

# Crawler Excavator

**R 914** compact  
Litronic®

Operating Weight: 14,700 – 16,600 kg  
Engine Output: 80 kW / 109 HP  
Bucket Capacity: 0.17 – 0.87 m<sup>3</sup>



# LIEBHERR

# Technical Data



## Engine

Rating per ISO 9249	80 kW (109 HP) at 1,800 RPM
Model	Deutz TCD3.6L4/stage IIIB
Type	4 cylinder in-line
Bore/Stroke	98/120 mm
Displacement	3.6 l
Engine operation	4-stroke diesel
	common-rail-injection
	turbo-charged and after-cooler
	reduced emissions
Harmful emissions values	in accordance with 97/68/EG stage IIIB
Emission control	oxidation catalyst
Option	Deutz particle filter
Cooling system	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, main and safety elements
Fuel tank	200 l
Engine idling	sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah/12 V
Alternator	three phase current 28 V/80 A



## Hydraulic System

Hydraulic pump	Liebherr, variable displacement, swashplate pump
Max. flow	195 l/min.
Max. hydr. pressure	350 bar
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic horsepower regulation, pressure cut-off, load sensing and torque controlled swing drive priority
Hydraulic tank capacity	100 l
Hydraulic system capacity	max. 230 l
Filtration	main return filter with integrated partial micro filtration (5 µm)
Cooling system	compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled fan
MODE selection	adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
Engine speed and performance setting	stepless alignment of engine output and hydraulic power via engine speed



## Hydraulic Controls

Power distribution	via control valve with integrated safety valves, simultaneous and independent operation of travel drive, swing drive and work
Control type	Attachment and swing proportional via joystick levers
Additional functions	via switch and/or electroproportional foot pedals
Option	proportional control, proportionally acting transmitters on the joysticks for additional hydraulic functions



## Swing Drive

Drive	Liebherr swashplate motor with torque control and integrated brake valve
Transmission	Liebherr compact planetary gear
Swing ring	Liebherr sealed single race ball bearing swing ring, internal teeth
Swing speed	0 – 9.0 RPM stepless
Swing torque	38 kNm
Brake	holding brake (spring applied – pressure released)
Option	pedal controlled positioning swing brake



## Operator's Cab

Cab	ROPS safety cab structure (capable of sweeping over) with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Standard	air cushioned operator's seat with headrest, lap belt, seat heater, manual weight adjustment, adjustable seat cushion inclination and length and mechanical lumbar vertebrae support
Operator's seat Comfort (Option)	in addition to operator's seat standard: lockable horizontal suspension, automatic weight adjustment, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatisation with active coal
Operator's seat Premium (Option)	in addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), pneumatic low frequency suspension and active seat climatisation with active coal and ventilator
Control system	joysticks with arm consoles and swivel seat
Operation and displays	large high-resolution operating unit, selfexplanatory, with touchscreen function, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and tool parameters
Air-conditioning	automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; recirculated air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures (country-dependent)



## Undercarriage

Drive	variable flow swashplate motor with automatic brake valves
Transmission	Liebherr planetary reduction gears
Pulling force	137 kN
Travel speed	low range –3.0 km/h high range –5.9 km/h
Tracks	sealed and greased
Track pads	triple grouser
Digging locks	wet multi-discs (spring applied, pressure released)
Brake valves	integrated into travel motors
Lashing eyes	integrated

