

Technical Description Hydraulic Excavator

R 964 B
Litronic®

Operating weight with backhoe attachment 59,5 – 67,5 t
Operating weight with shovel attachment 63,6 – 63,9 t
Engine output 270 kW (367 HP)
Bucket capacity 1,50 – 5,20 m³
Shovel capacity 3,40 – 5,80 m³



LIEBHERR

The Better Machine.



Engine

Rating per ISO 9249	270 kW (367 HP) at 1800 RPM
Model	Liebherr D 9406 TI-E
Type	6 cylinder V-engine
Bore/Stroke	135/150 mm
Displacement	12,88 l
Engine operation	4-stroke diesel direct injection, turbo-charged and after-cooled reduced emissions
Cooling	water-cooled
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements, automatic dust discharge
Fuel tank	1050 l
Standard	sensor controlled engine idling
Electrical system	
Voltage	24 V
Batteries	2 x 144 Ah/12 V
Starter	24 V/9,0 kW
Alternator	three phase current 28 V/80 A



Hydraulic System

Hydraulic pump for attachment and travel drive	2 Liebherr variable flow, swash plate pumps
Max. flow	2 x 410 l/min
Max. pressure	350 bar
Pump regulation	electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compen- sation, automatic oil flow optimizer, flow summation
Hydraulic pump for swing drive	reversible, variable flow, swash plate pump, closed-loop circuit
Max. flow	192 l/min
Max. pressure	384 bar
Hydraulic tank	460 l
Hydraulic system	850 l
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm), 1 high pressure filter for each main pump
Cooler	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and aftercooler cores and hydrostatically driven fan
MODE selection	adjustment of machine performance and the hydraulics via a mode selec- tor to match application
LIFT	for lifting
FINE	for precision work and lifting through very sensitive movements
ECO	for especially economical and environmentally friendly operation
POWER	for maximum digging power and heavy duty jobs
R.P.M adjustment	stepless adjustment of engine output via the r.p.m. at each selected mode



Hydraulic Controls

Power distribution	via control valves in single block with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	- proportional via joystick levers
Travel	- proportional via foot pedals or removable hand levers
Additional functions	via foot pedals or joystick toggle switch



Swing Drive

Drive by	Liebherr swash plate motor with inte- grated brake valves
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0 - 5,5 RPM stepless
Swing torque	220 kNm
Holding brake	wet multi-disc (spring applied, pressure released)
Option	pedal controlled positioning brake



Uppercarriage

Design	torque resistant modular design upper frame
Attachment mounting	parallel length girders
Catwalks	on both sides



Operator's Cab

Cab	built from deep drawn components, resi- liently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	shock absorbing suspension, adjustable to operator's weight, 6-way adjustable seat with mountable head rest
Joysticks	integrated into adjustable seat consoles
Monitoring	menu driven query of current operating conditions via the LCD display. Auto- matic monitoring, display, warning (acoustical and optical signal) and saving machine malfunction data, for example, engine overheating, low engine oil pressure or low hydraulic oil level
Heating system	Standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated



Undercarriage

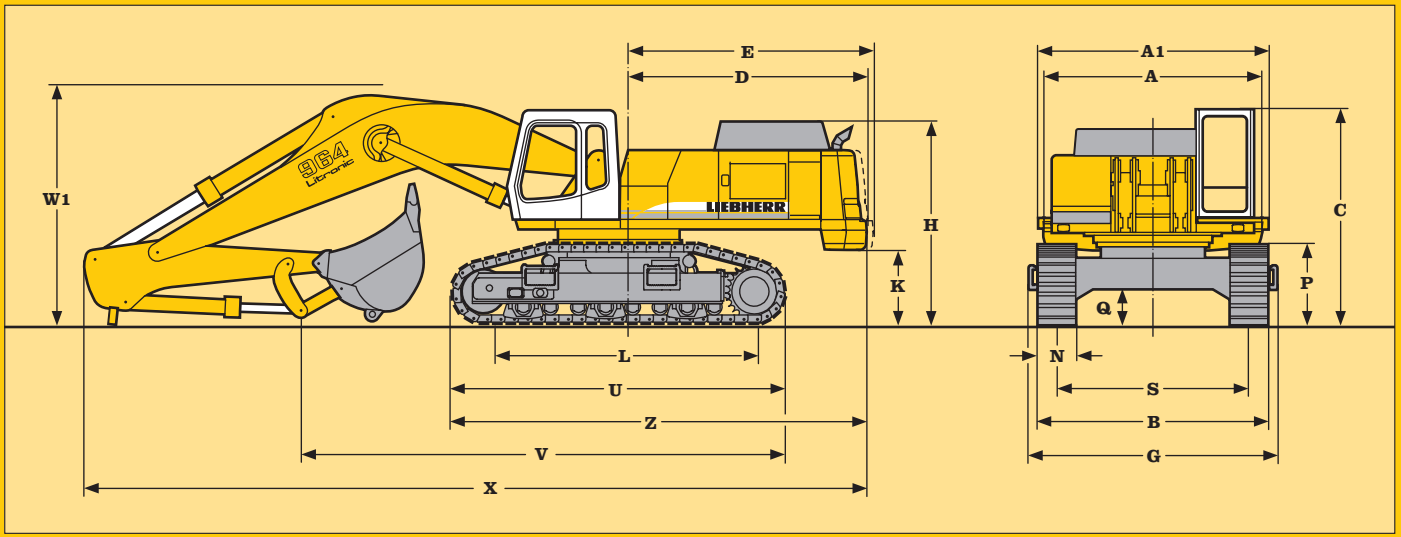
Versions:	
HD	heavy duty
HD-SL	heavy duty, long undercarriage
Drive	Liebherr swash plate motors with inte- grated brake valves on both sides
Transmission	Liebherr planetary reduction gears
Travel speed	low range - 3,1 km/h high range - 4,3 km/h
Drawbar pull max.	526 kN
Track components	D 8 K, maintenance-free
Track rollers/ carrier rollers	HD: 8/2 HD-SL: 9/2
Tracks	sealed and greased
Track pads	double grouser
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motor



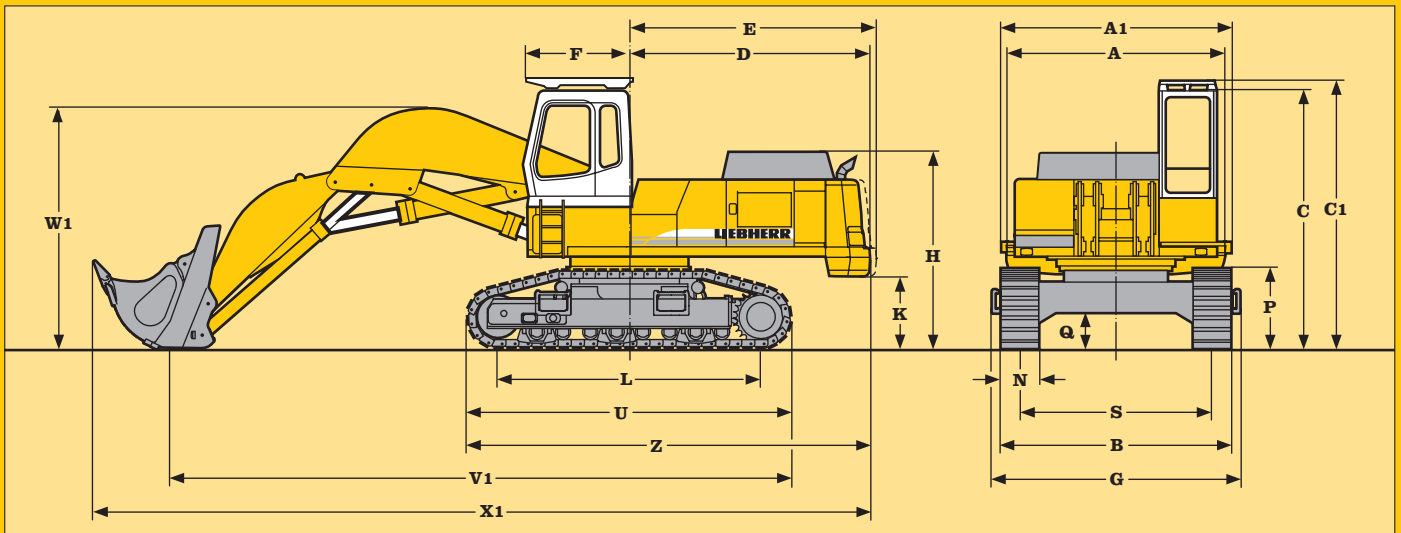
Attachment

Type	combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with special seal- system, shock absorbed
Pivots	sealed, low maintenance
Pivots bucket-to-stick, bucket-to-link	O-ring sealed and completely enclosed
Lubrication	easily accessible centralized lubrication
Hydraulic connections	pipes and hoses equipped with SAE split- flange connections
Bucket	standard equipped with 27 t lifting eye

Technical Data



	mm	Stick length	Gooseneck boom	Gooseneck boom	Gooseneck boom
A	3630		7,00 m	8,20 m	10,00 m
A1	3824		mm	mm	mm
C	3420				
D	3910	V	2,60	9050	10000
E	4030		3,40	8300	9400
H	3225		4,20	6000	7550
K	1247		5,00	-	7000
L	HD 4280				
	HD-SL 4600	W	2,60	3850	3900
P	1355		3,40	3850	3950
Q	606		4,20	3950	4050
S	3200		5,00	-	4100
U	HD 5370				
	HD-SL 5690	X	2,60	12450	13700
N	500 600 750		3,40	12450	13750
B	3908 3908 3950		4,20	12500	13800
G	4105 4105 4105		5,00	-	13800
Z	6595				



	mm		mm
A	3630	Q	606
A1	3824	S	3200
C	4220	U	5370
C1	4390	N	500 600 750
D	3910	B	3908 3908 3950
E	4030	G	4105 4105 4105
F	1680	Z	6595
H	3225	W1	4030
K	1247	V1	10200
L	4280	X1	12700
P	1355		

