

EN

HS 8200

HS 8007.01.03

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LIEBHERR

Construction machines



Concept and characteristics

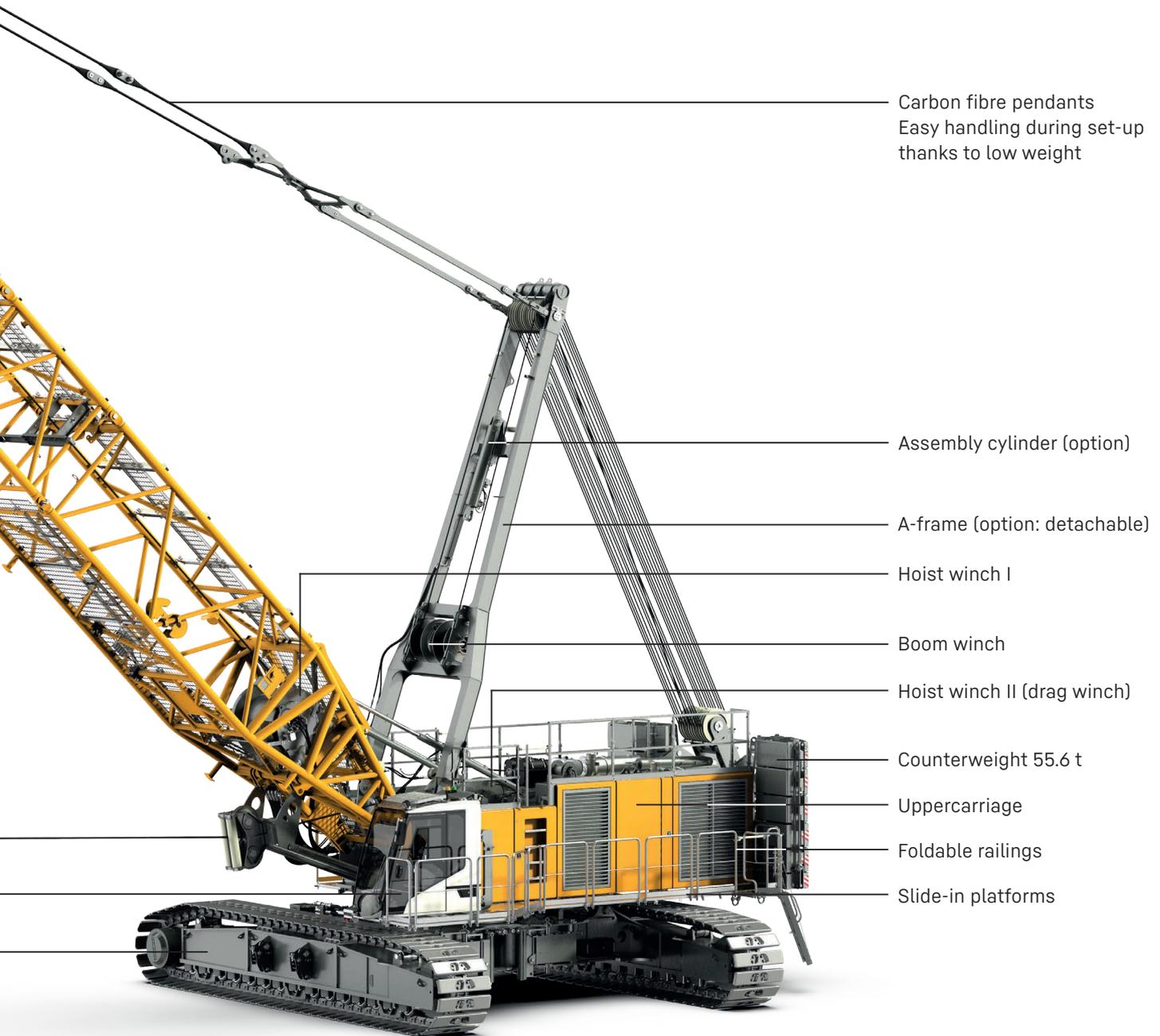
Universal boom head 2220.24
Various roller sets available

Hoist rope guide
Hoist winch I

Cabin

HD undercarriage
Crawlers easily detached





Carbon fibre pendants
Easy handling during set-up
thanks to low weight

Assembly cylinder (option)

A-frame (option: detachable)

Hoist winch I

Boom winch

Hoist winch II (drag winch)

Counterweight 55.6 t

Uppercarriage

Foldable railings

Slide-in platforms



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: vibration isolation for cabin
- Option: Piling control incl. cabin protection and armoured glass



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.

Example



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



Ground pressure

Ground pressure	0.985 kg/cm ²
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Operating weight

Composition of operating weight	basic machine with HD undercarriage, 2 main winches 350 kN including wire ropes, 20 m main boom, consisting of A-frame, boom foot (10 m), boom section (3 m) and boom head (7 m), 50.3 t rear counterweight, flat track pads (width 1100 mm), 160 t hook block.
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Total weight	approx. 172 t
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Equipment

Main boom (2220.24)	max. 68 m
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Characteristics

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
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Diesel engine

Power rating according to ISO 9249	750 kW (1005 hp) at 1700 rpm
Engine type	Liebherr D 9512 A7-04
Fuel tank capacity	1000l with continuous level indicator and reserve warning
AdBlue tank capacity	140l with continuous level indicator and reserve warning
Exhaust certification	EU Stage V/EPA CARB Tier 4F non-certified emission standard

Noise measurement data and vibration

Noise emission	according to 2000/14/EC directive	
Emission sound pressure level L_{PA}	73 dB(A)	(in the cabin)
Guaranteed sound power level L_{WA}	109 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	1300l
Max. working pressure	350 bar
Max. power at the connection plate	350 bar = 460 kW for external appliances
Max. power at the undercarriage	250 bar = 310 kW 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

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 piling control / chisel control Litronic Grab Matic (dredging assistance system)

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	1st gear 0.36 km/h 2nd gear 0.90 km/h 3rd gear 1.30 km/h
Flat track pads	width 1100 mm
Options	self-assembly system, jack-up system

Swing gear

Drive system	3 swing drives, with fixed axial piston hydraulic motors, planetary gearbox, pinion
Swing ring	Roller bearing with internal teeth
Brake	hydraulically released, spring-loaded multi-disc holding brake
Swing speed	0-3.33 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

Hoisting gear

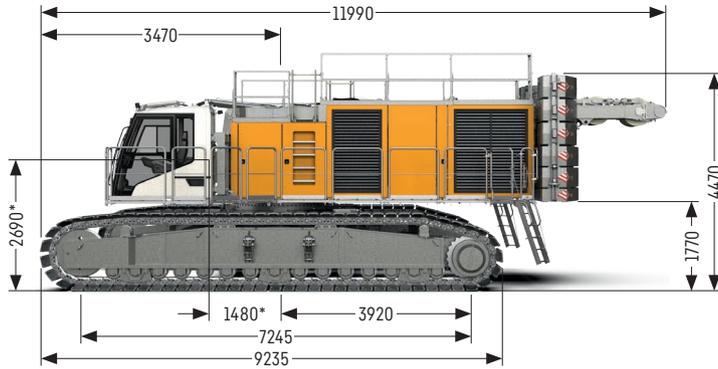
Main winches	pressure controlled, variable flow hydraulic motors for the drag and hoist winches, full utilisation of engine power as the winch speed is automatically adjusted to suit the respective line pull Free fall: clutch and braking functions are provided by the service brake (low wear and maintenance-free multi-disc brake in compact design)		
Winch options	Standard	35 t shaft excavation	45 t drag winch
Line pull (nominal load)	350 kN	350 kN** / 330 kN***	400 kN
Rope diameter	36 mm	36 mm	42 mm
Drum diameter	840 mm	840 mm	1070 mm
Rope speed	0-108 m/min	0-110 m/min	0-80 m/min
Rope capacity in the 1st layer	44 m*	44 m*	45.6 m*
Rope capacity in 4 layers	235.5 m*	235.5 m*	
Rope capacity in the 5th layer		307 m*	
		without free fall	
	*effective length	**winch pull _(layers 1-4)	***5th layer
Options			
Auxiliary winch	70 kN in boom foot		
Tagline winch	30 kN with free fall		
Tagline winch	70 kN with free fall		

