

EN-US

HS 8100.1

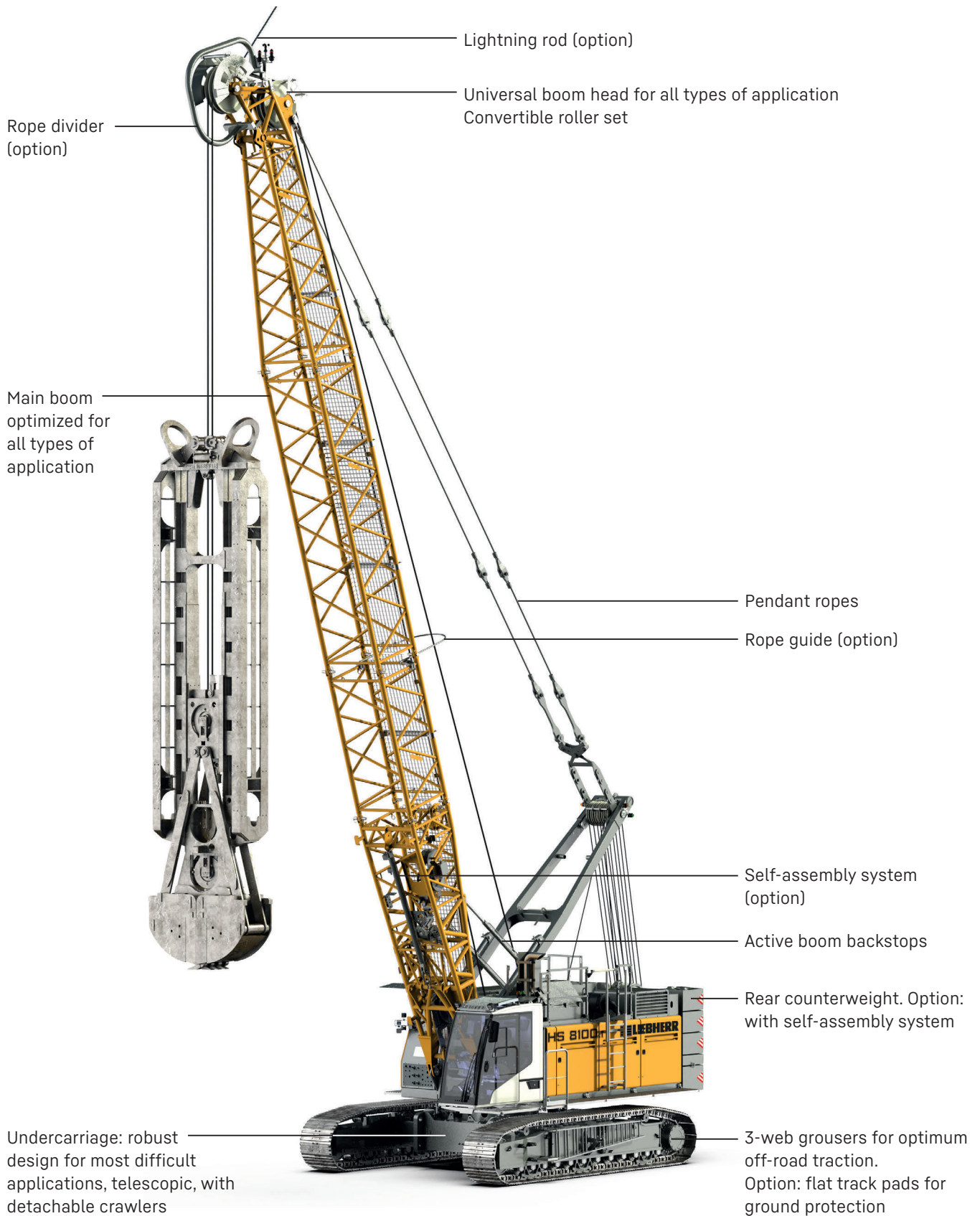
HS 8004.02.03
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LIEBHERR

Construction machines



Concept and characteristics

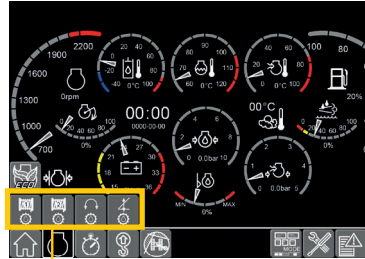




The newly developed cabin combines operator comfort with easy handling.

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

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



Example



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



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



Ground Pressure Visualization



Technical description



Operating weight

Composition of operating weight	The operating weight includes the basic machine with HD undercarriage, 2 main winches 61,822 lbf including wire ropes (295 ft) and 36 ft main boom, consisting of A-frame, boom foot (18 ft) and boom head (18 ft), 57,982 lbs rear counterweight, 2.6 ft 3-web grousers and 132,277 lbs hook block
Total weight	approx. 197,000 lbs

Ground pressure

Ground pressure	14.8 PSI
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Equipment

Main boom (1311.24)	max. 194 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

Diesel engine

Power rating according to ISO 9249	390 kW (523 hp) at 1700 rpm
Engine type	Liebherr D 946 A7-05
Fuel tank capacity	209 gal with continuous level indicator and reserve warning
AdBlue tank capacity	21 gal with continuous level indicator and reserve warning
Exhaust certification	97/68 EC Stage IV; EPA/CARB Tier 4f 97/68 EC Stage V; EPA/CARB Tier 4f ECE-R.96 Power Band H non-certified emission standard

Noise measurement data and vibration

Noise emission	according to 2000/14/EC directive	
Emission sound pressure level L_{PA}	74 dB(A)	(in the cabin)
Guaranteed sound power level L_{WA}	107 dB(A)	(of the machine)
Vibration transmitted to the machine operator	< 8.2 ft/s ²	(to the hand-arm system)
	< 1.6 ft/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	240 gal
Max. working pressure	5.7 PSI
Max. power at the connection plate	270 kW (2x 76 gal/min) for external appliances
Hydraulic oil	electronic monitoring of all filters use of synthetic environmentally friendly oil possible
Hydraulic retrofit kits for attachments	ready-made customized hydraulic retrofit kits are available e.g. powering casing oscillators, vibrators, hydraulic grabs, fixed leaders

Hoisting gear

Main winches	pressure controlled, variable flow hydraulic motors for the drag and hoist winches, full utilisation of engine power as the winch speed is automatically adjusted to suit the respective line pull Free fall: clutch and braking functions are provided by the service brake (low wear and maintenance-free multi-disc brake in compact design)
Winch options	
Line pull in the 1 st layer	61,822 lbf
Rope diameter	34 mm
Drum diameter	2.5 ft
Rope speed	0-315 ft/min
Rope capacity in the 1 st layer	127 ft*
Rope capacity in the 3 rd layer	465 ft* *effective length
Options	
Auxiliary winch	15,737 lbf in boom foot
Tagline winch	6,744 lbf with free fall

