

EN

HS 8100.1

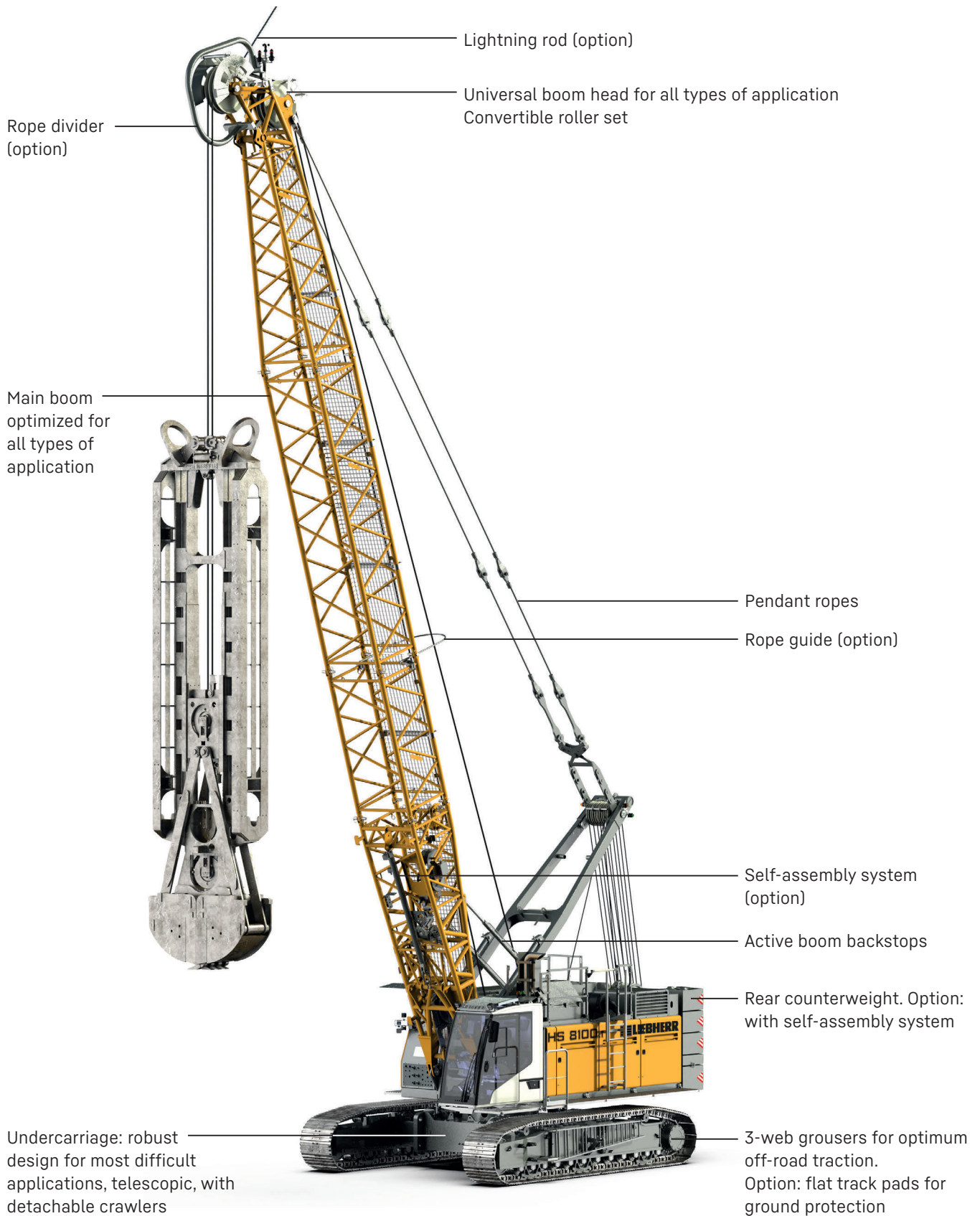
HS 8004.02.03
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LIEBHERR

Construction machines



Concept and characteristics





The newly developed cabin combines operator comfort with easy handling.

Air conditioning combined with an air-suspended seat offers an ideal workplace for the operator.

- Completely new cabin design focusing on ergonomics and operating comfort
- Improved soundproofing
- Orthopaedic seat, heatable, coolable and ventilated
- Individually adjustable monitors
- Integrated cool box for storage of provisions
- Charger for mobile devices
- Front window made of safety glass
- Heated outside mirror
- Option: Piling control incl. cabin protection and armoured glass



Example



Gear oil level warning

The new warning allows the operator to check the gear oil levels of both main winches, the swing drive and the luffing winch. This facilitates daily maintenance of the machine.

Gear oil level warning of winch 1 lights up green: Gear oil level of winch 1 is sufficient.



Gear oil level warning of winch 1 lights up yellow after ten seconds: fill gear oil for winch 1.



Ground Pressure Visualization



Technical description



Operating weight

Composition of operating weight	The operating weight includes the basic machine with HD undercarriage, 2 main winches 275 kN including wire ropes (90 m) and 11 m main boom, consisting of A-frame, boom foot (5.5 m) and boom head (5.5 m), 26.3 t rear counterweight, 800 mm 3-web grousers and 60 t hook block
Total weight	approx. 89 t

Ground pressure

Ground pressure	1.04 kg/cm ²
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Equipment

Main boom (1311.24)	max. 59 m
Characteristics	modular designed equipment for lifting, dragline or clamshell operation for dragline operation, a rotating fairlead is fitted into the boom foot minimized rope angle to drum resulting in lower rope wear

Diesel engine

Power rating according to ISO 9249	390 kW (523 hp) at 1700 rpm
Engine type	Liebherr D 946 A7-05
Fuel tank capacity	790 l with continuous level indicator and reserve warning
AdBlue tank capacity	78 l with continuous level indicator and reserve warning
Exhaust certification	97/68 EC Stage IV; EPA/CARB Tier 4f 97/68 EC Stage V; EPA/CARB Tier 4f ECE-R.96 Power Band H non-certified emission standard

Noise measurement data and vibration

Noise emission	according to 2000/14/EC directive	
Emission sound pressure level L_{PA}	74 dB(A)	(in the cabin)
Guaranteed sound power level L_{WA}	107 dB(A)	(of the machine)
Vibration transmitted to the machine operator	< 2.5 m/s ²	(to the hand-arm system)
	< 0.5 m/s ²	(to the whole body)

Hydraulic system

Hydraulic pumps	Variable pumps in closed and open circuits supplying oil only when needed (flow control on demand)
Hydraulic oil tank capacity	910 l
Max. working pressure	400 bar
Max. power at the connection plate	270 kW (2x 288 l/min) for external appliances
Hydraulic oil	electronic monitoring of all filters use of synthetic environmentally friendly oil possible
Hydraulic retrofit kits for attachments	ready-made customized hydraulic retrofit kits are available e.g. powering casing oscillators, vibrators, hydraulic grabs, fixed leaders

Hoisting gear

Main winches	pressure controlled, variable flow hydraulic motors for the drag and hoist winches, full utilisation of engine power as the winch speed is automatically adjusted to suit the respective line pull Free fall: clutch and braking functions are provided by the service brake (low wear and maintenance-free multi-disc brake in compact design)
Winch options	
Line pull in the 1 st layer	275 kN
Rope diameter	34 mm
Drum diameter	750 mm
Rope speed	0-96 m/min
Rope capacity in the 1 st layer	38.8 m*
Rope capacity in the 3 rd layer	141.6 m* *effective length
Options	
Auxiliary winch	70 kN in boom foot
Tagline winch	30 kN with free fall

Boom winch

Line pull	max. 105 kN
Rope diameter	20 mm
Boom luffing	15-86° in 44 s

Crawlers

Drive system	with fixed axial piston hydraulic motors
Crawler side frames	maintenance-free, with hydraulic chain tensioning device
Brake	hydraulically released, spring-loaded multi-disc holding brake
Drive speed	0-1.28 km/h
Grousers	3-web grousers, width 800 mm
Width of undercarriage	automatic track width adjustment from transport width to operating width via hydraulic cylinders
Options	self-assembly system, jack-up system 3-web grousers, width 900 mm flat track pads, width 900 mm 3-web grousers, width 1000 mm