Boom winch

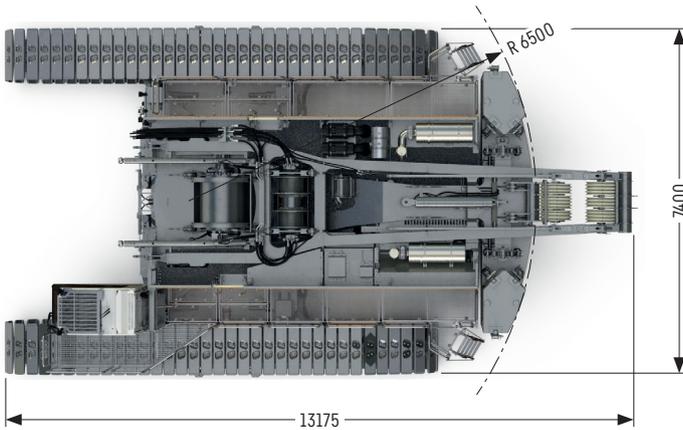
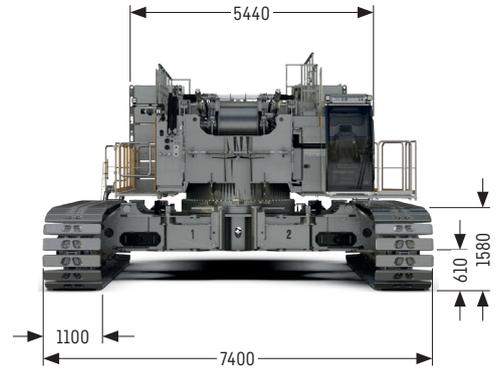
Line pull	max. 2x 160 kN
Rope diameter	24 mm
Boom luffing	15-84° in 134 s

Dimensions

Basic machine with undercarriage



*Boom pivot point



Remarks

- Liebherr cable excavator HS 8007.01.03
- 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 load 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



Casing oscillator

Max. drilling diameter

mm 3800



Further information on material handling



Dredging assistant (option)



Grab operation

Capacities [t]

*	Boom length [m]															
	20		23		26		29		32		35		38		41	
	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6
6	53.0	53.0	53.0	53.0	53.0	53.0										
7	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0				
8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
9	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
10	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
11	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
12	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
13	52.8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	52.9	53.0	52.9	53.0	52.8	53.0	52.7	53.0
14	47.3	50.3	47.5	50.4	47.5	50.5	47.5	50.5	47.5	50.4	47.4	50.3	47.3	50.2	47.2	50.1
15	42.8	45.5	43.0	45.7	43.0	45.7	43.0	45.7	42.9	45.6	42.9	45.5	42.8	45.4	42.6	45.3
16	39.0	41.5	39.2	41.7	39.2	41.6	39.2	41.7	39.1	41.6	39.0	41.5	38.9	41.4	38.8	41.3
17	35.7	38.0	35.9	38.2	35.9	38.2	35.9	38.2	35.8	38.1	35.8	38.0	35.6	37.9	35.5	37.8
18	32.9	35.0	33.1	35.2	33.1	35.2	33.1	35.2	33.0	35.1	32.9	35.1	32.8	34.9	32.7	34.8
19	30.3	32.3	30.6	32.6	30.6	32.6	30.6	32.6	30.5	32.5	30.5	32.4	30.3	32.3	30.2	32.2
20	28.1	30.0	28.4	30.3	28.4	30.3	28.4	30.3	28.3	30.2	28.3	30.1	28.1	30.0	28.0	29.9
21	26.1	27.8	26.4	28.2	26.5	28.2	26.5	28.3	26.4	28.2	26.3	28.1	26.2	28.0	26.1	27.8
22			24.7	26.4	24.7	26.4	24.8	26.4	24.7	26.3	24.6	26.3	24.5	26.1	24.3	26.0
23			23.1	24.7	23.2	24.7	23.2	24.8	23.1	24.7	23.0	24.6	22.9	24.5	22.8	24.4
24			21.6	23.1	21.7	23.2	21.8	23.3	21.7	23.2	21.6	23.1	21.5	23.0	21.4	22.9
25					20.4	21.8	20.5	21.9	20.4	21.8	20.3	21.8	20.2	21.6	20.1	21.5
26					19.2	20.6	19.3	20.7	19.2	20.6	19.2	20.5	19.0	20.4	18.9	20.3
27					18.0	19.4	18.2	19.5	18.1	19.5	18.1	19.4	17.9	19.3	17.8	19.1
28							17.2	18.5	17.1	18.4	17.1	18.4	16.9	18.2	16.8	18.1
29							16.2	17.5	16.2	17.4	16.2	17.4	16.0	17.2	15.9	17.1
30							15.3	16.5	15.3	16.5	15.3	16.5	15.2	16.4	15.1	16.2
31									14.5	15.7	14.5	15.7	14.4	15.5	14.3	15.4
32									13.8	14.9	13.8	14.9	13.6	14.7	13.5	14.6
33									13.0	14.1	13.1	14.1	13.0	14.0	12.9	13.9
34											12.4	13.4	12.3	13.3	12.2	13.2
35											11.8	12.8	11.7	12.7	11.6	12.6
36													11.1	12.1	11.0	12.0
37													10.6	11.5	10.5	11.4
38													10.0	10.9	10.0	10.9
39															9.5	10.4
40															9.0	9.9
41															8.6	9.4

*Rear counterweight in [t]

TLT 11981105 M282769 PF. Stability calculated according to EN 474-12. Max. capacities do not exceed 66% of tipping load.

Load capacities with hydraulic grab

Impact compaction



Impact compaction

Max. counterweight t 50.3

Capacities [t]

Radius [m]	Boom length [m]								
	20	23	26	29	32	35	38	41	44
8	35	35	35	35	35	35	35	35	35
9	35	35	35	35	35	35	35	35	35
10	35	35	35	35	35	35	35	35	35
11		35	35	35	35	35	35	35	35
12			35	35	35	35	35	35	35

TLT 11981105 M282769 PF. Stability calculated according to EN 474-12. Max. capacities 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 30 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 [t]

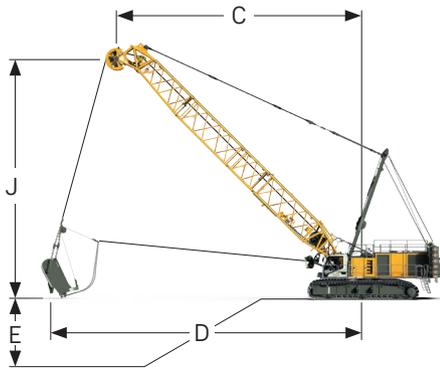
* Radius [m]	Boom length [m]															
	20		23		26		29		32		35		38		41	
	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6
6	53.0	53.0	53.0	53.0	53.0	53.0										
7	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0				
8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
9	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
10	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
11	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
12	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
13	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
14	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	52.5	53.0
15	48.7	51.7	48.9	51.9	48.9	51.9	48.9	51.9	48.8	51.8	48.7	51.8	48.6	51.6	48.3	51.5
16	44.3	47.1	44.5	47.3	44.5	47.3	44.5	47.3	44.4	47.2	44.4	47.2	44.2	47.0	44.1	46.9
17	40.6	43.2	40.8	43.4	40.8	43.4	40.8	43.4	40.7	43.3	40.6	43.2	40.5	43.1	40.4	43.0
18	37.3	39.8	37.6	40.0	37.6	40.0	37.6	40.0	37.5	39.9	37.4	39.8	37.3	39.7	37.1	39.6
19	34.5	36.7	34.8	37.0	34.8	37.0	34.8	37.1	34.7	37.0	34.6	36.9	34.4	36.7	34.3	36.6
20	31.9	34.1	32.3	34.4	32.3	34.4	32.3	34.5	32.2	34.3	32.1	34.3	32.0	34.1	31.8	34.0
21	29.6	31.6	30.1	32.1	30.1	32.1	30.1	32.1	30.0	32.0	29.9	31.9	29.8	31.8	29.6	31.6
22			28.0	29.9	28.1	30.0	28.1	30.0	28.0	29.9	28.0	29.9	27.8	29.7	27.6	29.5
23			26.2	28.0	26.3	28.1	26.4	28.2	26.3	28.1	26.2	28.0	26.0	27.8	25.9	27.7
24			24.5	26.0	24.7	26.4	24.8	26.5	24.6	26.4	24.6	26.3	24.4	26.1	24.3	26.0
25					23.2	24.8	23.3	24.9	23.2	24.8	23.1	24.8	22.9	24.6	22.8	24.4
26					21.8	23.4	21.9	23.5	21.8	23.4	21.8	23.3	21.6	23.2	21.5	23.0
27					20.5	22.0	20.7	22.2	20.6	22.1	20.6	22.1	20.4	21.9	20.3	21.8
28							19.5	21.0	19.5	20.9	19.4	20.9	19.3	20.7	19.1	20.6
29							18.5	19.8	18.4	19.8	18.4	19.8	18.2	19.6	18.1	19.5
30							17.4	18.7	17.4	18.8	17.4	18.7	17.2	18.6	17.1	18.5
31									16.5	17.8	16.5	17.8	16.3	17.6	16.2	17.5
32									15.6	16.9	15.7	16.9	15.5	16.7	15.4	16.6
33									14.8	16.0	14.9	16.1	14.7	15.9	14.6	15.8
34											14.1	15.3	14.0	15.1	13.9	15.0
35											13.4	14.5	13.3	14.4	13.2	14.3
36													12.6	13.7	12.5	13.6
37													12.0	13.0	11.9	13.0
38													11.4	12.4	11.3	12.4
39															10.8	11.8
40															10.2	11.2
41															9.7	10.7