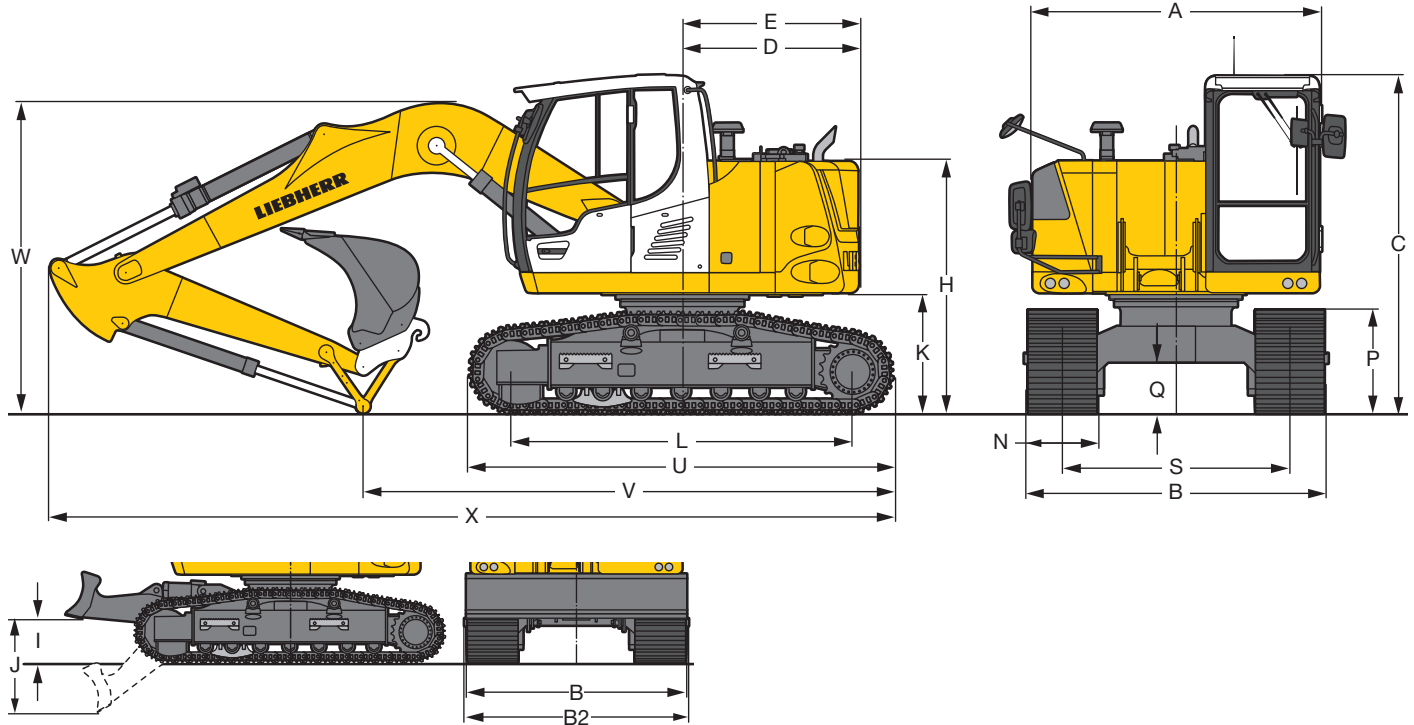


## Attachment

Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Bearings	sealed, low maintenance
Lubrication	Liebherr central lubrication system (country-dependent)



# Dimensions

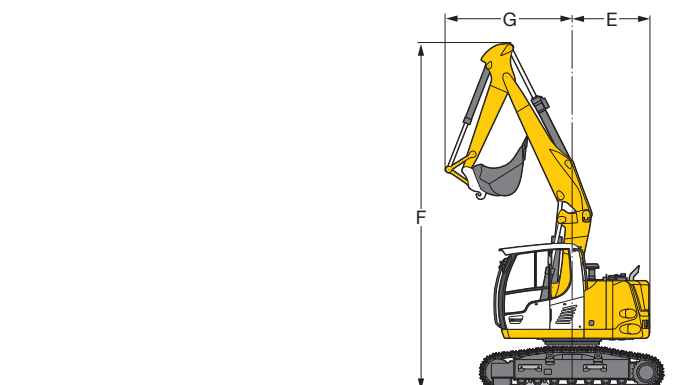


	Std			mm	with blade			mm
A				2,520				2,520
C				2,968				2,968
D				1,550				1,550
E				1,550				1,550
H				2,220				2,220
I				–				578
J				–				1,174
K				1,048				1,048
L				3,000				3,000
P				906				906
Q				448				448
S				2,000				2,000
U				3,733				3,733
N	500	600	700		500	600	700	
B	2,500	2,600	2,700		2,500	2,600	2,700	
B2	–	–	–		2,550	2,650	2,750	

E = Tail radius

	Stick	Two-piece Boom 3.20 m		Mono Boom 4.60 m	
		Std	with blade	Std	with blade
	m	mm	mm	mm	mm
V	2.05	5,450	5,450	5,050	5,880*
	2.25	5,150	5,950*	4,700	5,550*
	2.45	4,750	5,600*	4,300	5,100*
	2.65	4,650	5,500*	4,000	4,850*
W	2.05	2,800	2,800	2,950	2,950*
	2.25	2,800	2,800*	2,900	2,900*
	2.45	2,750	2,750*	2,750	2,750*
	2.65	2,800	2,800*	2,700	2,700*
X	2.05	7,800	7,800	7,550	8,400*
	2.25	7,800	8,650*	7,550	8,400*
	2.45	7,850	8,650*	7,550	8,350*
	2.65	7,850	8,650*	7,300	8,350*