Boom winch

Line pull	max. 23,605 lbf
Rope diameter	20mm
Boom luffing	15-86° in 44 s

Crawlers

Drive system	with fixed axial piston hydraulic motors
Crawler side frames	maintenance-free, with hydraulic chain tensioning device
Brake	hydraulically released, spring-loaded multi-disc holding brake
Drive speed	0-0.8 mph
Grousers	3-web grousers, width 2.6 ft
Width of undercarriage	automatic track width adjustment from transport width to operating width via hydraulic cylinders
Options	self-assembly system, jack-up system 3-web grousers, width 3 ft flat track pads, width 3 ft 3-web grousers, width 3.3 ft

Swing gear

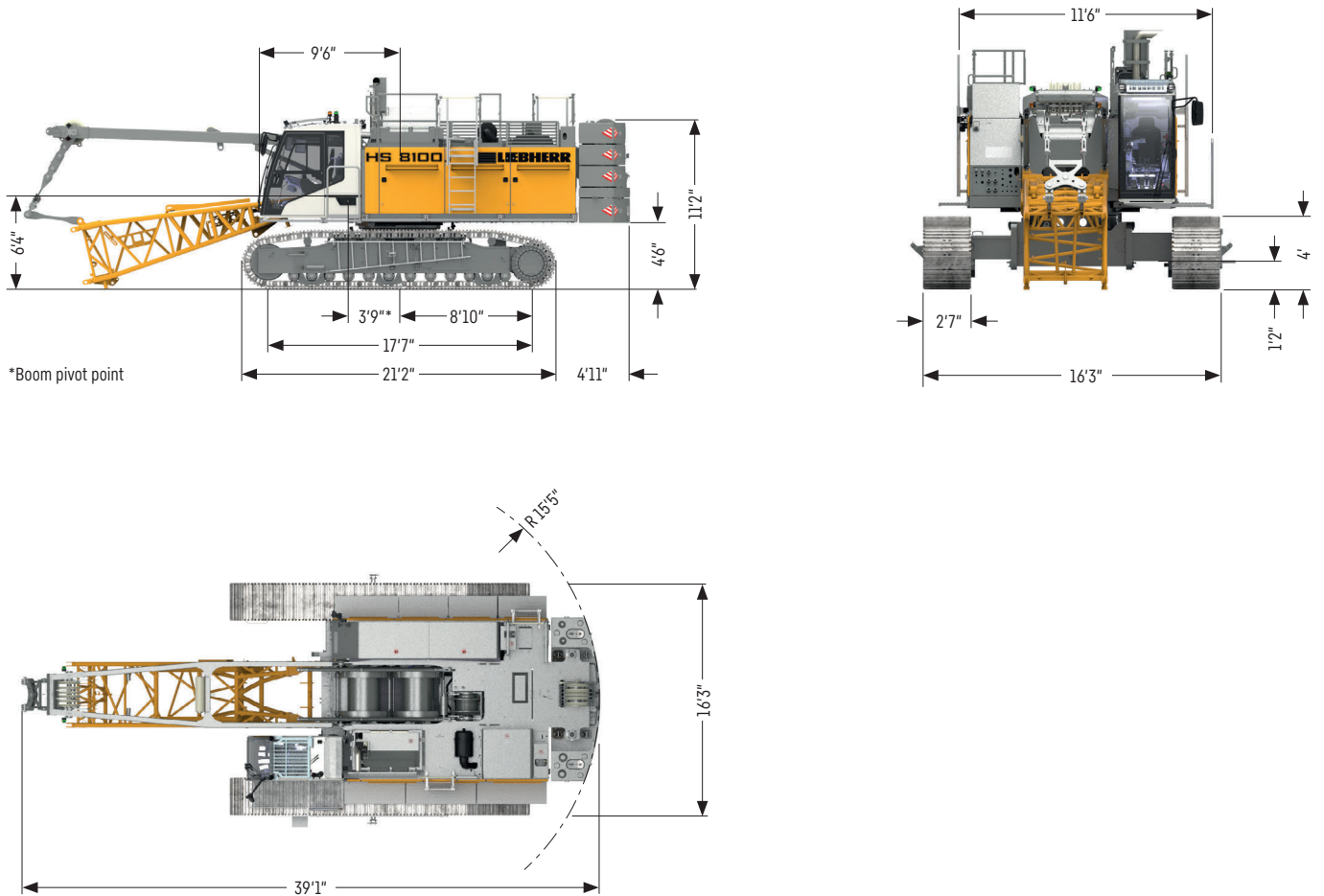
Drive system	with fixed axial piston hydraulic motors, planetary gearbox, pinion
Swing ring	roller bearing with external teeth
Brake	hydraulically released, spring-loaded multi-disc holding brake
Swing speed	0-4.6 rpm continuously variable, selector for 3 speed ranges to increase swing precision
Lubrication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

Control

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

Dimensions

Basic machine with undercarriage



Remarks

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

Grab versions

Dredging assistant (option)



Further information on material handling



Casing oscillator

Max. drilling diameter	ft 6.6
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HS 8100.1 on pedestal

Power rating of electric motor	kW 295/345 (50/60 Hz)
Power rating of diesel engine	kW 390
Free-fall winches	lbs 2x 44,092 or 2x 60,627
Option:	
Cabin elevation, fixed	ft 7.5
Cabin elevation, variable, hydraulic	ft 9

Capacities in grab operation

Capacities in [1000 lbs] with 58,000 lbs counterweight

Radius [ft]	Boom length [ft]							
	36	46	56	66	76	85	95	105
20	91.8	91.8	91.8	91.8	91.8	91.8	84.0	74.1
25	76.8	77.1	77.2	77.2	77.1	77.1	76.9	74.1
30	59.0	59.3	59.4	59.3	59.2	59.1	59.0	58.9
35	47.5	47.8	47.9	47.8	47.7	47.6	47.4	47.3
40		39.8	39.9	39.8	39.7	39.6	39.4	39.2
45		33.8	34.0	33.9	33.8	33.6	33.5	33.3
50		31.8	29.4	29.3	29.2	29.1	28.9	28.7
55			25.7	25.7	25.6	25.5	25.3	25.1
60				22.7	22.7	22.5	22.4	22.1
65				20.3	20.2	20.1	19.9	19.7
70					18.2	18.0	17.9	17.6
75						16.3	16.1	15.9
80						14.7	14.5	14.1
85							12.3	12.0
90							10.4	10.0
95								8.3
100								6.7

TLT 13159996 303503. Stability calculated according to EN 474-12. Max. capacities do not exceed 66% of tipping load.

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

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

Max. main boom 105 ft

Slurry wall grab

Maximum capacity in duty cycle operation with standard ropes

Line pull (1 st layer)	lbf	61,822
Rope diameter	mm	34
Minimum breaking load	lbf	235,150
Line pull - 1-rope duty cycle operation	lbf	61,822
Line pull - 2-rope duty cycle operation ¹⁾	lbf	93,745

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

Rigging and ropes are part of the load.

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

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



Load chart for slurry wall operation

Capacities in [1000 lbs] with 58,000 lbs counterweight

Radius [ft]	Boom length [ft]							
	36	46	56	66	76	85	95	105
15						93.5	84.0	74.1
20		93.5	93.5	93.1	93.5	93.5	84.0	74.1
25	69.5	69.7	69.8	69.7	69.7	69.6	69.5	69.4
30	53.4	53.6	53.7	53.6	53.5	53.4	53.3	53.1
35	43.0	43.3	43.3	43.2	43.1	43.0	42.9	42.7
40		43.3	36.1	36.0	35.9	35.7	35.6	35.4
45		30.6	30.7	30.7	30.6	30.4	30.2	30.0
50			26.6	26.6	26.5	26.3	26.1	25.9
55			23.3	23.3	23.2	23.0	22.9	22.7
60				20.6	20.5	20.4	20.2	20.0
65				18.4	18.3	18.2	18.0	17.8
70					16.5	16.3	16.2	16.0
75						14.7	14.6	14.4
80						13.3	13.2	13.0
85							12.0	11.8
90							10.5	10.1
95								8.4
100								6.8

Preliminary. Max. main boom 105 ft

Max. lifting capacity with mechanical grab is 60,627 lbs. For higher lifting capacities a hydraulic grab is required. Stability calculated according to EN 16228-5.

Machine standing on firm, horizontal ground.



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

Short boom

Rope diameter	mm	34
Radius	ft	20 at max. boom angle 28.3° 16.7 at min. boom angle 51.4°
Machine height during operation (max.)	ft	27.7 at max. boom angle 28.3°
(min.)		19.3 at min. boom angle 51.4°
Effective rope length	ft	127
Rear counterweight	lbs	51,368
Capacity in duty cycle operation	lbs	83,555 at radius of 16 ft 74,075 at radius of 20 ft

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

Dynamic soil compaction



Capacities in [1000 lbs] with 58,000 lbs counterweight

Radius [ft]	Boom length [ft]				
	66	76	85	95	105
26	55.7	54.1	52.5	50.7	47.8
30	44.9	44.8	44.4	43.0	41.7
33		39.6	39.4	38.8	37.7

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 82 ft.

Option: Piling control incl. cabin protection and armoured glass
 Max. main boom 105 ft

Special applications

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

Capacities in [1000 lbs] with 58,000 lbs counterweight

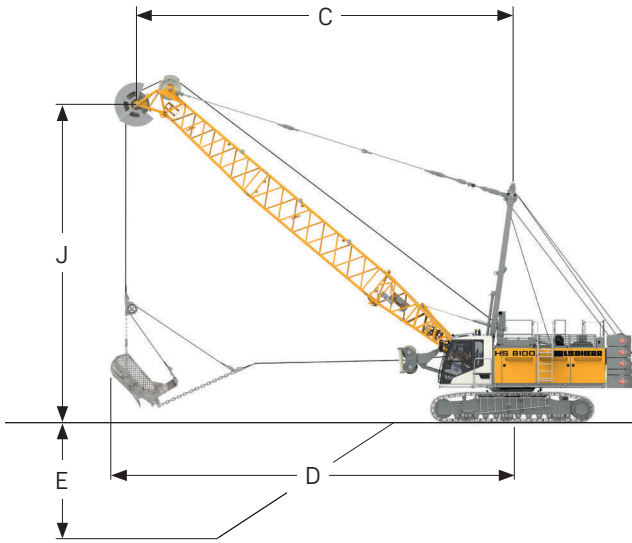
	Boom length [ft]							
	36	46	56	66	76	85	95	105
20	91.8	91.8	91.8	91.8	91.8	91.8	84.0	74.1
25	87.3	87.6	87.7	87.7	84.7	81.8	79.0	74.1
30	67.1	67.4	67.5	67.4	67.3	66.6	64.6	62.6
35	54.0	54.3	54.4	54.3	54.2	54.1	53.9	52.6
40		45.2	45.3	45.2	45.1	45.0	44.8	43.0
45		38.4	38.6	38.5	38.4	38.2	37.1	36.1
50			33.4	33.3	33.2	32.8	31.3	29.6
55			29.2	29.2	28.8	27.6	26.7	25.7
60				25.8	25.4	24.6	23.9	23.3
65				23.0	23.0	22.3	21.7	21.0
70					20.3	20.0	19.7	19.1
75						17.2	16.9	16.6
80						14.7	14.5	14.1
85							12.3	12.0
90							10.4	10.0
95								8.3
100								6.7

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

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

Max. main boom 105 ft

Dragline equipment



Digging diagram

C = Radius / dumping radius

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

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

J = Height to centre rope pulley boom head

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

Capacities in dragline operation

Capacities in [1000 lbs] with 58,000 lbs counterweight

alpha [°]	Boom length [ft]								
	46			56			66		
	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]
55	33.1	42.7	56.6	38.8	50.8	47.5	44.5	58.8	39.1
50	36.2	40.1	52.1	42.5	47.7	41.9	48.9	55.2	34.5
45	39.0	37.3	47.0	46.0	44.2	37.6	52.9	51.2	30.9
40	41.5	34.1	43.1	49.1	40.5	34.3	56.6	46.9	28.1
35	43.8	30.8	40.0	51.8	36.5	31.9	60.1	42.3	25.8
30	45.9	27.4	37.4	54.4	32.4	29.7	62.8	37.3	24.2
25	47.6	23.9	35.3	56.4	28.0	28.0	65.6	32.2	22.7