Dimensions

Digging envelope

- 1 with stick 2,60 m
- 2 with stick 3,40 m
- 3 with stick 4,20 m

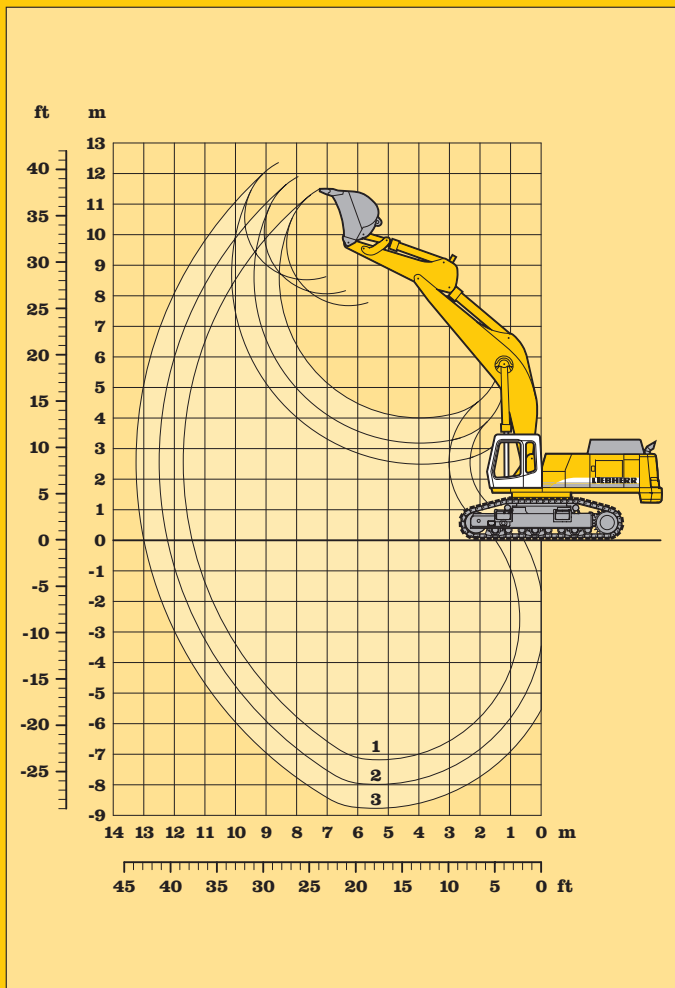
Stick lengths	m	2,60	3,40	4,20
Max. digging depth	m	7,20	8,00	8,75
Max. reach at ground level	m	11,40	12,20	13,00
Max. dump height	m	7,70	8,10	8,50
Max. teeth height	m	11,50	11,80	12,30

Digging force	kN/t	273/27,8	232/23,6	204/20,8
Breakout force	kN/t	329/33,5	329/33,5	329/33,5

Operating Weight and Ground Pressure

Operating weight includes basic machine with 7,00 m gooseneck boom, 2,60 m stick and 3,50 m³ bucket.

Undercarriage		HD			HD-SL		
Pad width	mm	500	600	750	500	600	750
Weight	kg	59500	60200	61300	61000	61800	63000
Ground pressure	kg/cm ²	1,27	1,06	0,86	1,22	1,03	0,84



Buckets

Cutting width	mm	1500 ²⁾	1450 ¹⁾	1700 ²⁾	1650 ¹⁾	1900 ²⁾	1850 ¹⁾	2100 ²⁾	2050 ¹⁾	2250 ³⁾	2450 ³⁾
Capacity ISO 7451	m ³	2,20	2,30	2,60	2,70	3,00	3,10	3,40	3,50	4,30	5,20
Weight	kg	2700	2300	2950	2400	3150	2550	3400	2800	3050	3400
Suitable for material up to a specific weight of											
with stick 2,60 m	t/m ³	-	-	-	-	2,20	2,20	1,80	1,80	1,50	1,20
with stick 3,40 m	t/m ³	-	-	2,20	2,20	1,80	1,80	1,50	1,50	1,20	-
with stick 4,20 m	t/m ³	2,20	2,20	1,80	1,80	1,50	1,50	-	1,20	-	-

¹⁾ Medium-duty bucket with teeth size 25 C (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ Heavy-duty rock bucket with teeth size 25 C (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

³⁾ Loading bucket with teeth size 20 C

Note:

Installation of optional side cutters onto medium-duty and loading buckets with Liebherr-teeth size 25 and 20 increase cutting width by approx. 160 and 170 mm respectively.

Side cutters installation kit consist of:

- Weld-on set of adapters (Id. No. 9352588)
- Set of bolt-on side cutters (Id. No. 9352587)

Backhoe Attachment with Gooseneck Boom 7,00 m

Stick 2,60 m						
Height in m	Under- carriage	Radius of load from centerline of machine in m				
		4,5	6,0	7,5	9,0	10,5
10,5	HD HD-SL					
9,0	HD HD-SL			6,7# (6,7#) 6,7# (6,7#)		
7,5	HD HD-SL			11,8# (11,8#) 11,8# (11,8#)		
6,0	HD HD-SL			12,9# (12,9#) 12,9# (12,9#)	10,1# (10,1#) 10,1# (10,1#)	
4,5	HD HD-SL	24,5# (24,5#) 24,5# (24,5#)	17,6# (17,6#) 17,6# (17,6#)	13,3 (14,4#) 13,7 (14,4#)	9,8 (12,5#) 10,0 (12,5#)	
3,0	HD HD-SL	27,4 (28,9#) 28,1 (28,9#)	17,7 (20,6#) 18,2 (20,6#)	12,8 (16,0#) 12,9 (16,0#)	9,3 (12,5) 9,6 (13,4#)	
1,5	HD HD-SL	22,4# (22,4#) 22,4# (22,4#)	16,6 (22,7#) 17,1 (22,7#)	11,9 (16,2) 12,2 (17,3#)	8,9 (12,1) 9,2 (13,9)	
0	HD HD-SL	25,5 (26,4#) 26,2 (26,4#)	16,0 (22,5) 16,5 (23,6#)	11,5 (15,7) 11,8 (18,0#)	8,7 (11,8) 9,0 (13,6)	
- 1,5	HD HD-SL	25,6 (31,2#) 22,1# (22,1#)	15,9 (22,3) 16,3 (23,2#)	11,3 (15,5) 11,6 (17,9)	8,6 (11,7) 8,9 (13,5)	
- 3,0	HD HD-SL	26,1 (28,3#) 29,5# (29,5#)	16,1 (21,6#) 16,3 (22,2#)	11,4 (15,6) 11,7 (16,7#)		
- 4,5	HD HD-SL	23,6# (23,6#) 23,6# (23,6#)	16,6 (18,2#) 17,1 (18,2#)			
- 6,0	HD HD-SL					
- 7,5	HD HD-SL					
- 9,0	HD HD-SL					
- 10,5	HD HD-SL					

Stick 3,40 m						
Height in m	Under- carriage	Radius of load from centerline of machine in m				
		4,5	6,0	7,5	9,0	10,5
10,5	HD HD-SL					
9,0	HD HD-SL					
7,5	HD HD-SL				7,2# (7,2#) 7,2# (7,2#)	
6,0	HD HD-SL				11,4# (11,4#) 11,4# (11,4#)	10,3 (10,5#) 10,5# (10,5#)
4,5	HD HD-SL		15,6# (15,6#) 15,6# (15,6#)	13,0# (13,0#) 13,0# (13,0#)	9,9 (11,5#) 10,2 (11,5#)	5,7# (5,7#) 5,7# (5,7#)
3,0	HD HD-SL	27,5# (27,5#) 27,5# (27,5#)	18,4 (18,9#) 18,8 (18,9#)	12,8 (14,9#) 13,2 (14,9#)	9,4 (12,6#) 9,7 (12,6#)	7,1 (7,9#) 7,4 (7,9#)
1,5	HD HD-SL	26,8 (27,8#) 27,5 (27,8#)	17,1 (21,6#) 17,5 (21,6#)	12,1 (16,4) 12,4 (16,5#)	9,0 (12,2) 9,3 (13,5#)	6,9 (8,7#) 7,1 (8,7#)
0	HD HD-SL	25,8 (26,5#) 26,5# (26,5#)	16,3 (22,7) 16,7 (23,2#)	11,5 (15,8) 11,9 (17,6#)	8,7 (11,8) 8,9 (13,6)	6,7 (7,1#) 6,9 (7,1#)
- 1,5	HD HD-SL	25,6 (30,3#) 26,3 (30,3#)	15,9 (22,3) 16,3 (23,5#)	11,2 (15,5) 11,6 (17,8)	8,5 (11,6) 8,7 (13,3)	
- 3,0	HD HD-SL	25,8 (30,6#) 26,5 (30,6#)	15,9 (22,3) 16,3 (22,6#)	11,2 (15,4) 11,5 (17,4#)	8,5 (11,6) 8,7 (13,3)	
- 4,5	HD HD-SL	26,3 (26,9#) 26,9# (26,9#)	16,2 (20,2#) 16,6 (20,2#)	11,4 (15,4#) 11,7 (15,4#)		
- 6,0	HD HD-SL	20,6# (20,6#) 20,6# (20,6#)	15,4# (15,4#) 15,4# (15,4#)			
- 7,5	HD HD-SL					
- 9,0	HD HD-SL					
- 10,5	HD HD-SL					