Swing gear

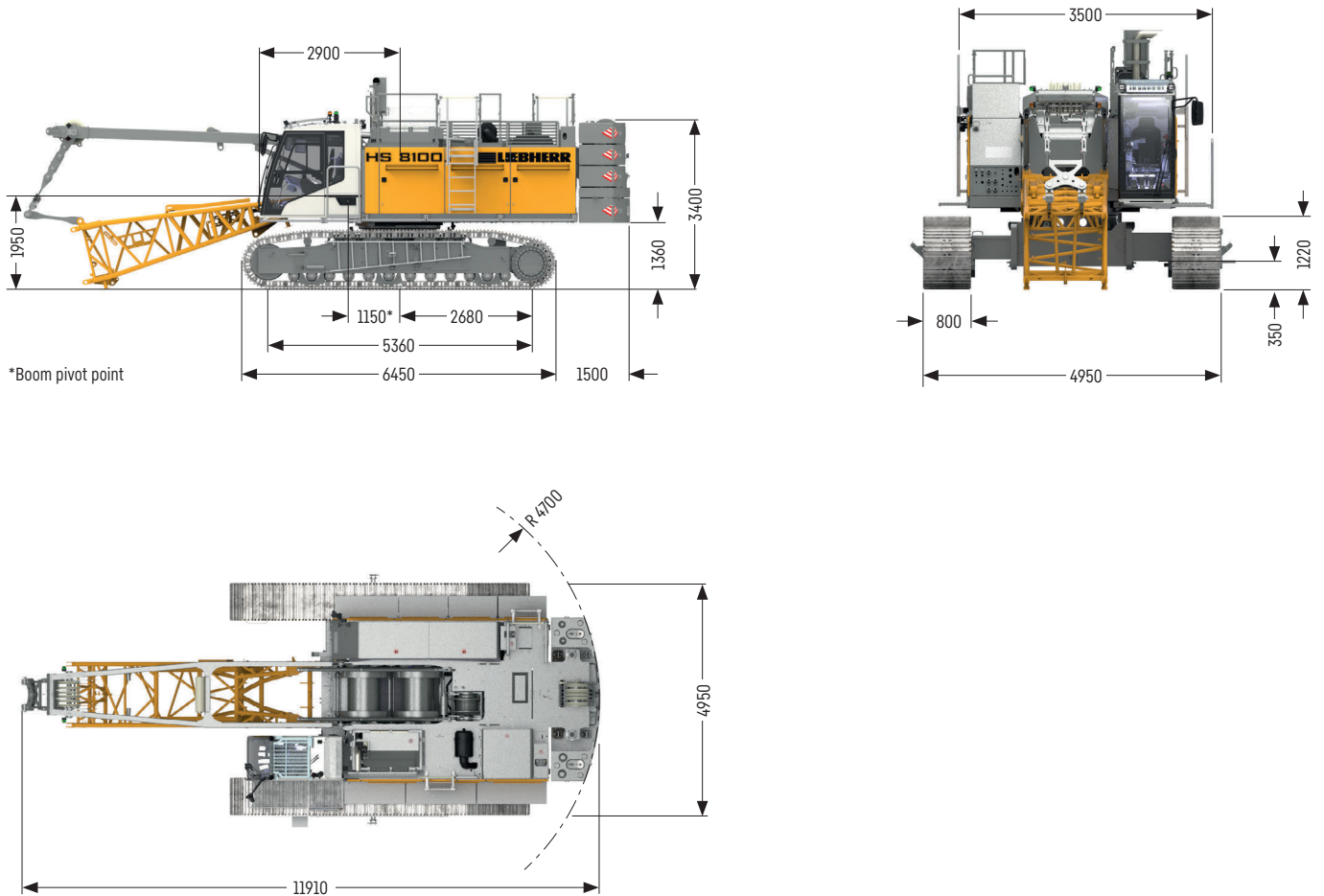
Drive system	with fixed axial piston hydraulic motors, planetary gearbox, pinion
Swing ring	roller bearing with external teeth
Brake	hydraulically released, spring-loaded multi-disc holding brake
Swing speed	0-4.6 rpm continuously variable, selector for 3 speed ranges to increase swing precision
Lubrication system	automatic central lubrication system reduces maintenance requirements and increases service life
Option	Display of swing angle second swing drive

Control

Control	includes all control and monitoring functions, designed to withstand extreme environmental conditions and heavy duty construction tasks
Display	high resolution monitor in the operator's cabin, clear display of complete machine operating data, warnings and failure indications in the required language
Operation	several movements can be performed simultaneously thanks to electro-hydraulic proportional control, all categories of loads can be positioned with utmost precision
Options	PDE*: process data recording LiTU: Liebherr Telematics Unit

Dimensions

Basic machine with undercarriage



Remarks

- Liebherr cable excavator HS 8004.02.03
- Designed according to EN 474-1 and EN 474-12.
- Machine standing on firm, horizontal ground.
- The weight of the lifting device (pulley block, hoist ropes, shackles etc.) must be deducted from the load capacity.
- Additional equipment on boom (e.g. walkways) must be deducted from the lifting capacity.
- For max. wind speed please refer to lift chart in operator's cab or manual.
- Working radii are measured from centre of swing and under load.
- The lifting capacities are valid for 360 degrees of swing.
- The last digits of the given dimensions are rounded to 0 and 5 and may differ from the actual dimensions.
- Weights may vary depending on the delivered configuration of the machine filling level of the tanks as well as generally valid tolerances.
- The figures in this brochure may include options which are not within the standard scope of supply of the machine.

Grab versions

Dredging assistant (option)



Further information on material handling



Casing oscillator

Max. drilling diameter mm 2000

HS 8100.1 on pedestal

Power rating of electric motor	kW 295/345 (50/60 Hz)
Power rating of diesel engine	kW 390
Free-fall winches	t 2x 20 or 2x 27.5
Option:	
Cabin elevation, fixed	m 2.3
Cabin elevation, variable, hydraulic	m 2.8

Capacities in grab operation

Capacities in [t] with 26.3t counterweight

	Boom length [m]							
	11	14	17	20	23	26	29	32
5	41.6	41.6	41.6	41.6	41.6	41.6		
6	41.6	41.6	41.6	41.6	41.6	41.6	38.1	33.6
7	39.6	39.7	39.7	39.8	39.7	39.7	38.1	33.6
8	32.5	32.6	32.6	32.6	32.6	32.5	32.5	32.4
9	27.4	27.5	27.5	27.5	27.5	27.4	27.4	27.3
10	23.6	23.7	23.8	23.7	23.7	23.6	23.6	23.5
11	20.6	20.8	20.8	20.8	20.7	20.7	20.6	20.5
12		18.4	18.5	18.5	18.4	18.3	18.3	18.2
13		16.5	16.6	16.5	16.5	16.4	16.3	16.3
14		14.9	15.0	14.9	14.9	14.8	14.7	14.7
15			13.6	13.6	13.6	13.5	13.4	13.3
16			12.5	12.4	12.4	12.3	12.2	12.1
17			11.4	11.4	11.4	11.3	11.2	11.1
18				10.6	10.5	10.4	10.4	10.3
19				9.8	9.7	9.7	9.6	9.5
20				9.1	9.1	9.0	8.9	8.8
21					8.4	8.4	8.3	8.2
22					7.9	7.8	7.7	7.6
23						7.3	7.2	7.1
24						6.8	6.8	6.7
25						6.4	6.4	6.3
26							6.0	5.9
27							5.6	5.5
28							5.3	5.2
29								4.9
30								4.6
31								4.3

TLT 13159996 M250588. Stability calculated according to EN 474-12. Max. capacities do not exceed 66% of tipping load.

Above capacities are for reference only and are not programmed in the LMI system.

When working with a mechanical 2-rope grab the total load to be lifted is limited by the line pull of one winch.

Max. main boom 32m

Max. lifting capacity with mechanical grab is 27.5t. For higher lifting capacities a hydraulic grab is required.

Slurry wall grab

Maximum capacity in duty cycle operation with standard ropes

Line pull (1 st layer)	kN	275
Rope diameter	mm	34
Minimum breaking load	kN	1046
Line pull - 1-rope duty cycle operation	kN	275
Line pull - 2-rope duty cycle operation ¹⁾	kN	417

1) Lifting a load exceeding the line pull of one winch is only allowed if it can be ensured that each individual winch is not overloaded. When working with a mechanical 2-rope grab the total load to be lifted is limited by the line pull of one winch.

Rigging and ropes are part of the load.

Capacities in slurry wall operation are for reference only and are not programmed in the LML system.

All loads and counterweight configurations are max. values and must not be exceeded. Weight of additional equipment on boom (e.g. walkways, hose drums etc.) must be deducted to get the net capacity.