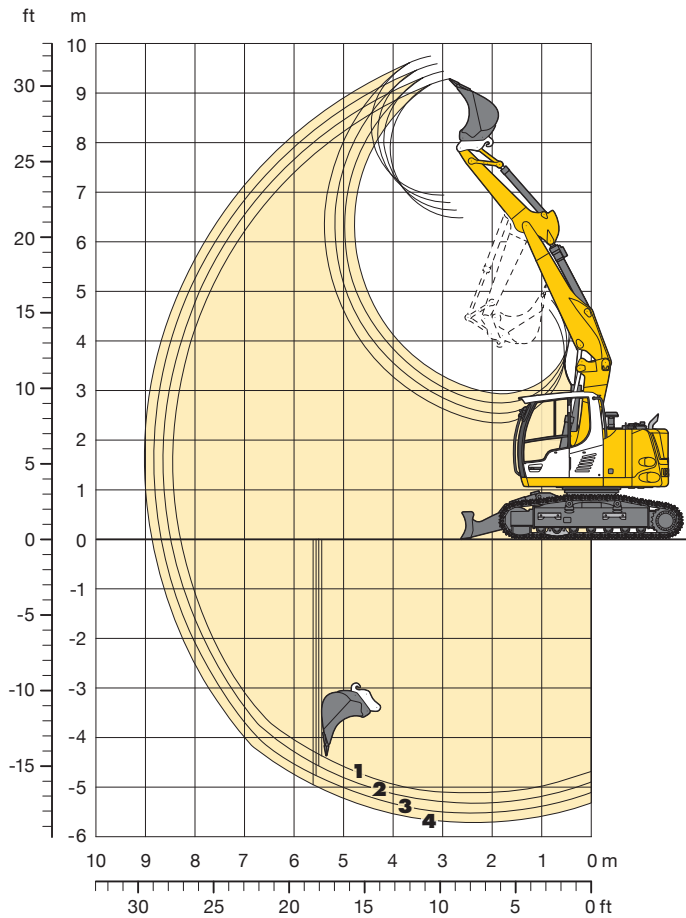
\* Attachment over digging axle



Boom	Stick	F	G	E
	m	mm	mm	mm
Two-piece boom 3.20 m	2.05	7,000	2,550	1,550
Two-piece boom 3.20 m	2.25	7,000	2,400	1,550
Two-piece boom 3.20 m	2.45	7,000	2,350	1,550
Two-piece boom 3.20 m	2.65	7,000	2,400	1,550
Mono boom 4.60 m	2.05	6,750	2,400	1,550
Mono boom 4.60 m	2.25	6,750	2,200	1,550
Mono boom 4.60 m	2.45	6,750	2,050	1,550
Mono boom 4.60 m	2.65	6,750	2,000	1,550

# Backhoe Bucket

with Two-piece Boom 3.20 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.05	2.25	2.45	2.65
Max. digging depth	m	5.15	5.35	5.50	5.70
Max. reach at ground level	m	8.30	8.50	8.70	8.85
Max. dumping height	m	6.50	6.65	6.80	6.95
Max. teeth height	m	9.30	9.45	9.60	9.75
Min. attachment radius	m	2.55	2.40	2.35	2.40

## Digging Forces without Quick Coupler

		1	2	3	4
Max. digging force (ISO 6015)	kN	72.7	67.9	63.8	60.1
	t	7.4	6.9	6.5	6.1
Max. breakout force (ISO 6015)	kN	88.2	88.2	88.2	88.2
	t	9.0	9.0	9.0	9.0

Max. breakout force with ripper bucket 124.1 kN (12.6 t)  
Max. possible digging force (stick 1.70 m) 82.9 kN ( 8.5 t)

## Operating Weight and Ground Pressure

The operating weight includes basic machine with triple grouser pads, two-piece boom 3.20 m, stick 2.25 m, quick coupler 33 and bucket 850 mm/0.50 m<sup>3</sup>.

Undercarriage versions		Standard			with blade		
Pad width	mm	500	600	700	500	600	700
Weight	kg	15,100	15,300	15,500	16,200	16,400	16,600
Ground pressure	kg/cm <sup>2</sup>	0.46	0.39	0.34	0.50	0.42	0.37

## Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m <sup>3</sup>	Weight kg	Standard without blade				with blade down			
			Stick length (m)				Stick length (m)			
			2.05	2.25	2.45	2.65	2.05	2.25	2.45	2.65
300 <sup>2)</sup>	0.17	220	□	□	□	□	□	□	□	□
400 <sup>2)</sup>	0.24	250	□	□	□	□	□	□	□	□
500 <sup>2)</sup>	0.32	250	□	□	□	□	□	□	□	□
550 <sup>2)</sup>	0.29	260	□	□	□	□	□	□	□	□
650 <sup>2)</sup>	0.36	290	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.50	340	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.65	380	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	0.80	430	△	△	△	■	□	□	□	□
300 <sup>3)</sup>	0.18	210	□	□	□	□	□	□	□	□
400 <sup>3)</sup>	0.26	240	□	□	□	□	□	□	□	□
500 <sup>3)</sup>	0.30	240	□	□	□	□	□	□	□	□
550 <sup>3)</sup>	0.31	250	□	□	□	□	□	□	□	□
650 <sup>3)</sup>	0.39	270	□	□	□	□	□	□	□	□
850 <sup>3)</sup>	0.53	320	□	□	□	□	□	□	□	□
1,050 <sup>3)</sup>	0.71	370	□	□	□	△	□	□	□	□
1,250 <sup>3)</sup>	0.87	420	△	△	■	■	□	□	□	△