Stick 4,20 m						
Height in m	Under- carriage	Radius of load from centerline of machine in m				
		4,5	6,0	7,5	9,0	10,5
10,5	HD HD-SL					
9,0	HD HD-SL					
7,5	HD HD-SL				7,4# (7,4#) 7,4# (7,4#)	2,4# (2,4#) 2,4# (2,4#)
6,0	HD HD-SL				9,3# (9,3#) 9,3# (9,3#)	5,5# (5,5#) 5,5# (5,5#)
4,5	HD HD-SL			11,4# (11,4#) 11,4# (11,4#)	10,0 (10,3#) 10,3 (10,3#)	7,4 (7,5#) 7,5# (7,5#)
3,0	HD HD-SL	23,6# (23,6#) 23,6# (23,6#)	16,8# (16,8#) 16,8# (16,8#)	13,0 (13,4#) 13,3 (13,4#)	9,4 (11,4#) 9,7 (11,4#)	7,1 (9,3#) 7,3 (9,3#)
1,5	HD HD-SL	27,4 (29,3#) 28,1 (29,3#)	17,3 (19,9#) 17,3 (19,9#)	12,1 (15,3#) 12,4 (15,3#)	8,9 (12,1) 9,2 (12,6#)	6,8 (9,3) 7,0 (10,7)
0	HD HD-SL	25,7 (28,2#) 26,5 (28,2#)	16,2 (22,0#) 16,6 (22,0#)	11,4 (15,7) 11,8 (16,7#)	8,5 (11,7) 8,8 (13,4)	6,5 (9,0) 6,7 (10,4)
- 1,5	HD HD-SL	25,1 (28,9#) 25,8 (28,9#)	16,6 (22,0) 16,1 (23,0#)	11,0 (15,2) 11,3 (17,4#)	8,2 (11,4) 8,5 (13,1)	6,3 (8,8) 6,6 (9,0#)
- 3,0	HD HD-SL	25,0 (31,5#) 25,6 (31,5#)	15,4 (21,8) 15,9 (22,7#)	10,8 (15,0) 11,1 (17,4#)	8,1 (11,2) 8,4 (13,0)	
- 4,5	HD HD-SL	25,4 (28,8#) 26,1 (28,8#)	15,5 (21,2#) 16,0 (21,2#)	10,9 (15,1) 11,2 (16,2#)	8,2 (11,4) 8,5 (12,5#)	
- 6,0	HD HD-SL	24,0# (24,0#) 24,0# (24,0#)	16,0 (17,9#) 16,5 (17,9#)	11,3 (13,3#) 11,6 (13,3#)		
- 7,5	HD HD-SL	15,6# (15,6#) 15,6# (15,6#)				
- 9,0	HD HD-SL					
- 10,5	HD HD-SL					

The load values are quoted in tons (t) on the backhoe bucket's load hook, and may be swung 360° on firm and even ground. Values quoted in brackets apply to the undercarriage when in longitudinal position.

Capacities are valid for 600 mm wide double grouser pads.

Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via #).

Maximum load for the backhoe bucket's lifting eye is 27 t.

Without bucket (2,70 m³), the lift capacities will increase by 2400 kg, without bucket cylinder, link and lever they increase by an additional 820 kg.

Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

When lifting loads, the hydraulic excavator must be equipped with automatic check valve on its hoist cylinders and overload warning device according to European Standard, EN 474-5.

Lift Capacities with Gooseneck Boom 7,00 m

Digging envelope

- 1 with stick 2,60 m
- 2 with stick 3,40 m
- 3 with stick 4,20 m
- 4 with stick 5,00 m and buckets R 954 B Litronic

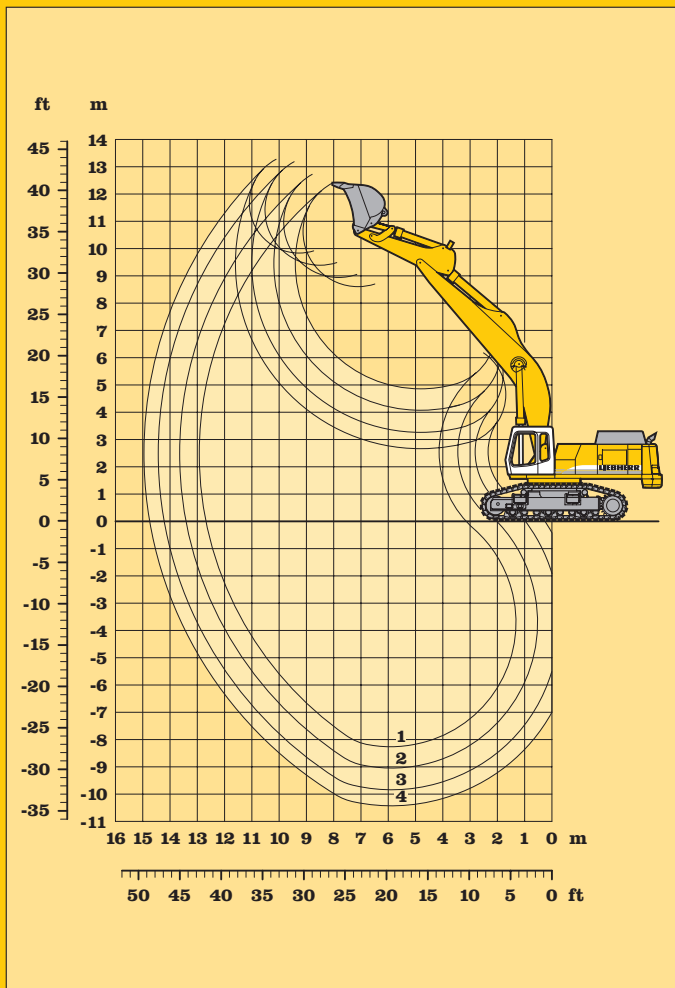
Stick lengths	m	2,60	3,40	4,20	5,00
Max. digging depth	m	8,25	9,05	9,85	10,45
Max. reach at ground level	m	12,70	13,45	14,25	14,75
Max. dump height	m	8,60	9,00	9,45	9,90
Max. teeth height	m	12,40	12,75	13,20	13,30

Digging force	kN/t	273/27,8	232/23,6	204/20,8	182/18,6
Breakout force	kN/t	329/33,5	329/33,5	329/33,5	285/20,1

Operating Weight and Ground Pressure

Operating weight includes basic machine with 8,20 m gooseneck boom, 3,40 m stick and 2,60 m³ bucket.

Undercarriage		HD			HD-SL		
Pad width	mm	500	600	750	500	600	750
Weight	kg	60000	60700	61800	61500	62300	63500
Ground pressure	kg/cm ²	1,28	1,08	0,88	1,23	1,04	0,85



Buckets

Cutting width	mm	1250 ⁴⁾	1450 ⁴⁾	1750 ⁴⁾	1300 ²⁾	1250 ¹⁾	1500 ²⁾	1450 ¹⁾	1700 ²⁾	1650 ¹⁾	1900 ²⁾	1850 ¹⁾	2100 ²⁾	2050 ¹⁾	2250 ³⁾
Capacity ISO 7451	m ³	1,65	2,00	2,35	1,80	1,90	2,20	2,30	2,60	2,70	3,00	3,10	3,40	3,50	4,30
Weight	kg	2250	2400	2600	2550	2100	2700	2300	2950	2400	3150	2550	3400	2800	3050
Suitable for material up to a specific weight of															
with stick 2,60 m	t/m ³	-	-	-	-	-	-	-	2,20	2,20	1,80	1,80	1,50	1,50	1,20
with stick 3,40 m	t/m ³	-	-	-	-	-	2,20	2,20	1,80	1,80	1,50	1,50	-	1,20	-
with stick 4,20 m	t/m ³	-	-	-	2,20	2,20	1,80	1,80	1,50	1,50	-	1,20	-	-	-
with stick 5,00 m	t/m ³	2,20	1,80	1,50	-	-	-	-	-	-	-	-	-	-	-

- ¹⁾ Medium-duty bucket with teeth size 25 C (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)
- ²⁾ Heavy-duty rock bucket with teeth size 25 C (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)
- ³⁾ Loading bucket with teeth size 20 C
- ⁴⁾ Heavy-duty rock bucket R 954 B Litronic with teeth size 25 C (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Note:
Installation of optional side cutters onto medium-duty and loading buckets with Liebherr-teeth size 25 and 20 increase cutting width by approx. 160 and 170 mm respectively.