Preliminary

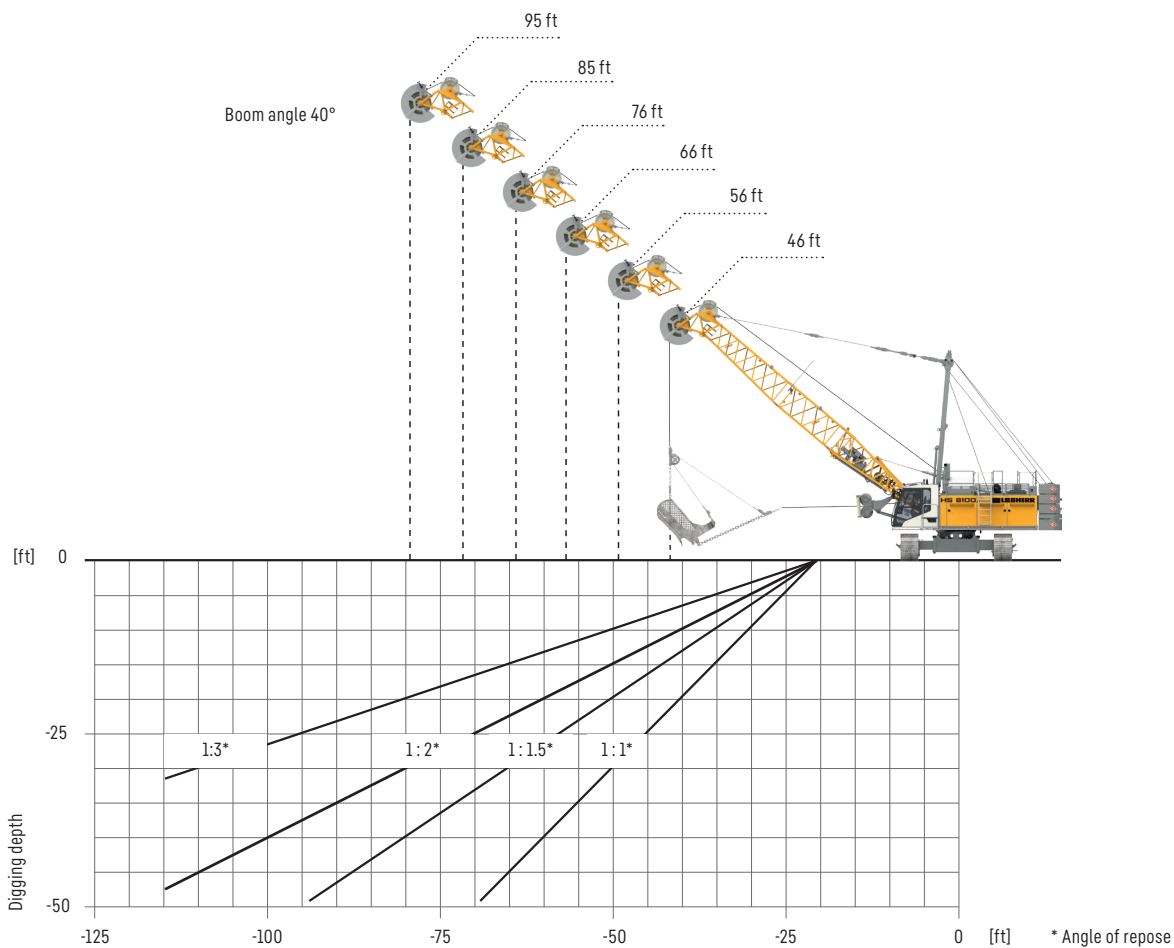
Capacities in [1000 lbs] with 58,000 lbs counterweight

alpha [°]	Boom length [ft]								
	76			85			95		
	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]	C [ft]	J [ft]	Rear counterweight [x 1000 lbs]
55	50.1	67.0	33.1	55.8	75.0	27.1	61.4	83.0	23.3
50	55.3	62.7	28.6	61.6	70.3	23.9	67.9	77.9	20.6
45	60.0	58.2	25.4	66.9	65.1	21.4	73.8	72.2	17.6
40	64.2	53.2	23.4	71.7	59.6	19.0	79.3	65.9	14.8
35	68.0	47.8	21.4	76.1	53.5	16.6	84.2	59.2	12.6
30	71.7	42.2	19.4	80.1	47.2	14.7	88.5	52.0	11.0
25	74.5	36.3	17.9	83.3	40.5	13.2	92.2	44.7	9.7

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

Max. main boom 105 ft

Planning aid for dragline operation



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

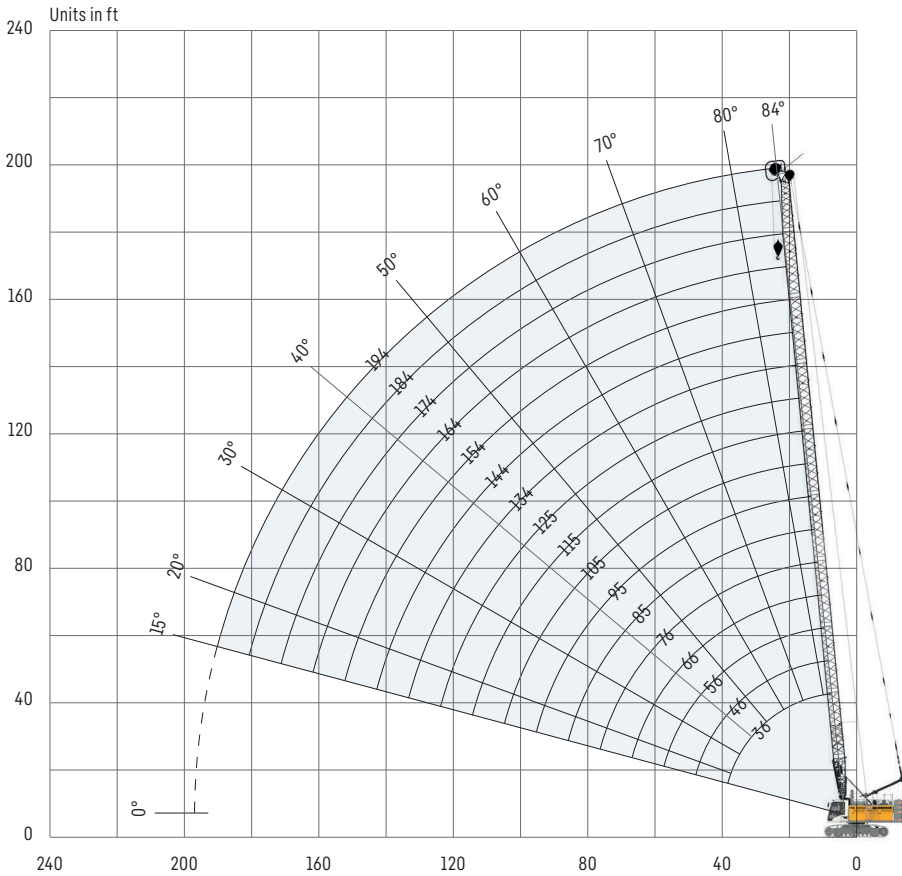
Main boom [m]	46	56	66	76	85	95
Dragline bucket [m ² /yd ³]	6.88 / 9	5.73 / 7.5	4.58 / 6	3.82 / 5	3.06 / 4	2.29 / 3

Density: 1.8 tm³ and fill factor 0.8

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

Lifting operation

Main boom 84°-15°








Auxiliary jib 55,116 lbs
 The maximum capacity of the auxiliary jib is 55,118 lbs.
 The corresponding load chart is programmed in the LML system.