*Rear counterweight in [t]

TLT 11981105 M282769 PF. Stability calculated according to EN 474-12. Max. capacities do not exceed 75% of tipping load.

Load capacities with hydraulic grab

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



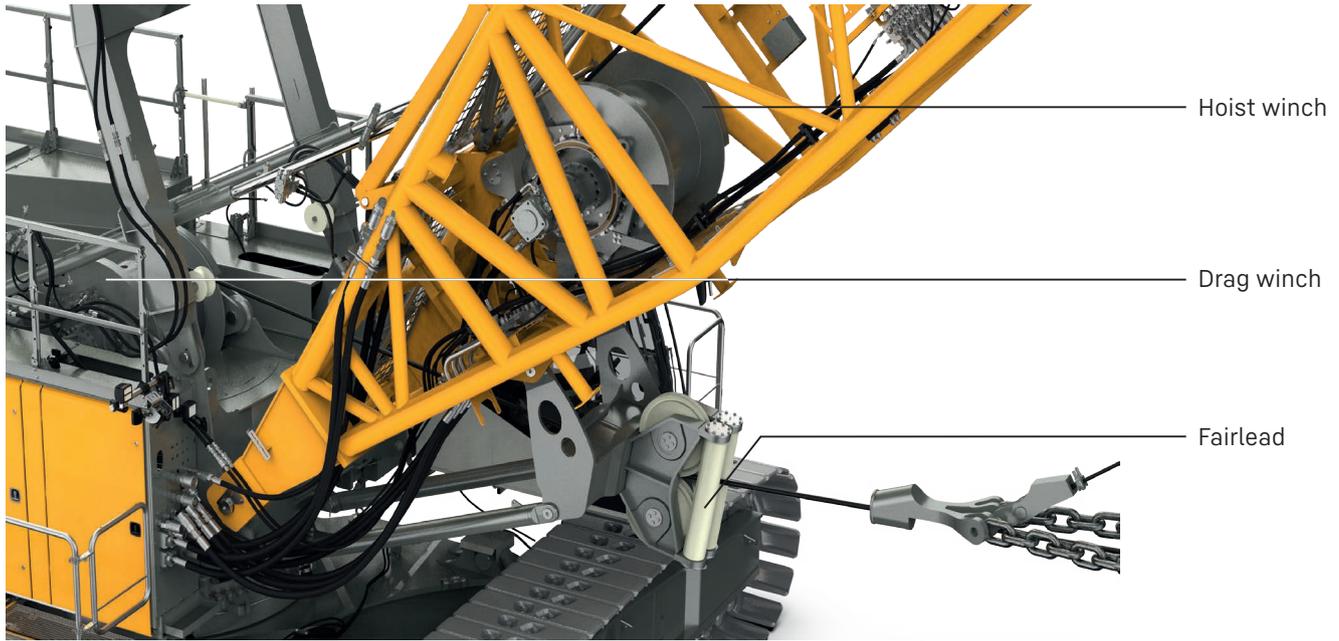
Capacities in dragline operation

Capacities [t]

	Boom length [m]												
	20				23				26				
	C [m]	J [m]	Rear counterweight [t]		C [m]	J [m]	Rear counterweight [t]		C [m]	J [m]	Rear counterweight [t]		
alpha [°]	60	12.9	20.0	35.0	35.0	14.4	22.6	35.0	35.0	15.9	25.2	35.0	35.0
	55	14.3	19.1	35.0	35.0	16.1	21.5	35.0	35.0	17.8	24.0	35.0	35.0
	50	15.6	18.0	35.0	35.0	17.6	20.3	35.0	35.0	19.5	22.6	33.6	34.7
	45	16.9	16.8	35.0	35.0	19.0	18.9	34.8	35.0	21.1	21.1	29.9	31.9
	40	18.0	15.5	35.0	35.0	20.3	17.5	31.7	33.8	22.6	19.4	27.1	28.9
	35	18.9	14.2	34.5	35.0	21.4	15.9	29.3	31.2	23.9	17.6	24.9	26.6
	30	19.8	12.7	32.5	34.3	22.4	14.2	27.3	29.2	25.0	15.7	23.2	24.8

Capacities [t]

	Boom length [m]												
	29				32				35				
	C [m]	J [m]	Rear counterweight [t]		C [m]	J [m]	Rear counterweight [t]		C [m]	J [m]	Rear counterweight [t]		
alpha [°]	60	17.4	27.8	35.0	35.0	18.9	30.4	34.7	35.0	20.4	33.0	31.2	33.3
	55	19.5	26.4	33.6	34.8	21.2	28.9	29.6	31.5	23.0	31.4	26.3	28.1
	50	21.4	24.9	29.2	31.2	23.4	27.2	25.7	27.5	25.3	29.5	22.7	24.3
	45	23.2	23.2	26.0	27.8	25.3	25.3	22.7	24.3	27.5	27.4	20.1	21.6
	40	24.9	21.3	23.5	25.1	27.2	23.3	20.4	21.9	29.5	25.2	17.9	19.3
	35	26.3	19.3	21.5	23.1	28.8	21.0	18.6	20.0	31.2	22.8	16.3	17.6
	30	27.6	17.2	20.0	21.5	30.2	18.7	17.2	18.6	32.8	20.2	15.1	16.3



Capacities [t]

		Boom length [m]											
		38				41				44			
alpha [°]		C	J	Rear counterweight [t]		C	J	Rear counterweight [t]		C	J	Rear counterweight [t]	
		[m]	[m]	50.3	55.6	[m]	[m]	50.3	55.6	[m]	[m]	50.3	55.6
	60		21.9	35.6	27.9	29.8	23.4	38.2	25.2	27.0	24.9	40.8	22.7
55		24.7	33.8	23.4	25.1	26.4	36.3	21.0	22.5	28.1	38.7	18.8	20.3
50		27.2	31.8	20.1	21.6	29.2	34.1	17.9	19.3	31.1	36.4	16.0	17.2
45		29.6	29.6	17.6	19.0	31.7	31.7	15.6	16.9	33.8	33.8	13.8	14.9
40		31.8	27.1	15.7	16.9	34.0	29.0	13.9	15.0	36.3	31.0	12.1	13.2
35		33.7	24.5	14.2	15.3	36.2	26.2	12.4	13.5	38.6	27.9	10.8	11.8
30		35.4	21.7	13.0	14.1	38.0	23.2	11.3	12.4	40.6	24.7	9.8	10.7

