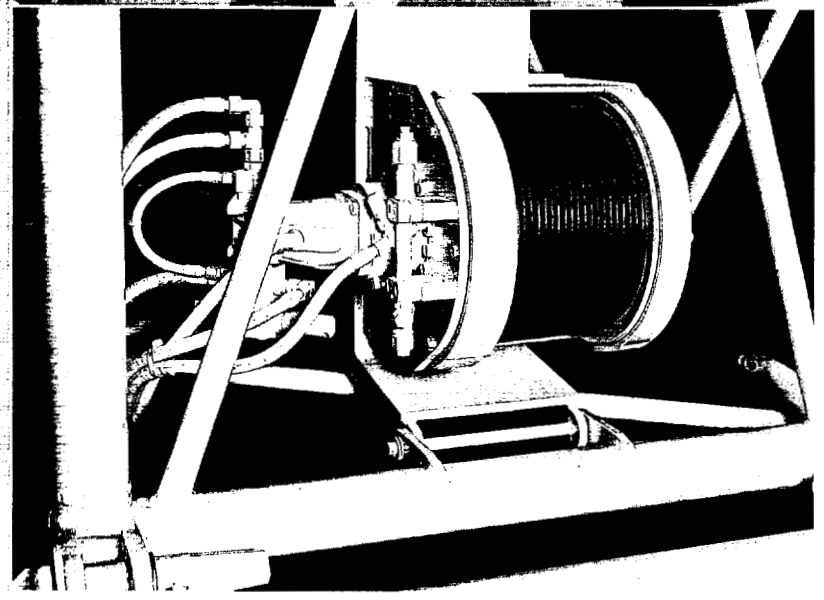
The high pressure controlled, variable flow, hydraulic motors – providing automatic speed according to line pull – allow total use of engine power even when working with intermediate load. The "Interlock" control system for dragline operations ensures powered lowering with drag winch, while lifting of the bucket with the hoist winch reduces fuel consumption considerably.



The tagline winch is used as a constant tension or free-fall winch. Clamshell or demolition ball operations can be carried out with optimum performance, safety and efficiency using the tagline winch.

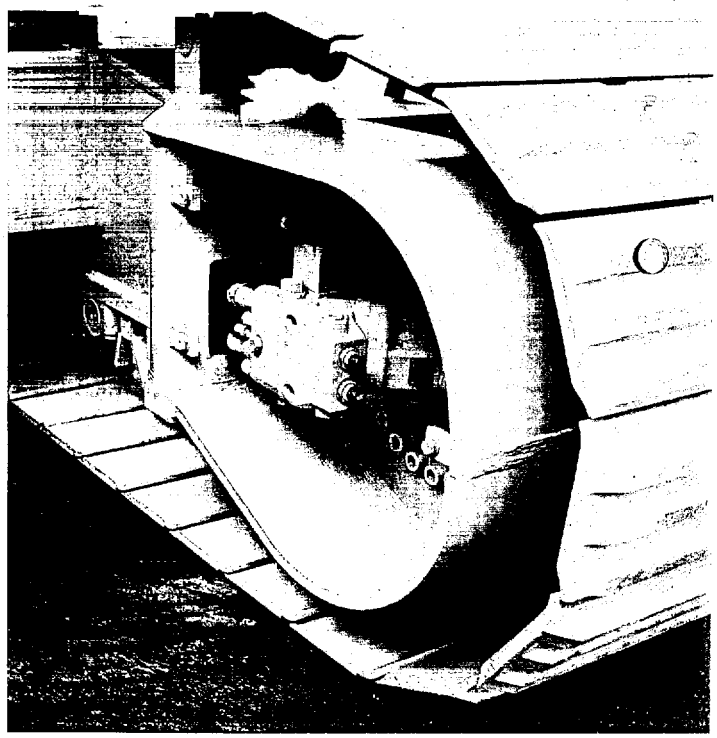


The man-basket winch is used for above and below ground level operations. In its design and construction, special regulations had to be taken into account, resulting in a four-fold safety factor, installed slack rope protection and a hand crank for emergency operation. This man-basket winch is designed and built for the highest operational safety.