Main boom configuration


Boom section	Amount of boom sections																
Boom foot 18 ft	1	1	1	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		1	
Boom section 20 ft			1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
Boom head 18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length [ft]	36	46	56	66	76	85	95	105	115	125	134	144	154	164	174	184	194
Auxiliary jib	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

preferred boom combinations

Capacities in [1000 lbs]

Radius [ft]	Boom length [ft]														
	36			46			56			66			76		
	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 
10	220.5														
15	167.1		220.5	156.8		210.4	147.5			139.2	159.4	197.6	131.6	150.8	187.0
20	113.1	129.8	161.3	108		154	103.2	118.5	209.2	98.8	113.4	141.1	94.6	108.7	135.3
25	80.3	92.4	115.1	80.6	57.3	115.4	78.8	90.7	147.3	75.9	87.4	109.1	73.2	84.3	105.4
30	61.4	70.8	88.7	61.7	47.3	88.9	61.8	71.2	113.1	61.3	70.7	88.6	59.3	68.5	85.9
35	49.2	56.9	71.5	49.5	39.1	71.9	49.6	57.4	89.0	49.5	57.3	71.9	49.4	57.1	71.7
40	40.8	45.4	45.4	41.3	33.0	59.9	41.4	47.7	72.0	41.3	47.6	60	41.1	47.4	59.8
45				34.9	28.4	51.1	35.1	40.8	60.1	35.0	40.6	51.2	34.8	40.5	51.0
50				29.8	24.9	44.4	30.2	35.2	51.3	30.1	35.1	44.6	30.0	35.0	44.5
55					22.0		26.3	30.8	44.7	26.2	30.7	39.2	26.1	30.6	39.1
60					19.7				39.3	23.0	27.1	34.8	23.0	27.0	34.8
65					17.8					20.4	24.1	31.2	20.3	24.1	31.1
70													18.1	21.6	28.0
75													16.2	19.4	25.4

TLT 13159993 298375






* Rear counterweight in [1000 lbs]
 + 33,069 lbs carbody counterweight



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 **Crane Planner 2.0**

Capacities in [1000 lbs]

* Radius [ft]	Boom length [ft]														
	85			95			105			115			125		
	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 
15	124.8	143.0	177.5												
20	90.7	104.3	129.9	87.0	100.1	124.8	83.6	96.2	120.1	80.3	92.5	115.7	77.3	89.1	111.5
25	70.6	81.4	101.8	68.1	78.6	98.5	65.8	76.0	95.3	63.5	73.4	92.2	61.3	71.0	89.3
30	57.4	66.3	83.3	55.5	64.3	80.8	53.7	62.3	78.5	52.0	60.3	76.2	50.3	58.5	74.0
35	48.0	55.6	70.2	46.5	54.0	68.2	45.3	52.4	66.4	44.0	50.9	64.5	42.6	49.4	62.8
40	40.9	47.2	59.6	40.0	46.3	58.8	38.8	45.2	57.2	37.6	43.9	55.7	36.4	42.7	54.2
45	34.6	40.3	50.8	34.4	40.0	50.6	33.6	39.4	50.1	32.6	38.3	48.8	31.6	37.2	47.5
50	29.7	34.8	44.3	29.5	34.5	44.0	29.2	34.2	43.8	28.6	33.7	43.4	27.7	32.7	42.3
55	25.9	30.4	38.9	25.6	30.1	38.7	25.3	29.8	38.4	25.1	29.6	38.1	24.4	29.0	37.8
60	22.7	26.8	34.5	22.5	26.6	34.3	22.2	26.3	34.0	21.9	26.0	33.7	21.6	25.7	33.4
65	20.1	23.8	30.9	19.9	23.6	30.7	19.6	23.3	30.4	19.3	23.0	30.1	19.0	22.7	29.8
70	17.9	21.3	27.8	17.7	21.1	27.6	17.4	20.8	27.3	17.1	20.5	27.0	16.8	20.2	26.7
75	16.0	19.2	25.2	15.8	19.0	25.0	15.5	18.7	24.7	15.2	18.4	24.4	14.9	18.1	24.1
80	14.4	17.3	22.9	14.2	17.1	22.7	13.9	16.9	22.5	13.6	16.6	22.2	13.3	16.2	21.8
85	12.9	15.7	20.9	12.8	15.5	20.8	12.5	15.2	20.5	12.2	15.0	20.2	11.9	14.6	19.9
90				11.5	14.1	19.0	11.2	13.8	18.7	10.9	13.5	18.5	10.6	13.2	18.1
95				10.3	12.8	17.4	10.1	12.5	17.2	9.8	12.3	16.9	9.5	12.0	16.6
100							9.1	11.4	15.8	8.8	11.1	15.5	8.5	10.8	15.2
105							8.1	10.3	14.5	7.9	10.1	14.3	7.6	9.8	14.0
110										7.1	9.2	13.1	6.8	8.9	12.8
115										6.3	8.3	12.1	6.0	8.0	11.8
120													5.3	7.2	10.9
125													4.7	6.5	10.0








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* Rear counterweight in [1000 lbs]

 + 33,069 lbs carbody counterweight


For boom lengths of 125 ft or more a second angle transmitter must be used in the boom head.

Capacities in [1000 lbs]

Radius [ft]	Boom length [ft]																
	134			144			154			164			174		184		194
	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	44.8	58.0	71.2 	58.0	71.2 	71.2 	71.2 	
20	74.3	85.8	103.1														
25	59.2	68.6	86.4	57.2	66.4	83.8	55.2	64.2	77.3	53.3	62.1	69.8	60.1	62.7			
30	48.7	56.7	71.8	47.1	54.9	69.7	45.6	53.2	65.6	44.5	51.6	61.9	50.0	56.4	52.0	45.5	
35	41.3	47.9	61.0	40.0	46.5	59.3	38.7	45.4	56.7	37.5	44.1	53.1	42.7	48.0	46.0	40.5	
40	35.3	41.5	52.8	34.2	40.3	51.3	33.1	39.1	49.3	32.1	37.9	46.9	36.8	41.8	41.4	35.7	
45	30.6	36.1	46.3	29.6	35.1	45.3	28.7	34.0	44.1	27.7	33.0	42.9	32.0	36.5	37.5	32.1	
50	26.8	31.8	41.2	25.9	30.8	40.1	25.0	29.9	39.1	24.2	29.0	38.0	28.0	32.2	33.4	29.0	
55	23.6	28.2	36.8	22.8	27.3	35.8	22.0	26.4	34.9	21.2	25.6	33.9	24.7	28.5	29.9	26.3	
60	20.9	25.2	33.1	20.2	24.3	32.2	19.4	23.5	31.3	18.7	22.7	30.4	22.0	25.5	27.1	24.1	
65	18.7	22.4	29.5	17.9	21.8	29.1	17.2	21.1	28.3	16.5	20.3	27.5	19.6	22.8	25.0	22.3	
70	16.5	19.9	26.4	16.0	19.6	26.1	15.3	18.9	25.7	14.6	18.2	24.9	17.4	20.5	23.1	20.8	
75	14.6	17.8	23.8	14.2	17.4	23.4	13.6	17.0	23.1	12.9	16.3	22.6	15.5	18.4	20.9	19.5	
80	13.0	15.9	21.5	12.6	15.6	21.2	12.2	15.2	20.8	11.5	14.6	20.5	13.9	16.6	18.9	18.2	
85	11.5	14.3	19.6	11.2	14.0	19.2	10.9	13.6	18.9	10.2	13.2	18.5	12.5	15.0	17.3	16.4	
90	10.3	12.9	17.8	9.9	12.6	17.5	9.6	12.2	17.1	9.1	11.9	16.8	11.2	13.6	15.8	14.9	
95	9.2	11.6	16.3	8.8	11.3	15.9	8.5	11.0	15.6	8.1	10.6	15.2	10.1	12.4	14.4	13.7	
100	8.2	10.5	14.9	7.8	10.2	14.6	7.5	9.8	14.2	7.1	9.5	13.9	9.1	11.1	13.1	12.5	
105	7.3	9.5	13.7	6.9	9.1	13.3	6.6	8.8	13.0	6.2	8.4	12.6	8.1	10.0	11.9	11.4	
110	6.5	8.6	12.5	6.1	8.2	12.2	5.8	7.9	11.9	5.4	7.5	11.5	7.2	9.0	10.8	10.4	
115	5.7	7.7	11.5	5.4	7.4	11.2	5.1	7.1	10.8	4.7	6.7	10.5	6.3	8.1	9.8	9.4	
120	5.1	7.0	10.6	4.7	6.6	10.2		6.3	9.9		5.9	9.5	5.6	7.2	8.8	8.5	
125		6.3	9.7		5.9	9.4		5.6	9.1		5.2	8.7	4.9	6.5	8.0	7.6	
130		5.6	8.9		5.3	8.6		4.9	8.3		4.6	7.9	4.5	5.8	7.2	6.8	
135		5.0	8.2		4.7	7.8			7.5			7.2	4.2	5.1	6.5	6.1	
140						7.2			6.9			6.5		4.5	5.8	5.4	
145						6.5			6.2			5.9			5.2	4.8	
150									5.6			5.3			4.6		
155												4.7					