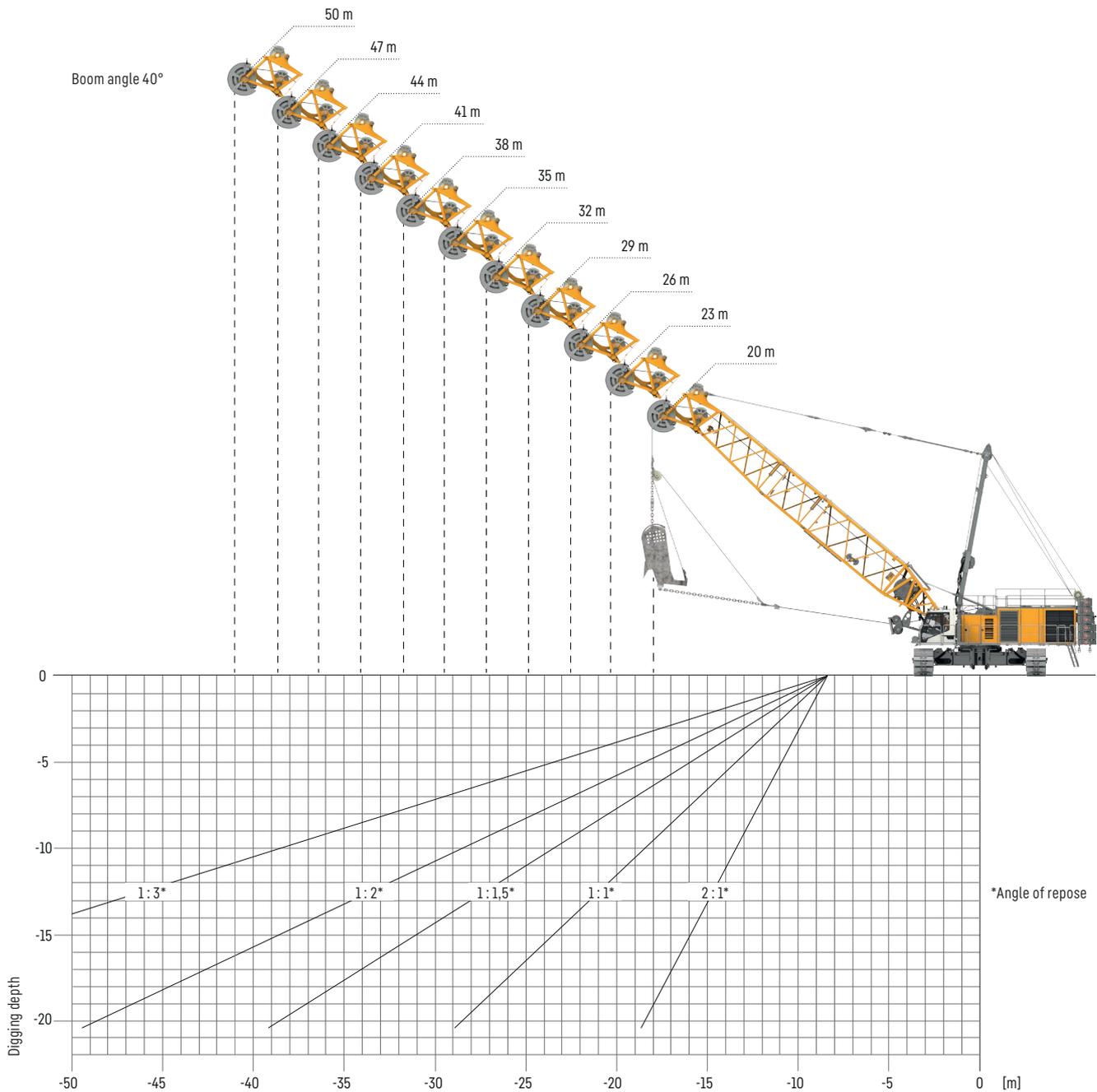
Capacities [t]

		Boom length [m]											
		47*				50*				53*			
alpha [°]		C	J	Rear counterweight [t]		C	J	Rear counterweight [t]		C	J	Rear counterweight [t]	
		[m]	[m]	50.3	55.6	[m]	[m]	50.3	55.6	[m]	[m]	50.3	55.6
	60		26.4	43.4	20.6	22.1	27.9	46.0	18.6	20.1	29.4	48.6	16.9
55		29.8	41.2	16.9	18.3	31.6	43.6	15.1	16.4	33.3	46.1	13.6	14.8
50		33.0	38.7	14.2	15.4	34.9	41.0	12.6	13.7	36.9	43.3	11.2	12.3
45		35.9	35.9	12.2	13.3	38.1	38.0	10.7	11.8	40.2	40.2	9.3	10.3
40		38.7	32.9	10.6	11.7	40.9	34.8	9.1	10.1	43.2	36.8	7.8	8.8
35		41.1	29.6	9.4	10.3	43.5	31.4	7.9	8.8	46.0	33.1	6.6	7.5
30		43.2	26.2	8.3	9.2	45.8	27.7	6.9	7.8	48.4	29.2	5.7	6.6

TLT 11981105 M282769 PF. Max. capacities in metric tonnes do not exceed 75% of tipping load. Above capacities are for reference only and are not programmed in the LML system. The size of the bucket has to be determined according to local conditions.

*These boom lengths can only be used in combination with the 35t drag winch.

Planning aid for dragline operation



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

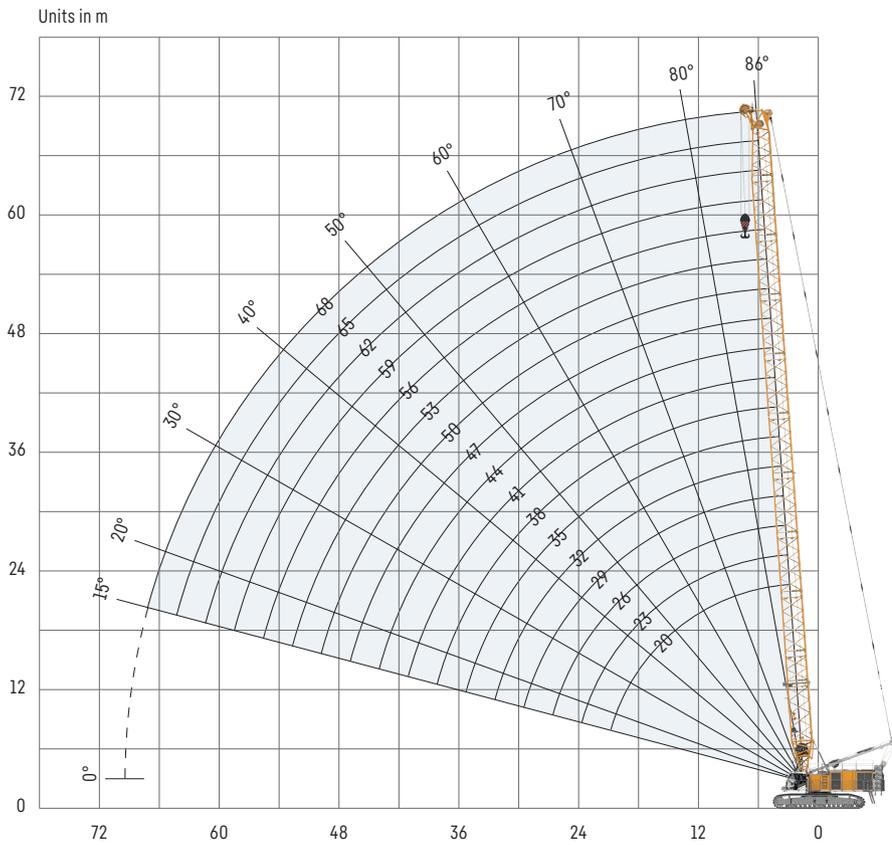
Main boom [m]	26	32	35	38	41	44
Dragline bucket [m³ / yd³]	6.5 / 8.5	6.5 / 8.5	6.5 / 8.5	6.2 / 8.0	5.8 / 7.5	4.6 / 6.0

Density: 1.8 t/m³ and fill factor 0.8

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

The planning aid for dragline operation refers to the 35 t drag winch.

Lifting operation



Auxiliary jib 35 t

The maximum capacity of the auxiliary jib is 35 t. The corresponding load chart is programmed in the LML system.