\* Indicated loads are based on ISO 10567 and do not exceed 75 % of tipping or 87 % of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm

<sup>1)</sup> comparable with SAE (heaped)

<sup>2)</sup> Bucket with teeth (also available in HD version) <sup>3)</sup> Bucket with cutting edge (also available in HD version)

Buckets up to 400 mm cutting width with limited digging depth

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized

# Lift Capacities

with Two-piece Boom 3.20 m

## Stick 2.05 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade					2.5*	2.5*
	Blade down					2.5*	3.9
6.0	Std without blade		3.9	4.0*		2.2*	2.2*
	Blade down		4.0*	4.0*		2.2*	5.6
4.5	Std without blade	5.5*	5.5*	3.9	4.9*	2.0	2.1*
	Blade down	5.5*	5.5*	4.4	4.9*	2.1*	6.6
3.0	Std without blade	6.9*	8.8*	3.8	5.6	1.7	2.1*
	Blade down	7.8*	8.8*	4.3	5.7*	2.0	7.1
1.5	Std without blade	6.7	9.7*	3.8*	5.5	1.6	2.3*
	Blade down	7.7	9.7*	4.3	6.4*	1.9	7.2
0	Std without blade	6.6	10.3*	3.6	5.6	1.6	2.6
	Blade down	7.7	10.3*	4.2	6.5*	1.9	7.0
-1.5	Std without blade	6.3	10.5*	3.3	5.3	1.8	2.9
	Blade down	7.4	10.5*	3.9	6.6*	2.2	6.5
-3.0	Std without blade	6.0	10.0*	3.1	5.1	2.3	3.1*
	Blade down	7.1	10.0*	3.7	5.5*	2.8	5.5
-4.5	Std without blade						
	Blade down						

## Stick 2.25 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade					2.3*	2.3*
	Blade down					2.3*	4.2
6.0	Std without blade		3.8*	3.8*		2.0*	2.0*
	Blade down		3.8*	3.8*		2.0*	5.9
4.5	Std without blade		3.9	4.7*	2.4	1.9*	1.9*
	Blade down		4.4	4.7*	2.8	1.9*	6.8
3.0	Std without blade	6.9	8.4*	3.8	5.6*	1.6	1.9*
	Blade down	7.8*	8.4*	4.3	5.6*	1.9*	7.3
1.5	Std without blade	6.7	9.6*	3.7	5.5	1.5	2.1*
	Blade down	7.6	9.6*	4.2*	6.3*	1.8	7.4
0	Std without blade	6.7	10.2*	3.6	5.5*	1.6	2.4*
	Blade down	7.7	10.2*	4.2	6.5*	1.9	7.2
-1.5	Std without blade	6.3	10.4*	3.3	5.4	1.7	2.8
	Blade down	7.4	10.4*	3.9	6.6*	2.0	6.7
-3.0	Std without blade	6.0	10.3*	3.1	5.1	2.2	3.1*
	Blade down	7.1	10.3*	3.7	5.9*	2.6	5.7
-4.5	Std without blade						
	Blade down						

## Stick 2.45 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade		2.2*	2.2*		2.1*	2.1*
	Blade down		2.2*	2.2*		2.1*	4.6
6.0	Std without blade		3.6*	3.6*	2.1*	1.8*	1.8*
	Blade down		3.6*	3.6*	2.1*	1.8*	6.1
4.5	Std without blade		3.9	4.3*	2.4	1.7*	1.7*
	Blade down		4.3*	4.3*	2.8	1.7*	7.0
3.0	Std without blade	6.9	8.0*	3.8	5.4*	1.6	1.8*
	Blade down	7.8	8.0*	4.3	5.4*	1.8*	7.5
1.5	Std without blade	6.7	9.5*	3.7	5.5	1.5	1.9*
	Blade down	7.6*	9.5*	4.2	6.2*	1.7	7.6
0	Std without blade	6.7*	10.1*	3.6	5.5	1.5	2.2*
	Blade down	7.6	10.1*	4.2	6.4*	1.8	7.4
-1.5	Std without blade	6.3	10.4*	3.4	5.4	1.6	2.6
	Blade down	7.4	10.4*	3.9	6.5*	1.9	6.9
-3.0	Std without blade	6.0	10.6*	3.1	5.1	2.0	3.1*
	Blade down	7.1	10.6*	3.7	6.1*	2.4	6.0
-4.5	Std without blade						
	Blade down						