Load chart for slurry wall operation

Capacities in [t] with 20.3t counterweight

* Radius [m]	Boom length [m]																							
	11			14			17			20			23			26			29			32		
	26.3	23.3	20.3	26.3	23.3	20.3	26.3	23.3	20.3	26.3	23.3	20.3	26.3	23.3	20.3	26.3	23.2	20.3	26.3	23.3	20.3	26.3	23.3	20.3
4.2																			38.1	38.1	38.1			
5		42.4	42.4		42.4	42.4		42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	38.1	38.1	38.1	33.6	33.6	33.6
6		42.4	39.7	42.4	42.4	39.8	42.4	42.4	39.9	42.3	39.9	42.4	42.4	39.9	42.4	42.4	39.9	38.1	38.1	38.1	33.6	33.6	33.6	
7	35.8	33.5	31.2	35.9	33.6	31.3	35.9	33.6	31.3	35.9	33.6	31.3	35.9	33.6	31.3	35.9	33.6	31.3	35.8	33.5	31.2	33.6	33.5	31.2
8	29.4	27.4	25.5	29.4	27.5	25.6	29.5	27.6	25.6	29.4	27.5	25.6	29.4	27.5	25.6	29.4	27.5	25.5	29.3	27.4	25.5	29.3	27.4	25.4
9	24.8	23.2	21.5	24.9	23.2	21.6	24.9	23.3	21.6	24.9	23.2	21.6	24.8	23.2	21.6	24.8	23.1	21.5	24.7	23.1	21.5	24.7	23.0	21.4
10	21.4	19.9	18.5	21.5	20.0	18.6	21.5	20.1	18.6	21.4	20.0	18.6	21.4	20.0	18.6	21.3	19.9	18.5	21.3	19.9	18.4	21.2	19.8	18.4
12				16.7	15.6	14.4	16.7	15.6	14.5	16.7	15.6	14.4	16.6	15.5	14.4	16.6	15.4	14.3	16.5	15.4	14.2	16.4	15.3	14.1
14				13.5	12.6	11.6	13.6	12.6	11.7	13.5	12.6	11.6	13.5	12.5	11.6	13.4	12.5	11.5	13.3	12.4	11.4	13.2	12.3	11.4
16							11.3	10.5	9.7	11.3	10.5	9.6	11.2	10.4	9.6	11.1	10.3	9.5	11.1	10.3	9.5	11.0	10.2	9.4
18										9.6	8.9	8.1	9.5	8.8	8.1	9.5	8.7	8.0	9.4	8.7	8.0	9.3	8.6	7.9
20										8.2	7.6	7.0	8.2	7.6	7.0	8.1	7.5	6.9	8.1	7.4	6.8	8.0	7.3	6.7
22													7.1	6.6	6.0	7.1	6.5	5.9	7.0	6.4	5.9	6.9	6.3	5.8
24																6.2	5.7	5.2	6.1	5.6	5.1	6.0	5.5	5.0
26																		5.4	4.9	4.5	5.3	4.9	4.4	
28																			4.4	4.0	3.6	4.3	3.9	3.5
30																						3.3	2.9	2.6

* Rear counterweight in [t]
Preliminary. Max. main boom 32m

Max. lifting capacity with mechanical grab is 27.5t. For higher lifting capacities a hydraulic grab is required. Stability calculated according to EN 16228-5. Machine standing on firm, horizontal ground.



For further information please refer to the HSG 5-18 datasheet



Short boom

Rope diameter	mm	34
Radius	mm	6100 at max. boom angle 28.3° 5100 at min. boom angle 51.4°
Machine height during operation (max.)	mm	8434 at max. boom angle 28.3°
(min.)		5900 at min. boom angle 51.4°
Effective rope length	m	38.8
Rear counterweight	t	23.3
Capacity in duty cycle operation	t	37.9 at radius of 5 m 33.6 at radius of 6 m

Stability calculated according to EN 16228-5.
Machine standing on firm, horizontal ground.

Dynamic soil compaction



Capacities in [t] with 26.3t counterweight

Radius [m]	Boom length [m]				
	20	23	26	29	32
8	24.5	24.5	24.0	23.7	22.4
9	20.7	20.7	20.7	20.5	19.7
10		17.9	17.8	17.7	17.2

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

All loads given are max. values and must not be exceeded. They are only permitted in two-rope automatic operation and are valid for work on a surface with max. inclination of 1%. Lifting heights must not exceed 25 m.

Option: Piling control incl. cabin protection and armoured glass

Max. main boom 32 m

Special applications

- Vibro-flot (deep vibrator)
- Hammer
- Vibrator (free-hanging)
- Shaft excavation
- Rock handling
- Magnet system
- Demolition (longer main booms available on request)

Capacities in [t] with 26.3t counterweight

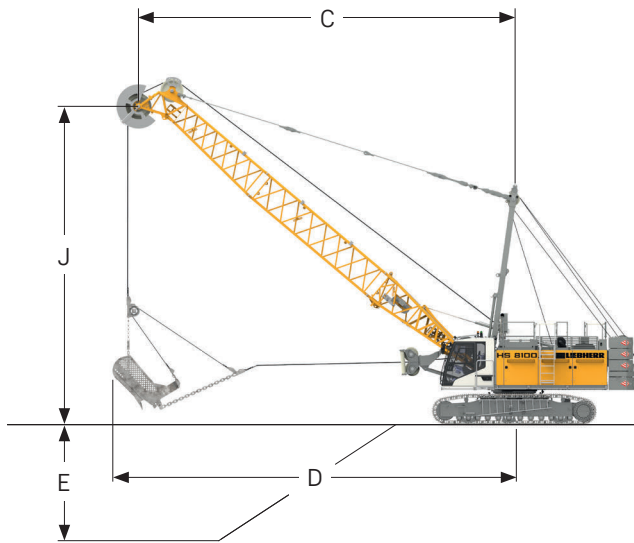
	Boom length [m]							
	11	14	17	20	23	26	29	32
5	41.6	41.6	41.6	41.6	41.6	41.6		
6	41.6	41.6	41.6	41.6	41.6	41.6	38.1	33.6
7	41.6	41.6	41.6	41.6	41.6	40.8	38.1	33.6
8	36.9	37.0	37.0	37.0	36.3	35.1	34.0	32.9
9	31.1	31.2	31.3	31.3	31.2	30.8	29.8	28.9
10	26.8	26.9	27.0	27.0	26.9	26.9	26.5	25.7
11	23.5	23.6	23.7	23.6	23.6	23.5	23.4	22.9
12		20.9	21.0	21.0	20.9	20.8	20.8	20.0
13		18.8	18.8	18.8	18.7	18.7	18.4	17.7
14		16.9	17.0	17.0	16.9	16.8	16.3	15.7
15			15.5	15.5	15.4	15.2	14.6	13.8
16			14.2	14.1	14.1	13.6	13.0	12.5
17			13.0	13.0	12.8	12.3	11.9	11.5
18				12.0	11.7	11.4	11.0	10.7
19				11.1	11.0	10.7	10.4	10.0
20				10.3	10.3	10.0	9.7	9.4
21					9.6	9.4	9.2	8.9
22					8.9	8.9	8.6	8.3
23						8.3	8.1	7.8
24						7.8	7.6	7.3
25						7.3	7.2	6.9
26							6.8	6.5
27							6.3	6.1
28							5.9	5.7
29								5.4
30								5.1
31								4.8

Preliminary. Stability calculated according to EN 474-12. Max. capacities do not exceed 75% of tipping load.

Above capacities are for reference only and are not programmed in the LMI system.

Max. main boom 32m

Dragline equipment



Digging diagram

C = Radius / dumping radius

D = Max. digging radius = approx. $C + 1/3$ to $1/2 J$

E* = Digging depth = approx. 40– 50% of C

J = Height to centre rope pulley boom head

*The digging depth, casting distance and digging reach may vary considerably depending on digging conditions, design of bucket and operator's skill. Maximum digging depths are attainable under ideal conditions and cannot be guaranteed.

Capacities in dragline operation

Capacities in [t] with 26.3t counterweight

alpha [°]	Boom length [m]								
	14			17			20		
	C	J	Rear counterweight	C	J	Rear counterweight	C	J	Rear counterweight
	[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]
55	10.1	13.0	26.4	11.8	15.5	21.3	13.6	18.0	17.7
50	11.1	12.3	23.4	13.0	14.6	18.8	14.9	16.9	15.5
45	11.9	11.4	21.1	14.0	13.5	16.9	16.2	15.6	13.9
40	12.7	10.4	19.3	15.0	12.4	15.4	17.3	14.3	12.6
35	13.4	9.4	17.9	15.9	11.2	14.3	18.3	12.9	11.7
30	14.0	8.4	16.9	16.6	9.9	13.4	19.2	11.4	10.9
25	14.5	7.3	16.0	17.2	8.5	12.7	20.0	9.8	10.3

Preliminary

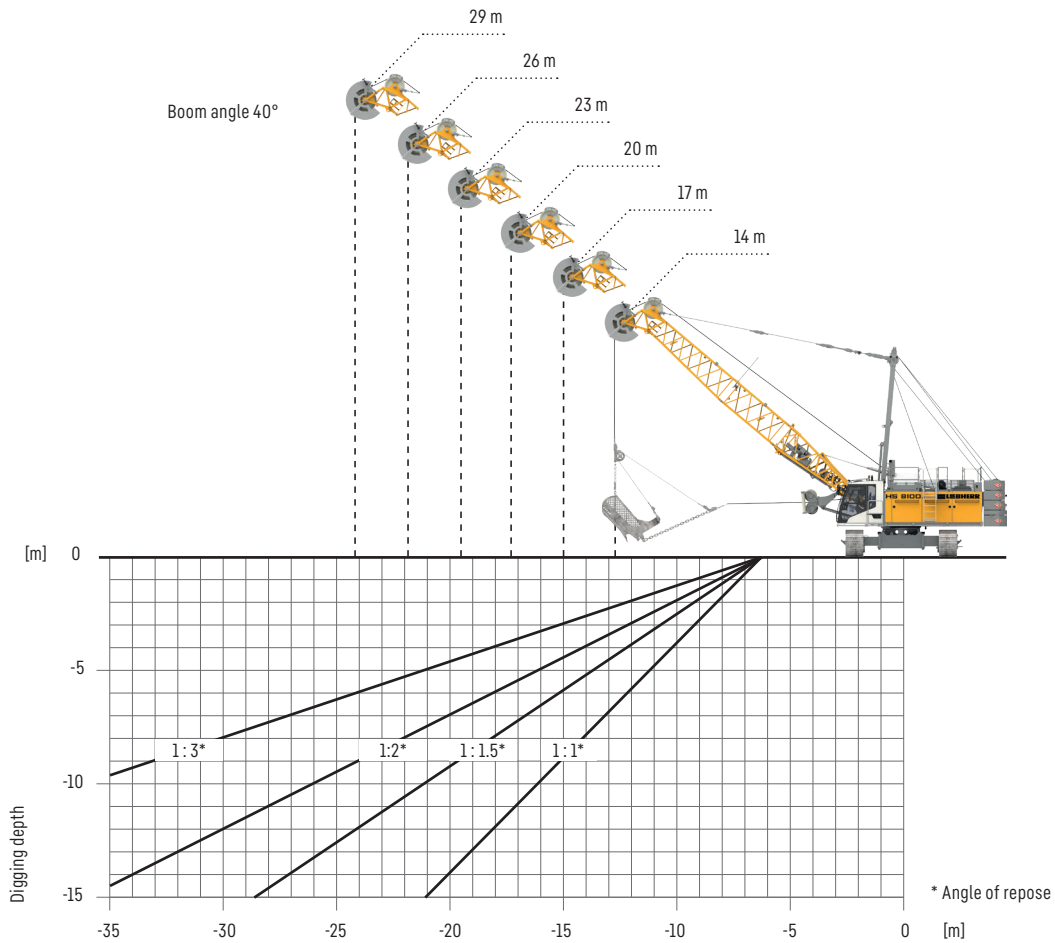
Capacities in [t] with 26.3t counterweight

alpha [°]	Boom length [m]								
	23			26			29		
	C	J	Rear counterweight	C	J	Rear counterweight	C	J	Rear counterweight
	[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]
55	15.3	20.4	14.9	17.0	22.9	12.3	18.7	25.3	10.6
50	16.8	19.1	13.0	18.8	21.4	10.9	20.7	23.7	9.4
45	18.3	17.8	11.5	20.4	19.9	9.8	22.5	22.0	8.0
40	19.6	16.2	10.6	21.9	18.2	8.6	24.2	20.1	6.7
35	20.8	14.6	9.7	23.2	16.3	7.6	25.7	18.0	5.8
30	21.8	12.9	8.8	24.4	14.4	6.7	27.0	15.9	5.0
25	22.7	11.1	8.1	25.4	12.3	6.0	28.1	13.6	4.4

Preliminary. Stability calculated according to EN 474-12. Max. capacities do not exceed 75% of tipping load. Above capacities are for reference only and are not programmed in the LMI system. The size of the bucket has to be determined according to local conditions.

Max. main boom 32m

Planning aid for dragline operation



Selection of dragline bucket and possible digging depths at 40° boom angle

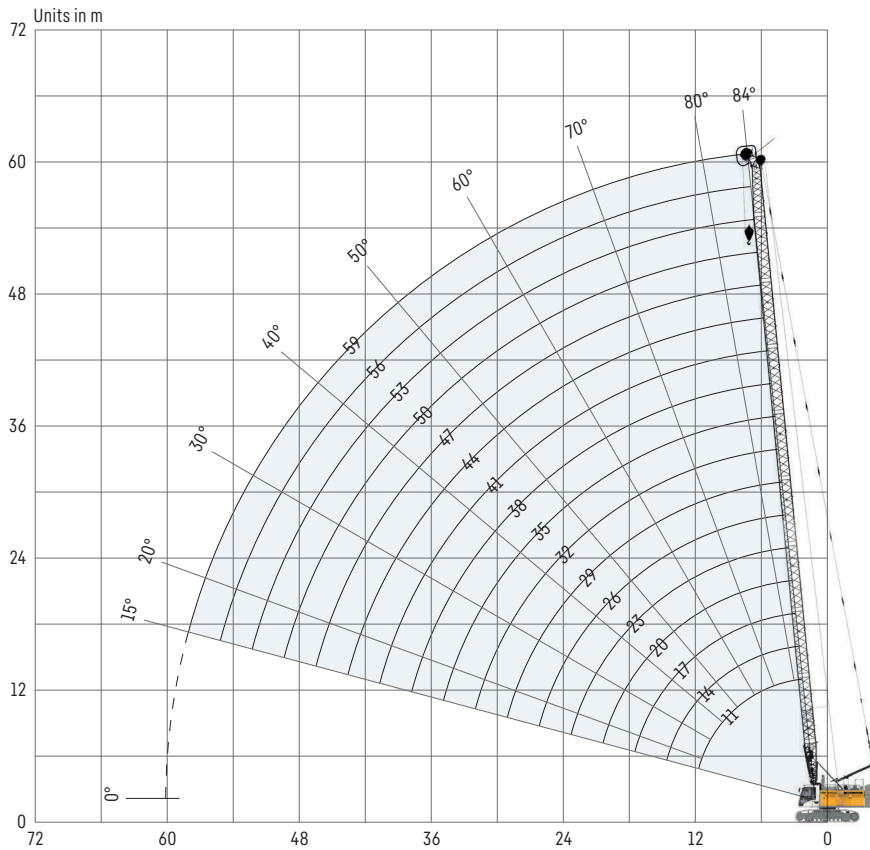
Main boom [m]	14	17	20	23	26	29
Dragline bucket [m ² /yd ³]	6.88 / 9	5.73 / 7.5	4.58 / 6	3.82 / 5	3.06 / 4	2.29 / 3

Density: 1.8 tm³ and fill factor 0.8

* The digging depth depends on the material's angle of repose.

Lifting operation

Main boom 84°-15°



Auxiliary jib 25 t






The maximum capacity of the auxiliary jib is 25 t. The corresponding load chart is programmed in the LML system.

Main boom configuration


Boom section	Amount of boom sections																
Boom foot 5.5m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom section 3m		1		1		1		1		1		1		1		1	
Boom section 6m			1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
Boom head 5.5m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom length [m]	11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56	59
Auxiliary jib	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

preferred boom combinations

Capacities in [t]

Radius [m]	Boom length [m]														
	11			14			17			20			23		
	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 
3	100.0														
4	91.9		100.0	85.3		100.0	79.4		97.9	74.3		100.0			
5	66.9		91.2	63.2		88.0	59.8	68.5	85.0	56.7	65.0	80.6	53.9	61.8	76.7
6	52.4	60.1	74.7	50.0	57.3	71.2	47.7	54.8	68.1	45.7	52.4	65.2	43.7	50.2	62.5
7	41.5	47.6	59.3	41.2	47.3	58.9	39.6	45.5	56.7	38.1	43.8	54.6	36.6	42.1	52.6
8	33.9	39.0	48.7	34.0	39.1	48.8	33.7	38.8	48.5	32.5	37.5	46.8	31.4	36.2	45.3
9	28.5	32.9	41.1	28.6	33.0	41.3	28.7	33.0	41.3	28.3	32.7	40.9	27.4	31.6	39.7
10	24.5	28.3	35.5	24.6	28.4	35.6	24.7	28.5	35.7	24.6	28.4	35.6	24.2	28.0	35.2
11	21.3	24.7	31.1	21.5	24.9	31.3	21.6	24.9	31.3	21.5	24.9	31.3	21.4	24.8	31.2
12				19.0	22.0	27.8	19.1	22.1	27.8	19.0	22.1	27.8	19.0	22.0	27.7
13				17.0	19.7	24.9	17.0	19.8	25.0	17.0	19.7	24.9	16.9	19.7	24.9
14				15.2	17.8	22.5	15.3	17.9	22.6	15.3	17.8	22.6	15.2	17.8	22.5
15							13.9	16.2	20.6	13.9	16.2	20.6	13.8	16.1	20.5
16							12.7	14.8	18.9	12.6	14.8	18.9	12.6	14.7	18.8
17							11.6	13.6	17.4	11.6	13.6	17.4	11.5	13.5	17.3
18										10.6	12.5	16.1	10.6	12.5	16.0
19										9.8	11.6	14.9	9.8	11.5	14.9
20										9.0	10.7	13.9	9.0	10.7	13.9
21													8.4	9.9	12.9
22													7.7	9.3	12.1
23													7.2	8.6	11.3

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* Rear counterweight in [t]
 + 15t carbody counterweight



www.liebherr.com/CranePlanner


 **Crane Planner 2.0**

Capacities in [t]

	Boom length [m]														
	26			29			32			35			38		
*	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 
5	51.3	58.8	73.1	48.9	56.1	69.7									
6	41.9	48.1	60.0	40.2	46.2	57.6	38.6	44.4	55.4	37.0	42.7	53.3	35.6	41.1	50.9
7	35.3	40.6	50.7	33.9	39.1	48.9	32.7	37.7	47.2	31.5	36.4	45.6	30.4	35.1	44.1
8	30.3	35.0	43.8	29.3	33.8	42.4	28.3	32.7	41.0	27.3	31.6	39.8	26.4	30.6	38.5
9	26.5	30.6	38.5	25.6	29.7	37.3	24.8	28.7	36.2	24.0	27.8	35.1	23.2	27.0	34.1
10	23.5	27.2	34.2	22.7	26.4	33.2	22.0	25.6	32.3	21.3	24.8	31.4	20.6	24.1	30.5
11	21.0	24.4	30.8	20.3	23.7	29.9	19.7	23.0	29.1	19.1	22.3	28.3	18.5	21.6	27.5
12	18.9	21.9	27.6	18.4	21.4	27.1	17.8	20.8	26.4	17.2	20.2	25.7	16.7	19.6	25.0
13	16.8	19.6	24.8	16.7	19.5	24.7	16.2	18.9	24.1	15.7	18.4	23.5	15.2	17.8	22.9
14	15.1	17.6	22.4	15.0	17.5	22.3	14.8	17.3	22.2	14.3	16.8	21.6	13.9	16.3	21.1
15	13.7	16.0	20.4	13.6	15.9	20.3	13.4	15.8	20.2	13.1	15.5	20.0	12.7	15.0	19.4
16	12.5	14.6	18.7	12.4	14.5	18.6	12.2	14.4	18.5	12.1	14.2	18.3	11.7	13.9	18.0
17	11.4	13.4	17.2	11.3	13.3	17.1	11.2	13.2	17.0	11.0	13.0	16.8	10.8	12.8	16.7
18	10.5	12.4	15.9	10.4	12.2	15.8	10.2	12.1	15.7	10.1	12.0	15.5	9.9	11.8	15.4
19	9.6	11.4	14.8	9.5	11.3	14.7	9.4	11.2	14.5	9.3	11.0	14.4	9.1	10.9	14.2
20	8.9	10.6	13.8	8.8	10.5	13.6	8.7	10.3	13.5	8.5	10.2	13.4	8.4	10.1	13.2
21	8.3	9.8	12.8	8.2	9.7	12.7	8.0	9.6	12.6	7.9	9.5	12.5	7.7	9.3	12.3
22	7.7	9.2	12.0	7.6	9.1	11.9	7.4	8.9	11.8	7.3	8.8	11.6	7.1	8.6	11.5
23	7.1	8.6	11.3	7.0	8.5	11.2	6.9	8.3	11.0	6.8	8.2	10.9	6.6	8.0	10.7
24	6.6	8.0	10.6	6.5	7.9	10.5	6.4	7.8	10.4	6.3	7.6	10.2	6.1	7.5	10.1
25	6.2	7.5	9.9	6.1	7.4	9.9	6.0	7.3	9.7	5.8	7.1	9.6	5.7	7.0	9.5
26	5.7	7.0	9.4	5.7	6.9	9.3	5.5	6.8	9.2	5.4	6.7	9.0	5.3	6.5	8.9
27				5.3	6.5	8.8	5.2	6.4	8.6	5.0	6.2	8.5	4.9	6.1	8.4
28				4.9	6.1	8.3	4.8	6.0	8.2	4.7	5.9	8.0	4.5	5.7	7.9
29				4.6	5.7	7.8	4.5	5.6	7.7	4.4	5.5	7.6	4.2	5.3	7.4
30							4.2	5.3	7.3	4.1	5.1	7.2	3.9	5.0	7.0
31							3.9	4.9	6.9	3.8	4.8	6.8	3.6	4.7	6.6
32							3.6	4.6	6.5	3.5	4.5	6.4	3.4	4.4	6.3
33										3.3	4.2	6.1	3.1	4.1	5.9
34										3.0	4.0	5.7	2.9	3.8	5.6
35										2.8	3.7	5.4	2.7	3.6	5.3
36													2.5	3.4	5.0
37													2.3	3.1	4.7
38													2.1	2.9	4.5









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* Rear counterweight in [t]

 + 15t carbody counterweight


For boom lengths of 38 m or more a second angle transmitter must be used in the boom head.

Capacities in [t]

		Boom length [m]																	
		41			44			47			50			53		56		59	
* Radius [m]	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	20.3	26.3	32.3 	26.3	32.3 	32.3 	32.3 
	7	29.3	33.9	42.6	28.3	32.8	39.4	27.3	31.7	36.1	26.2	30.5	32.7	26.0	28.0	24.7	21.8		
8	25.5	29.6	37.1	24.7	28.6	35.6	23.8	27.7	33.7	23.0	26.8	31.1	26.0	28.0	24.7	21.8			
9	22.5	26.1	32.8	21.7	25.3	31.5	21.0	24.5	30.0	20.3	23.8	28.5	23.0	26.7	23.7	20.8			
10	20.0	23.3	29.6	19.4	22.6	28.3	18.7	21.9	27.0	18.1	21.3	25.7	20.6	24.2	22.0	19.5			
11	17.9	21.0	26.8	17.4	20.4	25.8	16.8	19.8	24.7	16.3	19.2	23.4	18.6	22.1	20.4	17.8			
12	16.2	19.0	24.3	15.7	18.5	23.5	15.2	17.9	22.6	14.7	17.4	21.6	16.8	20.5	19.0	16.4			
13	14.7	17.3	22.3	14.2	16.8	21.5	13.8	16.3	20.7	13.3	15.8	19.9	15.3	19.0	17.9	15.2			
14	13.4	15.9	20.5	13.0	15.4	19.8	12.5	14.9	19.1	12.1	14.5	18.3	14.0	17.5	16.6	14.3			
15	12.3	14.6	18.9	11.9	14.1	18.4	11.5	13.7	17.7	11.1	13.3	16.9	12.8	16.2	15.4	13.4			
16	11.3	13.4	17.5	10.9	13.0	17.1	10.5	12.6	16.5	10.1	12.2	15.8	11.8	15.1	14.3	12.5			
17	10.4	12.4	16.3	10.0	12.1	15.9	9.7	11.7	15.4	9.3	11.3	14.8	10.9	14.1	13.4	11.8			
18	9.6	11.6	15.2	9.3	11.2	14.8	8.9	10.8	14.4	8.6	10.4	14.0	10.1	13.3	12.5	11.1			
19	8.9	10.7	14.1	8.6	10.4	13.8	8.2	10.0	13.4	7.9	9.7	13.0	9.3	12.6	11.8	10.5			
20	8.2	9.9	13.1	7.9	9.7	12.9	7.6	9.3	12.6	7.3	9.0	12.2	8.6	11.8	11.2	10.0			
21	7.6	9.2	12.2	7.4	9.0	12.0	7.0	8.7	11.8	6.7	8.4	11.4	8.0	11.1	10.7	9.6			
22	7.0	8.5	11.3	6.8	8.3	11.2	6.5	8.1	11.0	6.2	7.8	10.7	7.4	10.4	10.0	9.2			
23	6.5	7.9	10.6	6.3	7.7	10.4	6.0	7.6	10.3	5.7	7.2	10.1	6.9	9.7	9.4	8.8			
24	6.0	7.3	9.9	5.8	7.2	9.8	5.6	7.0	9.6	5.3	6.7	9.4	6.4	9.1	8.8	8.4			
25	5.5	6.8	9.3	5.4	6.7	9.1	5.2	6.5	9.0	4.9	6.3	8.8	6.0	8.6	8.2	7.9			
26	5.1	6.4	8.7	5.0	6.2	8.6	4.8	6.1	8.4	4.5	5.9	8.3	5.5	8.1	7.7	7.4			
27	4.7	6.0	8.2	4.6	5.8	8.1	4.4	5.6	7.9	4.2	5.5	7.7	5.2	7.6	7.3	6.9			
28	4.4	5.6	7.7	4.2	5.4	7.6	4.1	5.2	7.4	3.9	5.1	7.3	4.8	7.1	6.8	6.5			
29	4.1	5.2	7.3	3.9	5.0	7.1	3.8	4.9	7.0	3.6	4.7	6.8	4.5	6.6	6.4	6.1			
30	3.8	4.9	6.9	3.6	4.7	6.7	3.5	4.5	6.6	3.3	4.4	6.4	4.2	6.2	6.1	5.8			
31	3.5	4.5	6.5	3.3	4.4	6.3	3.2	4.2	6.2	3.0	4.1	6.0	3.9	5.8	5.7	5.4			
32	3.2	4.2	6.1	3.1	4.1	6.0	2.9	3.9	5.8	2.8	3.8	5.7	3.6	5.5	5.3	5.1			
33	3.0	4.0	5.8	2.8	3.8	5.6	2.7	3.7	5.5	2.5	3.5	5.3	3.3	5.2	5.0	4.8			
34	2.8	3.7	5.5	2.6	3.5	5.3	2.5	3.4	5.2	2.3	3.2	5.0	3.1	4.8	4.7	4.5			
35	2.5	3.5	5.2	2.4	3.3	5.0	2.2	3.1	4.9	2.1	3.0	4.7	2.8	4.5	4.4	4.2			
36	2.3	3.2	4.9	2.2	3.1	4.7	2.0	2.9	4.6		2.7	4.4	2.6	4.3	4.1	3.9			
37	2.1	3.0	4.6		2.8	4.5		2.7	4.3		2.5	4.2	2.4	4.0	3.8	3.7			
38		2.8	4.4		2.6	4.2		2.5	4.1		2.3	3.9	2.2	3.7	3.6	3.4			
39		2.6	4.1		2.4	4.0		2.3	3.8		2.1	3.7		3.5	3.3	3.2			
40		2.4	3.9		2.3	3.8		2.1	3.6			3.4		3.3	3.1	2.9			
41					2.1	3.5			3.4			3.2		3.1	2.9	2.7			
42						3.3			3.2			3.0		2.9	2.7	2.5			
43						3.1			3.0			2.8		2.7	2.5	2.3			
44									2.8			2.6		2.5	2.3	2.1			
45									2.6			2.5		2.3	2.1				
46									2.4			2.3		2.1					
47												2.1							

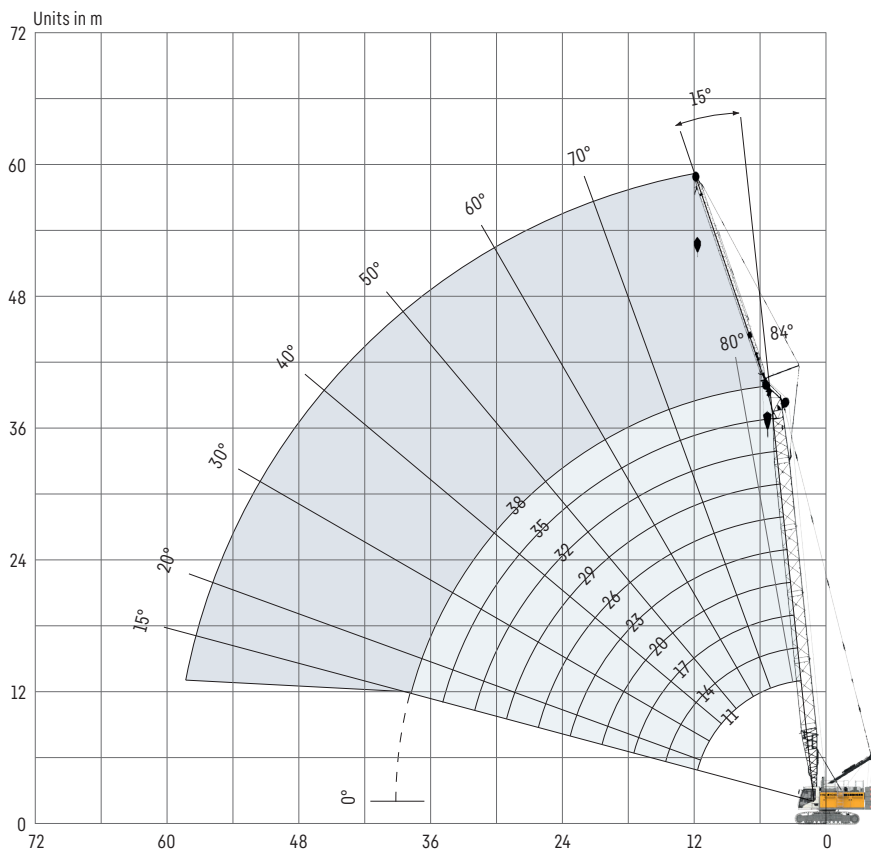
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* Rear counterweight in [t]

 + 15t carbody counterweight

For boom lengths of 38 m or more a second angle transmitter must be used in the boom head.

Lifting operation with fixed jib



Jib configuration 0806HS

Jib section	Amount of jib sections	
Jib foot 5.5 m	1	1
Jib section 9 m		1
Jib head 5.5 m	1	1
Jib length [m]	11	20

For main boom configuration 20 m - 41 m please refer to the table on page 16.

Load capacities with fixed jib 15° (0806.20)

Jib length 11m with 32.3 t rear counterweight and 15 t carbody counterweight

Radius [m]	Boom length [m]				
	20	26	32	38	41
9	15.2				
10	14.7	14.8	15.0		
11	14.1	14.4	14.4	13.4	12.8
12	13.6	13.9	14.0	13.1	12.5
13	13.2	13.4	13.5	12.9	12.2
14	12.9	13.1	13.1	12.7	12.1
15	12.6	12.9	12.7	12.5	12.0
16	12.3	12.7	12.5	12.4	11.9
17	12.0	12.5	12.3	12.3	11.8
18	11.7	12.3	12.2	12.0	11.8
19	11.4	12.1	12.1	11.8	11.4
20	11.2	11.8	12.0	11.5	11.1
21	10.9	11.5	11.8	11.3	10.7
22	10.5	11.3	11.5	11.0	10.4
23	10.2	11.0	10.7	10.3	10.0
24	9.8	10.3	10.0	9.7	9.4
25	9.6	9.7	9.4	9.0	8.8
26	9.4	9.1	8.8	8.5	8.3
27	8.8	8.5	8.2	7.9	7.7
28	8.3	8.0	7.7	7.4	7.2
29	7.9	7.6	7.3	6.9	6.8
30	7.4	7.1	6.8	6.5	6.3
31		6.7	6.4	6.1	5.9
32		6.4	6.0	5.7	5.6
33		6.0	5.7	5.4	5.2
34		5.7	5.4	5.0	4.9
35		5.3	5.0	4.7	4.6
36			4.7	4.4	4.3
37			4.5	4.1	4.0
38			4.2	3.9	3.7
39			3.9	3.6	3.5
40			3.7	3.4	3.2
41				3.2	3.0
42				2.9	2.8
43				2.7	2.6
44				2.5	2.4
45				2.3	2.2
46					2.0
47					1.8
48					1.7

Preliminary. Above load charts are for reference only. For actual lift duty please refer to load chart in operator's cabin or manual.

Load charts for lifting operation are valid with classification according to ISO 4301-1/1986, group A1.

Jib length 20m with 32.3 t rear counterweight and 15 t carbody counterweight

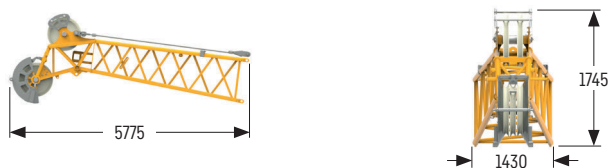
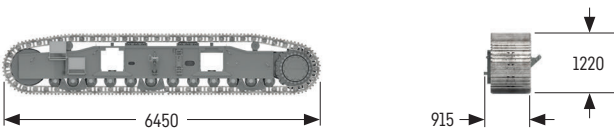
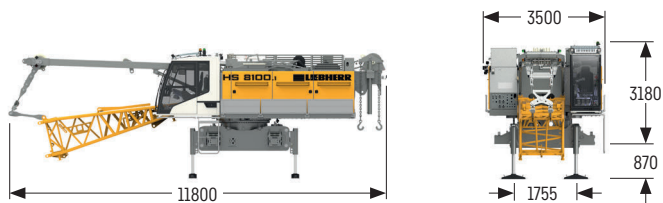
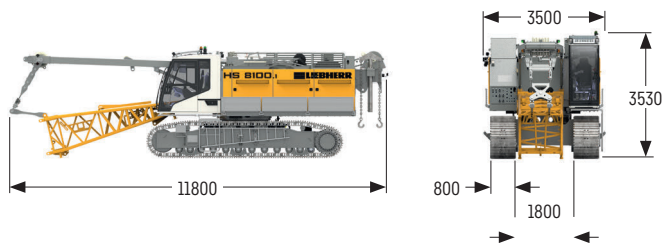
Radius [m]	Boom length [m]				
	20	23	29	35	38
12	6.8				
13	6.6	6.6	6.5		
14	6.4	6.3	6.3	6.2	6.1
15	6.2	6.2	6.1	6.1	6.0
16	6.0	6.0	6.0	5.9	5.9
17	5.9	5.9	5.9	5.9	5.8
18	5.8	5.8	5.8	5.8	5.7
19	5.6	5.7	5.8	5.7	5.6
20	5.5	5.6	5.7	5.7	5.6
21	5.4	5.5	5.6	5.6	5.5
22	5.3	5.4	5.5	5.5	5.5
23	5.2	5.3	5.4	5.4	5.4
24	5.1	5.2	5.3	5.4	5.3
25	5.0	5.1	5.3	5.3	5.3
26	4.9	5.0	5.2	5.2	5.2
27	4.9	5.0	5.1	5.2	5.2
28	4.8	4.9	5.0	5.1	5.1
29	4.7	4.8	5.0	5.1	5.1
30	4.6	4.7	4.9	5.0	5.0
31	4.6	4.7	4.9	4.9	4.9
32	4.5	4.6	4.8	4.9	4.9
33	4.5	4.6	4.8	4.8	4.8
34	4.4	4.5	4.7	4.8	4.8
35	4.4	4.5	4.6	4.8	4.8
36	4.3	4.4	4.6	4.7	4.7
37	4.3	4.4	4.5	4.7	4.6
38	4.3	4.4	4.5	4.5	4.4
39		4.3	4.5	4.3	4.1
40		4.3	4.3	4.0	3.9
41		4.3	4.1	3.8	3.6
42			3.9	3.6	3.4
43			3.7	3.4	3.2
44			3.5	3.2	3.0
45			3.3	3.0	2.8
46			3.1	2.8	2.6
47				2.6	2.4
48				2.4	2.3
49				2.3	2.1
50				2.1	2.0
51				2.0	1.8
52				1.8	1.7
53					1.5
54					1.4

Preliminary. Above load charts are for reference only. For actual lift duty please refer to load chart in operator's cabin or manual.

Load charts for lifting operation are valid with classification according to ISO 4301-1/1986, group A1.

Transport dimensions and weights

Basic machine and main boom (1311.24)



Basic machine

with HD undercarriage, boom foot (1311.24), A-frame, 2x 275 kN winches including wire ropes (90 m), without rear counterweight

Width	mm	3500
Weight with 800 mm 3-web grousers	kg	59550
Weight with 900 mm 3-web grousers	kg	59930
Weight of hoist ropes (2x 90 m)	kg/m	5.68

Basic machine (option)

with boom foot (1311.24), A-frame, 2x 275 kN winches including wire ropes (90 m), without rear counterweight and crawlers

Width	mm	3500
Weight	kg	40230
Weight of hoist ropes (2x 90 m)	kg/m	5.68

Crawler (2x)

3-web grousers	mm	800
Width	mm	915
Weight with 800 mm 3-web grousers	kg	9650
Weight with 900 mm 3-web grousers (option)	kg	9840
Weight with 900 mm flat track pads (option)	kg	10100
Weight with 1000 mm 3-web grousers (option)	kg	10350

Boom section 3 m (1311.24)

Width	mm	1430
Weight incl. pendant ropes	kg	525

Boom section 6 m (1311.24)

Width	mm	1430
Weight incl. pendant ropes	kg	880

Boom head* (No. 1311.24)

Width	mm	1430
Weight incl. pendant ropes	kg	2120

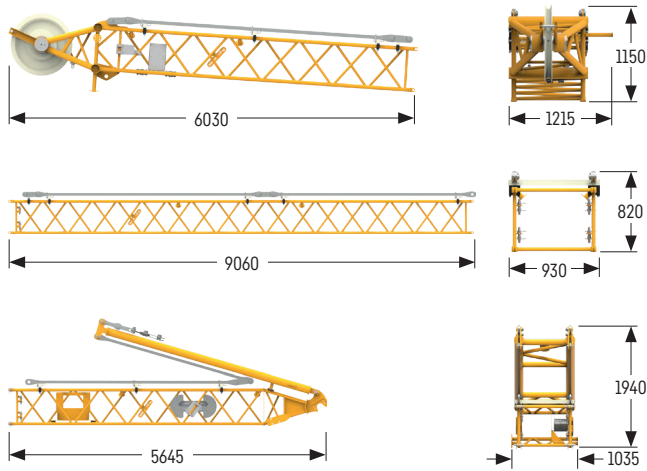
*) Steel sheaves (2+3)

Auxiliary jib

Width	mm	1135
Weight	kg	1085

Weights can vary with the final configuration of the machine. The figures in this brochure may include options which are not within the standard scope of supply of the machine.

Fixed jib



Jib head

Width	mm	1215
Weight	kg	760

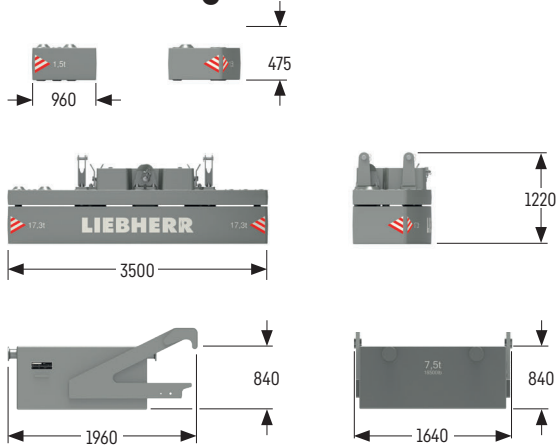
Jib section 9 m

Width	mm	930
Weight	kg	675

Jib foot with A-frame

Width	mm	1035
Weight	kg	980

Counterweight



Counterweight slab (standard 6x, option 10x)

Width	mm	850
Weight	kg	1500

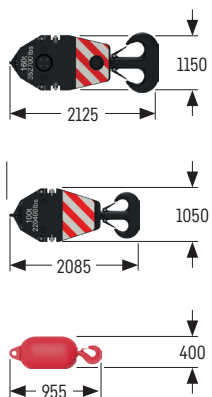
Counterweight slab (1x)

Width	mm	1050
Weight	kg	17330

Carbody counterweight (option 2x)

Width	mm	1640
Weight	kg	7500

Hooks



100 t hook block – 2 sheaves

Width	mm	384
Weight	kg	1200

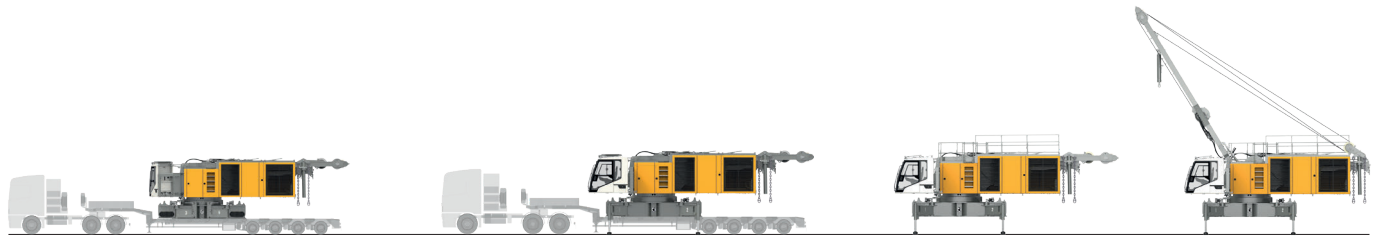
60 t hook block – 1 sheave

Width	mm	260
Weight	kg	970

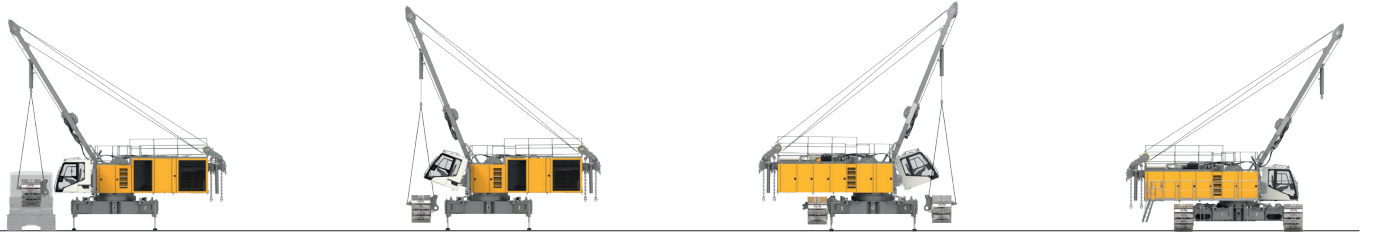
30 t hook block

Width	mm	400
Weight	kg	400

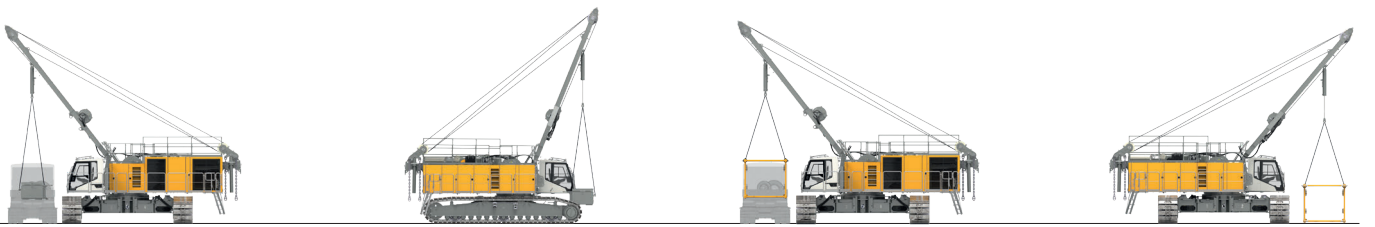
Self-assembly system



Unloading of basic machine (option)

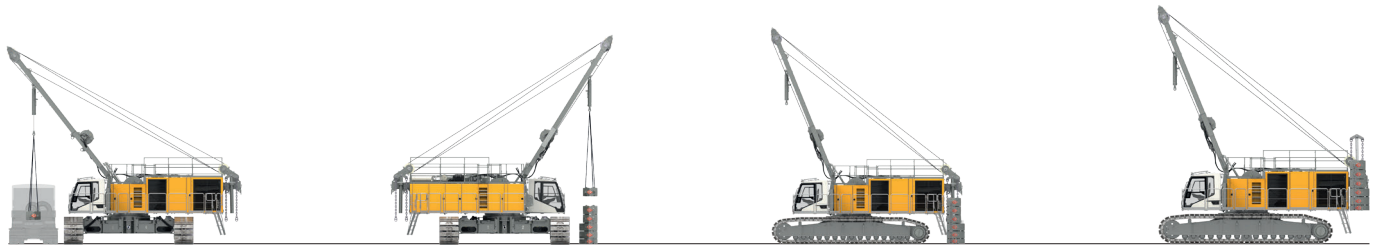


Unloading and assembly of crawlers



Unloading and assembly of carbody counterweight

Unloading and assembly of boom



Unloading and assembly of rear counterweight

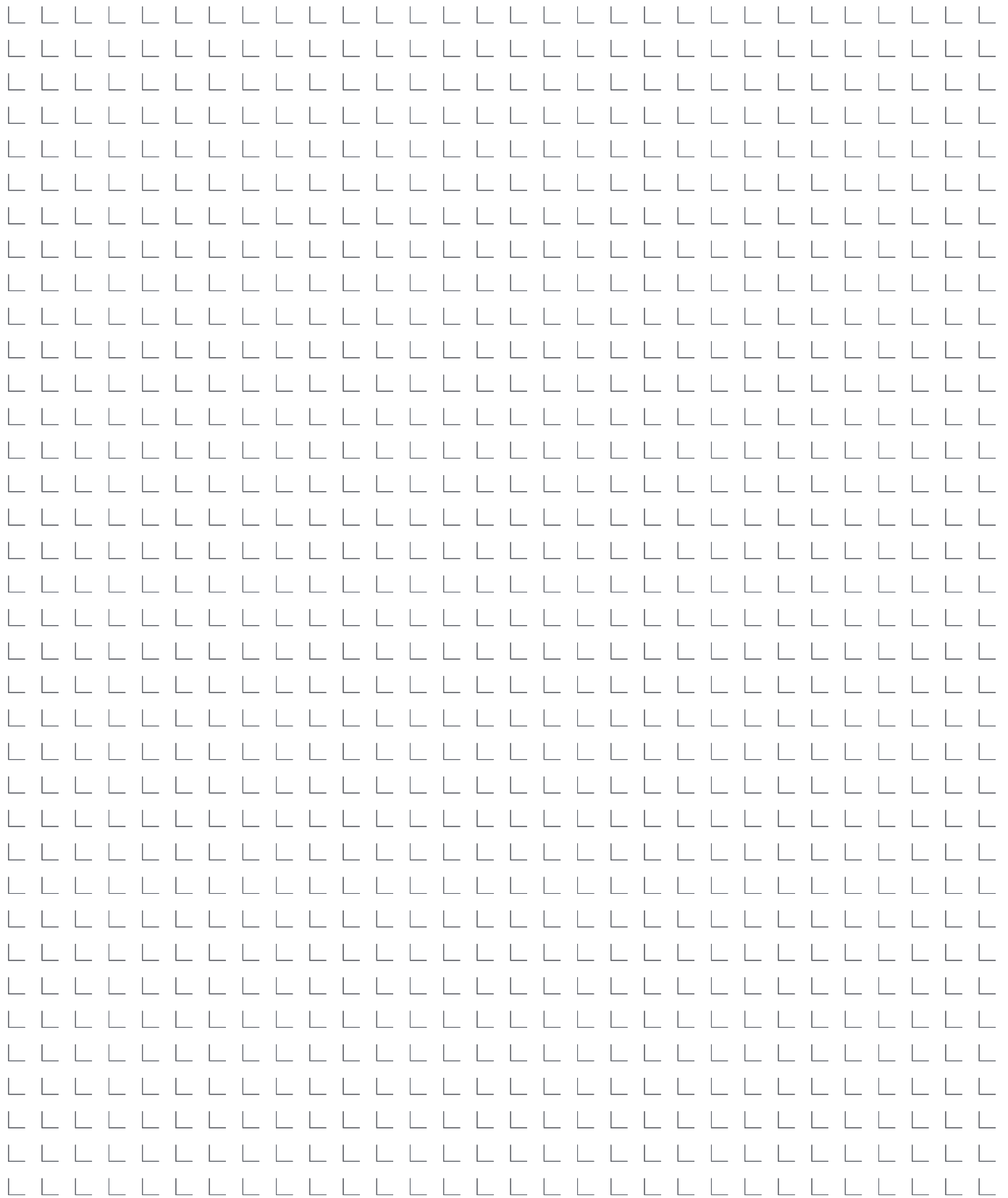


Assembly of boom foot



Assembly of boom

Reeving of hoist ropes



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