Main boom configuration

Boom section	Amount of boom sections																
	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Boom foot 10m	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	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 7m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom length [m]	20	23	26	29	32	35	38	41	44	47	50	53	56	59	62	65	68
Auxiliary jib	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* preferred boom combinations

Capacities [t]

		Boom length [m]															
		20		23		26		29		32		35		38		41	
*		50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6
4.8		200.0	200.0														
5		200.0	196.5														
6		185.7	183.6	176.9	186.1	168.8	178.4	161.3	170.5	153.8	162.7						
7		149.7	158.4	143.8	152.2	138.3	146.3	133.0	140.8	128.1	135.6	123.5	130.7	119.2	126.2	115.0	121.8
8		125.1	132.4	120.9	127.9	116.8	123.6	112.9	119.5	109.2	115.6	105.7	112.0	102.4	108.5	99.2	105.1
9		107.2	113.5	104.0	110.1	100.8	106.8	97.8	103.6	94.9	100.6	92.2	97.7	89.5	94.9	86.9	92.2
10		93.5	99.1	91.0	96.5	88.5	93.8	86.1	91.3	83.7	88.8	81.5	86.4	79.3	84.1	77.2	81.9
11		81.4	86.3	80.8	85.7	78.7	83.5	76.7	81.4	74.8	79.3	72.9	77.3	71.0	75.4	69.2	73.5
12		71.3	75.6	71.5	75.9	70.7	75.0	69.1	73.3	67.4	71.5	65.8	69.8	64.1	68.1	62.6	66.5
13		63.2	67.1	63.4	67.3	63.4	67.3	62.7	66.6	61.2	65.0	59.8	63.5	58.4	62.0	57.0	60.6
14		56.6	60.2	56.9	60.4	56.8	60.4	56.8	60.4	56.0	59.5	54.7	58.2	53.5	56.9	52.2	55.6
15		51.2	54.4	51.4	54.6	51.4	54.6	51.4	54.6	51.2	54.5	50.4	53.6	49.2	52.4	48.1	51.2
16		46.5	49.5	46.8	49.8	46.8	49.7	46.8	49.7	46.6	49.6	46.5	49.5	45.5	48.5	44.5	47.4
17		42.6	45.3	42.8	45.6	42.8	45.6	42.8	45.6	42.7	45.4	42.6	45.3	42.2	45.0	41.3	44.1
18		39.1	41.7	39.4	42.0	39.4	42.0	39.4	42.0	39.2	41.8	39.1	41.7	38.9	41.5	38.5	41.1
19		36.1	38.5	36.4	38.8	36.4	38.8	36.4	38.8	36.2	38.7	36.1	38.6	35.9	38.3	35.8	38.2
20		33.3	35.6	33.7	36.0	33.7	36.0	33.8	36.0	33.6	35.9	33.5	35.8	33.3	35.6	33.1	35.4
21		30.8	33.0	31.4	33.5	31.4	33.5	31.4	33.6	31.3	33.4	31.2	33.3	30.9	33.1	30.8	32.9
22				29.2	31.2	29.3	31.3	29.3	31.3	29.2	31.2	29.1	31.1	28.8	30.9	28.7	30.7
23				27.3	29.2	27.4	29.3	27.4	29.3	27.3	29.2	27.2	29.1	27.0	28.9	26.8	28.7
24				25.4	27.3	25.6	27.5	25.7	27.5	25.6	27.4	25.5	27.3	25.2	27.1	25.1	26.9
25						24.2	25.8	24.3	25.9	24.2	25.7	24.1	25.7	23.8	25.4	23.7	25.3
26						22.7	24.3	22.8	24.4	22.7	24.3	22.6	24.3	22.4	24.1	22.3	23.9
27						21.3	22.9	21.5	23.1	21.4	23.0	21.3	22.9	21.1	22.7	21.0	22.6
28								20.3	21.8	20.2	21.7	20.1	21.7	19.9	21.4	19.8	21.3
29								19.1	20.6	19.1	20.5	19.0	20.5	18.8	20.3	18.6	20.1
30								18.0	19.4	18.0	19.4	18.0	19.4	17.8	19.2	17.6	19.0
31										17.0	18.4	17.0	18.4	16.8	18.2	16.7	18.0
32										16.1	17.4	16.1	17.4	15.9	17.2	15.8	17.1
33										15.2	16.5	15.2	16.5	15.1	16.3	14.9	16.2
34												14.4	15.7	14.3	15.5	14.1	15.4
35												13.7	14.9	13.5	14.7	13.4	14.6
36														12.8	14.0	12.7	13.9
37														12.1	13.3	12.0	13.2
38														11.5	12.6	11.4	12.5
39																10.8	11.9
40																10.3	11.3
41																9.7	10.7

*Rear counterweight in [t]

TLT 11970165 M282769 PF. 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.



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Crane Planner 2.0

Capacities [t]

		Boom length [m]																
		44		47		50		53		56		59		62		65		68
* Radius [m]		50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	50.3	55.6	55.6
	8		96.2	101.9	93.2	98.8	90.5	95.9										
9		84.5	89.6	82.1	87.1	79.8	84.7	77.6	82.4	75.5	80.1	73.4	78.0					
10		75.1	79.7	73.1	77.6	71.2	75.6	69.3	73.6	67.5	71.8	65.7	69.9	64.0	68.1	62.4	66.4	64.7
11		67.5	71.6	65.7	69.9	64.1	68.1	62.5	66.4	60.9	64.8	59.4	63.2	57.9	61.6	56.4	60.1	58.6
12		61.1	64.9	59.6	63.4	58.1	61.8	56.7	60.3	55.3	58.9	54.0	57.5	52.6	56.1	51.3	54.7	53.4
13		55.7	59.2	54.3	57.8	53.0	56.5	51.8	55.2	50.5	53.9	49.3	52.6	48.1	51.3	46.9	50.1	48.9
14		51.0	54.3	49.8	53.1	48.7	51.9	47.5	50.7	46.4	49.5	45.3	48.4	44.2	47.2	43.1	46.1	45.0
15		47.0	50.1	45.9	49.0	44.9	47.9	43.8	46.8	42.8	45.7	41.8	44.6	40.8	43.6	39.8	42.6	41.6
16		43.5	46.4	42.5	45.4	41.5	44.3	40.6	43.3	39.6	42.3	38.7	41.4	37.7	40.4	36.8	39.4	38.5
17		40.4	43.1	39.5	42.2	38.6	41.2	37.7	40.3	36.8	39.4	35.9	38.4	35.0	37.5	34.2	36.6	35.8
18		37.6	40.2	36.8	39.3	35.9	38.4	35.1	37.6	34.2	36.7	33.4	35.8	32.6	35.0	31.8	34.1	33.3
19		35.1	37.6	34.4	36.8	33.5	35.9	32.8	35.1	32.0	34.3	31.2	33.5	30.4	32.7	29.6	31.9	31.1
20		32.9	35.2	32.2	34.5	31.4	33.7	30.7	32.9	29.9	32.1	29.2	31.4	28.4	30.6	27.7	29.8	29.1
21		30.5	32.7	30.2	32.4	29.5	31.6	28.8	30.9	28.0	30.1	27.3	29.4	26.6	28.7	25.9	28.0	27.2
22		28.4	30.5	28.2	30.2	27.7	29.8	27.0	29.1	26.3	28.3	25.6	27.7	25.0	26.9	24.3	26.3	25.6
23		26.5	28.5	26.3	28.3	26.1	28.0	25.4	27.4	24.7	26.7	24.3	26.0	23.6	25.3	23.0	24.7	24.0
24		24.8	26.7	24.6	26.4	24.3	26.2	24.1	25.9	23.5	25.2	22.9	24.5	22.2	24.1	21.6	23.4	22.8
25		23.4	25.0	23.2	24.8	23.0	24.5	22.7	24.3	22.1	23.9	21.6	23.3	20.9	22.7	20.3	22.1	21.4
26		22.0	23.7	21.8	23.5	21.5	23.2	21.3	23.0	20.9	22.6	20.3	22.1	19.7	21.4	19.1	20.8	20.2
27		20.7	22.3	20.5	22.1	20.2	21.8	20.0	21.6	19.7	21.3	19.2	20.9	18.6	20.2	18.0	19.7	19.1
28		19.5	21.0	19.3	20.8	19.0	20.6	18.8	20.3	18.5	20.0	18.1	19.7	17.6	19.2	17.0	18.6	18.0
29		18.4	19.9	18.2	19.7	17.9	19.4	17.7	19.2	17.4	18.9	17.1	18.6	16.6	18.1	16.1	17.6	17.0
30		17.4	18.8	17.2	18.6	16.9	18.3	16.6	18.1	16.4	17.8	16.1	17.5	15.7	17.2	15.2	16.6	16.1
31		16.4	17.8	16.2	17.6	15.9	17.3	15.7	17.1	15.4	16.8	15.1	16.5	14.8	16.2	14.3	15.7	15.2
32		15.5	16.8	15.3	16.6	15.0	16.4	14.8	16.1	14.5	15.8	14.3	15.6	14.0	15.3	13.5	14.9	14.4
33		14.7	16.0	14.5	15.8	14.2	15.5	14.0	15.2	13.7	15.0	13.4	14.7	13.1	14.4	12.8	14.1	13.6
34		13.9	15.1	13.7	14.9	13.4	14.7	13.2	14.4	12.9	14.1	12.6	13.9	12.3	13.6	12.1	13.3	12.8
35		13.2	14.4	13.0	14.2	12.7	13.9	12.5	13.7	12.2	13.4	11.9	13.1	11.6	12.8	11.3	12.5	12.1
36		12.5	13.6	12.3	13.4	12.0	13.2	11.8	12.9	11.5	12.6	11.2	12.4	10.9	12.1	10.6	11.8	11.5
37		11.8	12.9	11.6	12.8	11.3	12.5	11.1	12.2	10.8	12.0	10.6	11.7	10.3	11.4	10.0	11.1	10.8
38		11.2	12.3	11.0	12.1	10.7	11.8	10.5	11.6	10.2	11.3	10.0	11.1	9.7	10.7	9.4	10.5	10.2
39		10.6	11.7	10.4	11.5	10.2	11.2	9.9	11.0	9.6	10.7	9.4	10.4	9.1	10.1	8.8	9.9	9.6
40		10.1	11.1	9.9	10.9	9.6	10.6	9.4	10.4	9.1	10.1	8.8	9.9	8.5	9.6	8.3	9.3	9.0
41		9.5	10.5	9.4	10.4	9.1	10.1	8.9	9.9	8.6	9.6	8.3	9.3	8.0	9.0	7.7	8.7	8.4
42		9.0	10.0	8.9	9.8	8.6	9.6	8.4	9.4	8.1	9.1	7.8	8.8	7.5	8.5	7.2	8.2	7.9
43		8.5	9.5	8.4	9.3	8.1	9.1	7.9	8.9	7.6	8.6	7.4	8.3	7.0	8.0	6.8	7.7	7.4
44		8.0	9.0	7.9	8.9	7.7	8.6	7.5	8.4	7.2	8.1	6.9	7.8	6.6	7.5	6.3	7.3	7.0
45				7.5	8.4	7.2	8.1	7.0	7.9	6.7	7.6	6.5	7.4	6.2	7.1	5.9	6.8	6.5
46				7.0	7.9	6.8	7.7	6.6	7.5	6.3	7.2	6.1	7.0	5.8	6.7	5.5	6.4	6.1
47				6.6	7.5	6.4	7.3	6.2	7.1	5.9	6.8	5.7	6.6	5.4	6.3	5.1	6.0	5.7
48						6.0	6.9	5.8	6.7	5.6	6.4	5.3	6.2	5.0	5.9	4.7	5.6	5.3
49						5.7	6.5	5.5	6.3	5.2	6.0	5.0	5.8	4.7	5.5	4.4	5.2	4.9
50						5.3	6.1	5.1	5.9	4.8	5.7	4.6	5.4	4.3	5.1	4.0	4.9	4.5
51								4.8	5.6	4.5	5.3	4.3	5.1	4.0	4.8	3.7	4.5	4.2
52								4.4	5.2	4.2	5.0	4.0	4.7	3.7	4.4	3.4	4.2	3.9
53								4.1	4.9	3.9	4.6	3.7	4.4	3.4	4.1	3.1	3.9	3.6
54										3.6	4.3	3.4	4.1	3.1	3.8	2.8	3.6	3.2
55										3.3	4.0	3.1	3.8	2.8	3.5	2.5	3.3	3.0
56										3.0	3.7	2.8	3.5	2.5	3.2	2.3	3.0	2.7
57												2.5	3.2	2.2	3.0	2.0	2.7	2.4
58												2.3	3.0	2.0	2.7	1.7	2.4	2.1
59												2.0	2.7	1.7	2.4	1.5	2.2	1.9
60														1.5	2.2	1.3	1.9	1.6
61														1.2	1.9	1.0	1.7	1.4
62														1.0	1.7		1.4	1.1
63																	1.2	

*Rear counterweight in [t]

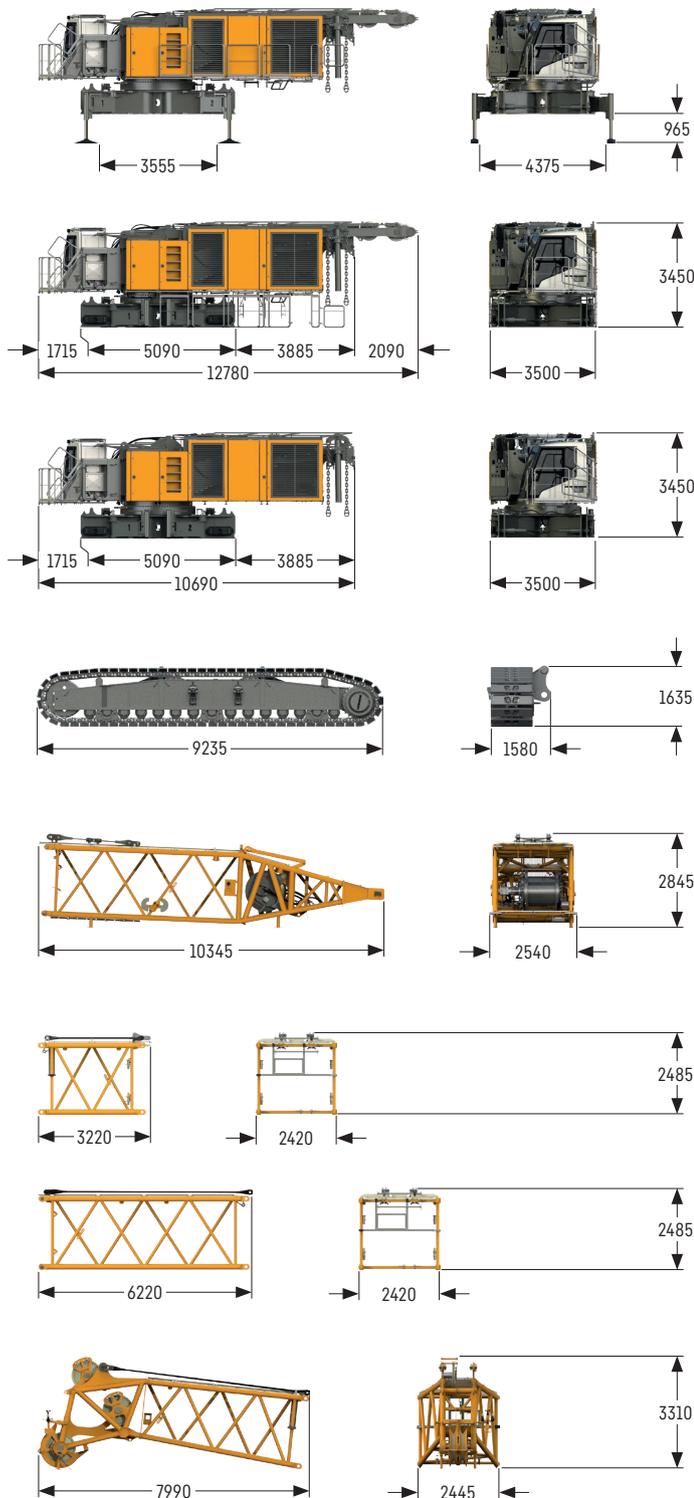
Load capacities [t] with 65.2t counterweight and 36t carbody counterweight

	Boom length [m]								
	44	47	50	53	56	59	62	65	68
8	127.1	122.9	116.4						
9	112.0	109.0	106.1	103.3	96.6	90.5			
10	99.9	97.4	95.0	92.6	90.4	85.5	79.3	74.2	68.9
11	90.0	87.9	85.8	83.8	81.8	79.9	75.7	70.5	65.1
12	81.8	79.9	78.1	76.4	74.6	73.0	71.1	66.6	61.9
13	74.8	73.2	71.6	70.0	68.5	67.0	65.5	63.0	58.2
14	68.8	67.4	65.9	64.5	63.1	61.8	60.5	59.2	55.3
15	63.6	62.3	61.0	59.7	58.5	57.2	56.0	54.8	52.8
16	59.1	57.9	56.7	55.5	54.4	53.2	52.1	51.0	49.9
17	55.1	54.0	52.9	51.8	50.7	49.7	48.6	47.6	46.6
18	51.5	50.5	49.4	48.5	47.5	46.5	45.5	44.5	43.6
19	48.3	47.4	46.4	45.5	44.5	43.6	42.7	41.8	40.9
20	44.9	44.6	43.6	42.8	41.9	41.0	40.1	39.3	38.4
21	41.9	41.7	41.1	40.3	39.5	38.6	37.8	37.0	36.2
22	39.2	39.0	38.7	38.1	37.2	36.5	35.7	34.9	34.1
23	36.8	36.6	36.3	36.0	35.2	34.5	33.7	33.0	32.2
24	34.6	34.4	34.1	33.9	33.4	32.7	31.9	31.2	30.5
25	32.6	32.4	32.1	31.8	31.6	31.0	30.3	29.6	28.9
26	30.7	30.5	30.3	30.0	29.7	29.4	28.7	28.1	27.4
27	29.1	28.9	28.6	28.3	28.0	27.8	27.3	26.7	26.0
28	27.5	27.3	27.0	26.8	26.5	26.2	26.0	25.3	24.7
29	26.1	25.9	25.6	25.4	25.1	24.8	24.5	24.3	23.5
30	24.8	24.6	24.3	24.2	23.9	23.7	23.4	23.1	22.3
31	23.7	23.5	23.2	23.0	22.7	22.4	22.1	21.9	21.3
32	22.5	22.3	22.1	21.8	21.5	21.3	21.0	20.7	20.3
33	21.5	21.3	21.0	20.8	20.5	20.2	19.9	19.6	19.3
34	20.5	20.3	20.0	19.8	19.5	19.2	18.9	18.6	18.3
35	19.5	19.3	19.1	18.8	18.5	18.3	18.0	17.7	17.4
36	18.6	18.4	18.2	17.9	17.6	17.4	17.1	16.8	16.5
37	17.8	17.6	17.3	17.1	16.8	16.6	16.3	16.0	15.7
38	17.0	16.8	16.6	16.3	16.0	15.8	15.5	15.2	14.9
39	16.3	16.1	15.8	15.6	15.3	15.0	14.7	14.5	14.1
40	15.6	15.4	15.1	14.9	14.6	14.3	14.0	13.8	13.4
41	14.9	14.7	14.4	14.2	13.9	13.7	13.4	13.1	12.8
42	14.2	14.1	13.8	13.6	13.3	13.0	12.7	12.5	12.1
43	13.6	13.5	13.2	13.0	12.7	12.4	12.1	11.9	11.5
44	12.9	12.9	12.6	12.4	12.1	11.9	11.6	11.3	11.0
45		12.3	12.1	11.9	11.6	11.3	11.0	10.8	10.4
46		11.8	11.5	11.3	11.1	10.8	10.5	10.2	9.9
47		11.1	11.0	10.8	10.6	10.3	10.0	9.7	9.4
48			10.5	10.4	10.1	9.8	9.5	9.3	8.9
49			10.1	9.9	9.6	9.4	9.1	8.8	8.5
50			9.5	9.4	9.2	8.9	8.6	8.4	8.1
51				9.0	8.7	8.5	8.2	8.0	7.6
52				8.6	8.3	8.1	7.8	7.6	7.2
53				8.0	7.9	7.7	7.4	7.2	6.9
54					7.6	7.3	7.1	6.8	6.5
55					7.2	7.0	6.7	6.4	6.1
56					6.7	6.6	6.3	6.1	5.8
57						6.3	6.0	5.8	5.4
58						5.9	5.7	5.4	5.1
59						5.5	5.4	5.1	4.8
60							5.0	4.8	4.5
61							4.7	4.5	4.2
62							4.4	4.2	3.9
63								4.0	3.7
64								3.7	3.4
65									3.1
66									2.9
67									2.6

TLT 11970165 M282769 PF. 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 (2220.24)



Basic machine on jack-up system

supported by hydraulic cylinders (jack-up system) for loading/unloading

*Telescopic hydraulic cylinders (jack-up system)

Basic machine (transport option I)

with A-frame, self-assembly system, 350 kN hoist winch II, without boom foot, basic counterweight and crawlers - fully tanked and ready for operation

Weight without hoist rope	kg	55400
Weight with hoist rope	kg	56000
Weight of hoist rope	kg/m	6.5

Basic machine (transport option II)

with self-assembly system, 350 kN hoist winch II, without A-frame, walkways, boom foot, basic counterweight and crawlers - fully tanked and ready for operation

Weight without hoist rope	kg	47400
Weight with hoist rope	kg	48000
Weight of hoist rope	kg/m	6.5

Crawler (2x)

Flat track pads	mm	1100
Weight	kg	25000

Boom foot 10 m (2220.24)

Weight incl. 350 kN hoist winch I without hoist rope	kg	10360
Weight incl. 350 kN hoist winch I with hoist rope	kg	10960
Weight of hoist rope	kg/m	6.5

Boom section 3 m (2220.24)

Weight incl. pendant straps	kg	1070
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Boom section 6 m (2220.24)

Weight incl. pendant straps	kg	1680
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Boom head 7 m (2220.24)

Weight incl. pendant straps and 200 t roller set	kg	4606
Weight incl. pendant straps and standard roller set for lifting equipment	kg	4658
Weight incl. pendant straps and standard roller set for grab	kg	4708
Weight incl. pendant straps and standard roller set for dragline bucket	kg	4802

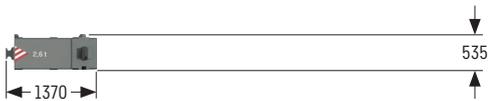


Auxiliary jib

Width	mm 1500
Weight	kg 1260

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.

Counterweight



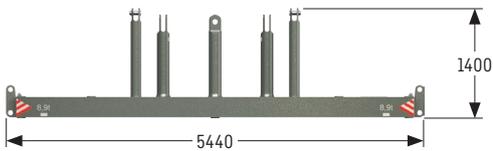
Counterweight slab (6x, option 8x)

Width	mm 843
Weight	kg 2600



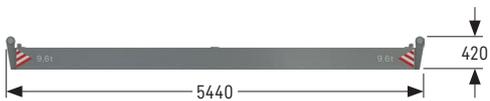
Counterweight slab (2x)

Width	mm 1050
Weight	kg 12300



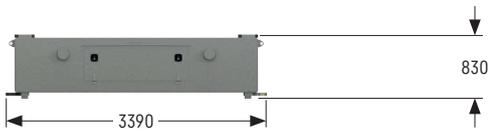
Basic counterweight slab (1x)

Width	mm 1050
Weight	kg 8900



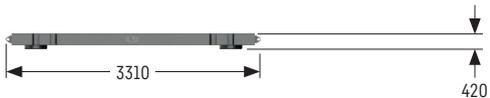
Additional counterweight (1x)

Width	mm 1050
Weight	kg 9600



Additional counterweight I (2x)

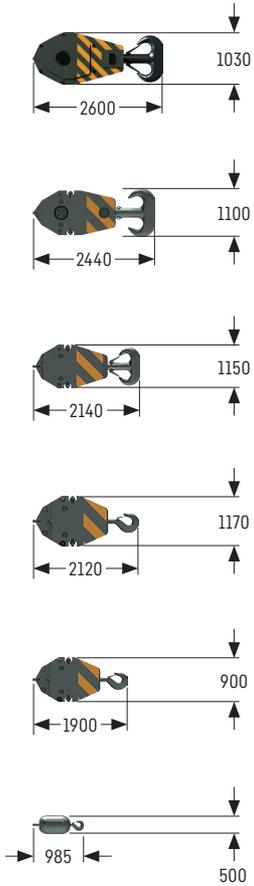
Width	mm 1910
Weight	kg 13500



Additional counterweight II (2x)

Width	mm 1220
Weight	kg 4500

Hooks



200 t hook block - 4 sheaves

Width	mm	545
Weight	kg	2600

160 t hook block - 3 sheaves

Width	mm	420
Weight	kg	2011

100 t hook block - 2 sheaves

Width	mm	270
Weight	kg	1200

80 t hook block - 1 sheave

Width	mm	245
Weight	kg	1200

50 t hook block - 1 sheave

Width	mm	230
Weight	kg	750

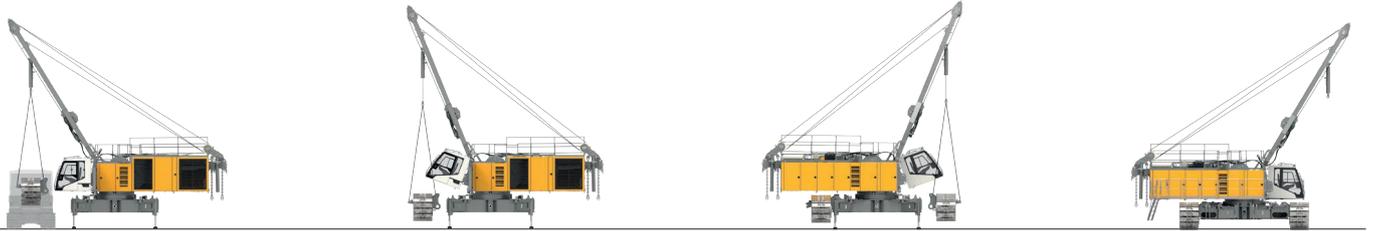
35 t single hook

Width	mm	500
Weight	kg	800

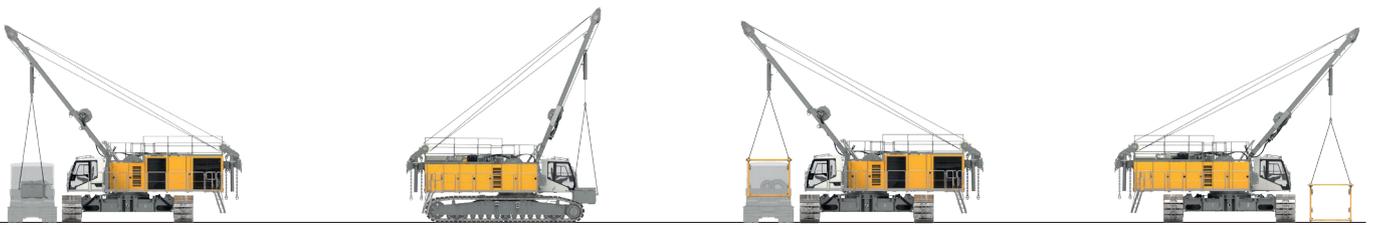
Self-assembly system



Unloading of basic machine (option)

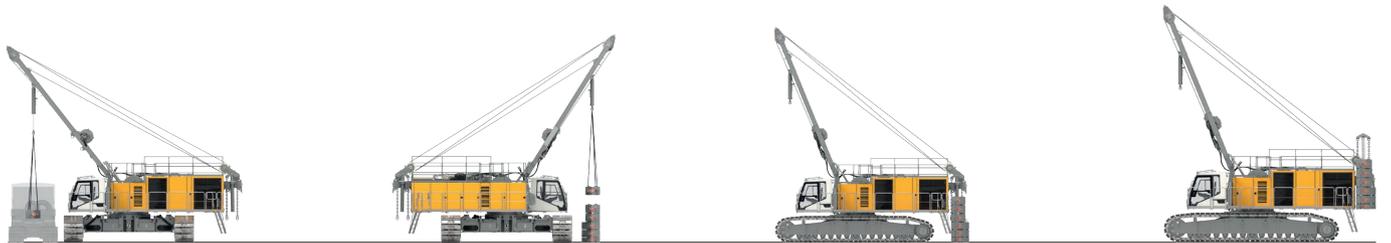


Unloading and assembly of crawlers



Unloading and assembly of carbody counterweight

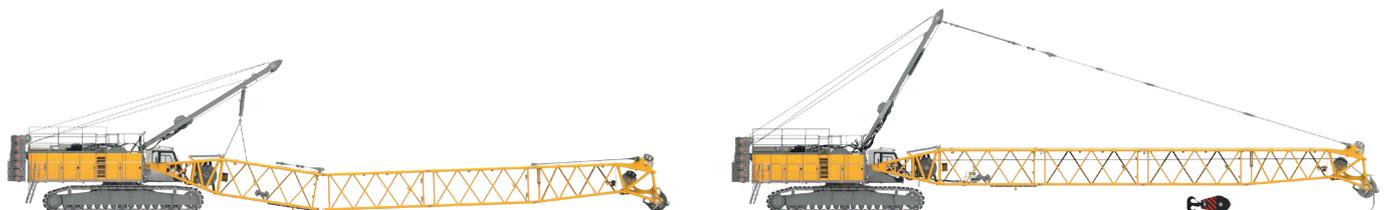
Unloading and assembly of boom



Unloading and assembly of rear counterweight

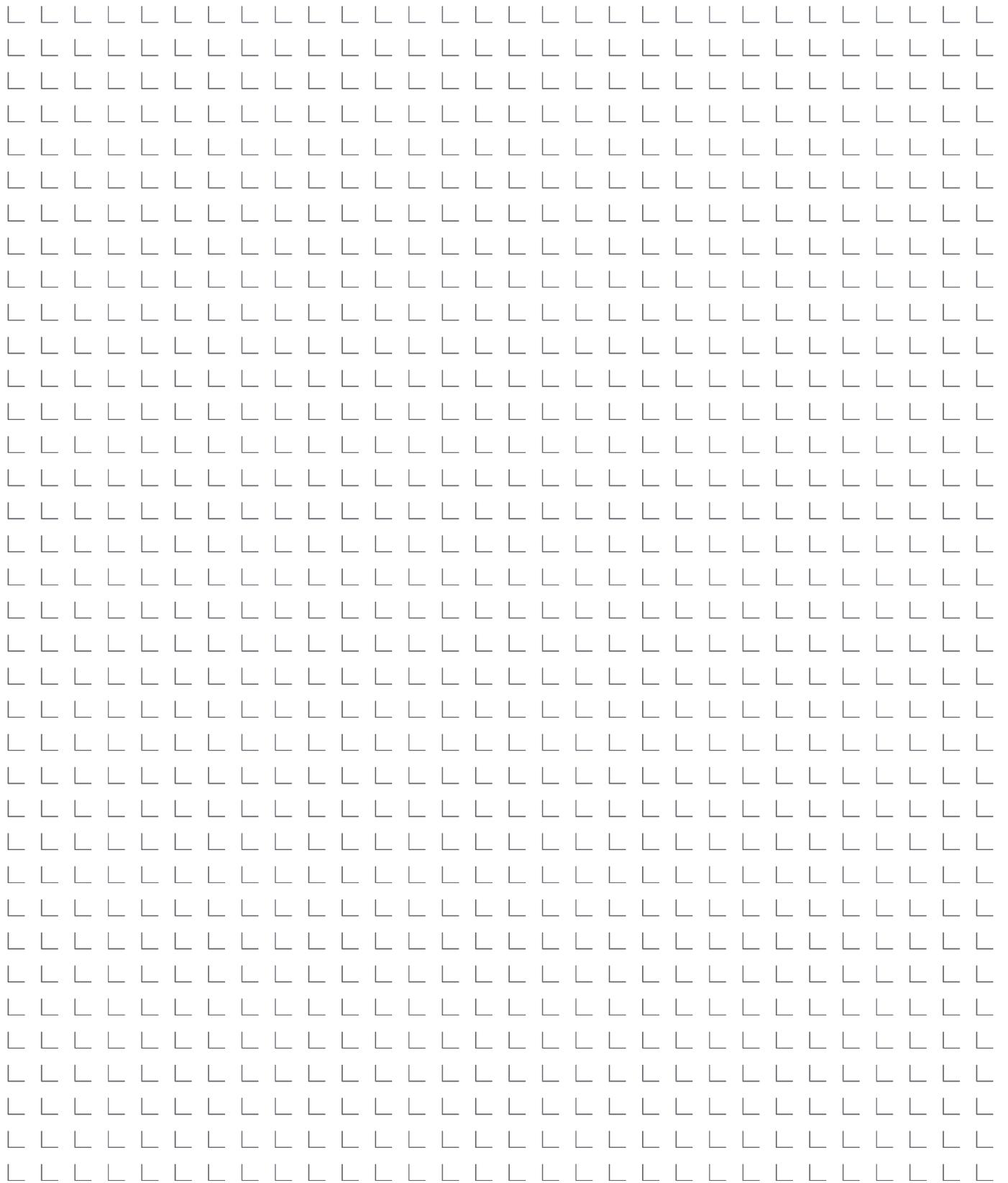


Assembly of boom foot



Assembly of boom

Reeving of hoist ropes



Liebherr-Werk Nenzing GmbH · Dr. Hans Liebherr Str. 1 · 6710 Nenzing, Austria
Phone +43 50809 41-473 · crawler.crane@liebherr.com · www.liebherr.com
facebook.com/LiebherrConstruction