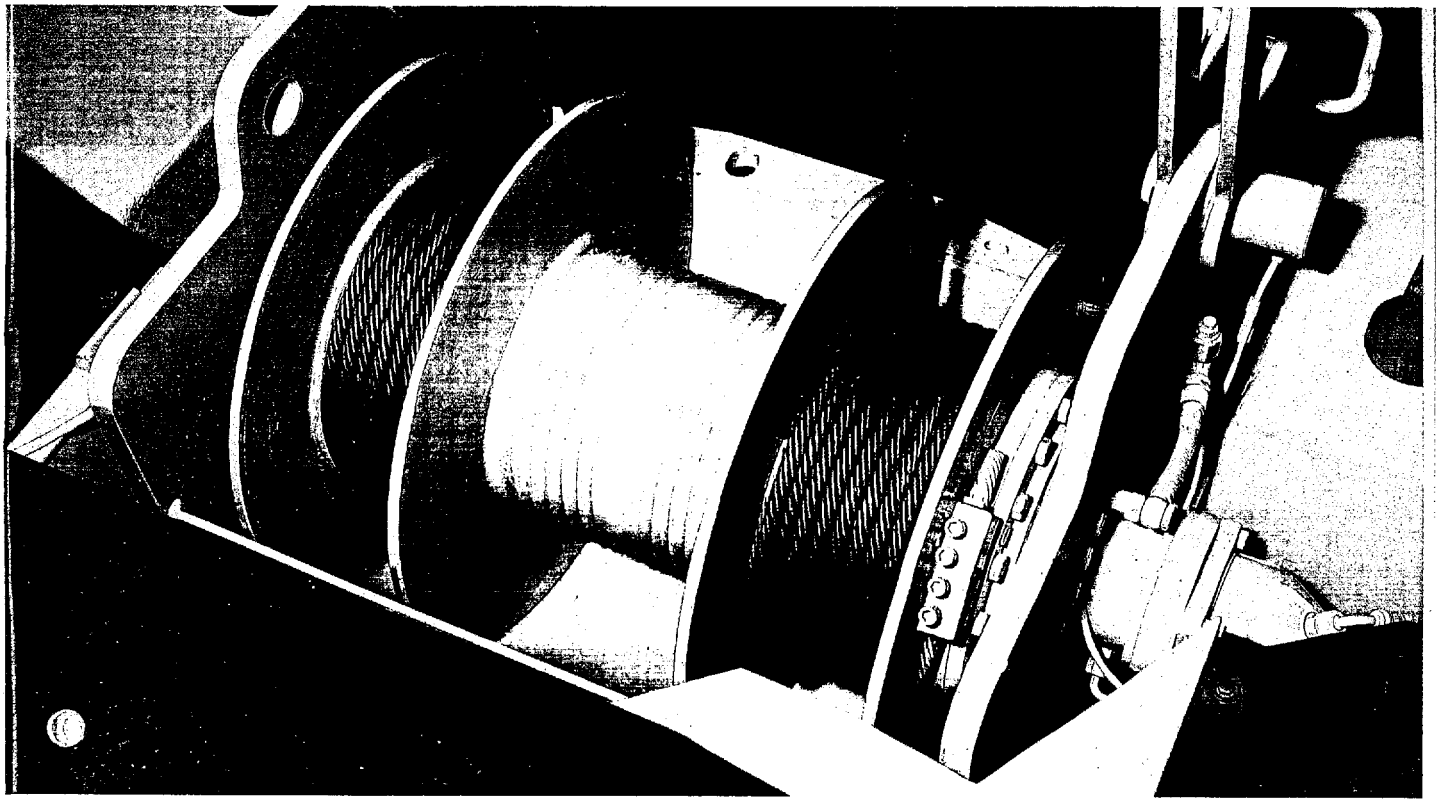
ering.

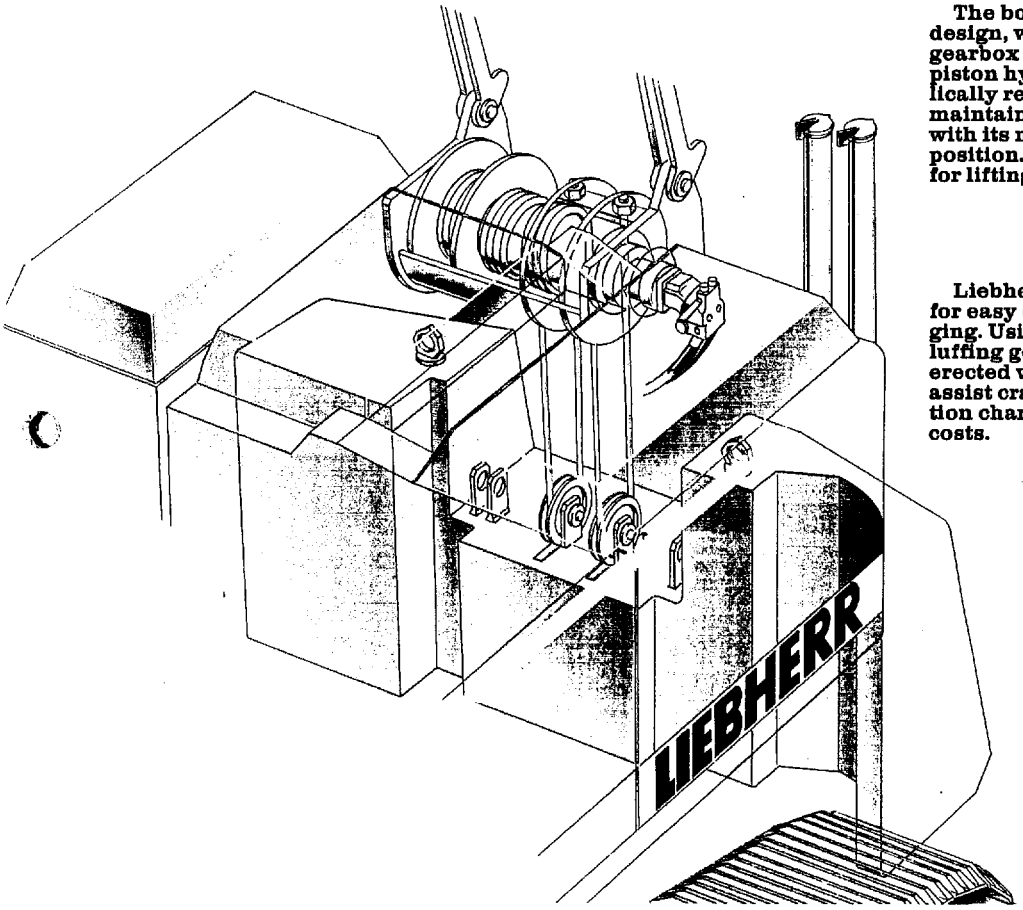
The crawler undercarriage is equipped with a new telescoping system which allows rapid change from transport to operating width. A further innovation, using a specially designed wedge-shaped configuration secures the crawler assemblies to the central fixed unit.



Hydraulic and drive conduits are installed within the crawler assemblies to provide complete protection from external damage.

Profitable even for short-term assignements.