Side cutters installation kit consist of:

- Weld-on set of adapters
- Set of bolt-on side cutters

Backhoe Attachment with Gooseneck Boom 8,20 m

Stick 2,60 m								
Height in m	Under- carriage	Radius of load from centerline of machine in m						
		4,5	6,0	7,5	9,0	10,5	12,0	13,5
10,5	HD HD-SL							
9,0	HD HD-SL				8,0# (8,0#) 8,0# (8,0#)			
7,5	HD HD-SL				9,9# (9,9#) 9,9# (9,9#)			
6,0	HD HD-SL	20,6# (20,6#) 20,6# (20,6#)	14,9# (14,9#) 14,9# (14,9#)	12,2# (12,2#) 12,2# (12,2#)	9,9 (10,6#) 10,1 (10,6#)	7,4 (9,4#) 7,6 (9,4#)		
4,5	HD HD-SL		17,5 (18,0#) 17,9 (18,0#)	12,5 (13,8#) 12,9 (13,8#)	9,3 (11,6#) 9,6 (11,6#)	7,1 (9,6) 7,3 (10,2#)		
3,0	HD HD-SL		15,8 (20,8#) 16,3 (20,8#)	11,6 (15,4#) 11,9 (15,4#)	8,8 (12,0) 9,1 (12,3#)	6,8 (9,3) 7,0 (10,7)		
1,5	HD HD-SL		14,9 (21,2) 15,4 (22,1#)	10,9 (15,1) 11,2 (16,5#)	8,3 (11,5) 8,6 (13,2)	6,5 (9,0) 6,7 (10,4)		
0	HD HD-SL		14,6 (20,9) 15,1 (22,3#)	10,5 (14,7) 10,8 (17,0)	8,0 (11,2) 8,3 (12,9)	6,3 (8,8) 6,6 (10,2)		
- 1,5	HD HD-SL	20,6# (20,6#) 20,6# (20,6#)	14,6 (20,9) 15,1 (21,8#)	10,4 (14,6) 10,7 (16,9)	7,9 (11,0) 8,2 (12,7)	6,3 (8,8) 6,5 (10,1)		
- 3,0	HD HD-SL	24,6 (25,9#) 25,3 (25,9#)	14,9 (20,6#) 15,3 (20,6#)	10,5 (14,7) 10,8 (16,4#)	8,0 (11,1) 8,2 (12,8)			
- 4,5	HD HD-SL	23,0# (23,0#) 23,0# (23,0#)	15,3 (18,5#) 15,3 (18,5#)	10,8 (14,8#) 11,1 (14,8#)				
- 6,0	HD HD-SL	18,4# (18,4#) 18,4# (18,4#)	14,9# (14,9#) 14,9# (14,9#)					
- 7,5	HD HD-SL							
- 9,0	HD HD-SL							
- 10,5	HD HD-SL							

Stick 3,40 m								
Height in m	Under- carriage	Radius of load from centerline of machine in m						
		4,5	6,0	7,5	9,0	10,5	12,0	13,5
10,5	HD HD-SL						4,4# (4,4#) 4,4# (4,4#)	
9,0	HD HD-SL				8,5# (8,5#) 8,5# (8,5#)			
7,5	HD HD-SL				8,9# (8,9#) 8,9# (8,9#)	7,3# (7,3#) 7,3# (7,3#)		
6,0	HD HD-SL				11,0# (11,0#) 11,0# (11,0#)	9,7# (9,7#) 9,7# (9,7#)	7,5 (8,9#) 7,7 (8,9#)	
4,5	HD HD-SL	24,3# (24,3#) 24,3# (24,3#)	16,2# (16,2#) 16,2# (16,2#)	12,7# (12,7#) 12,7# (12,7#)	9,5 (10,7#) 9,8 (10,7#)	7,2 (9,5#) 7,4 (9,5#)	4,3# (4,3#) 4,3# (4,3#)	
3,0	HD HD-SL		16,6 (19,3#) 17,1 (19,3#)	11,9 (14,4#) 12,3 (14,4#)	8,9 (11,8#) 9,2 (11,8#)	6,8 (9,4) 7,1 (10,2#)	5,3 (6,1#) 5,5 (6,1#)	
1,5	HD HD-SL	9,0# (9,0#) 9,0# (9,0#)	15,4 (21,4#) 15,9 (21,4#)	11,1 (15,4) 11,5 (15,9#)	8,4 (11,6) 8,7 (12,7#)	6,5 (9,0) 6,7 (10,4)	5,1 (6,4#) 5,3 (6,4#)	
0	HD HD-SL	13,6# (13,6#) 13,6# (13,6#)	14,8 (21,1) 15,3 (22,3#)	10,6 (14,8) 11,0 (16,8#)	8,0 (11,2) 8,3 (12,9)	6,3 (8,8) 6,5 (10,1)		
- 1,5	HD HD-SL	18,7# (18,7#) 18,7# (18,7#)	14,6 (20,9) 15,1 (22,3#)	10,4 (14,5) 10,7 (16,9)	7,8 (10,9) 8,1 (12,7)	6,1 (8,6) 6,4 (10,0)		
- 3,0	HD HD-SL	24,2 (24,5#) 24,5# (24,5#)	14,7 (21,0) 15,2 (21,5#)	10,3 (14,5) 10,7 (16,8#)	7,8 (10,9) 8,1 (12,6)	6,2 (8,6) 6,4 (10,0)		
- 4,5	HD HD-SL	24,7 (25,3#) 25,4 (25,3#)	15,0 (19,8#) 15,5 (19,8#)	10,5 (14,7) 10,8 (15,7#)	7,9 (11,1) 8,2 (12,5#)			
- 6,0	HD HD-SL	21,6# (21,6#) 21,6# (21,6#)	15,6 (17,1#) 16,0 (17,1#)	10,9 (13,4#) 11,3 (13,4#)				
- 7,5	HD HD-SL	15,6# (15,6#) 15,6# (15,6#)	12,1# (12,1#) 12,1# (12,1#)					
- 9,0	HD HD-SL							
- 10,5	HD HD-SL							

Stick 4,20 m								
Height in m	Under- carriage	Radius of load from centerline of machine in m						
		4,5	6,0	7,5	9,0	10,5	12,0	13,5
10,5	HD HD-SL							
9,0	HD HD-SL					5,3# (5,3#) 5,3# (5,3#)		
7,5	HD HD-SL					7,5# (7,5#) 7,5# (7,5#)		
6,0	HD HD-SL				8,5# (8,5#) 8,5# (8,5#)	7,5 (7,9#) 7,8 (7,9#)	5,1# (5,1#) 5,1# (5,1#)	
4,5	HD HD-SL		14,1# (14,1#) 14,1# (14,1#)	11,3# (11,3#) 11,3# (11,3#)	9,6 (9,6#) 9,6# (9,6#)	7,2 (8,6#) 7,4 (8,6#)	5,4 (7,1#) 5,6 (7,1#)	
3,0	HD HD-SL	19,6# (19,6#) 19,6# (19,6#)	17,1 (17,3#) 17,3# (17,3#)	12,1 (13,1#) 12,4 (13,1#)	8,9 (10,6#) 9,2 (10,6#)	6,8 (9,3) 7,0 (9,3#)	5,2 (7,3) 5,4 (8,3#)	
1,5	HD HD-SL	13,2# (13,2#) 13,2# (13,2#)	15,6 (19,9#) 16,0 (19,9#)	11,1 (14,8#) 11,5 (14,8#)	8,3 (11,5) 8,6 (11,8#)	6,4 (8,9) 6,6 (10,0#)	4,9 (7,0) 5,1 (8,1)	
0	HD HD-SL	14,4# (14,4#) 14,4# (14,4#)	14,7 (21,0) 15,1 (21,4#)	10,5 (14,7) 10,8 (15,9#)	7,9 (11,0) 8,1 (12,7#)	6,1 (8,6) 6,3 (9,9)	4,8 (6,8) 4,9 (7,9)	
- 1,5	HD HD-SL	17,6# (17,6#) 17,6# (17,6#)	14,2 (20,5) 14,7 (21,9#)	10,1 (14,2) 10,4 (16,6#)	7,6 (10,7) 7,8 (12,4)	5,9 (8,3) 6,1 (9,7)	4,7 (6,7) 4,8 (7,2#)	
- 3,0	HD HD-SL	21,6# (21,6#) 21,6# (21,6#)	14,2 (20,4) 14,6 (21,5#)	9,9 (14,1) 10,2 (16,4)	7,4 (10,5) 7,7 (12,3)	5,8 (8,3) 6,0 (9,6)		
- 4,5	HD HD-SL	23,7 (27,1#) 24,4 (27,1#)	14,3 (20,4#) 14,8 (20,4#)	10,0 (14,2) 10,3 (15,9#)	7,5 (10,6) 7,7 (12,3)	5,9 (8,4) 6,1 (9,7)		
- 6,0	HD HD-SL	24,1# (24,1#) 24,1# (24,1#)	14,8 (18,3#) 15,2 (18,3#)	10,3 (14,3#) 10,6 (14,3#)	7,7 (10,9) 8,0 (11,2#)			
- 7,5	HD HD-SL	19,1# (19,1#) 19,1# (19,1#)	14,7# (14,7#) 14,7# (14,7#)	10,9 (11,1#) 11,1# (11,1#)				
- 9,0	HD HD-SL							
- 10,5	HD HD-SL							

