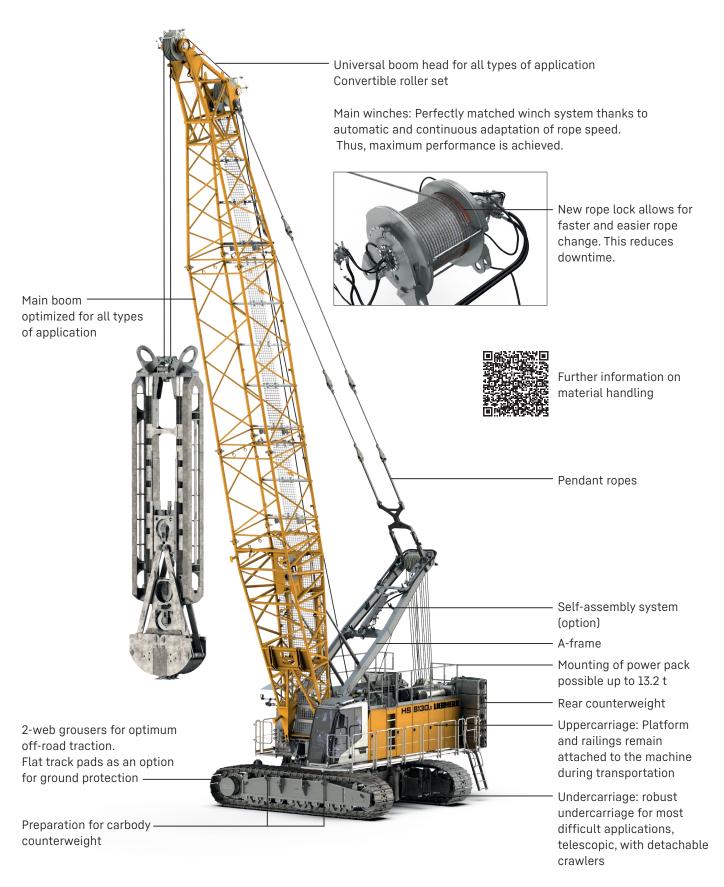


# **Concept and characteristics**





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



#### 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 visualisation



# **Technical description**



One	rating	wein	hts

Composition of operating weight

Basic machine with HD undercarriage, 2 main winches
350 kN including wire ropes, 14 m main boom, consisting
of A-frame, boom foot (7 m) and boom head (7 m), 29 t
rear counterweight, 2-web grousers (width 1000 mm),
50 t hook block.

Total weight
approx. 116 t

#### **Ground pressure**

Ground pressure	1.06 kg/cm <sup>2</sup>

#### Equipment

Lifting operation	max. 53 m
with fixed jib	max. 41 m
Duty cycle operation	max. 38 m
	with fixed jib



### Diesel engi<u>ne</u>

Power rating according to ISO 9249	565 kW (757 hp) at 1700 rpm
Engine type	Liebherr D 9508 A7-04
Fuel tank capacity	770 l with continuous level indicator and reserve
	warning
AdBlue tank capacity	132 l with continuous level indicator and reserve warning
Exhaust certification	EPA/CARB Tier 4f and EU 2016/1628 Stage V



# Noise measurement data and vibration

Noise emission	according to	2000/14/EC directive
Emission sound pressure level L <sub>PA</sub>	76.2 dB(A)	(in the cabin)
Guaranteed sound power level L <sub>wa</sub>	109 dB(A)	(of the machine)
Vibration transmitted to the	< 2.5 m/s <sup>2</sup>	(to the hand-arm system)
machine operator	$< 0.5  \text{m/s}^2$	(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	1170 l
Max. working pressure	350 bar
Max. power at the connection plate	380 kW (2x 421 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



rivia noisting 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)
Line pull (nominal load)	350 kN
Line pull in the 4th layer	286.5 kN
Rope diameter	36 mm
Drum diameter	830 mm
Rope speed	0-96 m/min
Rope capacity in the 1st layer	44 m
Rope capacity in 4 layers	236 m (effective length)
Options	
Auxiliarywinch	77kN in boom foot
Tagline winch	30 kN with free fall
Tagline winch	70 kN with free fall



Line pull	max. 165 kN
Rope diameter	24 mm
Boom luffing	15-84° in 56 s



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	0-1.3 km/h
Grousers	2-web grousers, width 1000 mm
Width of undercarriage	automatic track width adjustment from transport width to operating width via hydraulic cylinders
Options	Self-assembly system, jack-up system Flat track pads, width 1000mm



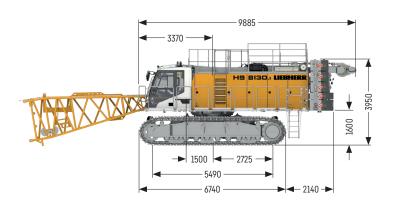
Swilly year	
Drive system	Fixed axial piston hydraulic motors, planetary gearbox, pinion
Swing ring	Roller bearing with external teeth
Brake	hydraulically released, spring-loaded multi-disc holding brake
Swing speed	0-4 rpm continuously variable, selector for 3 speed ranges to increase swing precision
Lubrication system	automatic central lubrication system reduces maintenance requirements and increases service life
Option	Display of swing angle

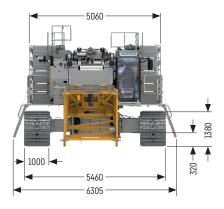


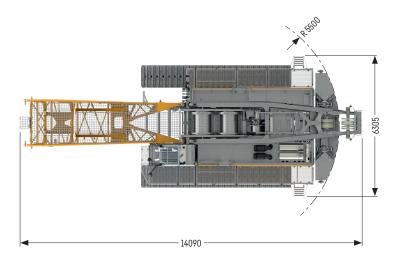
Control	
Control	includes all control and monitoring functions, designed to withstand extreme environmental conditions and heavy duty construction tasks
Display	high resolution monitor in the operator's cabin, clear display of complete machine operating data, warnings and failure indications in the required 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 8005.01.03
- Designed according to EN 474-1 and EN 474-12.
- Machine is 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**

### **Assistance system**

#### **GrabMatic**

- Grab visualisation
  The status of the grab (open, closed) is shown on the display.
- -Slack rope automatic When positioning the grab, it is possible that slack rope occurs. This is counteracted by the control system.
- Level cutting
   This function allows the dredging of a level surface under water to a specified depth.
- -Automatic winch synchronisation Thanks to the automatic winch synchronisation, lifting and lowering is possible with just one control lever.
- Grab filling level
  Automatic hoisting and lowering of the grab
  during dredging enables an optimum filling
  level of the grab.
- Cycle counter

  The number of work cycles is shown on the display.

#### **Dredging interface**

The interface allows the integration of different systems with which, for example, the swell compensation can be implemented.





Hydraulic grab for depths up to 25 m (40 m upon request)



#### Casing oscillator

Max. drilling diameter mm 3300

### HS 8130 during operation



#### Dredging assistant (option)



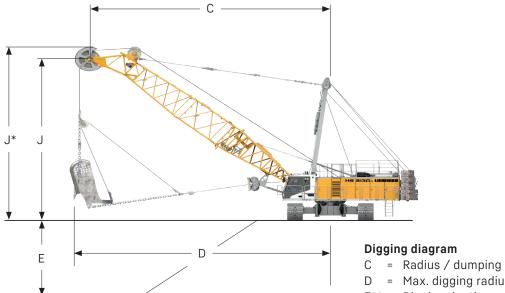
## Capacities in grab operation

Capacities in [t] with 34.3 t counterweight

			Boom length [m]						
		17	20	23	26	29	32	35	38
	5	53.0*	53.0*						
	6	53.0*	53.0*	53.0*	51.1*	50.0*			
	7	53.0*	53.0*	53.0*	48.1*	47.0*	40.1*	38.9*	33.9
	8	52.1*	51.1*	50.8*	45.5*	44.1*	37.7*	36.5*	31.7
	9	43.7*	43.7*	43.7*	43.1*	41.3*	35.8*	34.2	29.8
	10	37.5*	37.5*	37.5*	37.4*	37.4*	33.6	32.2	28.2
	11	32.7	32.7	32.7	32.6	32.5	31.4	30.4	26.5
	12	28.9	28.9	28.8	28.8	28.7	28.6	27.8	25.2
	13	25.8	25.8	25.8	25.7	25.6	25.5	25.0	23.0
	14	23.2	23.2	23.2	23.1	23.0	22.9	22.8	21.2
≣_	15	21.0	21.1	21.0	21.0	20.8	20.7	20.2	19.6
Kaulus [III]	16	19.1	19.2	19.2	19.1	19.0	18.9	18.1	17.5
2	18	15.6	16.2	16.2	16.1	16.0	15.6	15.1	14.5
	20		13.8	13.8	13.8	13.6	13.4	13.0	12.5
	22			11.9	11.9	11.8	11.7	11.4	11.1
	24			9.3	10.3	10.2	10.1	10.0	9.7
	25				9.7	9.6	9.5	9.3	9.2
	26				9.0	9.0	8.9	8.7	8.6
	28					7.8	7.8	7.6	7.5
	30					6.0	6.8	6.7	6.6
	32						5.8	5.9	5.8
	34							5.2	5.0
	35							4.5	4.7
	36							3.7	4.4
	38								3.4

TLT 13163554 M349160 PF. Stability calculated according to EN 474-12. The load capacities do not exceed 66 % of the tipping load. \*Max. lifting capacity with mechanical grab is 35 t. For higher lifting capacities a hydraulic grab is required (dual-winch operation).

# **Dragline equipment**



= Radius / dumping radius

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

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

= Height to centre rope pulley boom head

J + 0.64 m

\*\*The depth of cut, 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 34.3t counterweight

							Boom le						
			14			17			20			23	
		С	J		С	J		С	J		С	J	
		[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]
⊆	55	10.5	12.9	34.7	12.5	15.3	31.2	14.2	17.9	25.8	15.9	20.3	21.1
alpha	50	11.7	12.1	30.1	13.6	14.4	27.6	15.5	16.7	22.7	17.4	19.0	18.4
<del>a</del>	45	12.5	11.2	27.3	14.6	13.3	24.9	16.7	15.5	20.0	18.9	17.5	15.9
	40	13.2	10.2	25.1	15.5	12.2	22.7	17.9	14.1	18.0	20.2	16.0	14.4
	35	13.9	9.2	23.3	16.4	11.0	21.1	18.8	12.6	16.4	21.3	14.4	13.4
	30	14.5	8.1	22.0	17.1	9.7	19.4	19.7	11.1	15.1	22.3	12.6	12.4
	25	15.0	7.1	20.9	17.7	8.3	16.9	20.4	9.5	13.4	23.1	10.8	11.1

TLT 13163554 M349160 PF. Stability calculated according to EN 474-12.

Max. capacities do not exceed 75% of tipping load.

The size of the bucket has to be determined according to local conditions.

#### Capacities in [t] with 34.3t counterweight

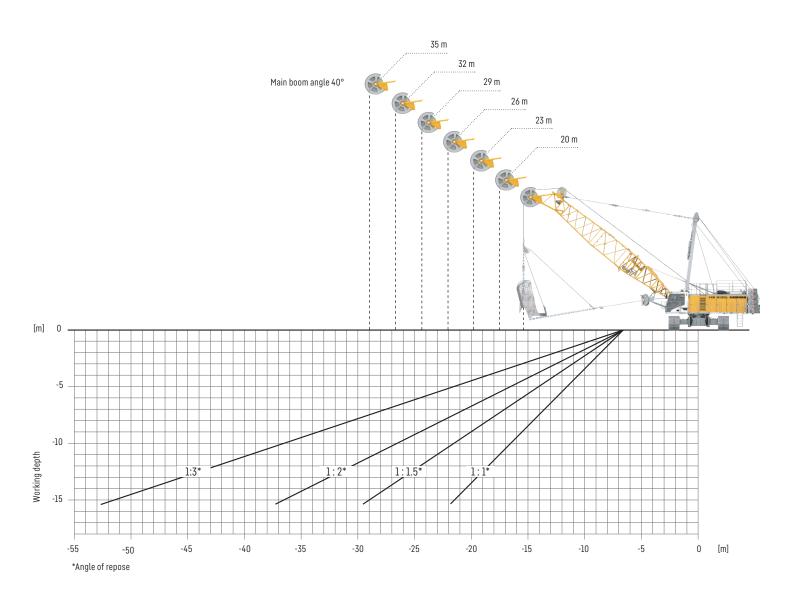
							Boom le	ngth [m]					
			26			29			32			35	
		С	J		С	J		С	J		С	J	
		[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]	[m]	[m]	[t]
⊡	55	17.6	22.8	17.3	19.4	25.2	14.4	21.1	27.6	12.5	22.8	30.1	10.8
alpha	50	19.4	21.3	14.8	21.3	23.6	12.7	23.2	25.9	11.0	25.2	28.2	9.5
ᇹ	45	21.0	19.7	13.3	23.1	21.8	11.3	25.2	23.9	9.8	27.4	26.1	8.3
	40	22.4	17.9	12.2	24.8	19.9	10.3	27.1	21.8	8.9	29.3	23.8	7.5
	35	23.8	16.1	11.3	26.3	17.9	9.4	28.7	19.6	8.1	31.1	21.3	6.8
	30	24.9	14.2	10.6	27.6	15.7	8.8	30.1	17.2	7.5	32.7	18.6	6.3
	25	25.9	12.1	9.3	28.7	13.4	8.1	31.3	14.6	6.5	34.0	15.9	5.3

TLT 13163554 M349160 PF. Stability calculated according to EN 474-12.

Max. capacities do not exceed 75% of tipping load.

The size of the bucket has to be determined according to local conditions.

# Planning aid for dragline operation



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

Main boom [m]	20	23	26	29	32	35
Dragline bucket [ <b>m</b> ³ / yd³]	<b>5.7</b> / 7.5	<b>5</b> / 6.5	<b>3.8</b> / 5	<b>3.4</b> / 4.5	<b>2.5</b> / 3.25	<b>1.9</b> / 2.5
Dumping reach D [m]	23.8	26.9	30	33.1	36.2	39.3
Digging depth* E [m]	10.7	12.1	13.5	14.9	16.3	17.6

Selection of dragline bucket and possible digging depths at 35° boom angle

<u> </u>	· · · · · · · · · · · · · · · · · · ·	, <u>, , , , , , , , , , , , , , , , , , </u>	· · · · · · · · · · · · · · · · · · ·			
Main boom m]	20	23	26	29	32	35
Dragline bucket [m³/yd³]	<b>5.7</b> / 7.7	<b>4.2</b> / 5.5	<b>3.8</b> / 5	<b>2.8</b> / 3.75	<b>2.1</b> / 2.75	<b>1.5</b> / 2
Dumping reach D [m]	24.2	27.3	30.5	33.6	36.9	40.0
Digging depth* E [m]	11.3	12.8	14.3	15.7	17.2	18.7

Dragline buckets in various designs depending on the ground conditions

Density: 1.8 tm³ and fill factor 0.8
\*The digging depth depends on the material's angle of repose.

# Slurry wall grab

#### Maximum capacity in duty cycle operation with standard ropes

Line pull (1st layer)	kN	350
Rope diameter	mm	36
Minimum breaking load	kN	1220
Line pull - 1-rope duty cycle operation	kN	350
Line pull - 2-rope duty cycle operation 1)	kN	530

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.

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



### Load chart for slurry wall operation

Capacities in [t] with 34.3t counterweight

	14	17	20	23	26	29	32	35	38
4.7		53.0*							
5	53.0*	53.0*	53.0*						
6	53.0*	53.0*	53.0*	53.0*	44.0*	42.5*			
7	53.0*	53.0*	52.0*	50.1*	41.4*	39.9*	34.2	32.5	28.4
8	44.9*	45.0*	45.0*	45.0*	39.2*	37.5*	32.1	30.5	26.6
9	37.6*	37.7*	37.8*	37.7*	37.2*	35.3*	30.5	28.6	25.0
10	32.3	32.4	32.4	32.4	32.3	32.3	28.6	26.9	23.7
11	28.1	28.2	28.2	28.2	28.2	28.1	27.2	25.4	22.2
12	24.8	24.9	25.0	24.9	24.9	24.8	24.7	23.9	21.1
13	22.2	22.2	22.3	22.2	22.2	22.1	22.0	21.9	19.8
14	19.9	20.0	20.1	20.0	20.0	19.9	19.8	19.7	18.7
15	18.0	18.2	18.2	18.2	18.1	18.0	17.9	17.8	17.7
16		16.5	16.6	16.6	16.5	16.4	16.3	16.2	16.0
18		13.9	14.0	14.0	13.9	13.8	13.7	13.6	13.5
20			11.9	11.9	11.9	11.8	11.7	11.6	11.4
22				10.3	10.3	10.2	10.1	10.0	9.8
24				8.8	8.9	8.8	8.8	8.6	8.5
25					8.3	8.3	8.2	8.1	7.9
26					7.8	7.7	7.6	7.5	7.4
28						6.8	6.7	6.6	6.5
30						5.7	5.9	5.8	5.7
32							5.2	5.1	5.0
34								4.4	4.4
35								4.2	4.1
36								3.5	3.8
38									3.3

TLT 13184894 M338340. Stability calculated according to EN 16228-5. Machine is standing on firm, horizontal ground.

<sup>\*</sup>Max. lifting capacity with mechanical grab is 35 t. For higher lifting capacities a hydraulic grab is required.

# **Dynamic soil compaction**

#### Soil compaction control

The soil compaction control makes working with dynamic compaction easier and offers the operator more protection. They can use the system to enter the number of blows per point. The process is documented in the PDE and can be analysed using various systems.



Capacities in [t] with 29t counterweight

				Boom le	ngth [m]		
-		20	23	26	29	32	35
Radius [m]	8	34.1	33.9	30.3	29.4	25.1	
adic	9	31.3	30.5	28.7	27.5	23.9	22.8
2	10		27.0	25.8	25.7	22.4	21.5
	11		23.7	23.5	22.5	20.9	20.3

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 30 m.

Option: Piling control incl. cabin protection and armoured glass  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

Max. main boom 35 m



# **Special applications**

- -Vibro-flot (deep vibrator)
- -Hammer
- -Vibrator (free-hanging)
- -Shaft excavation
- Rock handling
- Magnet system

Capacities in [t] with 34.3t counterweight

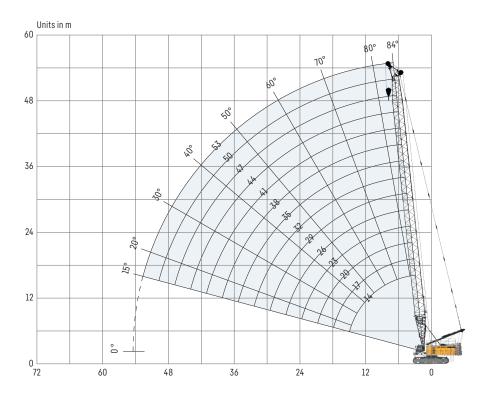
		.5 III [c] WICH 54.5 C			Boom le	ngth [m]			
		17	20	23	26	29	32	35	38
	4.7	53.0*							
	5	53.0*	53.0*						
	6	53.0*	53.0*	53.0*	51.1*	50.0*			
	7	53.0*	53.0*	53.0*	48.1*	47.0*	40.1*	38.9*	33.9
	8	53.0*	51.1*	50.8*	45.5*	44.1*	37.7*	36.5*	31.7
	9	47.1*	47.0*	45.7*	43.1*	41.3*	35.8*	34.2	29.8
	10	41.9*	41.0*	40.5*	38.7*	38.6*	33.6	32.2	28.2
	11	37.0*	36.6*	35.6*	35.3*	33.8	31.4	30.4	26.5
	12	32.8	32.4	32.1	31.0	30.5	28.6	27.8	25.2
	13	29.3	29.3	28.4	27.9	26.9	26.4	25.0	23.0
=	14	26.4	26.2	25.6	25.0	24.2	23.4	22.8	21.2
Radius [m]	15	23.9	23.9	23.1	22.4	21.8	21.0	20.2	19.6
ë	16	21.8	21.5	20.9	20.5	19.5	19.1	18.1	17.5
~	18	15.6	17.8	17.3	16.6	16.2	15.6	15.1	14.5
	20		14.6	14.5	14.2	13.9	13.4	13.0	12.5
	22			12.8	12.6	12.2	11.8	11.4	11.1
	24			9.3	11.1	10.8	10.5	10.1	9.7
	25				10.5	10.2	9.9	9.6	9.2
	26				9.1	9.6	9.4	9.0	8.7
	28					8.5	8.4	8.0	7.7
	30					6.0	7.6	7.2	6.9
	32						5.8	6.5	6.2
	34							5.3	5.6
	35							4.5	5.2
	36							3.7	4.9
	38								3.4

 $TLT\,13163554\,M349160.\,Stability\,calculated\,according\,to\,EN\,474-12.\,Max.\,capacities\,do\,not\,exceed\,75\,\%\,of\,tipping\,load.\,Above\,capacities\,are\,for\,reference\,only\,and\,are\,not\,programmed\,in\,the\,LML\,system.$ 

<sup>\*</sup>Lifting a load which exceeds 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.

# **Lifting operation**

### Main boom 84°-15°





Auxiliary jib 36 t
The maximum capacity of the auxiliary jib is 36 t. The corresponding load chart is programmed in the LML system.

Main boom configuration

Boom section						Am	ount of boo	m section:	S					
Boom foot 7m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom section 3 m		1		1		1		1		1		1		1
Boom section 6 m			1	1	2	2	3	3	4	4	5	5	6	6
Boom head 7m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length [m]	14	17	20	23	26	29	32	35	38	41	44	47	50	53
Auxiliary jib	<b>/</b>	~	~	~	~	~	~	~	~	~	~	~	~	<b>~</b>

preferred boom combinations

#### Capacities in [t]

								Вс	om length [	m]						
			14			17			20			23			26	
_	*	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]
	4	130.0	121.0													
	5	107.0	111.3		101.2	104.9		95.8	104.6		91.0	99.3				
	6	83.7	91.5		80.0	87.4		76.5	83.6		73.2	80.0		70.1	76.7	
	7	68.5	74.9		65.9	72.0		63.4	69.3	83.8	61.0	66.7	80.7	58.7	64.3	77.8
	8	57.0	62.4	74.9	55.8	61.1	74.0	53.9	59.0	71.5	52.0	57.0	69.2	50.3	55.1	66.9
	9	47.7	52.2	63.4	47.8	52.4	63.5	46.7	51.2	62.2	45.3	49.6	60.3	43.8	48.1	58.5
긑	10	40.8	44.8	54.4	40.9	44.9	54.6	40.9	44.9	54.6	39.9	43.8	53.4	38.7	42.5	51.9
Radius [m]	11	35.5	39.0	47.5	35.6	39.1	47.6	35.6	39.1	47.7	35.5	39.1	47.6	34.5	38.0	46.5
aği	12	31.2	34.4	42.0	31.3	34.5	42.2	31.4	34.5	42.2	31.3	34.4	42.1	31.0	34.2	42.0
~	13	27.8	30.6	37.6	27.9	30.7	37.7	27.9	30.8	37.7	27.8	30.7	37.7	27.8	30.6	37.6
	14	24.8	27.4	33.8	25.0	27.6	34.0	25.1	27.7	34.0	25.0	27.6	34.0	24.9	27.5	33.9
	15	22.6	24.7	27.6	22.8	25.0	30.8	22.8	25.1	30.9	22.8	25.0	30.8	22.7	24.9	30.8
	16				20.7	22.9	28.2	20.8	23.0	28.2	20.7	22.9	28.2	20.6	22.8	28.1
	18				17.2	19.1	23.9	17.4	19.3	23.9	17.3	19.2	23.9	17.2	19.2	23.9
	20							14.7	16.4	20.6	14.7	16.4	20.6	14.6	16.3	20.5
	22										12.6	14.1	17.9	12.5	14.1	17.8
	24										10.8	12.2	15.6	10.8	12.2	15.6
	25													10.0	11.4	14.6
	26													9.3	10.6	13.7

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\* Counterweight in [t]
[+7] Carbody counterweight in [t]



#### Capacities in [t]

								Во	om length [	m]						
			29			32			35			38			41	
_	*	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]	29	34.3	45 [+7]
	5.8						77.5									
	6	67.3	73.6	89.0	64.6	70.6	77.5									
	7	56.6	62.0	75.1	54.5	59.7	72.5	52.6	57.7	65.2	50.7	55.6	63.3	49.0	53.8	56.2
	8	48.6	53.3	64.8	47.1	51.5	62.7	45.5	49.9	60.7	44.0	48.3	58.8	42.6	46.9	53.7
	9	42.5	46.7	56.8	41.2	45.2	55.1	39.9	43.9	53.5	38.6	42.5	51.9	37.4	41.2	50.4
	10	37.5	41.3	50.4	36.4	40.1	49.0	35.3	38.9	47.6	34.3	37.8	46.3	33.2	36.7	45.0
	11	33.5	36.9	45.2	32.5	35.9	44.0	31.6	34.9	42.9	30.7	33.9	41.7	29.8	32.9	40.5
	12	30.2	33.3	40.9	29.3	32.4	39.8	28.5	31.5	38.8	27.6	30.6	37.8	26.8	29.7	36.8
	13	27.3	30.2	37.2	26.6	29.4	36.3	25.8	28.6	35.4	25.0	27.8	34.5	24.3	27.0	33.6
	14	24.8	27.4	33.7	24.2	26.8	33.3	23.7	26.1	32.4	23.0	25.4	31.6	22.3	24.7	30.8
Ξ	15	22.5	24.7	30.6	22.3	24.6	30.4	21.7	24.0	29.9	21.0	23.4	29.1	20.4	22.8	28.4
Radius [m]	16	20.4	22.7	27.9	20.3	22.5	27.8	19.9	22.2	27.6	19.3	21.6	26.9	18.8	21.0	26.2
Rac	18	17.1	19.0	23.8	16.9	18.9	23.6	16.7	18.7	23.4	16.5	18.5	23.2	15.9	17.9	22.8
	20	14.5	16.2	20.4	14.3	16.0	20.2	14.1	15.8	20.0	14.0	15.7	19.9	13.7	15.5	19.7
	22	12.4	13.9	17.7	12.2	13.8	17.6	12.0	13.6	17.4	11.9	13.4	17.2	11.6	13.2	17.0
	24	10.6	12.0	15.5	10.5	11.9	15.4	10.3	11.7	15.2	10.2	11.6	15.0	9.9	11.3	14.8
	25	9.9	11.2	14.5	9.8	11.1	14.4	9.6	10.9	14.2	9.4	10.7	14.0	9.2	10.5	13.8
	26	9.2	10.5	13.6	9.1	10.4	13.5	8.9	10.2	13.3	8.7	10.0	13.1	8.5	9.8	12.9
	28	8.0	9.2	12.0	7.9	9.0	11.9	7.7	8.9	11.8	7.5	8.7	11.6	7.3	8.5	11.4
	30	6.9	8.0	10.6	6.8	7.9	10.6	6.6	7.7	10.4	6.5	7.6	10.2	6.3	7.4	10.0
	32				5.9	6.9	9.4	5.7	6.7	9.2	5.6	6.6	9.1	5.4	6.4	8.9
	34							4.9	5.9	8.2	4.8	5.7	8.1	4.6	5.5	7.9
	35							4.5	5.4	7.7	4.4	5.3	7.6	4.2	5.1	7.4
	36							4.2	5.0	7.3	4.0	5.0	7.2	3.8	4.8	7.0
	38										3.4	4.2	6.3	3.2	4.1	6.1
	40													2.6	3.4	5.4

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<sup>\*</sup> Counterweight in [t]
[+7] Carbody counterweight in [t]

#### Capacities in [t]

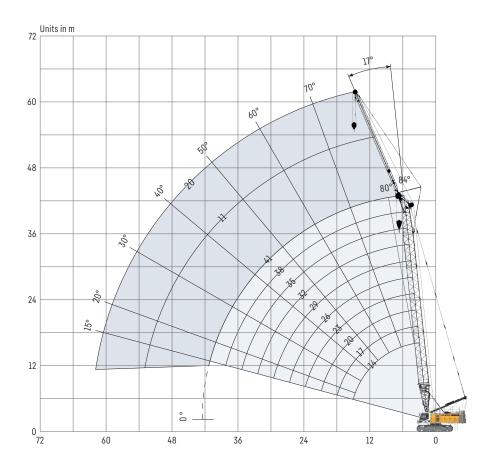
_		oo iii [c]				Boom length [m]				
			44			47		5	0	53
	*	29	34.3	45 [+7]	29	34.3	45 [+7]	34.3	45 [+7]	45 [+7]
	8	41.2	45.2	48.6	39.8	43.8	44.3	39.9	39.9	35.5
	9	36.3	40.0	46.5	35.2	38.7	42.0	37.5	38.2	34.8
	10	32.2	35.6	43.8	31.3	34.6	40.1	33.4	36.5	33.2
	11	28.9	32.0	39.4	28.0	31.0	38.1	30.1	34.7	31.8
	12	26.0	28.9	35.8	25.2	28.1	34.8	27.2	33.2	30.2
	13	23.8	26.2	32.7	23.0	25.5	31.8	24.7	31.0	29.0
	14	21.6	24.0	30.0	21.0	23.4	29.2	22.7	28.4	27.6
	15	19.8	22.1	27.6	19.2	21.5	26.9	20.8	26.1	25.4
	16	18.2	20.4	25.5	17.6	19.8	24.9	19.2	24.2	23.5
	18	15.4	17.4	22.2	14.9	16.8	21.6	16.3	20.8	20.2
	20	13.2	15.0	19.3	12.7	14.5	18.8	14.0	18.2	17.5
=	22	11.4	13.0	16.8	10.9	12.5	16.4	12.1	15.9	15.3
Radius [m]	24	9.7	11.1	14.6	9.4	10.9	14.3	10.4	14.0	13.5
agi	25	9.0	10.3	13.6	8.7	10.1	13.4	9.7	13.2	12.7
~	26	8.3	9.6	12.7	8.1	9.4	12.5	9.1	12.3	11.9
	28	7.1	8.3	11.2	6.9	8.0	10.9	7.8	10.7	10.5
	30	6.1	7.2	9.8	5.8	6.9	9.6	6.7	9.4	9.2
	32	5.2	6.2	8.7	4.9	6.0	8.4	5.7	8.2	8.0
	34	4.4	5.3	7.7	4.1	5.1	7.4	4.9	7.2	7.0
	35	4.0	4.9	7.2	3.8	4.7	7.0	4.5	6.8	6.5
	36	3.7	4.6	6.8	3.4	4.3	6.5	4.1	6.3	6.1
	38	3.0	3.9	6.0	2.8	3.7	5.7	3.4	5.5	5.3
	40	2.5	3.3	5.2	2.2	3.0	5.0	2.8	4.8	4.6
	42		2.7	4.6		2.5	4.4	2.3	4.2	3.9
	44		2.2	4.0			3.8		3.6	3.3
	45						3.5		3.3	3.1
	46						3.2		3.0	2.8
	48								2.5	2.3
	50								2.0	

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<sup>\*</sup> Counterweight in [t]

<sup>[+7]</sup> Carbody counterweight in [t]

# 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 11 m with 44.9 t rear counterweight and 7 t carbody counterweight

_		Boom length [m]				
		20	20 26 32 38 44			44
	10	18.8	18.8	32	30	77
	11	18.1	18.1	18.5	19.1	
	12	17.5	17.5	17.9	18.4	18.0
	13	16.9	17.5	17.5	17.9	17.5
	14	16.4	16.4	17.0	17.6	17.2
	15	16.1	16.1	16.6	17.2	17.0
	16	15.9	15.9	16.4	17.0	16.9
	17	15.6	15.6	16.1	16.8	16.8
	18	15.4	15.4	15.9	16.5	16.8
	19	15.3	15.3	15.7	16.3	16.8
	20	15.1	15.1	15.6	16.2	16.6
	21	14.9	14.9	15.4	16.0	16.5
	22	14.7	14.7	15.3	15.8	16.4
	23	14.6	14.6	15.1	15.7	15.6
	24	14.4	14.4	14.9	15.0	14.6
	25	14.3	14.3	14.4	14.0	13.8
	26	13.9	13.9	13.5	13.3	12.9
	27	13.1	13.1	12.9	12.5	12.1
_'	28	12.5	12.5	12.1	11.8	11.4
Radius [m]	29	11.8	11.8	11.5	11.1	10.7
ij	30	11.2	11.2	10.9	10.5	10.1
Ra	31	10.6	9.6	10.3	9.9	9.5
	32	10.1	9.1	9.7	9.4	9.0
	33	9.6	8.6	9.2	8.9	8.5
	34	9.1	8.3	8.8	8.4	8.0
	35	8.6	8.2	8.3	7.9	7.5
	36	8.2		7.9	7.5	7.1
	37			7.5	7.1	6.7
	38			7.1	6.7	6.3
	39			6.7	6.4	5.9
	40			6.4	6.0	5.5
	41			6.0	5.6	5.2
	42				5.3	4.9
	43				5.0	4.5
	44				4.7	4.2
	45				4.4	4.0
	46				4.1	3.7
	47					3.4
	48					3.2
	49					2.9
	50					2.7
	51					2.4

TLT 11990225 M330177 Vorab\_90. 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.

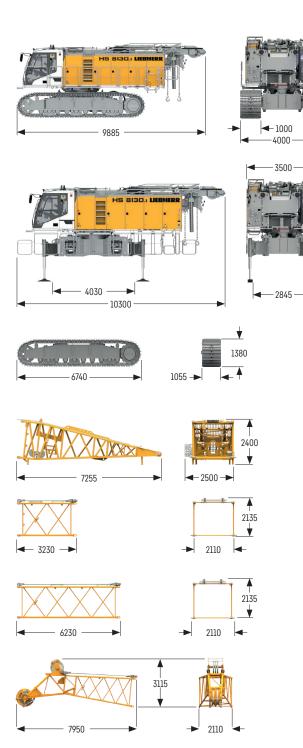
Jib length 20 m with 44.9 t rear counterweight and 7t carbody counterweight

uni	470	carbody coun		Boom length [m]		
		20	23	29	35	38
	13	20	8.4	27	30	30
	14	8.1	8.0	8.1		
	15	7.9	7.8	7.9	7.9	7.9
	16	7.9	7.8	7.9	7.9	7.9
				7.0		7.0
	17 18	7.7 7.7	7.7 7.7	7.7	7.7 7.6	7.7
	19	7.6	7.4	7.6	7.6	7.6
		7.6	7.4	7.6	7.6	7.4
	20 21	7.4	6.9			7.3
	22	6.9	6.7	7.3 7.0	7.5 7.4	7.2
	23		6.6	6.9		7.2
		6.8		6.7	7.2	6.9
	24 25	6.6	6.4	6.6	7.0	6.8
	26	6.5 6.3	6.3 6.2	6.4	6.8 6.7	6.7
	27			6.3		
	28	6.2 6.1	6.1 6.0	6.2	6.6 6.4	6.6 6.6
	29		5.9			6.5
		6.0		6.1	6.3	
	30	5.9	5.8	6.0	6.2	6.4
Ξ	31	5.8	5.7	6.0	6.2	6.3
Radius [m]	32	5.8	5.6	5.9	6.1	6.2
Rad	33	5.7	5.5	5.8	6.0	6.1
	34	5.6	5.4	5.7	5.9	6.0
	35	5.5	5.3	5.6	5.9	6.0
	36	5.4	5.3	5.5	5.8	5.9
	37	5.3	5.2	5.5	5.7	5.8
	38	5.3	5.2	5.4	5.6	5.8
	39	5.2	5.1 5.1	5.3	5.6	5.7
	40	5.2		5.3	5.5	5.6
	41	5.1	5.0	5.2	5.4	5.6
	42	5.1	4.8	5.2	5.4	5.5
	43 44	5.0 5.0		5.1 5.1	5.3 5.3	5.4 5.4
		5.0				
	45 46			5.1	5.2 5.0	5.1 4.9
				5.0		
	47			4.8	4.9	4.7
	48 49				4.6	4.4
					4.4	4.2
	50				4.1	3.9
	51				3.9	3.7
	52				3.6	3.5
	53					3.2
_	54					3.0

TLT 11990225 M330177 Vorab\_90. 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 (2018.33)



#### **Basic machine**

with HD undercarriage, A-frame, 2x 350 kN winches and self-assembly system for rear counterweight, without boom foot and rear counterweight – fully tanked and ready for operation width mm 4000

Weight without hoist ropes kg 78000

Weight of hoist ropes (2x 90m) kg/m 6.45

#### **Basic machine**

320

3515

1240

with A-frame, self-assembly system,  $2x\,350\,kN$  winches, without boom foot, rear counterweight and crawlers – fully tanked and ready for operation

Width	mm	3500
Weight without hoist ropes	kg	51000
Weight of hoist ropes (2x 90 m)	kg/m	6.45

#### Crawler (2x)

2-web grousers	mm	1000
Width	mm	1055
Weight	kg	14900

#### Boom foot 7 m (2018.33)

Width	mm	2500
Weight incl. pendant ropes	kg	3215

#### Boom section 3 m (2018.33)

Width	mm	2110	
Weight incl. pendant ropes	kg	750	

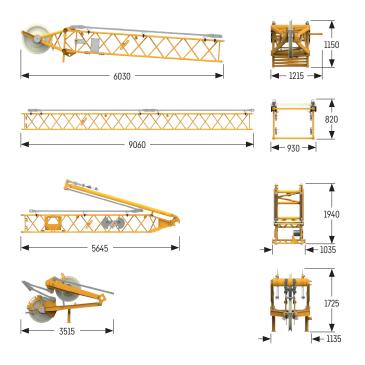
#### Boom section 6 m (2018.33)

Width	mm	2110
Weight incl. pendant ropes	kg	1230

#### Boom head 7 m (2018.33)

Weight incl. pendant ropes	ka	305N
weight hict, pendant ropes	ng_	3730

## Fixed jib



#### Jib head

Width	mm	1215
Weight	kg	760

#### Jib section 9 m

Width	mm	930
Weight	kg	675

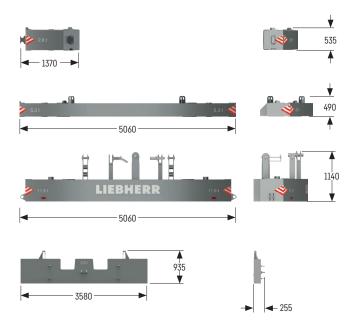
#### Jib foot with A-frame

Width	mm	1035
Weight	kg	980

#### **Auxiliary jib**

١	<i>N</i> idth	mm	1135
1	Neight	kg	1310

### Counterweight



#### Counterweight slab (4x, option 6x)

Width	mm	840
Weight	kg	2680

#### Counterweight slab (1x)

Width	mm	1220
Weight	kg	6300

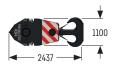
#### Counterweight slab (1x)

Width	mm	1220
Weight	kg	12000

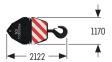
#### Carbody counterweight (2x)

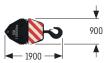
Width	mm	255
Weight	kg	3500

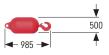
### Hooks











#### 160 t hook block - 3 sheaves

Width	mm	420
Weight	kg	2011

#### 100t hook block - 2 sheaves

Width	mm	270
Weight	kg	1200

#### 80 t hook block - 2 sheaves

Width	mm	245
Weight	kg	1200

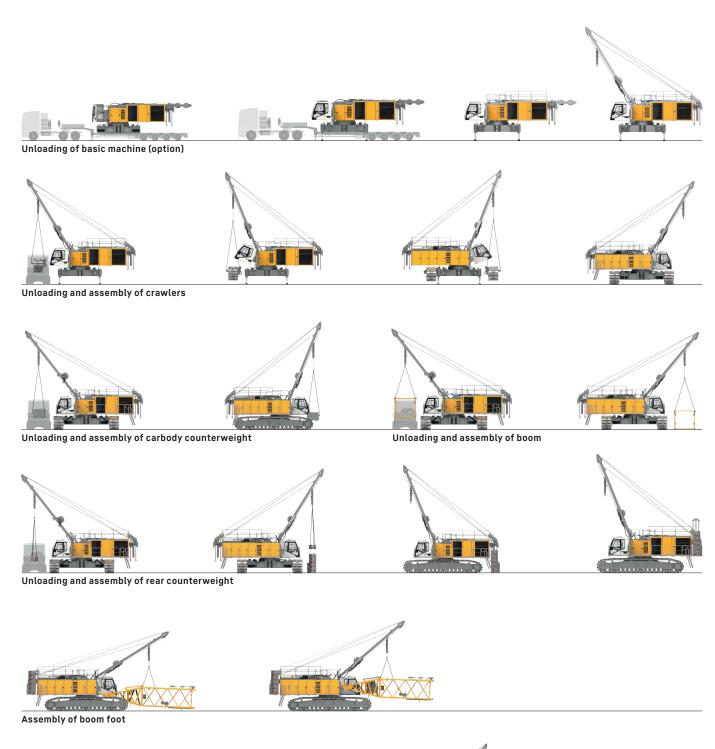
#### 50t hook block - 1 sheave

Width	mm	230
Weight	kg	750

#### 35 t single hook

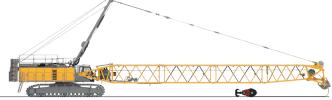
Width	mm	500
Weight	kg	800

# **Self-assembly system**





Assembly of boom



Reeving of hoist ropes