## Stick 2.65 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade		2.5*	2.5*		1.9*	1.9*
	Blade down		2.5*	2.5*		1.9*	4.9
6.0	Std without blade		3.3*	3.3*	2.4*	1.6*	1.6*
	Blade down		3.3*	3.3*	2.4*	1.6*	6.4
4.5	Std without blade		3.9*	3.9*	2.5	1.6*	1.6*
	Blade down		3.9*	3.9*	2.8	1.6*	7.2
3.0	Std without blade	6.9	7.6*	3.8	5.2*	1.6	1.6*
	Blade down	7.6*	7.6*	4.3	5.2*	1.8	7.7
1.5	Std without blade	6.6	9.5*	3.7	5.4	1.5	1.7*
	Blade down	7.6	9.5*	4.2*	6.1*	1.7	7.8
0	Std without blade	6.6	10.0*	3.6	5.4*	1.4	1.9*
	Blade down	7.6*	10.0*	4.2	6.4*	1.7	7.6
-1.5	Std without blade	6.3	10.3*	3.4	5.4	1.5	2.4*
	Blade down	7.4	10.3*	4.0	6.5*	1.8	7.1
-3.0	Std without blade	6.1	10.6*	3.1	5.1	1.9	3.0
	Blade down	7.2	10.6*	3.7	6.4*	2.2	6.2
-4.5	Std without blade	5.8	6.5*			4.6	5.1*
	Blade down	6.4*	6.4*			5.1*	3.5

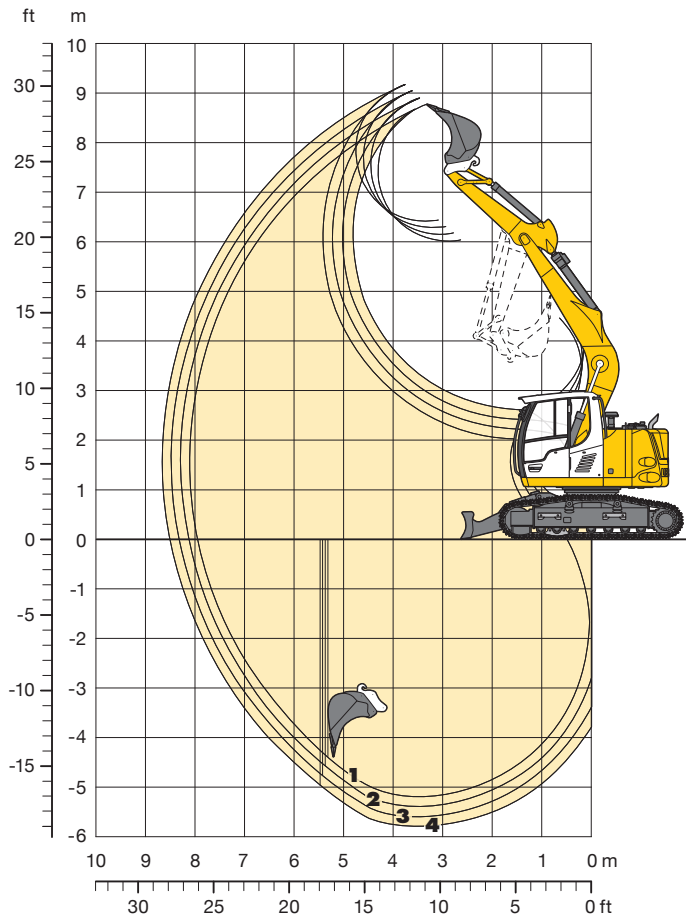
↑ Height   Can be slewed through 360°   In longitudinal position of undercarriage   Max. reach   \* Limited by hydr. capacity

The lift capacities on the load hook of the Liebherr quick coupler 33 without grab attachment are stated in metric tons (t) and are valid on a firm, level supporting surface. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the stabilizers with the stabilizers down. The values apply to track pads measuring 600 mm in width when the adjusting cylinder is in the optimal position. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity, or are limited by the permissible load of the load hook on the quick coupler (max. 5 t). Without the quick coupler, lift capacities will increase by up to 110 kg.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

# Backhoe Bucket

with Mono Boom 4.60 m



## Digging Envelope with Quick Coupler

		1	2	3	4
Stick length	m	2.05	2.25	2.45	2.65
Max. digging depth	m	5.20	5.40	5.60	5.80
Max. reach at ground level	m	7.95	8.15	8.30	8.50
Max. dumping height	m	6.05	6.15	6.30	6.45
Max. teeth height	m	8.75	8.90	9.05	9.15
Min. attachment radius	m	2.40	2.20	2.05	2.00

## Digging Forces without Quick Coupler

		1	2	3	4
Max. digging force (ISO 6015)	kN	72.7	67.9	63.8	60.1
	t	7.4	6.9	6.5	6.1
Max. breakout force (ISO 6015)	kN	88.2	88.2	88.2	88.2
	t	9.0	9.0	9.0	9.0

Max. breakout force with ripper bucket 124.1 kN (12.6 t)  
Max. possible digging force (stick 1.70 m) 82.9 kN ( 8.5 t)

## Operating Weight and Ground Pressure

The operating weight includes basic machine with triple grouser pads, mono boom 4.60 m, stick 2.25 m, quick coupler 33 and bucket 850 mm/0.50 m³.