Stick 5,00 m										
Height in m	Under- carriage	Radius of load from centerline of machine in m								
		4,5	6,0	7,5	9,0	10,5	12,0	13,5		
10,5	HD HD-SL						4,2# (4,2#) 4,2# (4,2#)			
9,0	HD HD-SL									
7,5	HD HD-SL						7,3# (7,3#) 7,3# (7,3#)	5,0# (5,0#) 5,0# (5,0#)		
6,0	HD HD-SL						7,8# (7,8#) 7,8# (7,8#)	6,4 (6,7#) 6,6 (6,7#)		
4,5	HD HD-SL						9,5# (9,5#) 9,5# (9,5#)	8,0 (8,6#) 8,2 (8,6#)	6,1 (8,0#) 6,3 (8,0#)	2,6# (2,6#) 2,6# (2,6#)
3,0	HD HD-SL	24,0# (24,0#) 24,0# (24,0#)	16,4# (16,4#) 16,4# (16,4#)	12,8# (12,8#) 12,8# (12,8#)	9,8 (10,7#) 10,1 (10,7#)	7,5 (9,4#) 7,8 (9,4#)	5,9 (8,0) 6,1 (8,5#)	3,6# (3,6#) 3,6# (3,6#)		
1,5	HD HD-SL	17,5# (17,5#) 17,5# (17,5#)	17,0 (19,5#) 17,5 (19,5#)	12,2 (14,7#) 12,5 (14,7#)	9,2 (12,0#) 9,5 (12,0#)	7,1 (9,6) 7,4 (10,2#)	5,6 (7,7) 5,8 (8,8)	3,7# (3,7#) 3,7# (3,7#)		
0	HD HD-SL	15,7# (15,7#) 15,7# (15,7#)	15,9 (21,5#) 16,4 (21,5#)	11,4 (15,7) 11,8 (16,2#)	8,7 (11,8) 8,9 (13,0#)	6,8 (9,3) 7,0 (10,6)	5,4 (7,4) 5,6 (8,6)			
- 1,5	HD HD-SL	17,3# (17,3#) 17,3# (17,3#)	15,3 (21,6) 15,7 (22,6#)	10,9 (15,1) 11,3 (17,1#)	8,3 (11,4) 8,6 (13,2)	6,5 (9,0) 6,7 (10,4)	5,2 (7,3) 5,4 (8,4)			
- 3,0	HD HD-SL	20,4# (20,4#) 20,4# (20,4#)	15,0 (21,3) 15,5 (22,7#)	10,7 (14,9) 11,0 (17,2)	8,1 (11,2) 8,4 (12,9)	6,4 (8,8) 6,6 (10,2)	5,2 (7,2) 5,4 (8,3)			
- 4,5	HD HD-SL	24,4 (24,5#) 24,5# (24,5#)	15,0 (21,3) 15,5 (22,1#)	10,6 (14,8) 11,0 (17,1#)	8,0 (11,2) 8,3 (12,9)	6,4 (8,8) 6,6 (10,2)				
- 6,0	HD HD-SL	24,9 (27,3#) 25,7 (27,3#)	15,3 (20,5#) 15,8 (20,5#)	10,8 (15,0) 11,1 (16,0#)	8,2 (11,3) 8,4 (12,8#)	6,5 (8,4#) 6,8 (8,4#)				
- 7,5	HD HD-SL	23,2# (23,2#) 23,2# (23,2#)	15,8 (17,7#) 16,3 (17,7#)	11,2 (13,8#) 11,5 (13,8#)	8,6 (10,5#) 8,8 (10,5#)					
- 9,0	HD HD-SL	16,6# (16,6#) 16,6# (16,6#)	12,6# (12,6#) 12,6# (12,6#)							
- 10,5	HD HD-SL									

The load values are quoted in tons (t) on the backhoe bucket's load hook, and may be swung 360° on firm and even ground.

Values quoted in brackets apply to the undercarriage when in longitudinal position.

Capacities are valid for 600 mm wide double grouser pads.

Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via #).

Maximum load for the backhoe bucket's lifting eye is 27 t/18 t*.

Without bucket (2,30 m³/1,90 m³*), the lift capacities will increase by 2400 kg/1950 kg*, without bucket cylinder, link and lever they increase by an additional 820 kg/680 kg*.

Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

When lifting loads, the hydraulic excavator must be equipped with automatic check valve on its hoist cylinders and overload warning device according to European Standard, EN 474-5.

* just for stick 5,00 m

Lift Capacities with Gooseneck Boom 8,20 m

Digging envelope

- 1 with stick 3,40 m
- 2 with stick 4,20 m
- 3 with stick 5,00 m and buckets R 954 B Litronic²

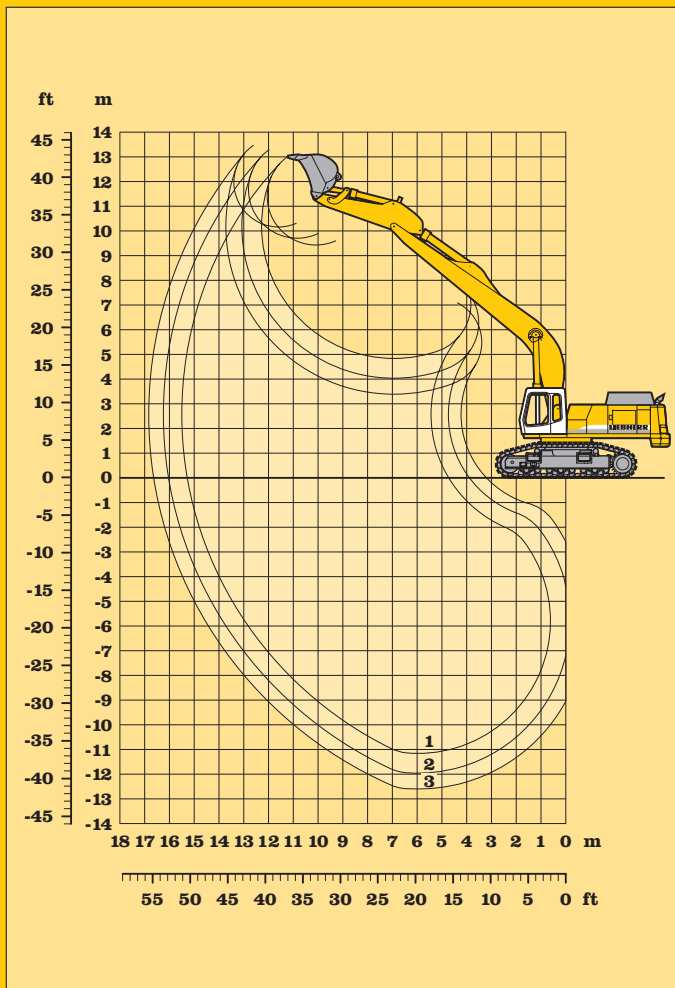
Stick lengths	m	3,40	4,20	5,00
Max. digging depth	m	11,20	12,00	12,60
Max. reach at ground level	m	15,30	16,00	16,65
Max. dump height	m	9,50	9,70	10,20
Max. teeth height	m	13,00	13,30	13,50

Digging force	kN/t	232/23,6	204/20,8	182/18,6
Breakout force	kN/t	329/33,5	329/33,5	285/20,1

Operating Weight and Ground Pressure

Operating weight includes basic machine with 10,00 m gooseneck boom, 4,20 m stick and 1,50 m³ bucket.

Undercarriage		HD			HD-SL		
Pad width	mm	500	600	750	500	600	750
Weight	kg	64000	64700	65800	65500	66300	67500
Ground pressure	kg/cm ²	1,37	1,16	0,94	1,31	1,11	0,90



Buckets

Cutting width	mm	1050 ²⁾	1250 ²⁾	1450 ²⁾	1650 ²⁾	1050 ¹⁾	1250 ¹⁾	1450 ¹⁾	1650 ¹⁾
Capacity ISO 7451	m ³	1,30	1,65	2,00	2,35	1,50	1,90	2,30	2,70
Weight	kg	1480	1620	1790	1970	1900	2100	2300	2400
Suitable for material up to a specific weight of									
with stick 3,40 m	t/m ³	-	-	-	-	2,20	1,80	1,50	1,20
with stick 4,20 m	t/m ³	-	-	-	-	1,80	1,50	1,20	-
with stick 5,00 m	t/m ³	2,20	1,80	1,50	1,20	-	-	-	-

¹⁾ Medium-duty bucket with teeth size 25 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ Medium-duty bucket R 954 B Litronic with teeth size 20 C (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Note:

Installation of optional side cutters onto medium-duty and loading buckets with Liebherr-teeth size 25 and 20 increase cutting width by approx. 160 and 170 mm respectively.

Side cutters installation kit consist of:

- Weld-on set of adapters
- Set of bolt-on side cutters

Backhoe Attachment with Gooseneck Boom 10,00 m

Stick 3,40 m									
Height in m	Under- carriage	Radius of load from centerline of machine in m							
		4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
10,5	HD HD-SL								
9,0	HD HD-SL						5,5# (5,5#) 5,5# (5,5#)		
7,5	HD HD-SL					6,0# (6,0#) 6,0# (6,0#)	5,7# (5,7#) 5,7# (5,7#)		
6,0	HD HD-SL	12,3# (12,3#) 12,3# (12,3#)	9,1# (9,1#) 9,1# (9,1#)	7,5# (7,5#) 7,5# (7,5#)	6,6# (6,6#) 6,6# (6,6#)	6,1# (6,1#) 6,1# (6,1#)	4,2# (4,2#) 4,2# (4,2#)		
4,5	HD HD-SL	10,3# (10,3#) 10,3# (10,3#)	11,1# (11,1#) 11,1# (11,1#)	8,7# (8,7#) 8,7# (8,7#)	7,4# (7,4#) 7,4# (7,4#)	6,1 (6,6#) 6,3 (6,6#)	4,8 (6,1#) 4,9 (6,1#)		
3,0	HD HD-SL		11,7 (12,9#) 12,1 (12,9#)	9,1 (9,9#) 9,4 (9,9#)	7,2 (8,2#) 7,4 (8,2#)	5,7 (7,1#) 5,9 (7,1#)	4,6 (6,4) 4,8 (6,5#)		
1,5	HD HD-SL		11,0 (14,2#) 11,4 (14,2#)	8,6 (10,9#) 8,8 (10,9#)	6,8 (8,9#) 7,0 (8,9#)	5,5 (7,6#) 5,7 (7,6#)	4,4 (6,3) 4,6 (6,8#)		
0	HD HD-SL	10,3# (10,3#) 10,3# (10,3#)	10,7 (15,0#) 11,0 (15,0#)	8,2 (11,5) 8,5 (11,6#)	6,5 (9,1) 6,7 (9,5#)	5,3 (7,4) 5,5 (8,1#)	4,3 (6,1) 4,5 (7,1#)		
- 1,5	HD HD-SL	15,2 (15,5#) 15,5# (15,5#)	10,6 (15,0) 10,9 (15,4#)	8,0 (11,3) 8,3 (12,1#)	6,3 (9,0) 6,6 (9,9#)	5,1 (7,3) 5,3 (8,4#)			
- 3,0	HD HD-SL	14,8# (14,8#) 14,8# (14,8#)	15,3 (19,8#) 15,8 (19,8#)	10,6 (15,0) 11,0 (15,4#)	8,0 (11,3) 8,3 (12,3#)	6,3 (8,9) 6,5 (10,2#)	5,1 (7,3) 5,3 (8,5)		
- 4,5	HD HD-SL	20,0# (20,0#) 20,0# (20,0#)	15,6 (19,2#) 16,1 (19,2#)	10,8 (15,1#) 11,1 (15,1#)	8,1 (11,4) 8,4 (12,2#)	6,4 (9,0) 6,6 (10,1#)	5,2 (7,4) 5,4 (8,4#)		
- 6,0	HD HD-SL	23,3# (23,3#) 23,3# (23,3#)	16,1 (18,1#) 16,5 (18,1#)	11,1 (14,4#) 11,5 (14,4#)	8,3 (11,6) 8,6 (11,7#)	6,6 (9,2) 6,9 (9,6#)			
- 7,5	HD HD-SL	20,9# (20,9#) 20,9# (20,9#)	16,4# (16,4#) 16,4# (16,4#)	11,6 (13,1#) 12,0 (13,1#)	8,8 (10,6#) 9,1 (10,6#)				
- 9,0	HD HD-SL	17,1# (17,1#) 17,1# (17,1#)	13,5# (13,5#) 13,5# (13,5#)						
- 10,5	HD HD-SL								