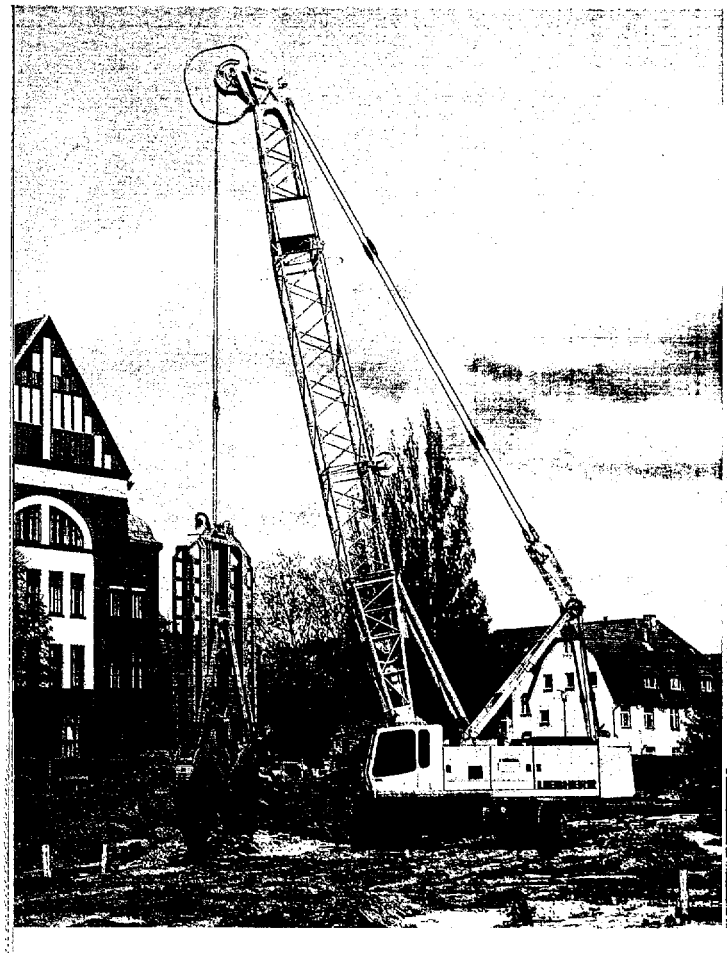


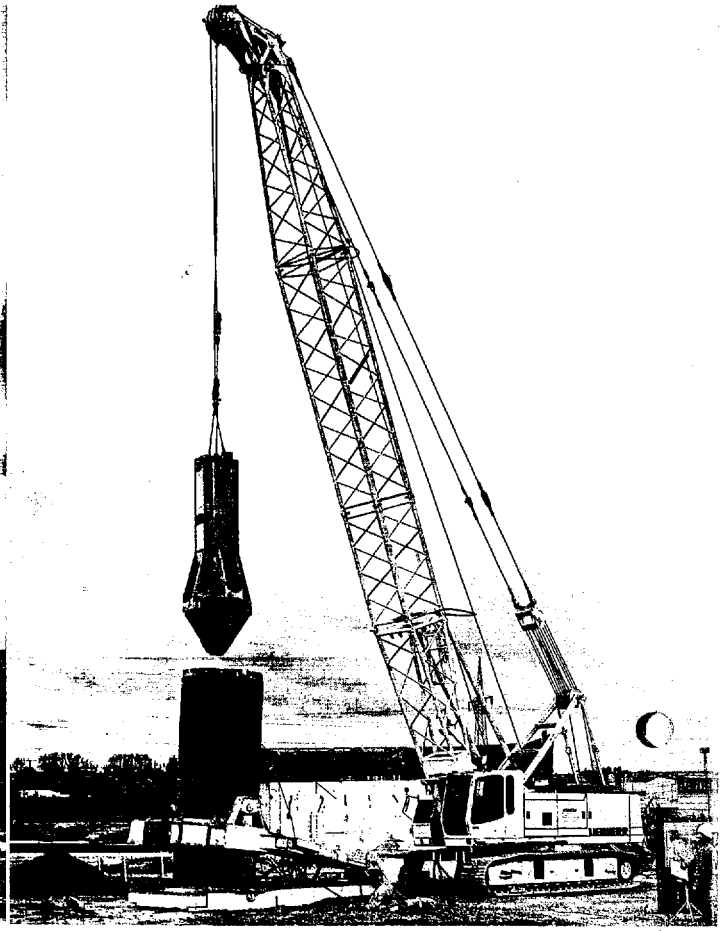


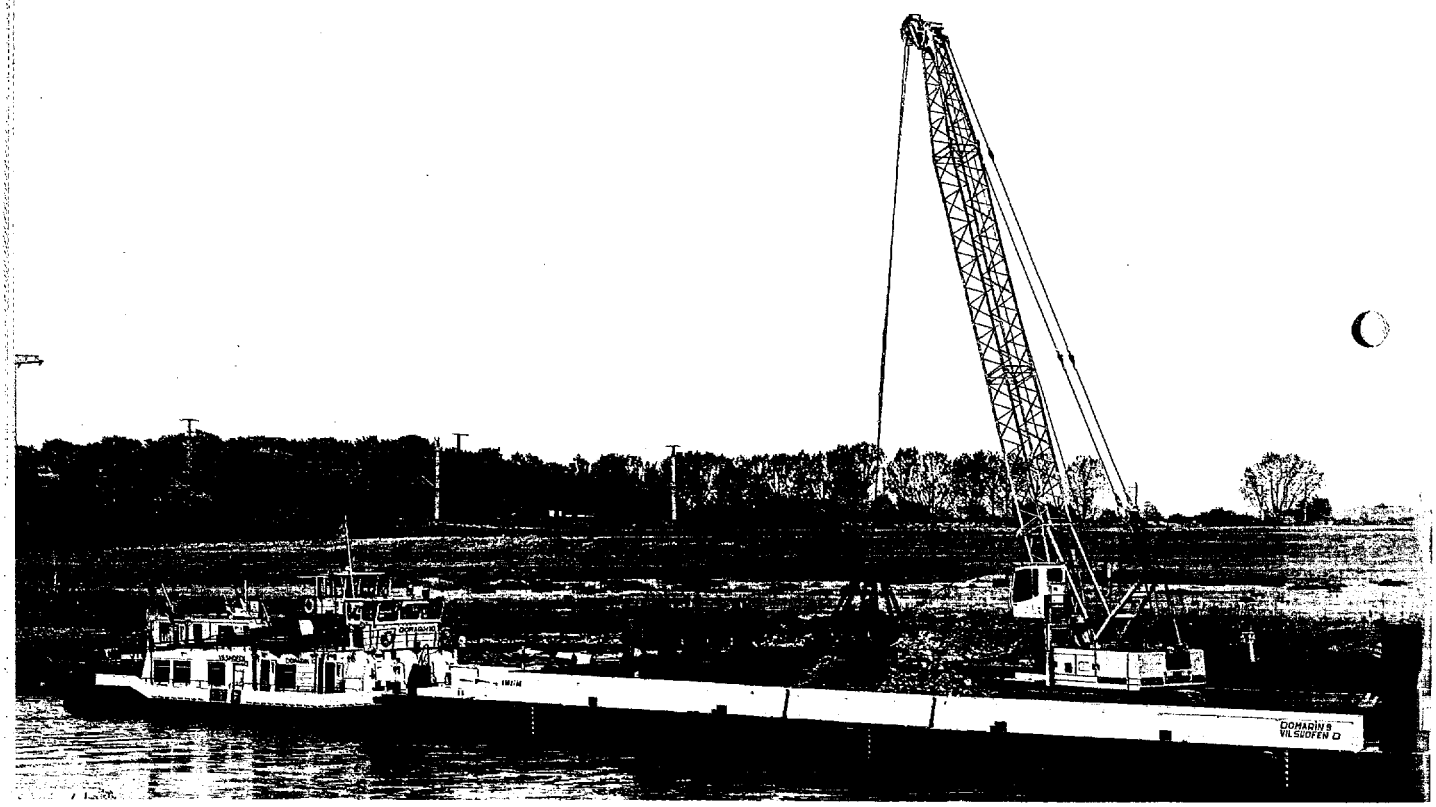
The boom hoist is a twin drum design, with an integral planetary gearbox which is driven via an axial piston hydraulic motor. The hydraulically released multi-disc brake maintains correct boom positioning with its nominal load in the right position. The boom hoist is also used for lifting the counterweight.

Liebherr crawler cranes are built for easy on-site assembly and rigging. Using its own boom foot and luffing gear, the machine can be self-erected without the need for an assist crane. This enables quick location changes and reduces rigging costs.

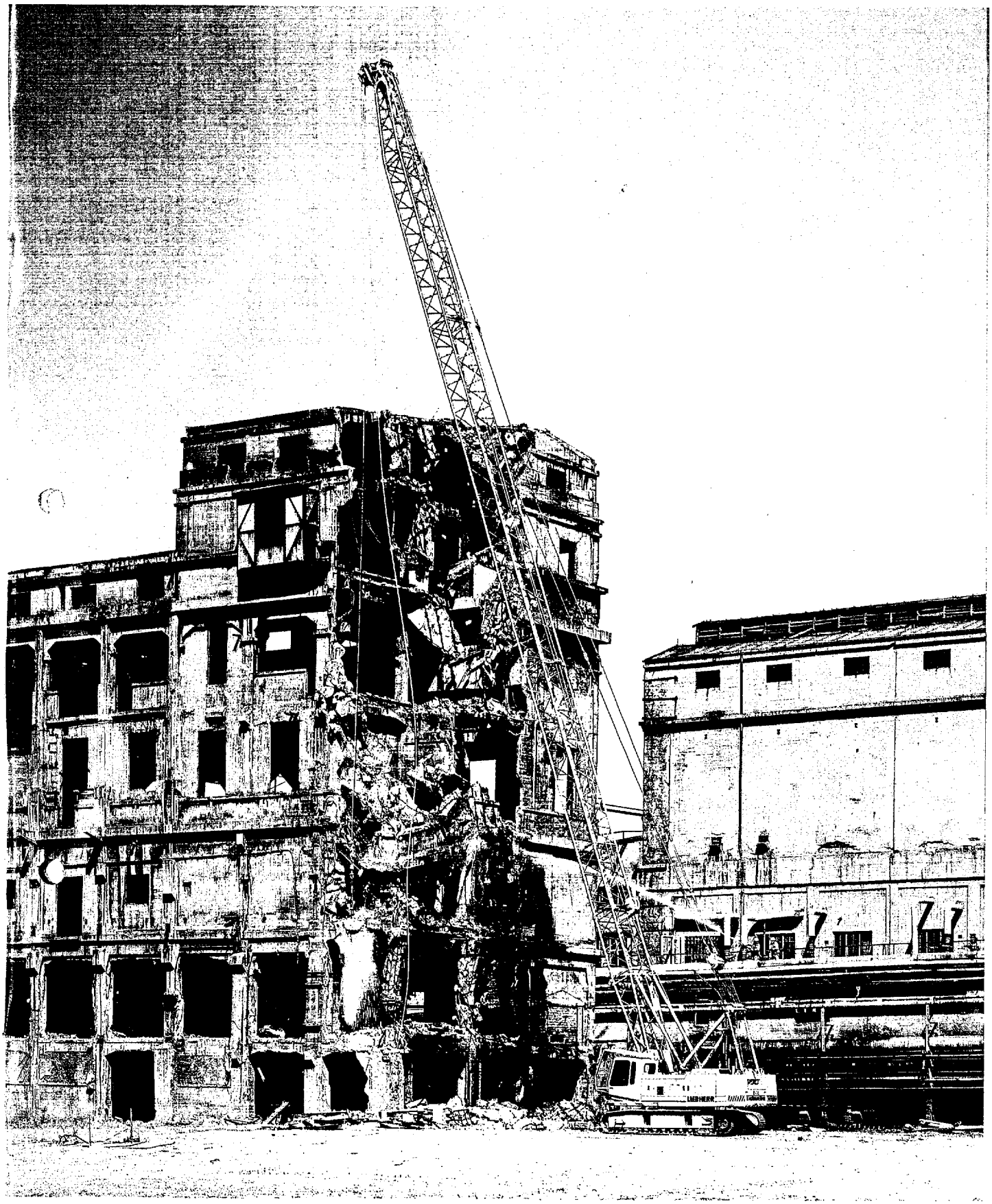
New technology for increased flexibility.

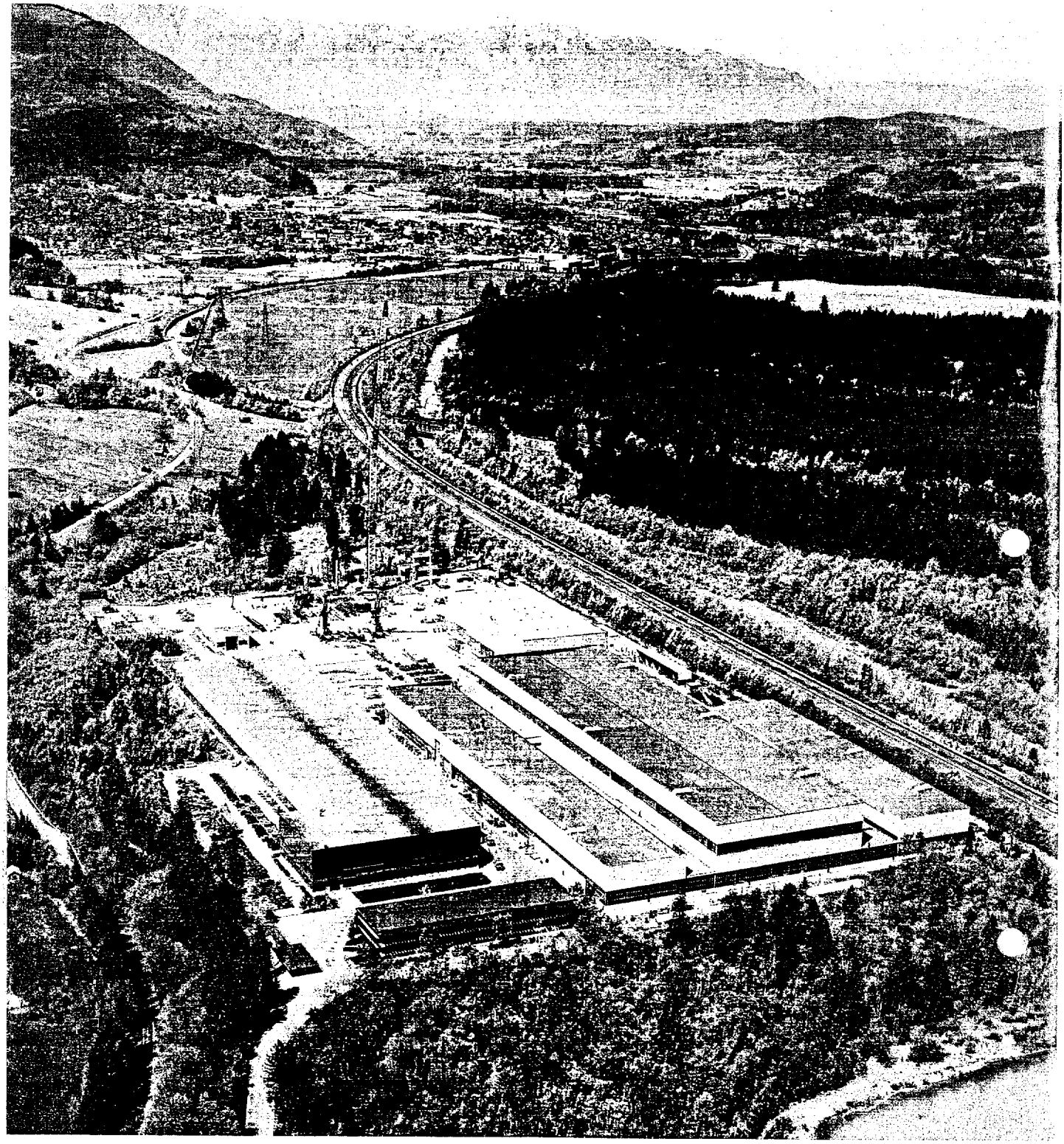






Versatility through flexibility.


LIEBHERR



The Nenzing factory occupies a site of some 170,000 m² with more than 63,000 m² of production facilities. Here, Liebherr manufactures ship and offshore cranes, mobile harbour cranes and hydraulic crawler cranes. The quality assurance system is accredited to ISO 9001. The company's plan, originally formulated in 1987, was to make a fourth production line devoted to crawler cranes. This has now been successfully achieved.

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Please contact
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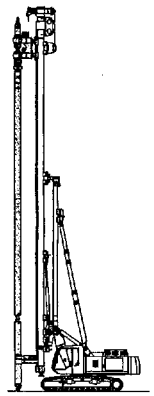
A-6710 Nenzing
☎ (05525) 606-0, Fax (05525) 606-20, Tx 052141

Piling and drilling rigs LRB Series

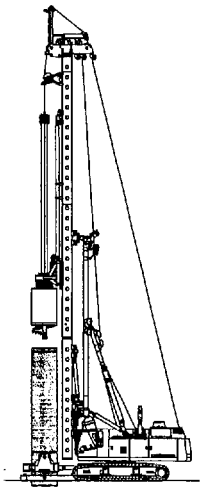
Foundation machines

Litronic®

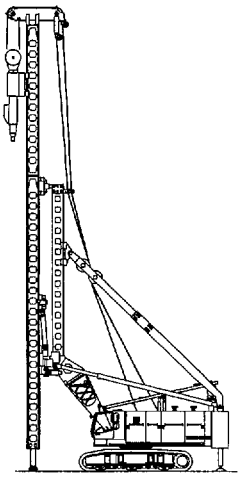
Type LRB 155



Type LRB 250



Type LRB 400



	Type LRB 155	Type LRB 250	Type LRB 400
Operating weight	65 t	80 t	140 t
Leader length	18 / 21 / 24 m	24 / 27 / 30 m	30 / 36 / 42 m
Max. torque	180 kNm	250 kNm	400 kNm
Max. pull/push	30 t	40 t	60 t
Engine	387 kW	400/605 kW	400/605 kW

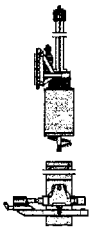
Vibrator

Hydraulic hammer

VdW drilling

Continuous flight auger drilling

Kelly drilling



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