Undercarriage versions		Standard			with blade		
Pad width	mm	500	600	700	500	600	700
Weight	kg	14,700	14,900	15,200	15,800	16,100	16,300
Ground pressure	kg/cm²	0.45	0.38	0.33	0.49	0.41	0.36

## Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m³	Weight kg	Standard without blade				with blade down			
			Stick length (m)				Stick length (m)			
			2.05	2.25	2.45	2.65	2.05	2.25	2.45	2.65
300 <sup>2)</sup>	0.17	220	□	□	□	□	□	□	□	□
400 <sup>2)</sup>	0.24	250	□	□	□	□	□	□	□	□
500 <sup>2)</sup>	0.32	250	□	□	□	□	□	□	□	□
550 <sup>2)</sup>	0.29	260	□	□	□	□	□	□	□	□
650 <sup>2)</sup>	0.36	290	□	□	□	□	□	□	□	□
850 <sup>2)</sup>	0.50	340	□	□	□	□	□	□	□	□
1,050 <sup>2)</sup>	0.65	380	□	□	□	□	□	□	□	□
1,250 <sup>2)</sup>	0.80	430	□	□	△	△	□	□	□	□
300 <sup>3)</sup>	0.18	210	□	□	□	□	□	□	□	□
400 <sup>3)</sup>	0.26	240	□	□	□	□	□	□	□	□
500 <sup>3)</sup>	0.30	240	□	□	□	□	□	□	□	□
550 <sup>3)</sup>	0.31	250	□	□	□	□	□	□	□	□
650 <sup>3)</sup>	0.39	270	□	□	□	□	□	□	□	□
850 <sup>3)</sup>	0.53	320	□	□	□	□	□	□	□	□
1,050 <sup>3)</sup>	0.71	370	□	□	□	□	□	□	□	□
1,250 <sup>3)</sup>	0.87	420	□	△	△	△	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75 % of tipping or 87 % of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm

<sup>1)</sup> comparable with SAE (heaped)

<sup>2)</sup> Bucket with teeth (also available in HD version) <sup>3)</sup> Bucket with cutting edge (also available in HD version)

Buckets up to 400 mm cutting width with limited digging depth

Max. material weight □ = ≤ 1.8 t/m³, △ = ≤ 1.5 t/m³, ■ = ≤ 1.2 t/m³, ▲ = not authorized

# Lift Capacities

with Mono Boom 4.60 m

## Stick 2.05 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade Blade down					2.1* 2.1*	
6.0	Std without blade Blade down		3.4* 3.4*			2.1* 2.1*	5.1
4.5	Std without blade Blade down		3.8 4.0*	2.4 2.5*		2.1* 2.1*	6.1
3.0	Std without blade Blade down	6.6 7.1*	3.5 4.9*	2.3 3.5		1.9 2.2*	6.7
1.5	Std without blade Blade down	5.8 7.7*	3.3 5.3	2.2 3.4		1.8 2.4*	6.8
0	Std without blade Blade down	5.6 7.5*	3.1 5.0	2.1 3.3		1.8 2.8	6.6
-1.5	Std without blade Blade down	5.5 9.5*	3.0 5.0	2.0 3.2		2.0 3.2	6.0
-3.0	Std without blade Blade down	5.6 7.8*	3.1 5.0			2.7 4.4	4.9
-4.5	Std without blade Blade down						

## Stick 2.25 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade Blade down					1.9* 1.9*	
6.0	Std without blade Blade down		3.3* 3.3*			1.9* 1.9*	5.4
4.5	Std without blade Blade down		3.8 3.8*	2.4 2.8*		1.9* 1.9*	6.3
3.0	Std without blade Blade down	6.6* 6.6*	3.5 4.7*	2.3 3.5		1.8 2.0*	6.9
1.5	Std without blade Blade down	5.9 9.0*	3.3 5.3	2.2 3.4		1.7 2.2*	7.0
0	Std without blade Blade down	5.5 7.6*	3.1 5.0	2.1 3.3		1.7 2.6*	6.8
-1.5	Std without blade Blade down	5.5 9.7*	3.0 4.9	2.0 3.2		1.9 3.0	6.3
-3.0	Std without blade Blade down	5.6 8.1*	3.0 5.0			2.5 4.0	5.2
-4.5	Std without blade Blade down						

## Stick 2.45 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade Blade down					2.1* 2.1*	3.9
6.0	Std without blade Blade down		3.2* 3.2*			1.8* 1.8*	5.6
4.5	Std without blade Blade down		3.6* 3.6*	2.4 2.9*		1.7* 1.7*	6.6
3.0	Std without blade Blade down	6.2* 6.2*	3.6 4.5*	2.3 3.5		1.7 1.8*	7.1
1.5	Std without blade Blade down	5.9 9.2*	3.3 5.3	2.1 3.4		1.6 2.0*	7.2
0	Std without blade Blade down	5.5 7.7*	3.0 5.0	2.0 3.3		1.6 2.3*	7.0
-1.5	Std without blade Blade down	5.4 9.6*	3.0 4.9	2.0 3.2		1.8 2.9	6.5
-3.0	Std without blade Blade down	5.5 8.4*	3.0 4.9			2.3 3.7	5.4
-4.5	Std without blade Blade down					4.5 4.5*	3.5