Stick 4,20 m										
Height in m	Under- carriage	Radius of load from centerline of machine in m								
		4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0	
10,5	HD HD-SL								4,0# (4,0#) 4,0# (4,0#)	
9,0	HD HD-SL								4,6# (4,6#) 4,6# (4,6#)	
7,5	HD HD-SL								4,9# (4,9#) 4,9# (4,9#)	
6,0	HD HD-SL							5,7# (5,7#) 5,7# (5,7#)	5,3# (5,3#) 5,3# (5,3#)	4,9 (5,0#) 5,0 (5,0#)
4,5	HD HD-SL	13,6# (13,6#) 13,6# (13,6#)	9,6# (9,6#) 9,6# (9,6#)	7,7# (7,7#) 7,7# (7,7#)	6,5# (6,5#) 6,5# (6,5#)	5,8# (5,8#) 5,8# (5,8#)	4,7 (5,4#) 4,8 (5,4#)			
3,0	HD HD-SL	12,4# (12,4#) 12,4# (12,4#)	11,5# (11,5#) 11,5# (11,5#)	8,9# (8,9#) 8,9# (8,9#)	7,1 (7,3#) 7,3# (7,3#)	5,8 (6,4#) 5,8 (6,4#)	4,4 (5,8#) 4,6 (5,8#)			
1,5	HD HD-SL	10,5# (10,5#) 10,5# (10,5#)	11,0 (13,0#) 11,3 (13,0#)	8,5 (9,9#) 8,7 (9,9#)	6,7 (8,1#) 6,9 (8,1#)	5,3 (6,9#) 5,5 (6,9#)	4,2 (6,1) 4,4 (6,2#)			
0	HD HD-SL	12,2# (12,2#) 12,2# (12,2#)	10,4 (14,1#) 10,8 (14,1#)	8,0 (10,8#) 8,3 (10,8#)	6,3 (8,8#) 6,5 (8,8#)	5,0 (7,2) 5,2 (7,4#)	4,0 (5,9) 4,2 (6,5#)			
- 1,5	HD HD-SL	9,2# (9,2#) 9,2# (9,2#)	14,5 (15,2#) 14,9 (15,2#)	10,2 (14,6) 10,5 (14,7#)	7,7 (11,0) 8,0 (11,5#)	6,1 (8,7) 6,3 (9,3#)	4,9 (7,0) 5,0 (7,9#)	3,9 (5,8) 4,1 (6,8#)		
- 3,0	HD HD-SL	13,2# (13,2#) 13,2# (13,2#)	14,6 (19,0#) 15,1 (19,0#)	10,1 (14,5) 10,5 (15,0#)	7,6 (10,9) 7,9 (11,8#)	5,9 (8,5) 6,2 (9,6#)	4,8 (6,9) 5,0 (8,1)	3,9 (5,8) 4,1 (6,3#)		
- 4,5	HD HD-SL	17,3# (17,3#) 17,3# (17,3#)	14,8 (19,2#) 15,3 (19,2#)	10,2 (14,6) 10,6 (14,9#)	7,6 (10,9) 7,9 (11,9#)	6,0 (8,6) 6,2 (9,7#)	4,8 (7,0) 5,0 (8,1)			
- 6,0	HD HD-SL	21,8# (21,8#) 21,8# (21,8#)	15,2 (18,4#) 15,7 (18,4#)	10,5 (14,4#) 10,8 (14,4#)	7,8 (11,1) 8,1 (11,6#)	6,1 (8,7) 6,3 (9,5#)				
- 7,5	HD HD-SL	22,4# (22,4#) 22,4# (22,4#)	15,8 (17,0#) 16,3 (17,0#)	10,9 (13,5#) 11,3 (13,5#)	8,2 (10,9#) 8,4 (10,9#)	6,5 (8,7#) 6,7 (8,7#)				
- 9,0	HD HD-SL	19,2# (19,2#) 19,2# (19,2#)	14,8# (14,8#) 14,8# (14,8#)	11,6 (11,7#) 11,7# (11,7#)						
- 10,5	HD HD-SL	14,1# (14,1#) 14,1# (14,1#)	10,7# (10,7#) 10,7# (10,7#)							

Stick 5,00 m									
Height in m	Under- carriage	Radius of load from centerline of machine in m							
		4,5	6,0	7,5	9,0	10,5	12,0	13,5	15,0
10,5	HD HD-SL								
9,0	HD HD-SL							4,2# (4,2#) 4,2# (4,2#)	
7,5	HD HD-SL						4,9# (4,9#) 4,9# (4,9#)	4,9# (4,9#) 4,9# (4,9#)	
6,0	HD HD-SL						5,4# (5,4#) 5,4# (5,4#)	5,2# (5,2#) 5,2# (5,2#)	2,7# (2,7#) 2,7# (2,7#)
4,5	HD HD-SL	12,4# (12,4#) 12,4# (12,4#)			7,6# (7,6#) 7,6# (7,6#)	6,6# (6,6#) 6,6# (6,6#)	6,0# (6,0#) 6,0# (6,0#)	5,3 (5,6#) 5,5 (5,6#)	4,2 (4,2#) 4,2# (4,2#)
3,0	HD HD-SL	15,8# (15,8#) 15,8# (15,8#)	11,3# (11,3#) 11,3# (11,3#)	8,9# (8,9#) 8,9# (8,9#)	7,5# (7,5#) 7,5# (7,5#)	6,3 (6,6#) 6,5 (6,6#)	5,1 (6,0#) 5,2 (6,0#)	4,1 (5,1#) 4,2 (5,1#)	
1,5	HD HD-SL	14,0# (14,0#) 14,0# (14,0#)	12,1 (13,0#) 12,4 (13,0#)	9,4 (10,1#) 9,6 (10,1#)	7,4 (8,3#) 7,7 (8,3#)	6,0 (7,2#) 6,2 (7,2#)	4,8 (6,5#) 5,0 (6,5#)	3,9 (5,4#) 4,1 (5,4#)	
0	HD HD-SL	6,3# (6,3#) 6,3# (6,3#)	13,7# (13,7#) 13,7# (13,7#)	11,4 (14,3#) 11,7 (14,3#)	8,8 (11,1#) 9,1 (11,1#)	7,0 (9,1#) 7,2 (9,1#)	5,7 (7,8#) 5,9 (7,8#)	4,6 (6,5) 4,8 (6,9#)	3,8 (4,9#) 3,9 (4,9#)
- 1,5	HD HD-SL	9,4# (9,4#) 9,4# (9,4#)	15,3 (15,4#) 15,4# (15,4#)	11,0 (15,2#) 11,3 (15,2#)	8,5 (11,8) 8,7 (11,9#)	6,7 (9,3) 7,0 (9,7#)	5,5 (7,6) 5,7 (8,3#)	4,5 (6,3) 4,7 (7,2#)	
- 3,0	HD HD-SL	12,4# (12,4#) 12,4# (12,4#)	15,3 (18,1#) 15,8 (18,1#)	10,8 (15,2) 11,2 (15,6#)	8,3 (11,6) 8,5 (12,4#)	6,6 (9,2) 6,8 (10,2#)	5,3 (7,5) 5,5 (8,6#)	4,4 (6,3) 4,6 (7,2)	
- 4,5	HD HD-SL	15,7# (15,7#) 15,7# (15,7#)	15,5 (20,5#) 15,9 (20,5#)	10,9 (15,3) 11,2 (15,8#)	8,2 (11,5) 8,5 (12,6#)	6,5 (9,1) 6,7 (10,4#)	5,3 (7,5) 5,5 (8,6)	4,4 (6,3) 4,6 (7,2#)	
- 6,0	HD HD-SL	19,4# (19,4#) 19,4# (19,4#)	15,8 (19,9#) 16,2 (19,9#)	11,0 (15,4) 11,4 (15,5#)	8,3 (11,6) 8,6 (12,5#)	6,6 (9,2) 6,8 (10,3#)	5,4 (7,6) 5,6 (8,7#)		
- 7,5	HD HD-SL	23,7# (23,7#) 23,7# (23,7#)	16,2 (18,8#) 16,7 (18,8#)	11,3 (14,8#) 11,7 (14,8#)	8,6 (11,9) 8,8 (12,0#)	6,8 (11,9) 7,0 (9,9#)			
- 9,0	HD HD-SL	22,4# (22,4#) 22,4# (22,4#)	16,9 (17,0#) 17,0# (17,0#)	11,8 (13,5#) 12,2 (13,5#)	9,0 (10,8#) 9,3 (10,8#)				
- 10,5	HD HD-SL	18,2# (18,2#) 18,2# (18,2#)	14,0# (14,0#) 14,0# (14,0#)	10,9# (10,9#) 10,9# (10,9#)					

The load values are quoted in tons (t) on the backhoe bucket's load hook, and may be swung 360° on firm and even ground. Values quoted in brackets apply to the undercarriage when in longitudinal position.