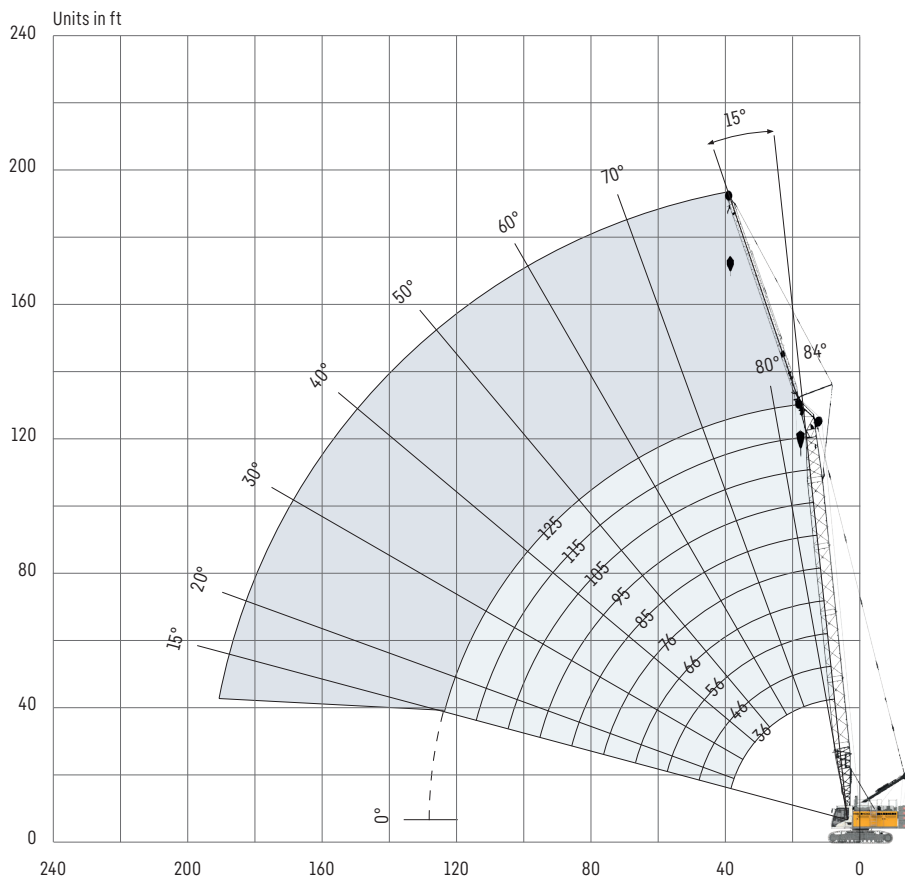
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* Rear counterweight in [1000 lbs]

 + 33,069 lbs carbody counterweight

For boom lengths of 125 ft or more a second angle transmitter must be used in the boom head.

Lifting operation with fixed jib



Jib configuration 0806HS

Jib section	Amount of jib sections	
Jib foot 18 ft	1	1
Jib section 29.5 ft		1
Jib head 18 ft	1	1
Jib length [ft]	36	66

For main boom configuration 66 - 135 ft please refer to the table on page 16.

Load capacities with fixed jib 15° (0806.20)

Jib length 36 ft with 71,100 lbs rear counterweight
and 33,100 lbs carbody counterweight, capacities in [1000 lbs]

Radius [ft]	Boom length [ft]				
	66	85	105	125	134
30	33.2	33.7			
35	31.5	31.9	32.2	29.7	28.8
40	29.9	30.4	30.7	28.7	27.4
45	28.6	29.1	29.0	28.1	26.6
50	27.6	28.3	27.8	27.5	26.3
55	26.6	27.6	27.3	27.1	26.1
60	25.6	27.1	26.9	26.4	25.8
65	24.7	26.1	26.6	25.5	24.5
70	23.7	25.3	25.8	24.8	23.4
75	22.5	24.5	23.8	22.9	22.2
80	21.5	22.2	21.5	20.8	20.1
85	20.7	20.1	19.4	18.7	18.3
90	19.0	18.3	17.7	16.9	18.3
95	17.4	16.7	16.1	15.3	15.0
100		15.3	14.6	13.9	13.5
105		14.0	13.3	12.6	12.3
110		12.8	12.2	11.4	11.1
115		11.7	11.1	10.4	10.0
120			10.1	9.4	9.0
125			9.2	8.5	8.1
130			8.3	7.7	7.3
135				6.9	6.6
140				6.2	5.8
145				5.5	5.2
150				4.9	4.5
155					3.9

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.

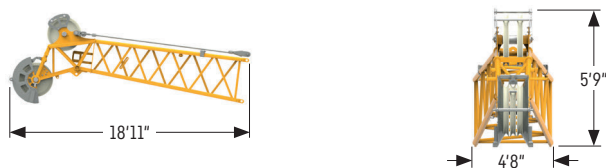
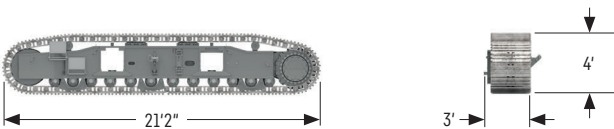
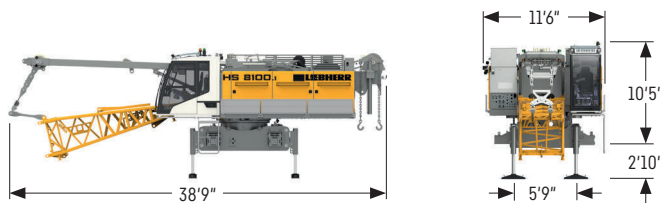
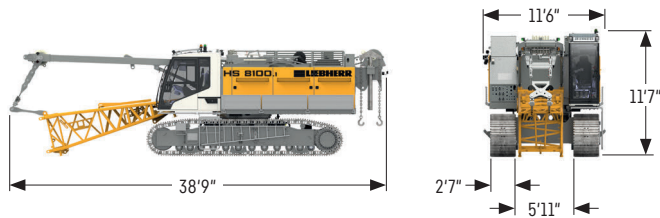
Jib length 66 ft with 71,200 lbs rear counterweight
and 33,100 lbs carbody counterweight, capacities in [1000 lbs]

Radius [ft]	Boom length [ft]				
	66	76	95	115	125
40	14.9	15.0			
45	14.1	14.1	14.1	13.8	
50	13.5	13.6	13.5	13.3	13.1
55	13.1	13.1	13.1	13.0	12.8
60	12.6	12.8	12.8	12.7	12.5
65	12.2	12.4	12.6	12.5	12.3
70	11.9	12.1	12.2	12.3	12.1
75	11.5	11.8	12.0	12.0	11.9
80	11.2	11.4	11.7	11.8	11.7
85	10.9	11.1	11.5	11.6	11.5
90	10.7	10.9	11.2	11.4	11.4
95	10.4	10.6	11.0	11.2	11.2
100	10.2	10.4	10.8	11.0	11.0
105	9.9	10.2	10.6	10.8	10.8
110	9.8	10.0	10.4	10.6	10.6
115	9.6	9.8	10.2	10.5	10.5
120	9.5	9.7	10.0	10.3	10.3
125	9.4	9.6	9.9	9.9	9.5
130		9.5	9.8	9.1	8.7
135		9.4	9.0	8.3	7.9
140			8.3	7.6	7.2
145			7.6	6.9	6.5
150			6.9	6.3	5.9
155				5.7	5.3
160				5.1	4.7
165				4.6	4.2
170				4.0	3.7
175					3.2

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 (1311.24)



Basic machine

with HD undercarriage, boom foot (1311.24), A-frame, 2x 61,822 lbf winches including wire ropes (295 ft), without rear counterweight

Width	inch	137.8
Weight with 2.6 ft 3-web grousers	lbs	131,285
Weight with 3 ft 3-web grousers	lbs	132,123
Weight of hoist ropes (2x 295 ft)	lbs/ft	3.82

Basic machine (option)

with boom foot (1311.24), A-frame, 2x 61,822 lbf winches including wire ropes (295 ft), without rear counterweight and crawlers

Width	inch	137.8
Weight	lbs	88,692
Weight of hoist ropes (2x 295 ft)	lbs/ft	3.82

Crawler (2x)

3-web grousers	inch	31.5
Width	inch	36
Weight with 2.6 ft 3-web grousers	lbs	21,275
Weight with 3 ft 3-web grousers (option)	lbs	21,693
Weight with 3 ft flat track pads (option)	lbs	22,267
Weight with 3.3 ft 3-web grousers (option)	lbs	22,818

Boom section 10 ft (1311.24)

Width	inch	56.3
Weight incl. pendant ropes	lbs	1,157

Boom section 20 ft (1311.24)

Width	inch	56.3
Weight incl. pendant ropes	lbs	1,940

Boom head* (No. 1311.24)

Width	inch	56.3
Weight incl. pendant ropes	lbs	4,674

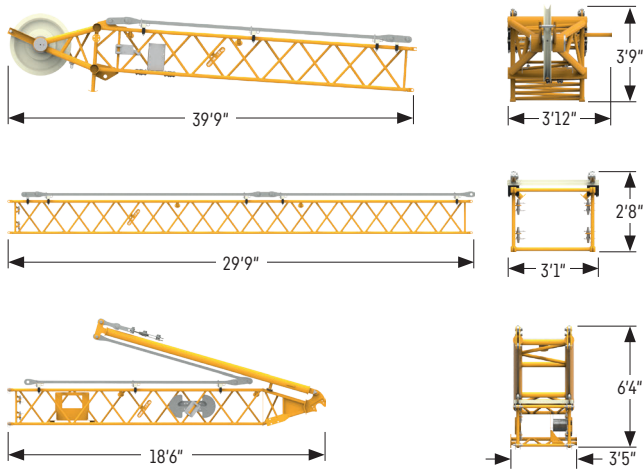
*) Steel sheaves (2+3)

Auxiliary jib

Width	inch	44.7
Weight	lbs	2,392

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

Fixed jib



Jib head

Width	inch	47.8
Weight	lbs	1,676

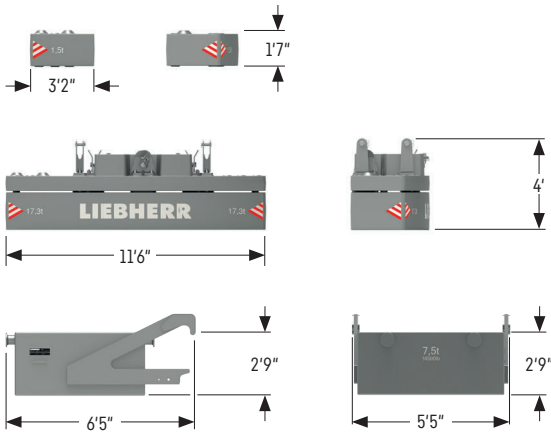
Jib section 30 ft

Width	inch	36.6
Weight	lbs	1,488

Jib foot with A-frame

Width	inch	40.7
Weight	lbs	2,161

Counterweight



Counterweight slab (standard 6x, option 10x)

Width	inch	33.5
Weight	lbs	3,307

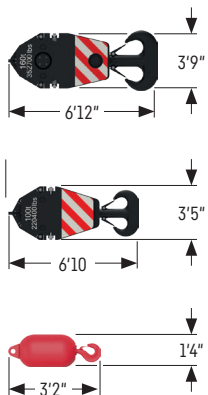
Counterweight slab (1x)

Width	inch	41.3
Weight	lbs	38,206

Carbody counterweight (option 2x)

Width	inch	64.6
Weight	lbs	16,535

Hooks



220,462 lbs hook block - 2 sheaves

Width	inch	15.2
Weight	lbs	2,646

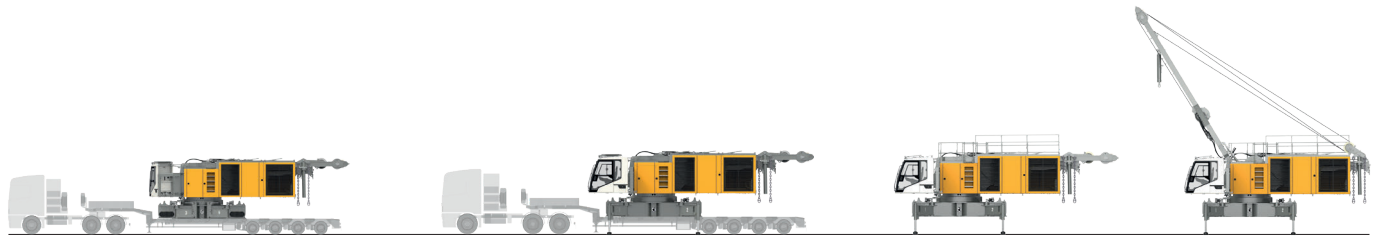
132,277 lbs hook block - 1 sheave

Width	inch	10.3
Weight	lbs	2,138

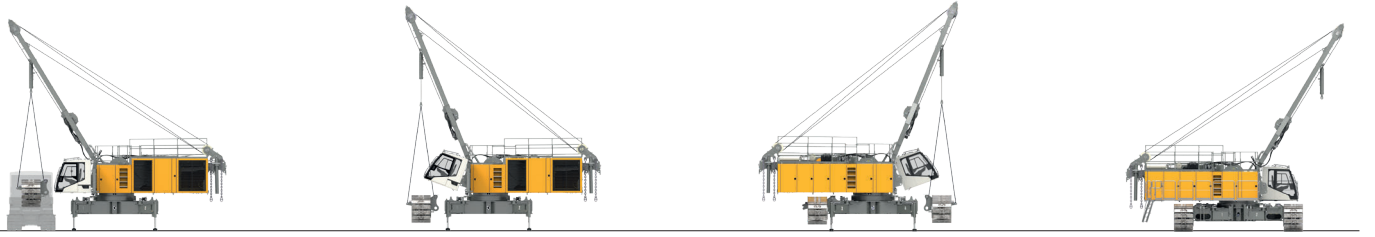
66,139 lbs hook block

Width	inch	15.7
Weight	lbs	882

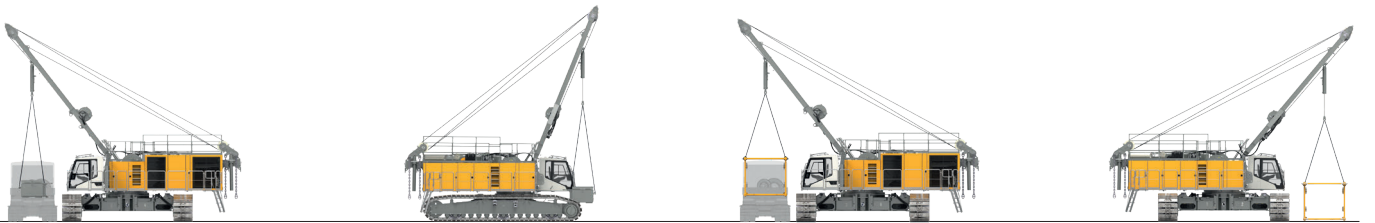
Self-assembly system



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

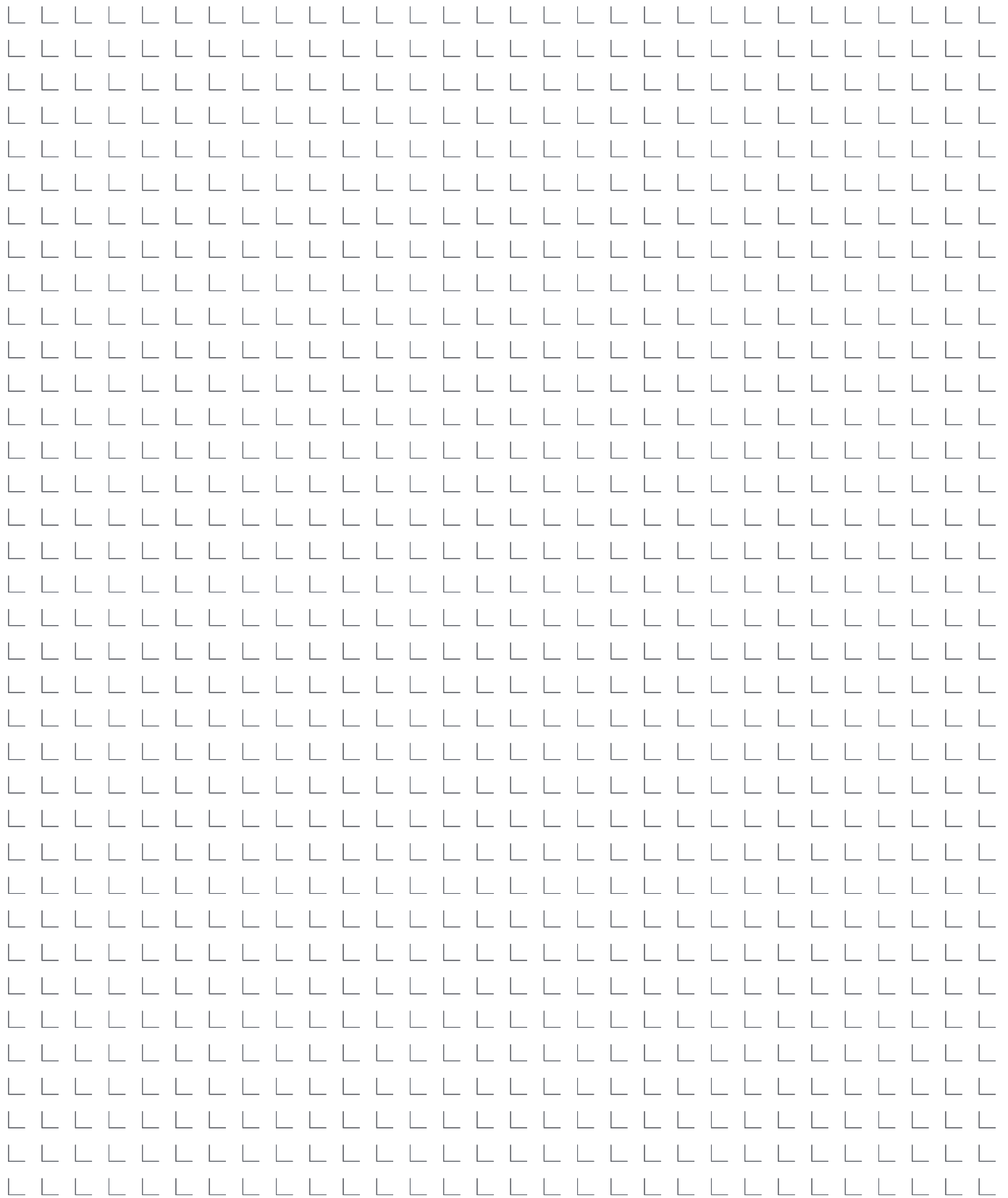


Assembly of boom

Reeving of hoist ropes

Notes





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