## Stick 2.65 m

↑ m	Undercarriage	3.0 m	4.5 m	6.0 m	7.5 m	Max. reach	m
7.5	Std without blade Blade down					1.9* 1.9*	4.2
6.0	Std without blade Blade down		3.0* 3.0*			1.6* 1.6*	5.8
4.5	Std without blade Blade down		3.4* 3.4*	2.4 2.9*		1.6* 1.6*	6.8
3.0	Std without blade Blade down	5.7* 5.7*	3.6 4.3*	2.3 3.5		1.6* 1.6*	7.2
1.5	Std without blade Blade down	6.0 8.8*	3.3 5.3	2.1 3.4		1.5 1.8*	7.4
0	Std without blade Blade down	5.5 7.9*	3.0 5.0	2.0 3.2		1.5 2.1*	7.2
-1.5	Std without blade Blade down	5.4 9.3*	2.9 4.9	2.0 3.2		1.7 2.7*	6.7
-3.0	Std without blade Blade down	5.5 8.6*	2.9 4.9			2.1 3.4	5.7
-4.5	Std without blade Blade down	5.7 5.8*				3.8 4.4*	3.9

↑ Height   Can be slewed through 360°   In longitudinal position of undercarriage   Max. reach   \* Limited by hydr. capacity

The lift capacities on the load hook of the Liebherr quick coupler 33 without grab attachment are stated in metric tons (t) and are valid on a firm, level supporting surface. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (+/- 15°) are specified over the stabilizers with the stabilizers down. The values apply to track pads measuring 600 mm in width. Indicated loads comply with the ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity, or are limited by the permissible load of the load hook on the quick coupler (max. 5 t). Without the quick coupler, lift capacities will increase by up to 110 kg.

In accordance with the harmonised European Standard EN 474-5, hydraulic excavators used for lifting operations must be equipped with pipe fracture safety valves, an overload warning device, a load hook and a lift capacity chart.

# Attachments

## Ditch Cleaning Buckets/Tilt Buckets

### Ditch Cleaning Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m³	Weight kg	Standard without blade				with blade down			
			Stick length (m)				Stick length (m)			
			2.05	2.25	2.45	2.65	2.05	2.25	2.45	2.65
Two-piece Boom 3.20 m										
1,500 <sup>3)</sup>	0.50	360	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.55	690	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.50	690	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.48	350	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.65	390	□	□	□	□	□	□	□	□
Mono Boom 4.60 m										
1,500 <sup>3)</sup>	0.50	360	□	□	□	□	□	□	□	□
1,600 <sup>2)</sup>	0.55	690	□	□	□	□	□	□	□	□
2,000 <sup>2)</sup>	0.50	690	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.48	350	□	□	□	□	□	□	□	□
2,000 <sup>3)</sup>	0.65	390	□	□	□	□	□	□	□	□

### Tilt Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width mm	Capacity ISO 7451 <sup>1)</sup> m³	Weight kg	Standard without blade				with blade down			
			Stick length (m)				Stick length (m)			
			2.05	2.25	2.45	2.65	2.05	2.25	2.45	2.65
Two-piece Boom 3.20 m										
1,500 <sup>2)</sup>	0.60	680	□	□	△	△	□	□	□	□
Mono Boom 4.60 m										
1,500 <sup>2)</sup>	0.60	680	□	□	□	□	□	□	□	□

\* Indicated loads are based on ISO 10567 and do not exceed 75 % of tipping or 87 % of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm

<sup>1)</sup> comparable with SAE (heaped)

<sup>2)</sup> with 2 x 50° rotator

<sup>3)</sup> rigid ditch cleaning bucket

Max. material weight □ = ≤ 1.8 t/m<sup>3</sup>, △ = ≤ 1.5 t/m<sup>3</sup>, ■ = ≤ 1.2 t/m<sup>3</sup>, ▲ = not authorized



# Equipment



## Undercarriage

Stabilizer blade	+
600 mm triple grouser track pads	•
500 mm rubber track pads (Bridgestone)	+
Track pads, variants	+
Travel speed levels (two)	•
Chain guide, single	•
Chain guide, triple	+
Load holding valve on each stabilization cylinder	•
Protection for piston rods, stabilizer cylinder	•
Tool equipment, extended	+



## Uppercarriage

Uppercarriage right side light, 1 piece, LED 1300 lumen	+
Uppercarriage rear light, 2 pieces, halogen	+
Uppercarriage rear light, 2 pieces, LED 1300 lumen	+
Refuelling system with filling pump	+
Main battery switch for electrical system	•
Engine hood with gas spring	•
Warning beacon on uppercarriage	•
Service doors, lockable	+



## Hydraulics

Shut-off valve between hydraulic tank and pump(s)	•
Pressure test fittings	•
Accumulator for controlled lowering of the attachment with the engine shut down	•
Hydraulic oil filter with integrated microfilter	•
Liebherr hydraulic oil from -20 °C to +40 °C	•
Liebherr hydraulic oil, biologically degradable	+
Liebherr hydraulic oil, specially for warm or cold regions	+
Bypass filter	+
Switchover high pressure circuit and tipping cylinder	+
Switchover high pressure circuit and adjustment cylinder (two-piece boom)	+



## Engine

Deutz particle filter	+
Fuel anti-theft device	+
Air pre-filter with dust discharge	+
Preheating fuel	+



## Operator's Cab

Storage compartment	•
Cab lights rear, halogen	+
Cab lights rear, LED 1300 lumen	+
Cab lights front, halogen (above rain cover)	•
Cab lights front, halogen (under rain cover)	•
Cab lights front, LED 1300 lumen (above rain cover)	+
Cab lights front, LED 1300 lumen (under rain cover)	+
Mechanical hour meters, readable from outside the cab	•
Operator's seat Standard	•
Operator's seat Comfort	+
Operator's seat Premium	+
Driving alarm (acoustic signal is emitted during travel, can be switched ON/OFF)	+
Fire extinguisher	+
Windscreen retractable (including upper part)	•
Intermittent windscreen wiper with wiper washer	•
Rubber floor mat, removable	•
Dome light	•
Coat hook	•
Automatic air conditioning*	•
Fuel consumption indicator	•
Electric cooler	+

LIDAT Plus (extended Liebherr data transfer system)**	•
Automatic engine shut-down (time adjustable)	+
Emergency exit rear window	•
Bullet proof front screen – not adjustable	+
Bullet proof glass (top)	•
Positioning swing brake	+
Proportional control	+
Radio Comfort (control via display)	+
Preparation for radio installation	•
Rain cover over front window opening	•
ROPS cab protection	•
Warning beacon on cab	•
All tinted windows	+
Windscreen wiper, roof	+
Door with sliding window	•
Top guard	+
Front guard	+
Right side window and windshield made of laminated glass	•
Sun blind	•
Auxiliary heating, adjustable (week time switch)	+
Electronic immobilizer	+
Cigarette lighter and ashtray	•



## Attachment

Boom lights, 2 pieces, halogen	•
Boom lights, 2 pieces, LED 1300 lumen	+
Stick lights, 2 pieces, halogen	+
High pressure circuit incl. lines and Tool Control	+
Load hook on stick	+
Shackle on stick	+
Leak oil line, additional for working tools	+
Liebherr ditch cleaning bucket	+
Liebherr quick coupler, hydraulic or mechanical	+
Liebherr tilt bucket	+
Liebherr tilt rotator	+
Liebherr backhoe bucket	+
Liebherr tooth system	+
Liebherr clamshell grab	+
Middle pressure circuit incl. lines	+
Mono boom	+
Offset mono boom	+
Pipe fracture safety valves hoist cylinders	•
Pipe fracture safety valve tipping cylinder	+
Pipe fracture safety valve stick cylinder	•
Return line, pressureless (in high pressure circuit option included)	+
Hose quick coupling at end of stick	•
Quick coupling system LIKUFIX	+
Protection for piston rod, tipping cylinder	+
Protection for piston rod, stick cylinder	+
Custom painting for tools	+
Tool Control, 10 tool adjustments selectable over the display	+
Tool Management, automatic tool recognition (in combination with LIKUFIX)***	+
Overload warning device	•
Protection for stick	+
Two-piece boom	+
Offset two-piece boom	+



## Complete Machine

Lubrication	
Lubrication undercarriage, manually – decentralized (grease points)	•
Central lubrication system for uppercarriage and attachment, automatically (without quick coupler and connecting link)*	•
Central lubrication system, extension for quick coupler	+
Central lubrication system, extension for connecting link	+
Special coating	
Single-coloured, grey parts excepted	+
Single-coloured, grey parts included (except power train)	+
Multicoloured (except power train)	+
Monitoring	
Rear view monitoring with camera*	•
Side view monitoring with camera	+

• = Standard, + = Option

\* = country-dependent, \*\* = optionally extendable after one year, \*\*\* = available only for quick coupler 48

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

# The Liebherr Group of Companies



## Wide Product Range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

## Exceptional Customer Benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

## State-of-the-art Technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

## Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with over 38,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

**[www.liebherr.com](http://www.liebherr.com)**

### Liebherr-Hydraulikbagger GmbH

Liebherrstraße 12, D-88457 Kirchdorf/Ilser

☎ +49 7354 80-0, Fax +49 7354 80-7294

[www.liebherr.com](http://www.liebherr.com), E-Mail: [info.lhb@liebherr.com](mailto:info.lhb@liebherr.com)

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