Capacities are valid for 600 mm wide double grouser pads.

Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via #).

Maximum load for the backhoe bucket's lifting eye is 27 t/18 t*.

Without bucket (1,90 m³/1,65 m³*), the lift capacities will increase by 2400 kg/1950 kg*, without bucket cylinder, link and lever they increase by an additional 820 kg/680 kg*.

Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

When lifting loads, the hydraulic excavator must be equipped with automatic check valve on its hoist cylinders and overload warning device according to European Standard, EN 474-5.

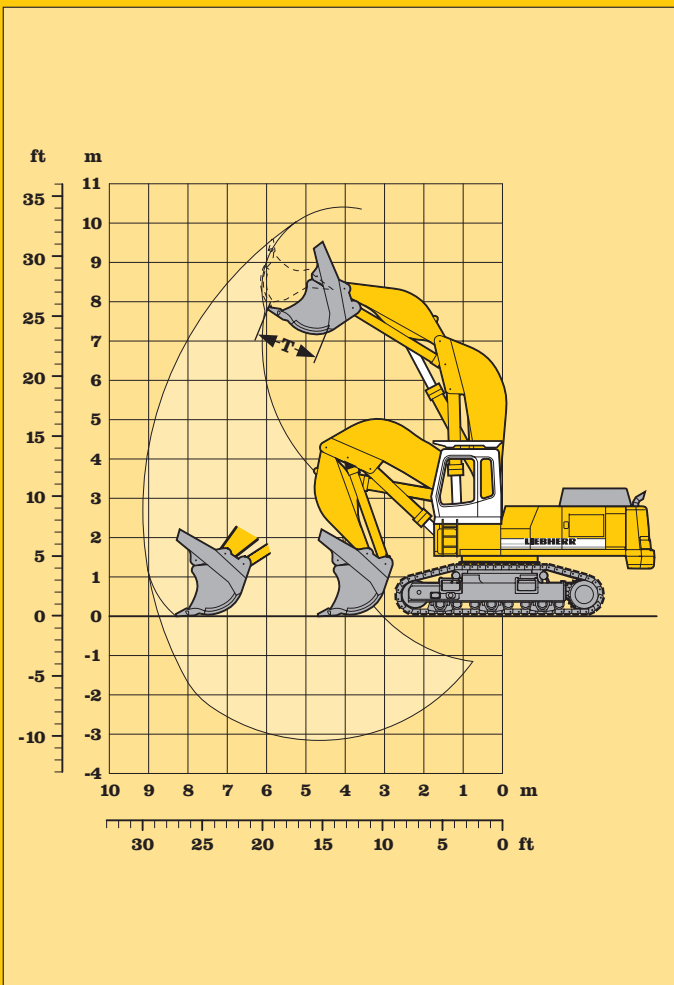
* just for stick 5,00 m

Lift Capacities with Gooseneck Boom 10,00 m

Digging envelope

Max. reach at ground level	8,80 m
Max. dump height	7,25 m
Max. crowd length	3,60 m
Bucket opening width T	1650 mm

Max. crowd force:	500 kN/51,0 t
Max. crowd force at ground level:	410 kN/41,8 t
Max. breakout force:	370 kN/37,7 t



Operating Weight and Ground Pressure

Operating weight includes basic machine with shovel attachment and 4,00 m³ bottom dump bucket, level II.

Undercarriage		HD	
Pad width	mm	500	600
Weight	kg	62850	63550
Ground pressure	kg/cm ²	1,33	1,12

Bottom dump bucket

Cutting width SAE	mm	2250 ¹⁾	2250 ¹⁾	2500 ¹⁾	2500 ¹⁾	2500 ¹⁾	2750 ²⁾
Capacity SAE	m ³	3,40	3,40	4,00	4,00	4,40	5,80
Weight	kg	5400	6100	5400	5850	5800	5800
Suitable for material up to a specific weight of t/m ³		2,20	2,20	1,80	1,80	1,65	1,20
Wear kit level		II	III	I	II	I	-

¹⁾ Bottom dump bucket with Delta cutting edge and teeth size 25

²⁾ Coal bottom dump bucket with Delta cutting edge and teeth size 20

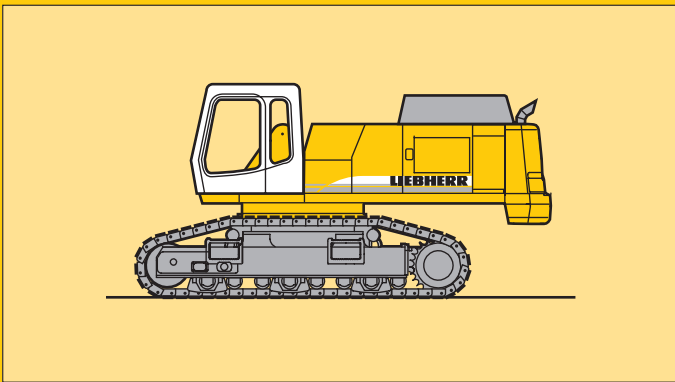
Notes:

Level I: For non-abrasive materials, such as limestone, without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.

Level II: For preblasted heavy rock, or deteriorated, cracked material (classification 3 to 4, accord. to DIN 18300)

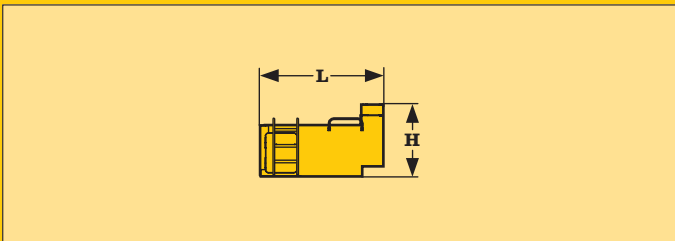
Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Shovel Attachment



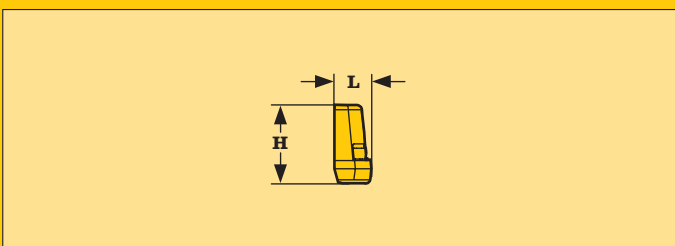
Basic machine

Track pads	mm	500	600	750
Weight with HD-undercarriage and counterweight 11200 kg	kg	46400	47100	48200
Weight with HD-undercarriage and counterweight 14500 kg	kg	49700	50400	51500
Weight with HD-SL-undercarriage and counterweight 11200 kg	kg	47900	48700	49900
Weight with HD-SL-undercarriage and counterweight 14500 kg	kg	51200	52000	53200



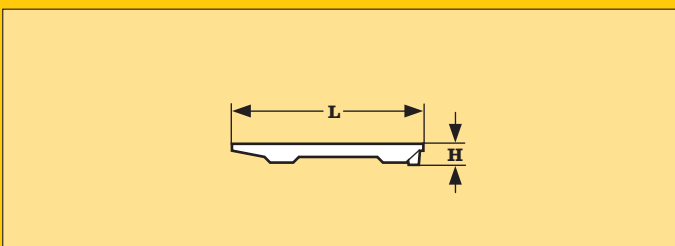
Cab elevation

L Length	mm	1940
H Height	mm	1130
Width	mm	1250
Weight	kg	850



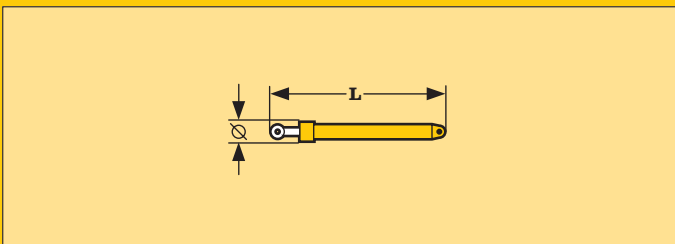
Counterweight

L Length	mm	710	710
H Height	mm	1546	1546
Width	mm	3630	3630
Weight	kg	11200	14500



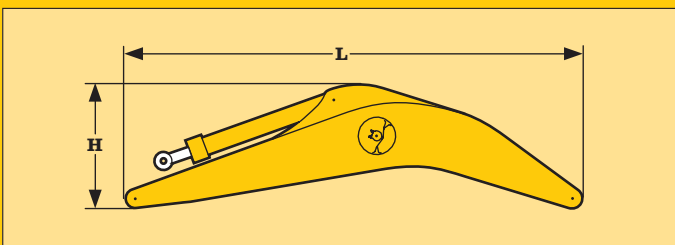
Upper protection screen

L Length	mm	1730
H Height	mm	160
Width	mm	950
Weight	kg	30



Hoist cylinders (two)

