EN-US

HS 8130.1

HS 8005.01.03
www.liebherr.com

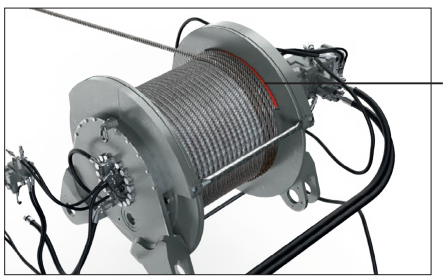
LIEBHERR

Construction machines

Concept and characteristics

Universal boom head for all types of application
Convertible roller set

Main winches: Perfectly matched winch system thanks to automatic and continuous adaptation of rope speed. Thus, maximum performance is achieved.



New rope lock allows for faster and easier rope change. This reduces downtime.

Main boom optimized for all types of application

Further information on material handling

Pendant ropes

Jack-up system available as an option

A-frame

Mounting of power pack possible up to 29,101 lbs

Rear counterweight

Uppercarriage: Platform and railings remain attached to the machine during transportation

Undercarriage: robust undercarriage for most difficult applications, telescopic, with detachable crawlers

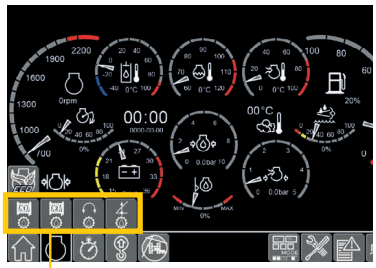
2-web grousers for optimum off-road traction.
Flat track pads as an option for ground protection

Preparation for carbody counterweight

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.

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

Diesel engine

Power rating according to ISO 9249	565 kW (758 hp) at 1700 rpm
Engine type	Liebherr D 9508 A7-04
Fuel tank capacity	203 gal with continuous level indicator and reserve warning
AdBlue tank capacity	35 gal 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_{PA}	76.2 dB(A)	(in the cabin)
Guaranteed sound power level L_{WA}	109 dB(A)	(of the machine)
Vibration transmitted to the machine operator	< 8.2 ft/s²	(to the hand-arm system)
	< 1.6 ft/s²	(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	309 gal
Max. working pressure	5.076 PSI
Max. power at the connection plate	509 hp (2x 111gal/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)
Line pull (nominal load)	78,683 lbf
Line pull in the 4th layer	64,408 lbf
Rope diameter	36 mm
Drum diameter	2.7 ft
Rope speed	0-315 ft/min
Rope capacity in the 1st layer	144 ft
Rope capacity in 4 layers	774 ft (effective length)
Options	
Auxiliary winch	17,310 lbf in boom foot
Tagline winch	6,744 lbf with free fall
Tagline winch	15,737 lbf with free fall

Boom winch

Line pull	max. 37,093 lbf
Rope diameter	24 mm
Boom luffing	15-84° in 56 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	0-0.81 mph
Grousers	2-web grousers, width 3 ft
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 3 ft

Swing gear

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

Operating weight

Composition of operating weight	Basic machine with HD undercarriage, 2 main winches 78,683 lbf including wire ropes, 46 ft main boom, consisting of A-frame, boom foot (23 ft) and boom head (23 ft), 63,934 lbs rear counterweight, 2-web grousers (width 3 ft), 110,231 lbs hook block
Total weight	approx. 255,736 lbs

Ground pressure

Ground pressure	15.08 PSI

Equipment

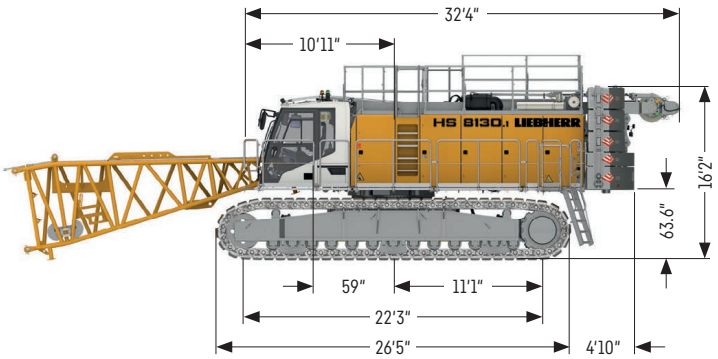
Main boom (2018.33)	max. 174 ft
Characteristics	modular designed equipment for lifting, dragline or clamshell operation for dragline operation, a rotating fairlead is fitted into the boom foot minimized rope angle to drum resulting in lower rope wear

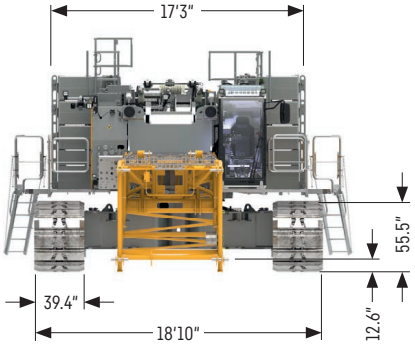
Remarks

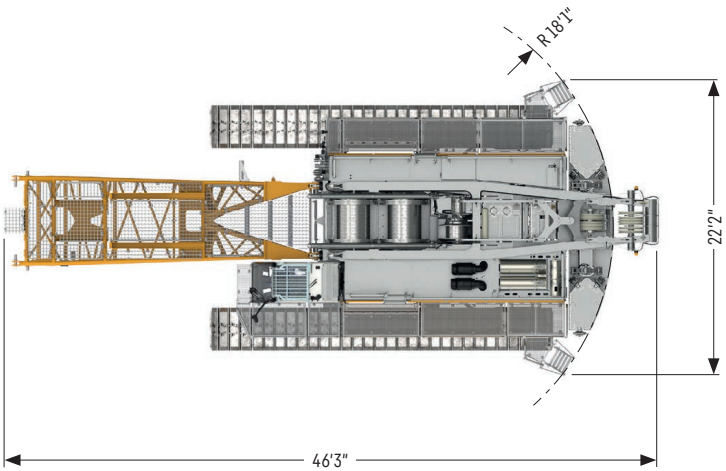
- Liebherr cable excavator HS 8005.01.03
- Designed according to EN 474-1 and EN 474-12.
  Designed and tested in accordance to ASME B 30.5
- Machine standing on firm, horizontal ground.
- The weight of the lifting device (pulley block, hoist ropes, shackles etc.) must be deducted from the load capacity.
- 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.
- 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.

Dimensions

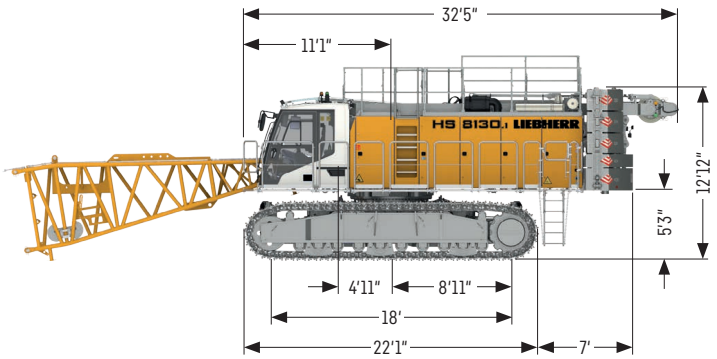
Basic machine with wide track and long crawlers (standard)

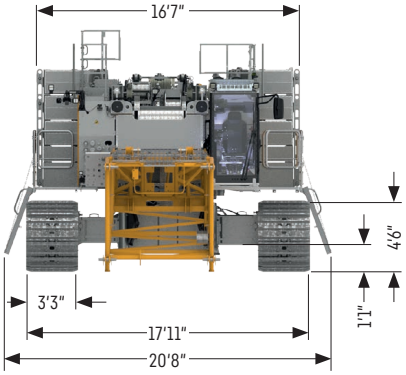


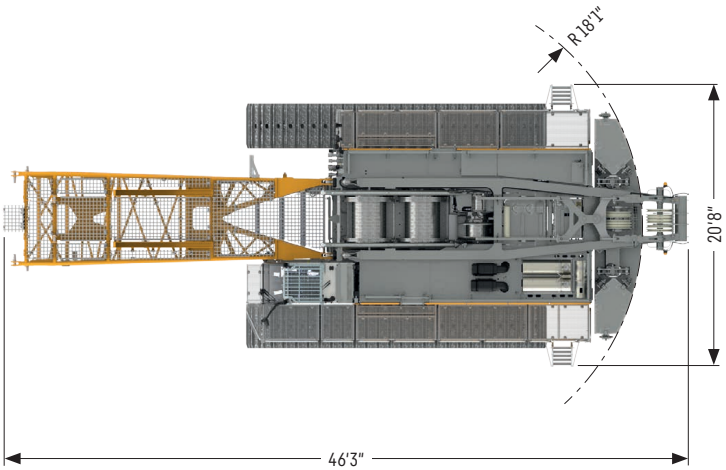




Basic machine with undercarriage (option)







Grab versions

Hydraulic grab

for depths up to 82 ft (131 ft upon request)

HS 8130 during operation

Dredging assistant (option)

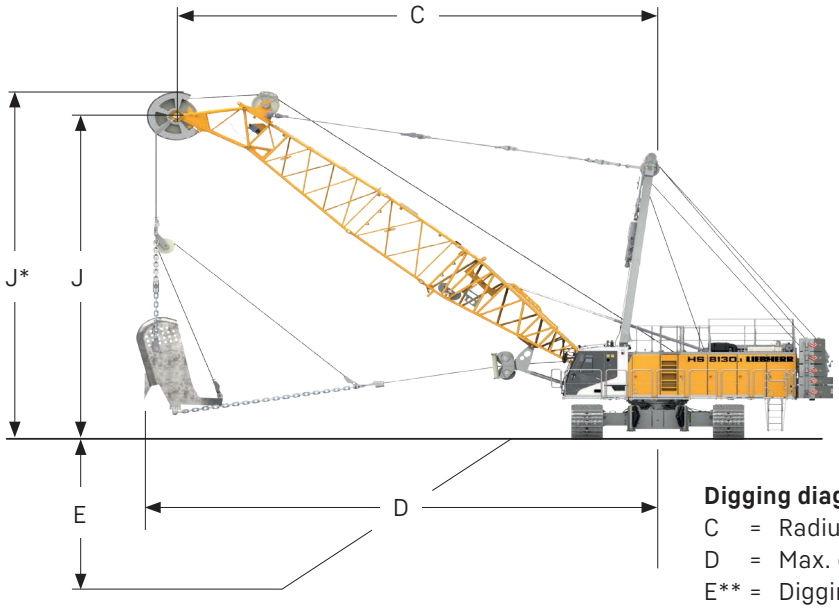
Capacities in grab operation

Capacities in [1000 lbs] with 75,620 lbs counterweight

Radius [ft]	Boom length [ft]							
	56	**66**	**76**	**85**	**95**	**105**	**115**	**125**
20	116.8*	116.8*	116.8*	112.1*	109.8*			
25	116.8*	116.8*	114.1*	102.4*	99.5*	85.4*	82.2*	72.0
30	94.1*	94.2*	94.1*	94.0*	90.0*	78.0*	74.8	65.2
35	75.4	75.4	75.4	75.2	75.1	71.8	68.2	59.6
40	62.4	62.5	62.4	62.3	62.1	61.8	59.9	54.9
45	52.9	53.0	52.9	52.8	52.5	52.3	51.7	47.7
50	45.6	45.7	45.6	45.5	45.3	45.0	43.2	42.0
55	39.8	40.0	39.9	39.7	39.5	38.8	37.2	35.6
60	30.9	35.3	35.2	35.1	34.8	33.6	32.5	31.2
65		31.3	31.3	31.2	31.0	29.9	29.0	27.9
70		23.7	28.0	28.0	27.7	27.0	26.2	25.3
75			25.2	25.2	24.9	24.7	23.7	23.1
80				22.7	22.5	22.3	21.9	20.9
85				20.3	20.4	20.2	19.9	19.2
90					18.6	18.4	18.1	17.6
95					16.0	16.7	16.5	16.1
100						15.2	15.0	14.7
105						12.7	13.7	13.4
110							12.4	12.2
115							9.8	11.1
120								9.8
125								7.4

TLT 13163554 M285712 v6. 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.
* Max. lifting capacity with mechanical grab is 77,162 lbs. For higher lifting capacities a hydraulic grab is required.

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
J* = J + 2.1 ft

** 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 [1000 lbs] with 75.620 lbs counterweight

		Boom length [ft]											
		46			56			66			75		
		C	J		C	J		C	J		C	J	
		[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]
alpha [°]	**55**	35.2	39.6	**76.8**	40.9	47.7	**69.0**	46.5	55.8	**57.2**	52.2	63.8	**46.8**
	50	38.2	37.2	**73.0**	44.6	44.7	**61.1**	50.9	52.3	**50.2**	57.2	59.8	**40.3**
	45	40.9	34.5	**68.6**	47.9	41.5	**55.3**	54.9	48.4	**44.0**	61.8	55.4	**35.3**
	40	43.4	31.5	**63.3**	51.0	37.9	**50.5**	58.5	44.2	**39.8**	66.1	50.5	**31.7**
	35	45.6	25.0	**57.7**	53.7	34.0	**46.8**	61.7	39.7	**36.4**	69.9	45.3	**29.3**
	30	47.3	25.0	**52.0**	56.0	29.9	**42.4**	64.6	34.8	**33.5**	73.1	39.7	**27.1**
	25	49.0	21.4	**46.2**	57.8	25.6	**37.1**	66.7	29.7	**29.8**	76.2	33.9	**24.8**

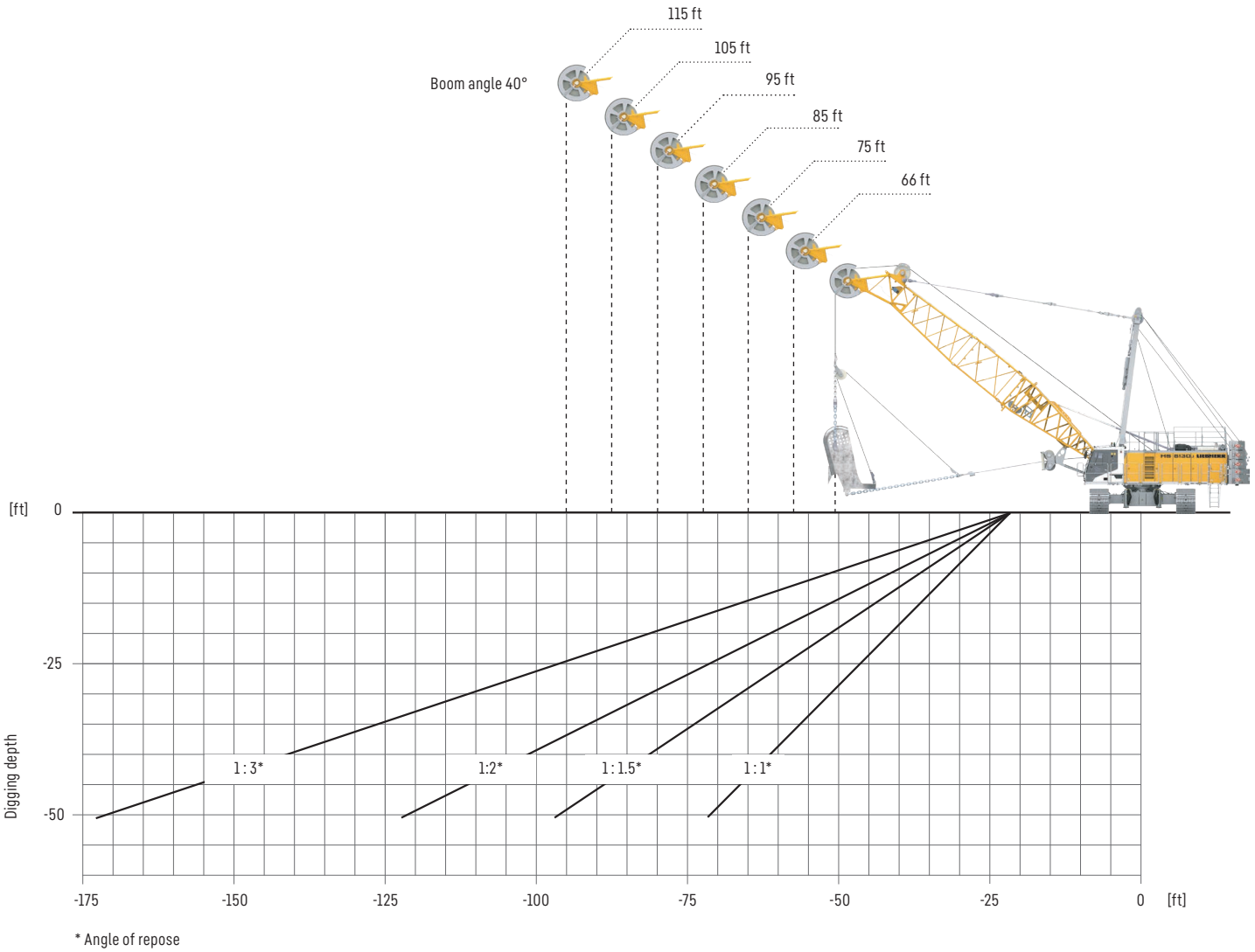
TLT 13163554 M285712 v6. Stability calculated according to EN 474-12. Max. capacities do not exceed 75 % of tipping load. Above capacities are for reference only and are not programmed in the LMI system. The size of the bucket has to be determined according to local conditions.

Capacities in [1000 lbs] with 75,620 lbs counterweight

		Boom length [ft]											
		85			95			105			115		
		C	J		C	J		C	J		C	J	
		[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]	[ft]	[ft]	[1000 lbs]
alpha [°]	55	57.9	71.9	**38.1**	63.5	80.0	**32.2**	69.1	88.0	**27.5**	74.8	96.1	**23.8**
	50	63.6	67.4	**32.8**	69.9	74.9	**28.1**	76.2	82.4	**24.2**	82.6	90.0	**20.9**
	45	68.9	62.3	**29.4**	75.8	69.3	**25.1**	82.8	76.3	**21.5**	89.7	83.2	**18.4**
	40	73.6	56.8	**26.9**	81.2	63.2	**22.9**	88.7	69.5	**19.5**	96.2	75.8	**16.7**
	35	77.9	50.9	**24.9**	86.0	56.6	**21.0**	94.1	62.2	**17.9**	102.1	67.9	**15.1**
	30	81.6	44.7	**22.8**	90.3	49.6	**19.5**	98.7	54.5	**16.6**	107.2	59.4	**13.6**
	25	84.9	38.1	**20.3**	93.8	42.2	**16.9**	102.6	46.4	**14.4**	111.5	50.5	**11.8**

TLT 13163554 M285712 v6. 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.

Planning aid for dragline operation



* Angle of repose

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

Main boom [ft]	66	75	85	95	105	115
Dragline bucket [**m³** / yd³]	**5.7** / 7.5	**5** / 6.5	**3.8** / 5	**3.4** / 4.5	**2.5** / 3.25	**1.9** / 2.5
Dumping reach D [ft]	78.1	88.3	98.4	108.6	118.8	128.9
Digging depth* E [ft]	35.1	39.7	44.3	48.9	53.5	57.7

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

Main boom [ft]	66	75	85	95	105	115
Dragline bucket [**m³** / yd³]	**5.7** / 7.7	**4.2** / 5.5	**3.8** / 5	**2.8** / 3.75	**2.1** / 2.75	**1.5** / 2
Dumping reach D [ft]	79.4	89.6	100.1	110.2	121.1	131.2
Digging depth* E [ft]	37.1	42	46.9	51.5	56.4	61.4

Density: 1.8 tm³ and fill factor 0.8
* The digging depth depends on the material's angle of repose.
Dragline buckets in various designs depending on the ground conditions

Slurry wall grab

Maximum capacity in duty cycle operation with standard ropes

Line pull (1st layer)	lbf	78,683
Rope diameter	mm	36
Minimum breaking load	lbf	274,267
Line pull – 1-rope duty cycle operation	lbf	78,683
Line pull – 2-rope duty cycle operation [1]	lbf	119,149

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. catwalks, hose drums etc.) must be deducted to get the net capacity.

Load chart for slurry wall operation

Capacities in [1000 lbs] with 75,620 lbs counterweight

Radius [ft]	Boom length [ft]								
	46	56	66	75	85	95	105	115	125
18.4					115.0*				
20		116.8*	116.8*	116.8*	112.1*	109.8*			
25	110.4*	110.7*	110.8*	110.8*	102.4*	99.5*	85.4*	82.2*	72.0
30	84.1*	84.3*	84.3*	84.3*	84.2*	84.1*	78.0*	74.8	65.2
35	67.3	67.5	67.6	67.5	67.5	67.2	67.0	66.9	59.6
40	55.7	55.9	56.0	55.9	55.9	55.6	55.4	55.2	54.9
45	47.1	47.4	47.4	47.3	47.3	47.0	46.8	46.6	46.3
50	40.4	40.8	40.9	40.8	40.8	40.5	40.3	40.0	39.8
60		30.9	31.5	31.5	31.5	31.1	30.9	30.7	30.4
65			28.0	28.0	28.0	27.7	27.5	27.2	26.9
70			23.7	25.0	25.0	24.8	24.6	24.3	24.0
75				22.5	22.5	22.3	22.1	21.8	21.5
80						20.1	19.9	19.6	19.4
85						18.2	18.0	17.8	17.5
90						16.5	16.4	16.1	15.7
95						14.4	14.2	13.7	13.3
100							11.9	11.5	11.1
105							9.8	9.4	9.1
115								5.8	5.5
125									2.5

Preliminary. Stability calculated according to EN 16228-5. Machine is standing on firm, horizontal ground.
For higher lifting capacities a hydraulic grab is required.
* Max. lifting capacity with mechanical grab is 77,162 lbs. For higher lifting capacities a hydraulic grab is required.

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

Short boom

Rope diameter	mm	36
Radius	ft	17.7 at max. boom angle 35°
		19.6 at min. boom angle 20°
Machine height during operation	ft	18 at max. boom angle 35°
		19.7 at min. boom angle 20°
Effective rope length winch 1/2	ft	192.3
Rear counterweight	lbs	26,235
Capacity in duty cycle operation	lbs	132,277 at radius of 17.7 ft
		111,995 at radius of 19.7 ft

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

Short boom

Working depth	ft	361
Wall thickness	ft	2.6-5.9

Stability calculated according to EN 16228-5.
Machine is standing on firm, horizontal ground.
For further information please refer to the LSC 8-18 datasheet

Dynamic soil compaction and casing oscillator

Capacities in [lbs] with 63,934 lbs counterweight

Radius [ft]	Boom length [ft]					
	66	76	85	95	105	115
25	77.9	77.9	68.3	66.3	56.9	54.8
30	65.2	65.2	63.0	60.0	52.0	49.9
35			51.9	51.8	47.9	45.5

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 98 ft.
Option: Piling control incl. cabin protection and armoured glass
Max. main boom 115 ft

Casing oscillator

Max. drilling diameter	ft	11

Special applications

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

Capacities in [1000 lbs] with 75,620 lbs counterweight

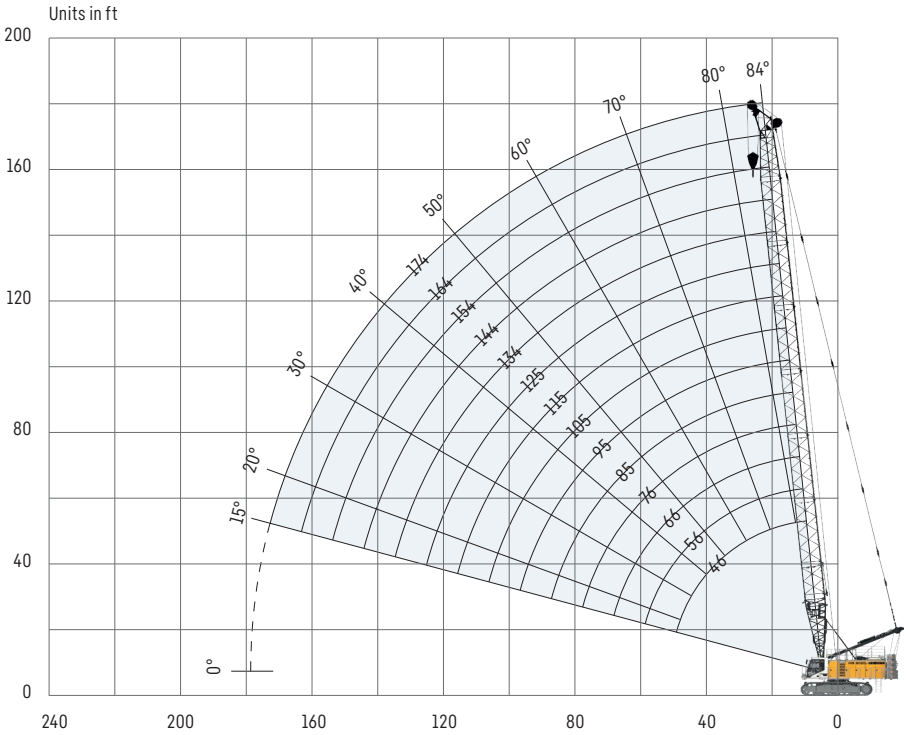
Radius [ft] \ Boom length [ft]	56	66	76	85	95	105	115	125
20	116.8*	116.8*	116.8*	112.1*	109.8*			
25	116.8*	116.8*	114.1*	102.4*	99.5*	85.4*	82.2*	72.0
30	102.2*	101.9*	98.7*	94.5*	90.0*	78.0*	74.8	65.2
35	84.6*	83.9*	81.6*	80.0*	77.7*	71.8	68.2	59.6
40	70.9	70.1	69.1	66.8	65.6	62.1	59.9	54.9
45	60.1	59.7	58.0	56.9	54.8	53.3	51.7	47.7
50	51.8	51.6	49.7	48.4	46.7	45.4	43.2	42.0
55	45.1	43.9	43.0	41.5	39.8	38.8	37.2	35.6
60	30.9	38.1	37.0	35.6	34.9	33.6	32.5	31.2
65		33.1	32.4	31.7	31.0	29.9	29.0	27.9
70		23.7	29.3	28.7	28.0	27.0	26.2	25.3
75			25.7	26.2	25.4	24.8	23.7	23.1
80				24.0	23.4	22.5	21.9	20.9
85				20.3	21.3	20.7	19.9	19.2
90					19.7	19.1	18.3	17.6
95					16.0	17.6	17.0	16.1
100						16.2	15.6	14.9
105						12.7	14.3	13.8
110							12.7	12.6
115							9.8	11.7
120								9.8
125								7.4

TLT 13163554 M285712 v6. 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.

* 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.

Lifting operation

Main boom 84°-15°



Auxiliary jib 79,366 lbs
The maximum capacity of the auxiliary jib is 79,366 lbs.
The corresponding load chart is programmed in the LML system.

Main boom configuration

Boom section	**Amount of boom sections**													
Boom foot 23 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom section 10 ft		1		1		1		1		1		1		1
Boom section 20 ft			1	1	2	2	3	3	4	4	5	5	6	6
Boom section 23 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length [ft]	**46**	**56**	**66**	**76**	**85**	**95**	**105**	**115**	**125**	**134**	**144**	**154**	**164**	**174**
Auxiliary jib	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

preferred boom combinations

Capacities in [1000 lbs]

Radius [ft]	Boom length [ft]														
	46			56			66			76			85		
*	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]
13	286.6														
14				245.0											
15	281.8	281.8	281.8	241.8	241.8	241.8	232.9	232.9	232.9						
20	196.8	214.5	216.5	187.9	204.8	215.7	179.6	195.8	206.1	171.9	187.5	209.4	164.7	179.6	204.7
25	137.4	149.9	173.6	137.8	150.3	173.1	136.1	148.6	169.1	131.2	143.4	168.6	126.6	138.4	165.2
30	103.7	113.4	137.1	104.1	113.7	137.4	104.2	113.8	137.5	104.2	113.8	137.5	102.1	111.7	135.5
35	82.5	90.4	109.7	82.8	90.7	109.9	82.9	90.8	110.0	82.9	90.7	110.0	82.8	90.6	109.8
40	67.9	74.5	90.8	68.2	74.8	91.1	68.3	74.9	91.2	68.2	74.8	91.1	68.1	74.7	91.0
45	57.1	62.9	76.9	57.5	63.2	77.3	57.7	63.4	77.4	57.6	63.3	77.3	57.4	63.1	77.1
50	49.1	53.7	55.6	49.7	54.4	66.7	49.9	54.6	66.9	49.7	54.4	66.8	49.6	54.3	66.6
55				43.1	47.6	58.3	43.4	47.9	58.6	43.3	47.8	58.5	43.1	47.6	58.4
60				37.7	41.7	49.7	38.1	42.2	52.2	38.1	42.1	52.1	37.9	42.0	52.0
65							33.7	37.4	46.5	33.7	37.4	46.5	33.6	37.3	46.4
70							29.9	33.3	39.4	30.0	33.4	41.8	30.0	33.4	41.7
75										26.9	30.0	37.7	26.9	30.0	37.7
80											26.9	31.7	24.1	27.1	34.3
85													21.7	24.5	31.2
															27.1

TLT 13620774 M316065

* Counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

[+15] Carbody counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

Above load chart is for reference only. For actual lift duty please refer to load chart in operator's cab or manual.
Load charts for lifting operation are valid with classification according to ISO 4301-1/1986, group A1.

www.liebherr.com/CranePlanner

Crane Planner 2.0

Capacities in [1000 lbs]

Radius [ft]	Boom length [ft]														
	95			105			115			125			134		
	* 64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]
20	158.0	172.4	202.8	151.6	165.5	195.1									
25	122.3	133.7	161.6	118.0	129.1	156.3	114.1	124.9	151.3	110.2	120.7	146.4	106.6	116.8	141.8
30	99.0	108.3	131.5	95.9	105.0	127.6	93.0	102.0	124.0	90.2	99.0	120.3	87.5	96.1	117.0
35	82.4	90.5	109.7	80.1	88.0	107.2	77.8	85.5	104.4	75.5	83.1	101.7	73.3	80.7	99.0
40	67.9	74.5	90.8	67.7	74.3	90.5	66.3	73.1	89.7	64.4	71.1	87.4	62.6	69.1	85.2
45	57.2	62.9	76.9	56.9	62.6	76.7	56.7	62.4	76.4	55.7	61.6	76.1	54.1	60.0	74.3
50	49.3	54.0	66.4	49.1	53.8	66.1	48.8	53.5	65.8	48.5	53.2	65.5	47.6	52.7	65.2
55	42.9	47.4	58.1	42.6	47.1	57.8	42.3	46.8	57.5	42.0	46.5	57.2	41.6	46.1	56.9
60	37.7	41.7	51.7	37.4	41.4	51.4	37.1	41.1	51.1	36.7	40.8	50.8	36.4	40.4	50.4
65	33.3	37.0	46.1	33.1	36.8	45.9	32.7	36.4	45.5	32.4	36.1	45.2	32.0	35.7	44.8
70	29.7	33.1	41.5	29.5	32.8	41.2	29.1	32.5	40.9	28.8	32.2	40.5	28.4	31.8	40.2
75	26.6	29.7	37.5	26.4	29.5	37.2	26.0	29.2	36.9	25.7	28.8	36.6	25.3	28.4	36.2
80	23.9	26.8	34.0	23.7	26.6	33.8	23.3	26.3	33.5	23.0	25.9	33.1	22.6	25.5	32.7
85	21.6	24.3	31.0	21.3	24.1	30.8	21.0	23.7	30.5	20.7	23.4	30.1	20.3	23.0	29.7
90	19.5	22.0	28.3	19.3	21.8	28.2	18.9	21.5	27.8	18.6	21.2	27.5	18.2	20.8	27.1
95		20.0	25.9	17.4	19.9	25.8	17.1	19.5	25.5	16.8	19.2	25.2	16.4	18.8	24.8
100				15.8	18.1	23.7	15.5	17.8	23.4	15.1	17.5	23.1	14.6	17.1	22.7
105					16.4	21.7	13.9	16.1	21.5	13.5	15.8	21.2	13.1	15.4	20.8
110							12.4	14.6	19.7	12.1	14.3	19.5	11.6	13.8	19.1
115							11.0	13.1	18.1	10.8	12.9	17.9	10.3	12.4	17.6
120										9.6	11.6	16.5	9.2	11.2	16.1
125										8.4	10.3	15.1	8.0	10.0	14.7
130													7.0	8.9	13.4
135													6.0	7.8	12.1

TLT 13620774 M316065

* Counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

[+15] Carbody counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

Above load chart is for reference only. For actual lift duty please refer to load chart in operator's cab or manual.
Load charts for lifting operation are valid with classification according to ISO 4301-1/1986, group A1.

Capacities in [1000 lbs]

Radius [ft]	Boom length [ft]															
	144			154			164			174			184		194	203
*	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	64	76	99 [+15]	76	99 [+15]	99 [+15]	99 [+15]
25	103.3	113.0	129.9	100.0	109.4	122.4										
30	84.7	93.2	113.6	82.2	90.4	110.4	79.7	87.7	100.5	77.3	85.2	96.3	82.3	87.4	81.4	72.3
35	71.1	78.4	96.3	69.1	76.2	93.6	67.0	74.0	91.1	65.0	71.9	88.1	69.8	79.4	74.9	68.2
40	60.7	67.2	83.0	59.0	65.3	80.9	57.2	63.5	78.6	55.5	61.7	76.6	59.9	72.6	68.8	63.0
45	52.7	58.3	72.5	51.4	56.7	70.6	49.8	55.1	68.8	48.3	53.5	67.0	52.3	65.1	62.9	57.9
50	46.2	51.4	63.9	44.9	50.0	62.3	43.5	48.6	60.7	42.1	47.2	59.1	45.7	57.5	55.9	54.0
55	40.7	45.5	56.5	39.5	44.2	55.4	38.2	42.9	54.0	37.0	41.6	52.7	40.3	51.1	49.7	48.2
60	36.0	40.1	50.0	34.9	39.3	49.7	33.8	38.1	48.6	32.6	36.9	47.3	35.7	46.0	44.4	43.1
65	31.7	35.4	44.5	31.0	35.0	44.1	30.0	33.9	43.7	28.9	32.8	42.5	31.7	41.3	40.1	38.6
70	28.0	31.4	39.8	27.6	31.0	39.4	26.7	30.4	39.0	25.6	29.3	38.4	28.3	37.2	36.1	34.9
75	24.9	28.1	35.8	24.5	27.7	35.4	23.8	27.3	35.0	22.8	26.3	34.6	25.3	33.7	32.6	31.5
80	22.2	25.2	32.4	21.8	24.8	32.0	21.3	24.4	31.5	20.3	23.6	31.1	22.6	30.5	29.5	28.4
85	19.9	22.6	29.4	19.5	22.2	29.0	19.0	21.8	28.5	18.1	21.2	28.1	20.2	27.7	26.7	25.7
90	17.9	20.4	26.7	17.4	20.0	26.3	16.9	19.6	25.9	16.1	19.0	25.5	18.1	25.1	24.2	23.3
95	15.9	18.5	24.4	15.5	18.0	24.0	15.0	17.6	23.6	14.3	17.0	23.1	16.2	22.7	22.0	21.1
100	14.2	16.6	22.3	13.7	16.1	21.9	13.2	15.7	21.5	12.7	15.2	21.1	14.5	20.6	20.0	19.1
105	12.6	15.0	20.4	12.1	14.5	20.0	11.7	14.0	19.6	11.1	13.5	19.2	12.9	18.7	18.1	17.3
110	11.2	13.4	18.8	10.7	12.9	18.3	10.3	12.5	17.9	9.7	11.9	17.3	11.4	16.8	16.3	15.6
115	9.9	12.0	17.2	9.4	11.5	16.7	9.0	11.1	16.2	8.4	10.5	15.7	10.0	15.2	14.7	14.1
120	8.8	10.8	15.7	8.3	10.3	15.2	7.8	9.8	14.7	7.3	9.3	14.2	8.8	13.7	13.2	12.6
125	7.7	9.6	14.3	7.2	9.1	13.8	6.7	8.6	13.3	6.2	8.1	12.8	7.6	12.3	11.8	11.3
130	6.7	8.5	13.0	6.2	8.0	12.5	5.7	7.6	12.1	5.2	7.0	11.6	6.5	11.1	10.5	10.0
135	5.7	7.5	11.8	5.2	7.0	11.3	4.8	6.6	10.9		6.0	10.4	5.5	9.9	9.3	8.8
140	4.8	6.5	10.7		6.1	10.2		5.6	9.8		5.1	9.3	4.6	8.8	8.3	7.7
145		5.6	9.6		5.2	9.2		4.8	8.8			8.3		7.8	7.3	6.7
150						8.2			7.8			7.3		6.9	6.3	5.8
155						7.3			6.9			6.4		6.0	5.4	4.9
160									6.1			5.6		5.2	4.6	
165									5.3			4.8		4.4		

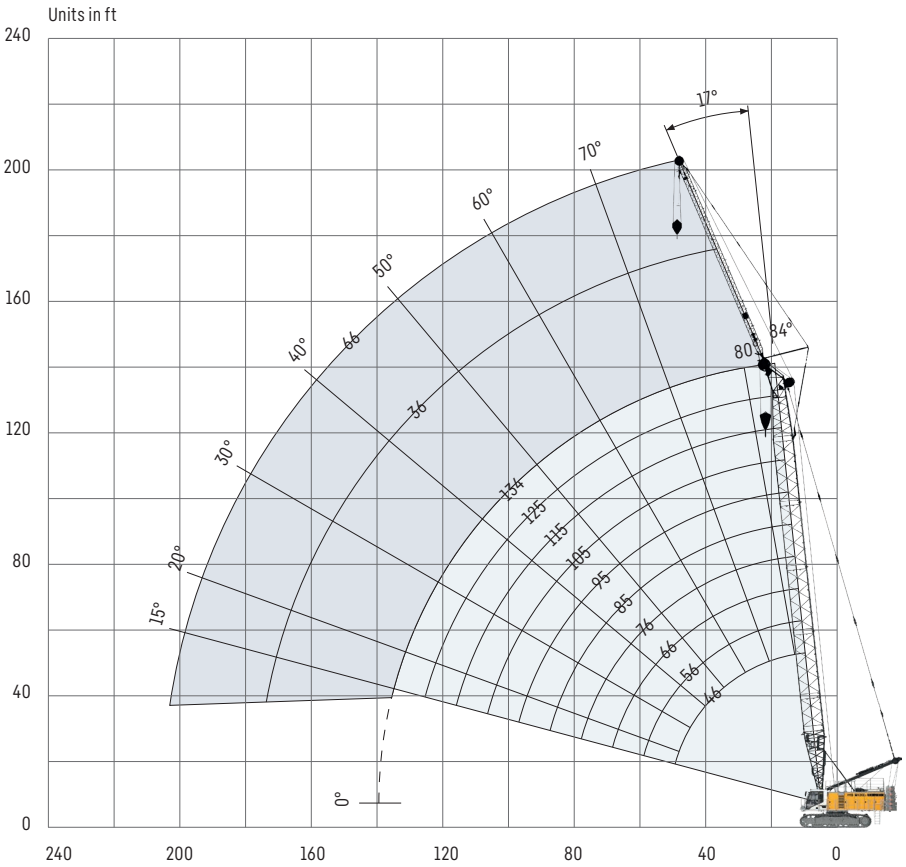
TLT 13620774 M316065

* Counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

[+15] Carbody counterweight in [1000 lbs] rounded: 64 = 63,940 lbs, 76 = 75,620 lbs, 99+15 = 99,210+15,450 lbs

Above load chart is for reference only. For actual lift duty please refer to load chart in operator's cab or manual.
Load charts for lifting operation are valid with classification according to ISO 4301-1/1986, group A1.

Lifting operation with fixed jib



Jib configuration 0806HS

Jib section	Amount of jib sections	
Jib foot 18 ft	1	1
Jib section 30 ft		1
Jib head 18 ft	1	1
Jib length [ft]	**36**	**66**

For main boom configuration 66 ft - 134 ft please refer to the table on page 16.

Load capacities with fixed jib 15° (0806.20)

Jib length 36 ft with 99,000 lbs rear counterweight and 15,700 lbs carbody counterweight, capacities in [1000 lbs]

Radius [ft]	Boom length [ft]				
	66	85	105	125	144
32		35.1			
34			34.9		
35	33.5	33.9	34.6		
36				35.0	
38					34.0
40	31.3	32.2	33.0	33.3	33.5
45	29.9	30.5	31.6	31.8	32.0
50	28.7	29.4	30.5	30.9	31.0
55	27.8	28.7	29.7	30.2	30.3
60	27.0	28.1	29.0	29.6	29.7
65	26.4	27.5	28.5	29.0	29.2
70	25.8	26.9	28.0	28.4	28.7
75	25.4	26.3	27.4	28.0	28.3
80	24.9	25.9	26.9	27.6	27.9
85	24.6	25.5	26.5	27.1	27.6
90	23.9	25.1	26.2	26.7	25.9
95	23.2	24.8	25.5	24.5	23.6
100	22.6	24.2	23.3	22.3	21.4
105		22.2	21.3	20.4	19.4
110		20.4	19.6	18.6	17.6
115		18.8	18.0	17.0	16.0
120			16.5	15.5	14.5
125			15.1	14.2	13.2
130			13.8	12.9	11.9
135			12.8	11.8	10.8
140				10.7	9.7
145				9.7	8.7
150				8.7	7.8
155					6.9
160					6.1
165					5.3
170					4.7

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.

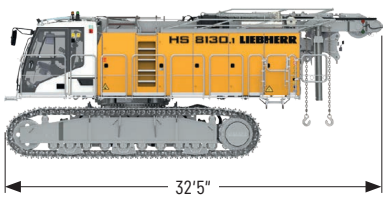
Jib length 66 ft with 99,000 lbs rear counterweight and 15,700 lbs carbody counterweight, capacities in [1000 lbs]

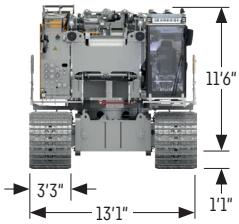
Radius [ft]	Boom length [ft]				
	66	76	95	115	134
42	15.8				
43		15.6			
45	15.1	15.1	15.2		
47				14.9	
49					14.6
50	14.4	14.4	14.6	14.6	14.5
55	13.9	13.9	14.1	14.2	14.1
60	13.4	13.5	13.7	13.8	13.9
65	12.9	13.0	13.4	13.5	13.5
70	12.5	12.6	13.0	13.2	13.3
75	12.1	12.3	12.6	12.9	13.1
80	11.7	11.9	12.3	12.6	12.7
85	11.4	11.5	12.0	12.3	12.5
90	11.1	11.3	11.7	12.1	12.3
95	10.8	11.0	11.4	11.8	12.1
100	10.5	10.7	11.2	11.5	11.9
105	10.2	10.5	11.0	11.3	11.6
110	10.0	10.2	10.7	11.1	11.4
115	9.9	10.0	10.5	10.9	11.2
120	9.7	9.9	10.3	10.7	11.0
125	9.6	9.8	10.1	10.5	10.9
130	8.4	9.7	10.0	10.3	10.7
135		9.6	9.8	10.2	10.5
140			9.8	10.0	10.4
145			9.7	9.9	10.2
150			9.6	9.8	10.0
155			8.3	9.8	9.2
160				9.3	8.3
165				8.4	7.5
170				7.7	6.8
175					6.1
180					5.4
185					4.7
190					4.2

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 (2018.33)

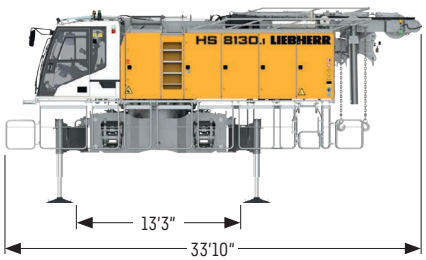


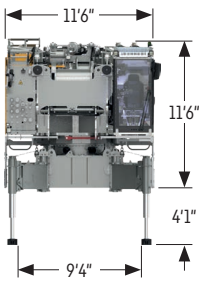


Basic machine

with HD undercarriage, A-frame, 2x 78,683 lbs winches and self-assembly system for rear counterweight, without boom foot and rear counterweight – fully tanked and ready for operation

Width		13'1"
Weight without hoist ropes	lbs	171,961
Weight of hoist ropes (2x 295 ft)	lbs/ft	4.33

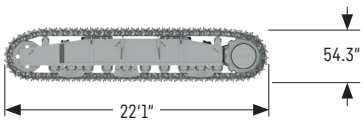




Basic machine

with A-frame, self-assembly system, 2x 78,683 lbs winches, without boom foot, rear counterweight and crawlers – fully tanked and ready for operation

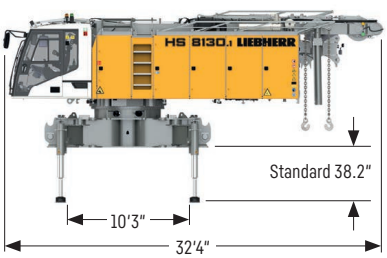
Width		11'6"
Weight without hoist ropes	lbs	112,435
Weight of hoist ropes (2x 295 ft)	lbs/ft	4.33

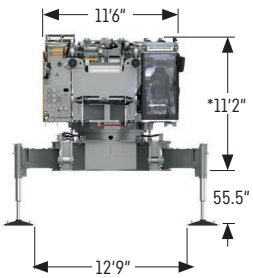


Crawler (2x)

2-web grousers		22'1"
Width	inch	41.5
Weight	lbs	32,850

Basic machine with wide track and long crawlers (US-standard)



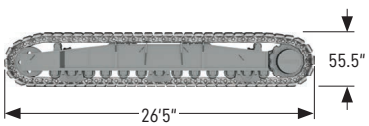


Basic machine

with A-frame, self-assembly system, 2x 78,800 lbs winches, without boom foot, basic counterweight and crawlers – fully tanked and ready for operation

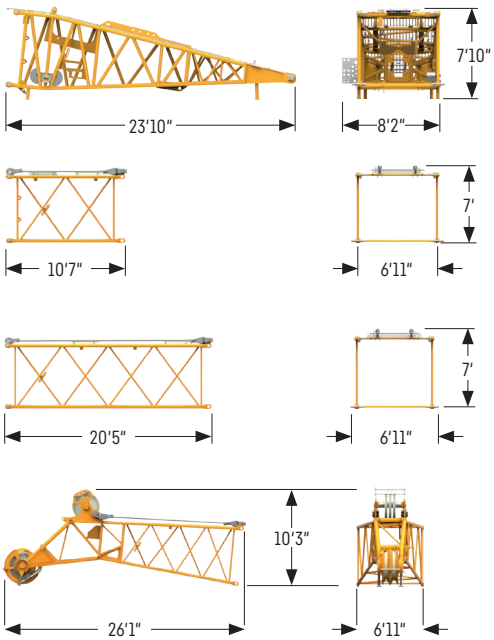
Width		11'6"
Weight without hoist ropes	lbs	94,800
Weight of hoist ropes (2x 295 ft)	lbs/ft	4.338

*) 11'4" with diesel engines for countries with little regulation, compliant with emissions level according to regulation ECE-R.96 H.



Crawler (2x)

2-web grousers		26'5"
Width	inch	40.9
Weight	lbs	41,447



Boom foot 23 ft (2018.33)

Width	inch	98.4
Weight incl. pendant ropes	lbs	7,088

Boom section 10 ft (2018.33)

Width	inch	83
Weight incl. pendant ropes	lbs	1,653

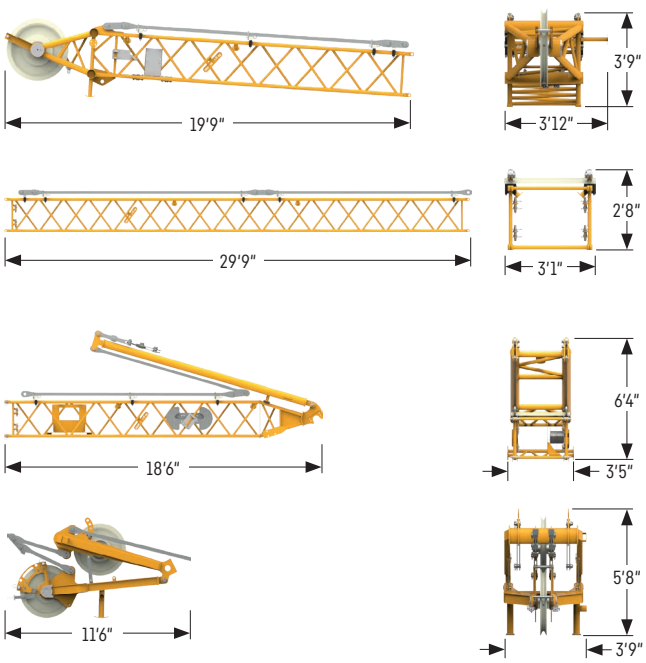
Boom section 20 ft (2018.33)

Width	inch	83
Weight incl. pendant ropes	lbs	2,712

Boom head 23 ft (2018.33)

Width	inch	83
Weight incl. pendant ropes	lbs	8,708

Fixed jib



Jib head

Width	inch	47.8
Weight	lbs	1,676

Jib section 30 ft

Width	inch	36.6
Weight	lbs	1,488

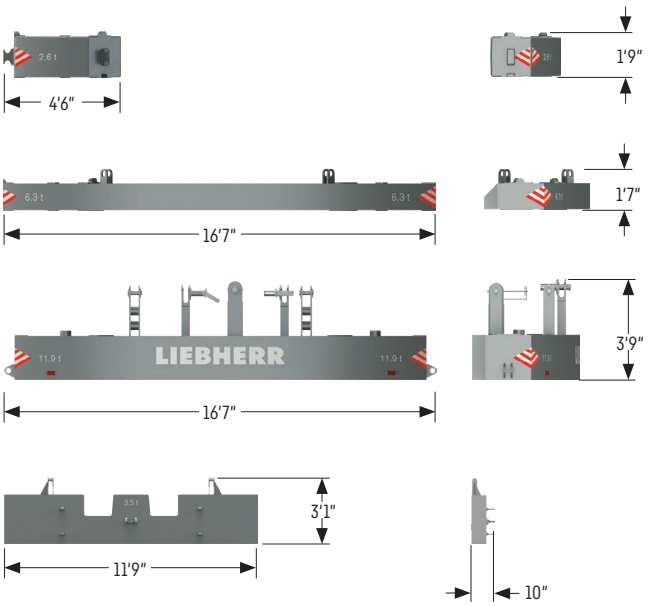
Jib foot with A-frame

Width	inch	40.7
Weight	lbs	2,161

Auxiliary jib

Width	inch	44.7
Weight	lbs	2,888

Counterweight



Counterweight slab (4x. option 6x)

Width	inch	33
Weight	lbs	5,08

Counterweight slab (1x)

Width	inch	44.2
Weight	lbs	13,889

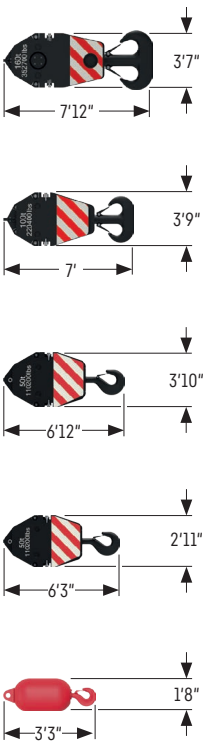
Counterweight slab (1x)

Width	inch	48
Weight	lbs	26,455

Carbody counterweight (2x)

Width	inch	10
Weight	lbs	7,716

Hooks



352,740 lbs hook block – 3 sheaves

Width	inch	16.5
Weight	lbs	4,433

220,462 lbs hook block – 2 sheaves

Width	inch	10.6
Weight	lbs	2,646

176,370 lbs hook block – 2 sheaves

Width	inch	9.6
Weight	lbs	2,646

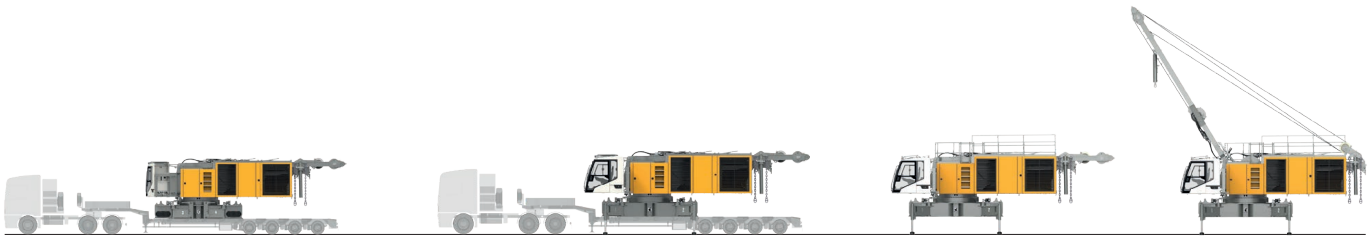
110,231 lbs hook block – 1 sheave

Width	inch	9
Weight	lbs	1,653

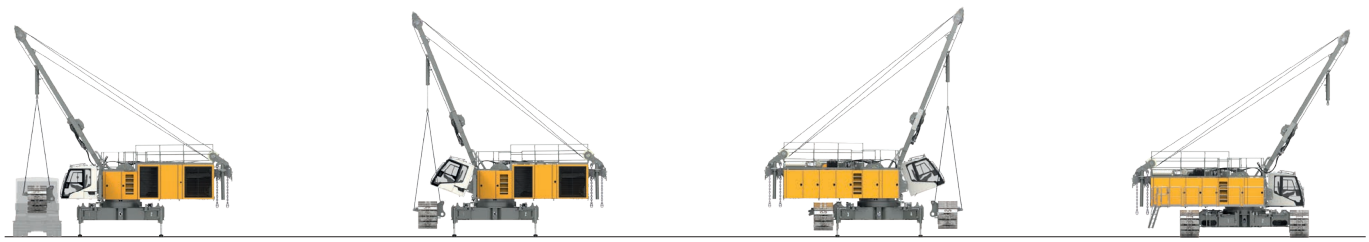
77,162 lbs single hook

Width	inch	19.7
Weight	lbs	1,764

Self-assembly system

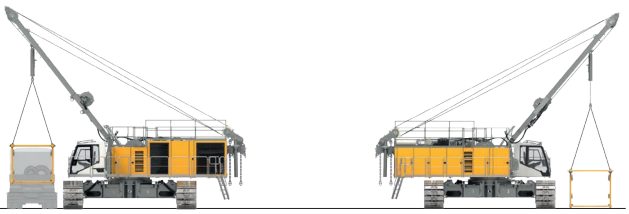


Unloading of basic machine (option)

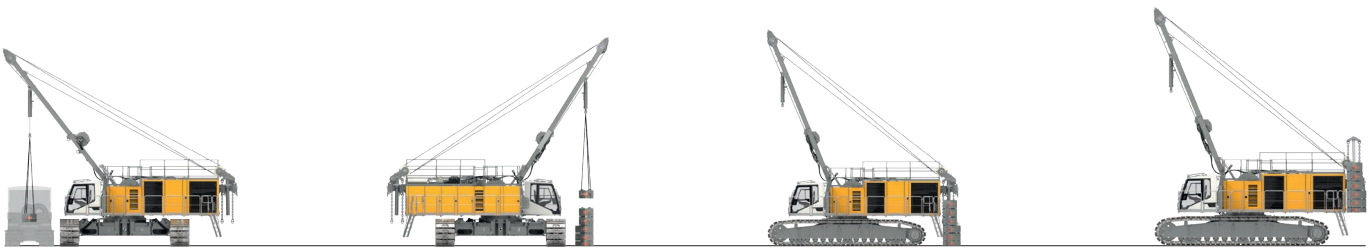


Unloading and assembly of crawlers

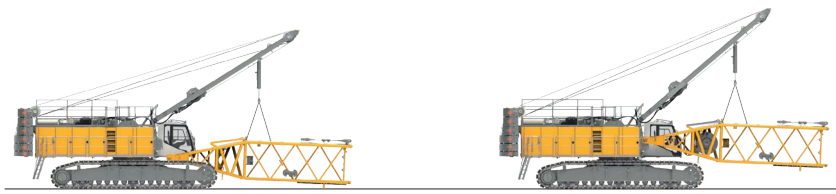
Unloading and assembly of carbody counterweight



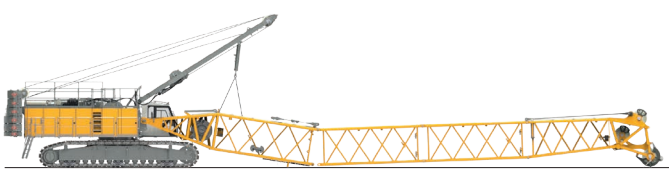
Unloading and assembly of boom



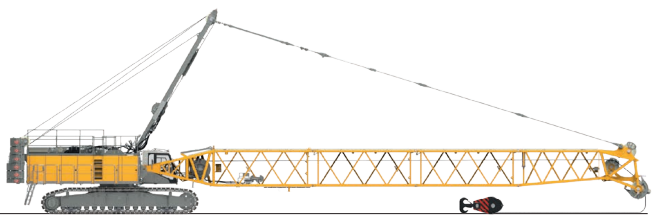
Unloading and assembly of rear counterweight



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

Liebherr USA, Co. · 7075 Bennington Street · Houston. TX 77028-5812
Phone (713) 636-4050 · crawler.cranes.usa@liebherr.com · www.liebherr.com
facebook.com/LiebherrConstruction

Printed in Austria HS 8130.1 8005.01.3 - rE - EN-US v02.062023 - 13175000
Subject to modifications.