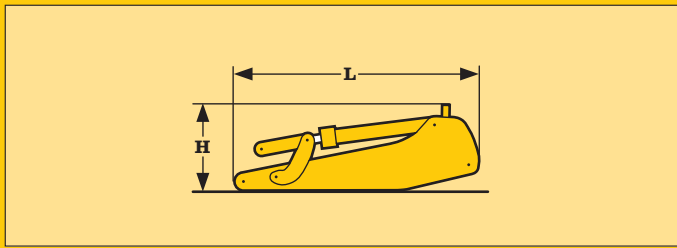
L Length	mm	2650
ø Diameter	mm	300
Weight	kg	2 x 620



Gooseneck boom with stick cylinder

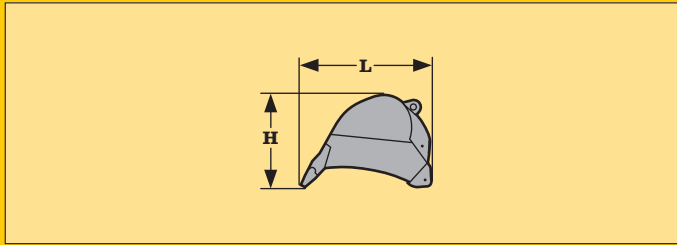
Stick length	m	7,00	8,20	10,00
L Length	mm	7300	8500	10300
H Height	mm	2100	1900	2300
Width	mm	1250	1250	1250
Weight	kg	5950	6650	7400

Components Dimensions and Weights



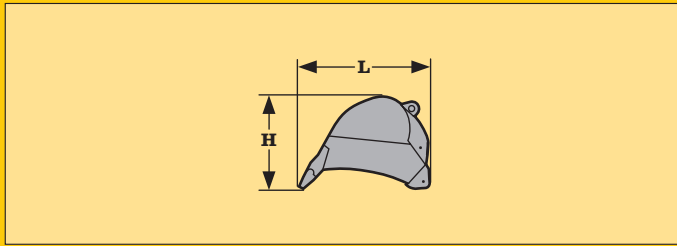
Stick with bucket cylinder

Length	m	2,60	3,40	4,20	5,00
L Length	mm	3850	4650	5450	6250
H Height	mm	1350	1350	1250	1250
Width	mm	850	850	850	850
Weight	kg	2600	2700	2950	3100



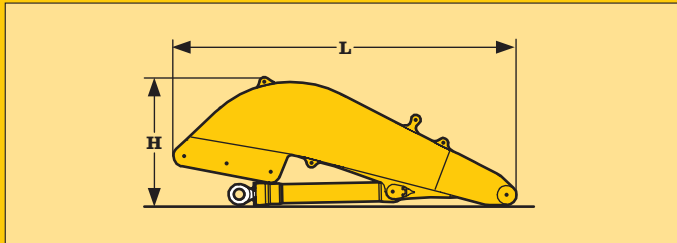
Backhoe buckets

Cutting width	mm	1050	1300	1250	1500	1450	1700	1650
I Capacity	m ³	1,50	1,80	1,90	2,20	2,30	2,60	2,70
L Length	mm	2200	2220	2200	2200	2200	2200	2200
H Height	mm	1550	1600	1550	1600	1550	1600	1550
Width	mm	1050	1300	1250	1500	1450	1700	1650
Weight	kg	1900	2550	2100	2700	2300	2950	2400



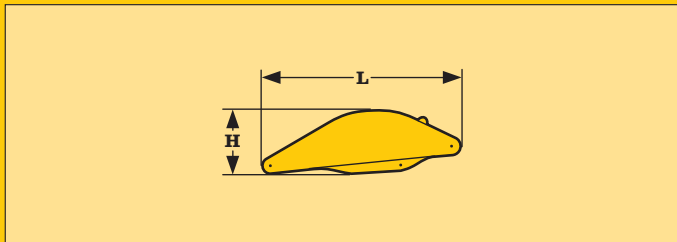
Backhoe buckets

Cutting width	mm	1900	1850	2100	2050	2250	2500
I Capacity	m ³	3,00	3,10	3,40	3,50	4,30	5,20
L Length	mm	2200	2200	2200	2200	2250	2300
H Height	mm	1600	1550	1600	1550	1600	1600
Width	mm	1900	1850	2100	2050	2250	2500
Weight	kg	3150	2550	3400	2800	3050	3400



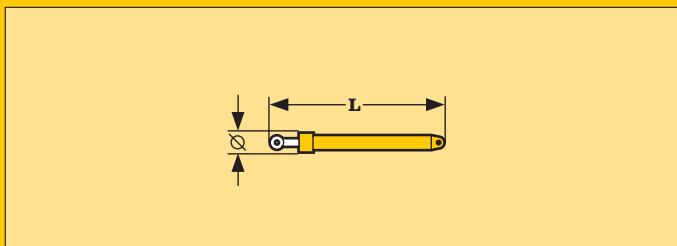
Shovel boom

L Length	mm	4800
H Height	mm	1800
Width	mm	1550
Weight	kg without crowd cylinder	4200
Weight	kg crowd cylinder	600



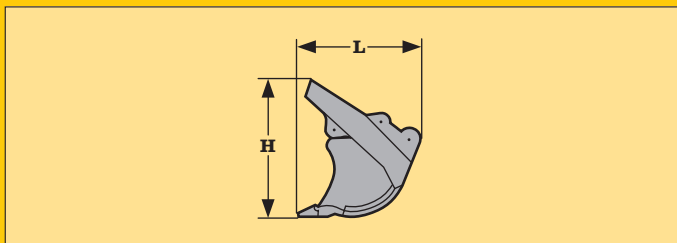
Shovel stick

L Length	mm	3250
H Height	mm	1100
Width	mm	1600
Weight	kg	2200



Shovel bucket cylinders (two)

L Length	mm	2550
Ø Diameter	mm	260
Weight	kg	2 x 530



Bottom dump buckets

Cutting width	mm	2250	2500	2500	2750
I Capacity	m ³	3,40	4,00	4,40	5,80
L Length	mm	2200	2200	2350	2450
H Height	mm	2200	2200	2350	2450
Width	mm	2250	2500	2500	2750
Weight	kg				
Level I	kg	-	5400	5550	5800
Level II	kg	5500	6100	-	-
Level III	kg	6400	7100	-	-

Components Dimensions and Weights

Standard Equipment

Undercarriage

- Three track guide per track
- Integrated travel drive
- Digging locks
- Protection on idler end
- Tracks greased

Uppercarriage

- Engine hood with lift help
- Lockable tool box
- Handrails, non slip surfaces
- Tool Kit
- Maintenance-free swing brake lock
- Maintenance-free HD-batteries
- Sound insulation
- Mechanical swing lock upper/lower

Hydraulics

- Electronic pump regulation
- Stepless work mode selector
- Pressure storage for controlled lowering of attachments with engine turned off
- Hydraulic tank shut-off valve
- Pressure compensation
- Flow compensation
- Filter with integrated fine filter area (5 µm)
- Pressure test ports

Engine

- Direct injection
- Turbo charger
- Dry-type air cleaner w/pre-cleaner, main and safety element
- Engine idling
- Air filter with automatic dust ejector

Operator's Cab

- Deep drawn cab shell components
- All tinted windows
- Door with sliding window
- All-round adjustable roof flap
- Rain protective shade for front window
- Washer and wiper
- 6-way adjustable cloth suspension seat
- Seat and consoles independently adjustable
- Coat hook
- Dome light
- Sun visor
- Inside rear mirrors
- Radio installation prep-kit
- Removable handle for travel pedals
- Cigar lighter and ashtray
- Removable custom floor mat
- Storage and Literature tray
- Digital instrumentation
- Digital instruments for oil temp. engine RPM and oil pressure
- Digital hour meter visible from outside
- Heating-Air conditioning system

Attachment

- Cylinders with shock absorbers
- Sealed pivots
- Centralized lube points
- SAE split flanges on all high pressure lines
- 27 t lifting eye on buckets
- Work light on boom
- O-ring sealed between bucket and stick

Optional Equipment

- Different undercarriage versions
- Different track pad width

- Electric fuel tank filler pump
- Pedal controlled positioning swing brake
- Customized paint - compl. machine
- Protection for front working light
- Heavy counterweight

- Additional hydraulic circuits
- Bio-degradable hydr. oil
- Filter for secondary circuit

- Engine cold starting aid
- Main switch for electric circuit
- Fuel pre-heater

- Removable lower section of front window with support
- AM/FM stereo radio w/cassette
- Air power seat adjustment
- Warning beacon
- Additional flood lights
- Fan
- Armored glass

- Two-way selector valve for bucket/clam
- Safety check valves for hoist cylinder, high mounted
- Overload warning device
- Hydr. quick change coupler
- Liebherr line of clams and grapples
- Quick disconnect hose couplers
- Special application buckets
- Hydr. lines, on stick, for clam operation
- Bucket link holder/clam application
- Customized colors

Options and/or special attachments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr to retain warranty.

Standard and Optional Equipment

**LIEBHERR-FRANCE S.A. 2, Avenue Joseph Rey, B.P. 287, F-68005 Colmar-Cedex, ☎ 03 89 21 35 10, Fax 03 89 21 37 93
www.liebherr.com, E-Mail: info@lfr.liebherr.com**

With compliments: