

Product Information: Crawler Excavator

R 956

Litronic®



Generation

6

Engine

335 HP/250 kW

Tier 4 Final

Operating Weight

59,400 kg / 130,960 lb

Bucket Capacity

1.65 – 3.50 m³

2.16 – 4.58 yd³

LIEBHERR

Experience the Progress

R 956

Safety

- Panoramic visibility with no obstructions, rear and side view monitoring cameras
- Retractable console for easy and safe access to the cab
- Emergency exit via the rear cab window, whatever the excavator's configuration
- Windshield and right-hand window in laminated tinted glass

Equipment

- Large choice of sticks
- Longer lifespan of components and higher productivity thanks to the automatic centralised lubrication system (option)
- Safety check valves for hoist and stick cylinders

Maintenance

- Maintenance points on the cool side of the engine
- Quick and easy cleaning and visual inspection
- Complementary radiators fitted on hinges
- Engine oil, hydraulic oil, fuel and urea levels visible on the display
- Shut-off valve to quickly and easily interrupt the circulation of oil between the tank and the hydraulic system





Comfort

- Spacious, air-conditioned work space
- Airsprung seat with vertical and longitudinal damping as standard
- Userfriendly high resolution 7" colour touchscreen
- 3" orange belt
- New LED lighting as standard

Engine

- New, more powerful engine that conforms with the US EPA Tier 4 Final exhaust emissions standard
- Automatic engine idling / speed increase, controlled via joystick sensors

Undercarriage

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free crawler track and track rollers with lifetime lubrication
- 3-part chain guide

Technical Data

Engine

Rating	
per SAE J1349	335 HP (250 kW) at 1,800 rpm
per ISO 9249	340 HP (250 kW) at 1,800 rpm
Torque	
	2,280 Nm at 1,000 rpm / 1,682 lbf ft at 1,000 rpm
Model	
	Liebherr D936 A7
Type	
Bore	6 cylinder in-line
Stroke	130 mm / 5.1 in
Displacement	150 mm / 5.9 in
Engine operation	10.5 l / 641 in³
	4-stroke diesel
	Common-Rail, monoturbo
Exhaust gas treatment	
	Tier 4 Final
	SCR Filter
	Passive regeneration by thermo management
Cooling system	
	Water-cooled and integrated motor oil cooler, after-cooled and fuel cooled
Air cleaner	
	Dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	734 l / 194 gal
Urea tank	90 l / 24 gal
Electrical system	
Voltage	24 V
Batteries	2 x 180 Ah/12 V
Starter	24 V/7.8 kW
Alternator	Three-phase current 28 V/140 A
Engine idling	Sensor controlled
Motor management	
	Connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available

Hydraulic Controls

The controlling is conducted via the integrated excavator system technology, input and output modules, communicated via the CAN-BUS with the electronic central unit	
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	
Equipment and swing	Proportional via joystick levers
Travel	- Proportional control via foot pedals or removable levers - Speed pre-selection
Additional functions	
	Proportional regulation via foot pedals or mini-joystick

Hydraulic System

Hydraulic pumps	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 380 l/min. / 2 x 100 gpm
Max. pressure	350 bar / 5,076 psi
For swing drive	Reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	201 l/min. / 53 gpm
Max. pressure	375 bar / 5,439 psi
Pump regulation	
	Electro-hydraulic with electronic engine speed sensing regulation, pressure compensation, flow compensation
Hydraulic tank	380 l / 100 gal
Hydraulic system	743 l / 196 gal
Hydraulic oil filter	2 full flow filters in return line with integrated fine filter area (5 µm / 2,500 mesh)
Cooling system	
	Compact cooler for water cooler, after-cooler, fuel cooler and transmission pump oil, sandwiched with cooler for oil and condenser of air-conditioning with hydrostatically controlled fan drives
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
RPM adjustment	
	Stepless adjustment of engine output via RPM at each selected mode
Tool Control	
	20 pre-adjustable pump flows and pressures for add-on attachments

Swing Drive

Drive	Liebherr swashplate motor with integrated brake valve
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	
	0 – 5.8 rpm stepless
Swing torque	160 kNm / 118,010 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	LED work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreens, cigarette lighter and 12 V plug, storage bins, lunchbox, cup holder
Operator's seat	Liebherr-Comfort seat, air sprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in width, height and inclination), seat heating as standard
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	Large high-resolution operating unit, intuitive, color display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment 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
Noise emission	ISO 6396 L _{PA} (inside cab) = 72 dB(A) 2000/14/EC L _{WA} (surround noise) = 106 dB(A)

Undercarriage

Versions	Gauge 2,890 mm / 9'6" Gauge 2,900 mm / 9'6"
Drive	Liebherr swashplate motor with integrated brake valve
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	Low range 2.6 km/h / 1.6 mph High range 3.7 km/h / 2.3 mph
Drawbar pull on crawler	446 kN / 100,265 lbf
Track components	D8L, maintenance-free
Track rollers/Carrier rollers	LC-V: 10/3 HD: 9/2
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



Equipment

Type	Combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance
Lubrication	Automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	Pipes and hoses equipped with SAE split-flange connections
Buckets	Standard equipped with Liebherr tooth system



WARNING

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65warnings.ca.gov.



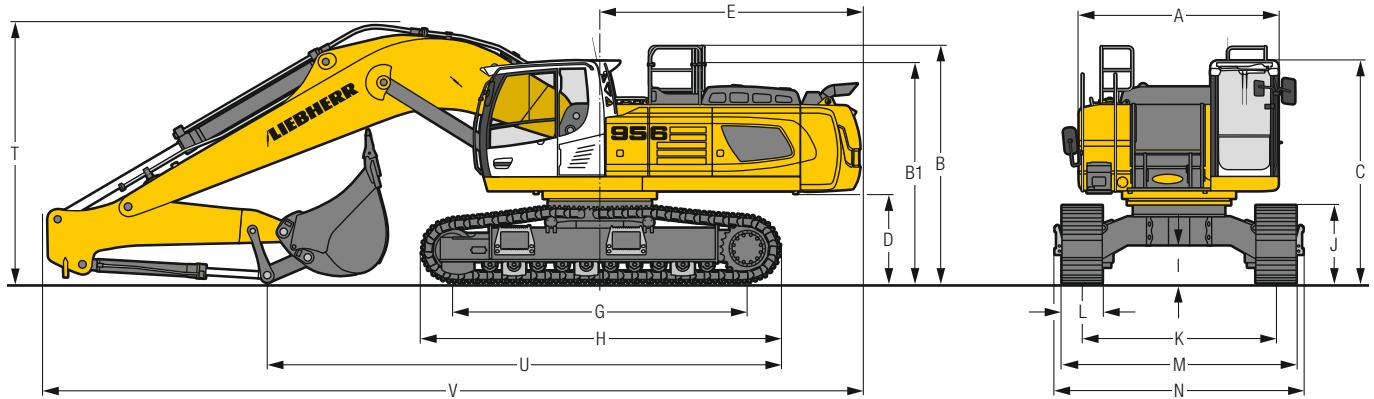
WARNING

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.

Dimensions



		HD	mm/ft in		LC-V	mm/ft in	
A*	Uppercarriage width		2,970/ 9' 9"				2,970/ 9' 9"
B	Uppercarriage height		3,555/11' 8"				3,660/12'
B1	Uppercarriage height (handrails folded)		3,305/10'10"				3,410/11' 2"
C	Cab height		3,335/3,530***/10'11"/11' 7***				3,440/3,635***/11'3"/11'11***
D	Counterweight ground clearance		1,355/ 4' 5"				1,460/ 4' 9"
E	Rear-end length		3,900/12'10"				3,900/12'10"
G	Wheelbase		4,500/14' 9"				4,500/14' 9"
H	Undercarriage length		5,550/18' 3"				5,550/18' 3"
I	Undercarriage ground clearance		575/ 1'11"				800/ 2' 7"
J	Track height		1,225/ 4"				1,210/ 4'
K	Track gauge		2,900/ 9' 6"				2,390/2,890**/ 7'10"/ 9' 6**
L	Track pad width	500/ 20" 600/ 24" 750/ 30"		500 / 20" 600 / 24" 750 / 30"			
M	Width over tracks	3,465/11' 4" 3,500/11' 6" 3,650/12'		2,970/3,470**/ 9'9"/11' 5*** 2,990/3,490**/ 9'10"/11' 5***		3,140/3,640**/10' 4"/11'11***	
N	Width over steps	3,715/12' 2" 3,715/12' 2" 3,715/12' 2"		3,225/3,725**/10'7"/12' 3*** 3,225/3,725**/10' 7"/12' 3***		3,225/3,725**/10' 7"/12' 3***	

* without door stop device and spacer

** work position

*** with FOPS top guard

		Stick length m/ft in	Mono boom 6.70 m/22' direct mounting		Mono boom 7.60 m/24'11" direct mounting		Mono boom straight 8.00 m/26'3" direct mounting		Mono boom 9.20 m/30'2" direct mounting	
			HD	mm/ft in	HD	mm/ft in	HD	mm/ft in	HD	mm/ft in
T	Boom height	2.35/ 7'9"	3,900 /12'10"	4,000 /13'1"	3,900 /12'10"	4,000 /13'1"	3,600 /11'10"	—	—	—
		2.90/ 9'6"	3,950 /13'	4,050 /13'3"	3,950 /13'	4,050 /13'3"	3,700 /12' 2"	4,250/13'11"	—	—
		3.35/11'	3,850*/12' 8**	3,950*/13**	3,950 /13'	4,050 /13'3"	—	—	—	—
		3.80/12'6"	3,900*/12'10**	4,000*/13'1**	4,000/13' 1"	4,100/13'5"	3,850 /12' 8"	4,350/14' 3"	—	4,450/14' 7"
		5.00/16'5"	—	—	—	—	—	—	—	—
U	Length on ground	2.35/ 7'9"	7,750 /25' 5"		7,700/25' 3"		8,350/27' 5"		—	—
		2.90/ 9'6"	7,200 /23' 7"		8,300/37' 3"		7,900/25'11"		8,900/29' 2"	
		3.35/11'	9,800*/32' 2**		7,900/25'11"		—	—	—	—
		3.80/12'6"	9,400*/30'10**		7,400/24' 3"		8,250/27' 1"		9,150/30'	7,900/25'11"
V	Overall length	5.00/16'5"	—	—	—	—	—	—	—	—
		2.35/ 7'9"	12,200 /40'		13,250/43' 6"		13,800/45' 3"		14,850/48' 9"	
		2.90/ 9'6"	12,250 /40' 2"		13,250/43' 6"		13,700/44'11"		14,850/48' 9"	
		3.35/11'	12,200*/40*		13,250/43' 6"		—	—	—	—
W	Bucket	3.80/12'6"	12,200*/40*		13,250/43' 6"		13,700/44'11"		14,850/48' 9"	
		5.00/16'5"	—	—	—	—	—	—	—	—

* without bucket

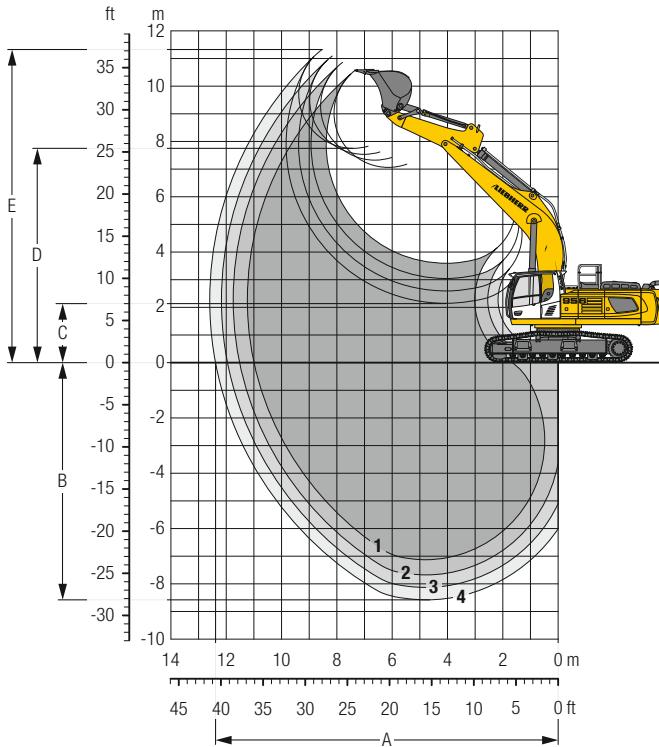
Transport Dimensions removable elements disassembled

	Undercarriage/ Stick m/ft in	Mono boom 6.70 m/22'			Mono boom 7.60 m/24'11"			Mono boom straight 8.00 m/26'3"			Mono boom 9.20 m/30'2"		
		mm/ft in		mm/ft in	mm/ft in		mm/ft in	mm/ft in		mm/ft in	mm/ft in		
Pad width		500/ 20"	600/ 24"	750/ 30"	500/ 20"	600/ 24"	750/ 30"	500/ 20" 600/ 24" 750/ 30"	500/ 20" 600/ 24" 750/ 30"	500/ 20" 600/ 24" 750/ 30"	500/ 20"	600/ 24"	750/ 30"
Transport width	HD	3,465/11' 4"	3,500/11' 6"	3,650/12'	3,465/11' 4"	3,500/11' 6"	3,650/12'	3,465/11' 4"	3,500/11' 6"	3,650/12'	—	—	—
	LC-V	2,970/ 9' 9"	2,990/ 9'10"	3,140/10' 4"	2,970/ 9' 9"	2,990/ 9'10"	3,140/10' 4"	—	—	—	2,970/ 9' 9"	2,990/ 9'10"	3,140/10' 4"
	HD	mm/ft in		HD	mm/ft in		HD	mm/ft in		HD	mm/ft in		
Transport length	2.35/ 7'9"	12,200 /40'			13,250/43'6"			13,800/45' 3"			14,850/48' 9"		
	2.90/ 9'6"	12,250 /40'2"			13,250/43'6"			13,700/44'11"			14,850/48'9"		
	3.35/11'	12,200*/40*			13,250/43'6"			—			—		
	3.80/12'6"	12,200*/40*			13,250/43'6"			13,700/44'11"			14,850/48'9"		
	5.00/16'5"	—			—			—			14,850/48'9"		
Transport height	2.35/ 7'9"	3,900/12'10"	4,000/13'1"		3,900/12'10"	4,000/13'1"		3,600/11'10"	—	—	—	—	—
	2.90/ 9'6"	3,950/13'	4,050/13'3"		3,950/13'	4,050/13'3"		3,700/12' 2"	4,250/13'11"	—	—	—	—
	3.35/11'	3,850/12' 8"	3,950/13'		3,950/13'	4,050/13'3"		—	—	—	—	—	—
	3.80/12'6"	3,900/12'10"	4,000/13'1"		4,000/13' 1"		4,100/13'5"	—	—	—	—	—	—
	5.00/16'5"	—	—		—	—	—	—	—	—	—	—	—
Bucket		2.70 m ³ /3.53 yd ³			2.00 m ³ /2.62 yd ³			2.00 m ³ /2.62 yd ³			1.65 m ³ /2.16 yd ³		

* without bucket

Backhoe Bucket

with Mono Boom 6.70 m/22' and Counterweight 11.0 t/24,250 lb



Digging Envelope

		1	2	3	4
Stick length	m/ft in	2.35 / 7' 9"	2.90 / 9' 6"	3.35 / 11'	3.80 / 12' 6"
A Max. reach at ground level	m/ft in	11.10 / 36' 5"	11.50 / 37' 9"	11.95 / 39' 2"	12.40 / 40' 8"
B Max. digging depth	m/ft in	7.15 / 23' 5"	7.70 / 25' 3"	8.15 / 26' 9"	8.60 / 28' 3"
C Min. dumping height	m/ft in	3.60 / 11' 10"	3.05 / 10'	2.60 / 8' 6"	2.15 / 7' 1"
D Max. dumping height	m/ft in	7.05 / 23' 2"	7.30 / 23' 11"	7.55 / 24' 9"	7.70 / 25' 3"
E Max. cutting height	m/ft in	10.55 / 34' 7"	10.85 / 35' 7"	11.10 / 36' 5"	11.30 / 37' 1"

Forces

		1	2	3	4
Stick digging force (ISO 6015)	kN/lbf	249 / 55,980	218 / 49,010	198 / 44,510	182 / 40,920
Bucket digging force (ISO 6015)	kN/lbf	316 / 71,040	316 / 71,040	316 / 71,040	316 / 71,040
Stick digging force (SAE J1179)	kN/lbf	235 / 52,830	207 / 46,540	189 / 42,490	174 / 39,120
Bucket digging force (SAE J1179)	kN/lbf	273 / 61,370	273 / 61,370	273 / 61,370	273 / 61,370

Max. bucket digging force ISO with ripper bucket 345 kN / 77,560 lbf

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 11.0 t/24,250 lb, mono boom 6.70 m/22', stick 2.90 m/9'6" and HD bucket 2.70 m³/3.53 yd³ (3,100 kg/6,830 lb).

Undercarriage		HD	
Pad width	mm/in	500 / 20"	600 / 24"
Weight	kg/lb	55,500 / 122,360	56,050 / 123,570
Ground pressure	kg/cm ² /psi	1.14 / 16.2	0.96 / 13.7

Undercarriage		LC-V	
Pad width	mm/in	500 / 20"	600 / 24"
Weight	kg/lb	58,050 / 127,980	58,600 / 129,190
Ground pressure	kg/cm ² /psi	1.19 / 16.9	1.00 / 14.2

Optional: removable counterweight 12.0 t/26,460 lb

(removable counterweight 12.0 t/26,460 lb increases the operating weight by 1,000 kg/2,210 lb and ground pressure by 0.02 kg/cm²/0.3 psi) see load tables on page 18 and 19

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

				HD-Undercarriage (with track pads 600 mm/24")				LC-V-Undercarriage (with track pads 600 mm/24")					
Cutting width	Capacity ISO 7451	Weight		2.35	Stick length (m/ft in)	2.90	3.35	3.80	2.35	Stick length (m/ft in)	2.90	3.35	3.80
mm in	m³ yd³	kg lb		7'9"	9'6"	11'	12'6"		7'9"	9'6"	11'	12'6"	
with counterweight 11.0 t/24,250 lb													
STD ¹⁾	1,550	2.00	2,250	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	61"	2.62	4,960										
	1,750	2.35	2,450	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	69"	3.07	5,400										
	1,950	2.70	2,650	▲	▲	■	△	▲	▲	▲	■	△	
	77"	3.53	5,840										
	1,950	3.00	2,750	▲	▲	▲	△	▲	▲	▲	▲	▲	△
	77"	3.92	6,060										
	2,100	3.30	2,850	▲	▲	■	-	▲	▲	▲	■	-	
	83"	4.32	6,280										
HD ²⁾	1,550	2.00	2,650	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	61"	2.62	5,840										
	1,750	2.35	2,850	▲	▲	▲	■	▲	▲	▲	▲	▲	■
	69"	3.07	6,280										
	1,950	2.70	3,100	▲	▲	▲	△	▲	▲	▲	▲	▲	△
	77"	3.53	6,830										
	1,950	3.00	3,200	▲	▲	■	-	▲	▲	▲	■	-	
	77"	3.92	7,060										
	1,950	3.30	3,250	▲	▲	△	-	▲	▲	▲	△	-	
	77"	4.32	7,170										
STD ¹⁾	2,100	3.50	3,500	■	▲	△	-	▲	■	▲	△	-	
	83"	4.58	7,720										
with counterweight 12.0 t/26,460 lb													
1,550	2.00	2,250	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
61"	2.62	4,960											
1,750	2.35	2,450	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
69"	3.07	5,400											
1,950	2.70	2,650	▲	▲	■	△	▲	▲	▲	■	△		
77"	3.53	5,840											
1,950	3.00	2,750	▲	▲	▲	△	▲	▲	▲	▲	▲	△	
77"	3.92	6,060											
2,100	3.30	2,850	▲	▲	■	-	▲	▲	▲	■	-		
HD ²⁾	83"	4.32	6,280										
	1,550	2.00	2,650	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	61"	2.62	5,840										
	1,750	2.35	2,850	▲	▲	▲	■	▲	▲	▲	▲	▲	■
	69"	3.07	6,280										
	1,950	2.70	3,100	▲	▲	▲	△	▲	▲	▲	▲	▲	△
	77"	3.53	6,830										
	1,950	3.00	3,200	▲	▲	■	-	▲	▲	▲	■	-	
	77"	3.92	7,060										
	1,950	3.30	3,250	▲	▲	△	-	▲	▲	▲	△	-	
STD ¹⁾	2,100	3.50	3,500	▲	▲	△	-	▲	■	▲	△	-	
	83"	4.58	7,720										

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

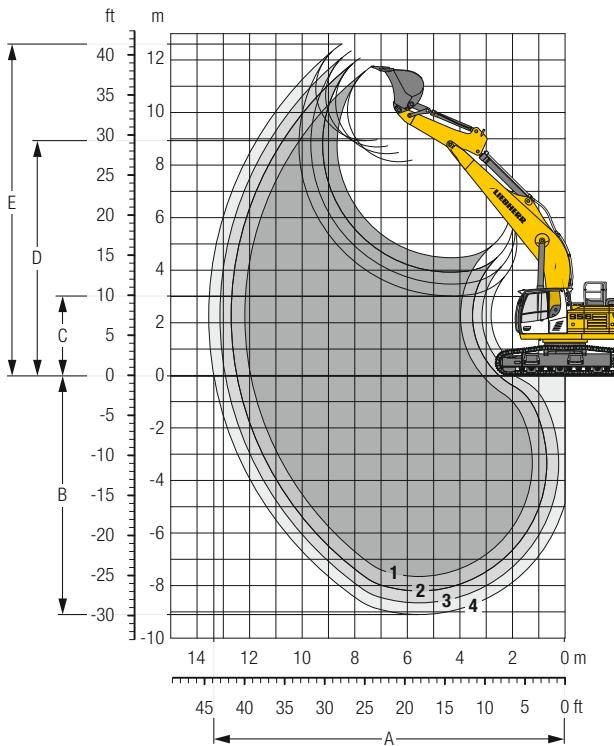
²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³, ■ = ≤ 1.8 t/m³/3,000 lb/yd³, ▲ = ≤ 1.65 t/m³/2,800 lb/yd³, ■ = ≤ 1.5 t/m³/2,500 lb/yd³, △ = ≤ 1.2 t/m³/2,000 lb/yd³, - = not authorized

Backhoe Bucket

with Mono Boom 7.60 m/24'11" and Counterweight 11.0 t/24,250 lb



Digging Envelope

		1	2	3	4
without quick coupler	m/ft/in	2.35/ 7'9"	2.90/ 9' 6"	3.35/11'	3.80/12' 6"
Stick length	m/ft/in	11.95/39'2"	12.50/41'	12.90/42'4"	13.35/43'10"
A Max. reach at ground level	m/ft/in	7.65/25'1"	8.20/26'11"	8.65/28'5"	9.10/29'10"
B Max. digging depth	m/ft/in	4.45/14'6"	3.90/12'10"	3.45/11'4"	3.00/ 9'10"
C Min. dumping height	m/ft/in	8.10/26'7"	8.40/27' 7"	8.70/28'7"	8.90/29' 2"
D Max. dumping height	m/ft/in	11.70/38'5"	12.05/39' 6"	12.35/40'6"	12.60/41' 4"
E Max. cutting height	m/ft/in				

Forces

		1	2	3	4
without quick coupler	kN/lbf	249/55,980	218/49,010	198/44,510	182/40,920
Stick digging force (ISO 6015)	kN/lbf	316/71,040	316/71,040	316/71,040	316/71,040
Bucket digging force (ISO 6015)	kN/lbf	235/52,830	207/46,540	189/42,490	174/39,120
Stick digging force (SAE J1179)	kN/lbf	273/61,370	273/61,370	273/61,370	273/61,370
Bucket digging force (SAE J1179)	kN/lbf				

Max. bucket digging force ISO with ripper bucket

345 kN/77,560 lbf

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 11.0 t/24,250 lb, mono boom 7.60 m/24'11", stick 2.90 m/9'6" and bucket 2.00 m³/2.62 yd³ (2,250 kg/4,960 lb).

Undercarriage		HD		
Pad width	mm/in	500/20"	600/24"	750/30"
Weight	kg/lb	55,100/121,480	55,650/122,690	56,450/124,450
Ground pressure	kg/cm ² /psi	1.13/16.1	0.95/13.5	0.77/11.0

Undercarriage		LC-V		
Pad width	mm/in	500/20"	600/24"	750/30"
Weight	kg/lb	57,650/127,100	58,200/128,310	59,000/130,070
Ground pressure	kg/cm ² /psi	1.18/16.8	0.99/14.1	0.81/11.5

Optional: removable counterweight 12.0 t/26,460 lb

(removable counterweight 12.0 t/26,460 lb increases the operating weight by 1,000 kg/2,210 lb and ground pressure by 0.02 kg/cm²/0.3 psi) see load tables on page 22 and 23

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

STD ¹⁾	Cutting width mm in	Capacity ISO 7451 m ³ yd ³	Weight kg lb	HD-Undercarriage (with track pads 600 mm/24")				LC-V-Undercarriage (with track pads 600 mm/24")			
				Stick length (m/ft in)		Stick length (m/ft in)		Stick length (m/ft in)		Stick length (m/ft in)	
				2.35 7'9"	2.90 9'6"	3.35 11'	3.80 12'6"	2.35 7'9"	2.90 9'6"	3.35 11'	3.80 12'6"
with counterweight 11.0 t/24,250 lb											
STD ¹⁾	1,550 61"	2.00 2.62 4,960	2,250	▲	▲	▲	▲	▲	▲	▲	▲
	1,750 69"	2.35 3.07 5,400	2,450	▲	▲	▲	▲	▲	▲	▲	▲
	1,950 77"	2.70 3.53 5,840	2,650	▲	■	▲	△	▲	▲	■	△
	1,950 77"	3.00 3.92 6,060	2,750	■	▲	■	△	■	▲	■	△
	2,100 83"	3.30 4.32 6,280	2,850	▲	△	△	-	▲	■	△	-
	1,550 61"	2.00 2.62 5,840	2,650	▲	▲	▲	■	▲	▲	▲	■
	1,750 69"	2.35 3.07 6,280	2,850	▲	▲	■	■	▲	▲	▲	■
	1,950 77"	2.70 3.53 6,830	3,100	■	▲	■	△	▲	■	▲	△
	1,950 77"	3.00 3.92 7,060	3,200	▲	■	△	-	■	▲	■	-
	with counterweight 12.0 t/26,460 lb										
STD ¹⁾	1,550 61"	2.00 2.62 4,960	2,250	▲	▲	▲	▲	▲	▲	▲	▲
	1,750 69"	2.35 3.07 5,400	2,450	▲	▲	▲	▲	▲	▲	▲	▲
	1,950 77"	2.70 3.53 5,840	2,650	▲	▲	■	△	▲	▲	■	△
	1,950 77"	3.00 3.92 6,060	2,750	▲	■	▲	△	▲	■	▲	△
	2,100 83"	3.30 4.32 6,280	2,850	■	■	△	-	■	▲	△	-
	1,550 61"	2.00 2.62 5,840	2,650	▲	▲	▲	■	▲	▲	▲	■
	1,750 69"	2.35 3.07 6,280	2,850	▲	▲	▲	■	▲	▲	▲	■
	1,950 77"	2.70 3.53 6,830	3,100	▲	■	▲	△	▲	▲	▲	△
	1,950 77"	3.00 3.92 7,060	3,200	■	▲	■	-	▲	■	■	-
	with counterweight 12.0 t/26,460 lb										

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

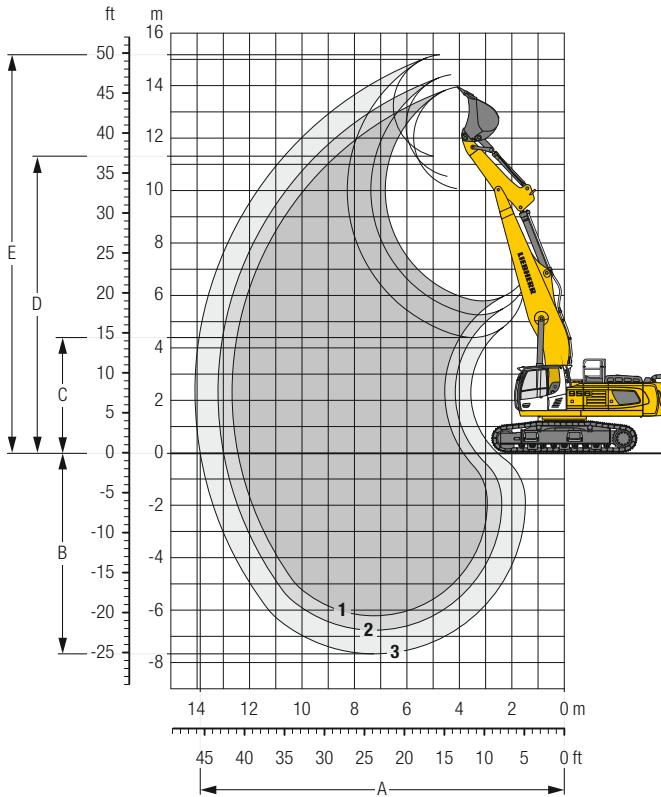
²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³, ■ = ≤ 1.8 t/m³/3,000 lb/yd³, ▲ = ≤ 1.65 t/m³/2,800 lb/yd³, ■ = ≤ 1.5 t/m³/2,500 lb/yd³, △ = ≤ 1.2 t/m³/2,000 lb/yd³, - = not authorized

Backhoe Bucket

with Mono Boom Straight 8.00 m/26'3" and Counterweight 11.0 t/24,250 lb



Digging Envelope

		1	2	3
without quick coupler	m/ft/in	2.35 / 7' 9"	2.90 / 9' 6"	3.80 / 12' 6"
Stick length	m/ft/in	12.45 / 40' 10"	13.00 / 42' 8"	13.90 / 45' 7"
A Max. reach at ground level	m/ft/in	6.20 / 20' 4"	6.75 / 22' 2"	7.65 / 25' 1"
B Max. digging depth	m/ft/in	5.80 / 19'	5.25 / 17' 3"	4.40 / 14' 5"
C Min. dumping height	m/ft/in	10.05 / 33'	10.55 / 34' 7"	12.30 / 40' 4"
D Max. dumping height	m/ft/in	13.95 / 45' 9"	14.40 / 47' 3"	15.20 / 49' 10"
E Max. cutting height	m/ft/in			

Forces

		1	2	3
without quick coupler	kN/lbf	249 / 55,980	218 / 49,010	182 / 40,920
Stick digging force (ISO 6015)	kN/lbf	316 / 71,040	316 / 71,040	316 / 71,040
Bucket digging force (ISO 6015)	kN/lbf	235 / 52,830	207 / 46,540	174 / 39,120
Stick digging force (SAE J1179)	kN/lbf	273 / 61,370	273 / 61,370	273 / 61,370
Bucket digging force (SAE J1179)	kN/lbf			
Max. bucket digging force ISO with ripper bucket				345 kN / 77,560 lbf

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 11.0 t/24,250 lb, mono boom straight 8.00 m/26'3", stick 2.90 m/9'6" and bucket 2.00 m³/2.62 yd³ (2,250 kg/4,960 lb).

Undercarriage			
	mm/in	500 / 20"	600 / 24"
Pad width	kg/lbf	55,150 / 121,590	55,700 / 122,800
Weight	kg/cm ² /psi	1.13 / 16.1	0.95 / 13.5
Ground pressure	kg/cm ² /psi	0.77 / 11.0	

Optional: removable counterweight 12.0 t/26,460 lb

(removable counterweight 12.0 t/26,460 lb increases the operating weight by 1,000 kg/2,210 lb and ground pressure by 0.02 kg/cm²/0.3 psi) see load tables on page 25

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

	Cutting width mm in	Capacity ISO 7451 m³ yd³	Weight kg lb	HD-Undercarriage (with track pads 600 mm/24")	Stick length (m/ft in)	
			2.35 7'9"		2.90 9'6"	3.80 12'6"
with counterweight 11.0 t/24,250 lb						
STD ¹⁾	1,350	1.65	2,100	▲	▲	▲
	53"	2.16	4,630			
	1,550	2.00	2,250	▲	▲	■
	61"	2.62	4,960			
	1,750	2.35	2,450	▲	■	■
	69"	3.07	5,400			
	1,950	2.70	2,650	■	■	△
HD ²⁾	77"	3.53	5,840			
	1,950	3.00	2,750	■	△	-
	77"	3.92	6,060			
	1,350	1.65	2,350	▲	▲	▲
	53"	2.16	5,180			
	1,550	2.00	2,650	▲	▲	▲
	61"	2.62	5,840			
STD ¹⁾	1,750	2.35	2,850	▲	▲	△
	69"	3.07	6,280			
	1,950	2.70	3,100	▲	△	△
	77"	3.53	6,830			
	with counterweight 12.0 t/26,460 lb					
	1,350	1.65	2,100	▲	▲	▲
	53"	2.16	4,630			
HD ²⁾	1,550	2.00	2,250	▲	▲	▲
	61"	2.62	4,960			
	1,750	2.35	2,450	▲	▲	■
	69"	3.07	5,400			
	1,950	2.70	2,650	▲	▲	△
	77"	3.53	5,840			
	1,950	3.00	2,750	▲	■	△
STD ¹⁾	77"	3.92	6,060			
	1,350	1.65	2,350	▲	▲	▲
	53"	2.16	5,180			
	1,550	2.00	2,650	▲	▲	■
	61"	2.62	5,840			
	1,750	2.35	2,850	▲	■	△
	69"	3.07	6,280			
HD ²⁾	1,950	2.70	3,100	■	■	△
	77"	3.53	6,830			

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

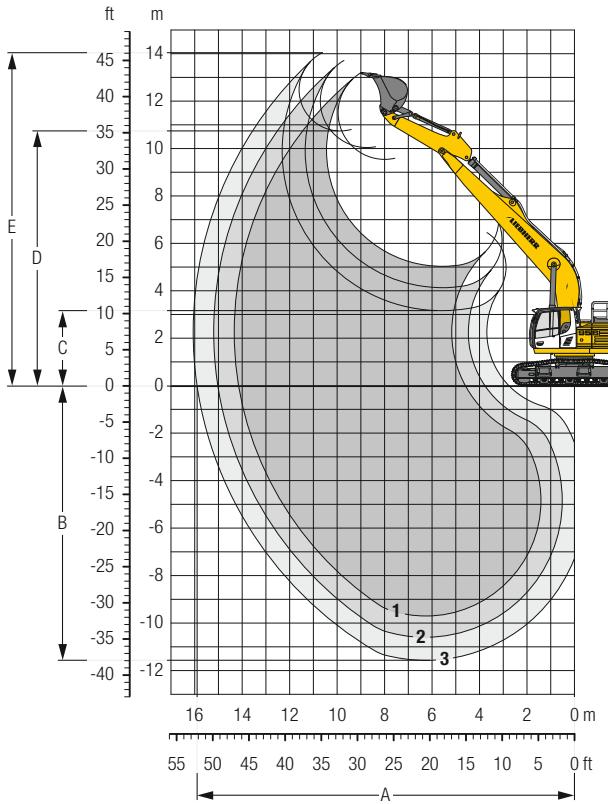
²⁾ HD bucket with Liebherr teeth Z 70 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³, ■ = ≤ 1.8 t/m³/3,000 lb/yd³, ▲ = ≤ 1.65 t/m³/2,800 lb/yd³, ■ = ≤ 1.5 t/m³/2,500 lb/yd³, △ = ≤ 1.2 t/m³/2,000 lb/yd³, - = not authorized

Backhoe Bucket

with Mono Boom 9.20 m/30'2" and Counterweight 11.0 t/24,250 lb



Digging Envelope

		1	2	3*
without quick coupler	m/ft/in	2.90/9'6"	3.80/12'6"	5.00/16'5"
Stick length	m/ft/in	14.10/46'3"	15.00/49'3"	15.90/52'2"
A Max. reach at ground level	m/ft/in	9.70/31'10"	10.60/34'9"	11.60/38'1"
B Max. digging depth	m/ft/in	5.05/16'7"	4.15/13'7"	3.15/10'4"
C Min. dumping height	m/ft/in	9.55/31'4"	10.05/33'	10.75/35'3"
D Max. dumping height	m/ft/in	13.15/43'2"	13.70/44'11"	14.00/45'11"
E Max. cutting height	m/ft/in			

Forces

		1	2	3*
without quick coupler	kN/lbf	218/49,010	182/40,920	149/33,500
Stick digging force (ISO 6015)	kN/lbf	316/71,040	316/71,040	235/52,530
Bucket digging force (ISO 6015)	kN/lbf	207/46,540	174/39,120	145/32,600
Stick digging force (SAE J1179)	kN/lbf	273/61,370	273/61,370	209/46,990
Bucket digging force (SAE J1179)	kN/lbf			

* with kinematic R 946 Litronic®

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 11.0 t/24,250 lb, mono boom 9.20 m/30'2", stick 3.80 m/12'6" and bucket 1.65 m³/2.16 yd³ (2,100 kg/4,630 lb).

Undercarriage		LC-V		
Pad width	mm/in	500/20"	600/24"	750/30"
Weight	kg/lbf	57,850/127,540	58,400/128,750	59,200/130,510
Ground pressure	kg/cm ² /psi	1.19/16.9	1.00/14.2	0.81/11.5

Optional: removable counterweight 12.0 t/26,460 lb

(removable counterweight 12.0 t/26,460 lb increases the operating weight by 1,000 kg/2,210 lb and ground pressure by 0.02 kg/cm²/0.3 psi) see load tables on page 28 and 29

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

Cutting width mm in	Capacity ISO 7451 m³ yd³	Weight kg lb	LC-V-Undercarriage (with track pads 600 mm/24")		
			Stick length (m/ft in)	3.80 12'6"	5.00 16'5"
with counterweight 11.0 t/24,250 lb					
STD ¹⁾	1,350 53"	1.65 2.16	2,100 4,630	▲	▲
	1,550 61"	2.00 2.62	2,250 4,960	■	■
	1,750 69"	2.35 3.07	2,450 5,400	■	△
	1,200 47"	1.25 1.63	1,300 2,870	—	—
	1,350 53"	1.50 1.96	1,400 3,090	—	—
	1,500 59"	1.75 2.29	1,500 3,310	—	—
STD ²⁾	1,650 65"	2.00 2.62	1,600 3,530	—	—
	with counterweight 12.0 t/26,460 lb				
	1,350 53"	1.65 2.16	2,100 4,630	▲	▲
	1,550 61"	2.00 2.62	2,250 4,960	▲	▲
	1,750 69"	2.35 3.07	2,450 5,400	▲	△
	1,950 77"	2.70 3.53	2,650 5,840	△	△
STD ²⁾	1,950 77"	3.00 3.92	2,750 6,060	△	—
	1,200 47"	1.25 1.63	1,300 2,870	—	—
	1,350 53"	1.50 1.96	1,400 3,090	—	—
	1,500 59"	1.75 2.29	1,500 3,310	—	—
	1,650 65"	2.00 2.62	1,600 3,530	—	—

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ Standard bucket with Liebherr teeth Z 70 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

²⁾ Standard bucket from R 946 Litronic with Liebherr teeth Z 50 (appropriate for materials up to classification 5, according to VOB, Section C, DIN 18300)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³, ■ = ≤ 1.8 t/m³/3,000 lb/yd³, ▲ = ≤ 1.65 t/m³/2,800 lb/yd³, ■ = ≤ 1.5 t/m³/2,500 lb/yd³, △ = ≤ 1.2 t/m³/2,000 lb/yd³, — = not authorized

Lift Capacities

with Mono Boom 6.70 m/22', Counterweight 11.0 t/24,250 lb and Track Pads 750 mm/30"

Stick 2.35 m / 7'9"

Under-carriage	Stick 2.35 m / 7'9"								m ft in
	3.0 m 10 ft	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	10.2* 10.2*	6.2	
9.0 m t 30 ft lb									
7.5 m t 25 ft lb				11.5* 11.5*			9.2* 9.2*	7.6	
6.0 m t 20 ft lb			13.2* 13.2*	11.7* 11.7*			8.9* 8.9*	8.4	20.4* 20.4* 24.6"
4.5 m t 15 ft lb	21.8* 21.8*	15.2* 15.2*	12.6* 12.6*	9.3* 9.3*			8.9* 8.9*	9.0	19.6* 19.6* 27.7"
3.0 m t 10 ft lb	45.9* 45.9*	32.7* 32.7*	27.4* 27.4*				19.5* 19.5*	29.5"	
1.5 m t 5 ft lb			17.0 17.3*	12.6 13.7*	9.8 11.8*		9.2* 9.2*	9.2	
0 m t 0 ft lb			36.7 37.3*	27.1 29.6*	20.9 25.7*		20.2* 20.2* 30.4"		
-1.5 m t -5 ft lb			16.4 18.7*	12.2 14.5*	9.5 12.2*		9.2 9.8*	9.2	
-3.0 m t -10 ft lb			35.2 40.2*	26.2 31.4*	20.5 26.3*		20.3 21.6* 30.4"		
-4.5 m t -15 ft lb			16.1 19.0*	11.9 14.8*			9.5 10.9*	9.0	
-6.0 m t -20 ft lb			37.5* 37.5*	34.6 40.9*	25.7 32.0*		21.0 24.1* 29.5"		
-1.5 m t -5 ft lb	15.4* 15.4*	23.6* 23.6*	16.1 18.3*	11.9 14.4*			10.4 12.4*	8.4	
-3.0 m t -10 ft lb	35.4* 35.4*	51.2* 51.2*	34.6 39.5*	25.7 31.0*			23.0 27.3* 27.7"		
-4.5 m t -15 ft lb			16.0 21.0*	16.4 16.4*			12.4 12.5* 7.5		
-6.0 m t -20 ft lb			35.2 40.2*	26.2 31.4*	20.5 26.3*		27.4 27.4* 24.7"		
-1.5 m t -5 ft lb			16.1* 16.1*				11.8* 11.8*	6.1	
-3.0 m t -10 ft lb			34.3* 34.3*				25.8* 25.8* 19.8"		

Stick 2.90 m / 9'6"

Under-carriage	Stick 2.90 m / 9'6"								m ft in
	3.0 m 10 ft	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	10.2* 10.2*	6.2	
9.0 m t 30 ft lb									
7.5 m t 25 ft lb				10.4* 10.4*			22.9* 22.9*		7.7* 7.7* 6.9
6.0 m t 20 ft lb				19.4* 19.4*	14.2* 14.2*	11.9* 11.9*	10.0 10.8*		7.1* 7.1* 8.2
4.5 m t 15 ft lb	41.1* 41.1*	30.6* 30.6*	25.8* 25.8*	21.5 23.5*					15.7* 15.7* 26.7"
3.0 m t 10 ft lb	14.1* 14.1*	16.5* 16.5*	12.7 13.1*	9.8 11.3*			7.8* 7.8*		6.9* 6.9* 9.0
1.5 m t 5 ft lb	37.1* 37.1*	35.5* 35.5*	27.2 28.3*	21.0 24.6*					15.1* 15.1* 29.5"
0 m t 0 ft lb	11.9* 11.9*	16.5 18.2*	12.2 14.1*	9.5 11.8*			9.5 11.8*		7.5* 7.5* 9.8
-1.5 m t -5 ft lb	29.1* 29.1*	35.5 39.1*	26.2 30.5*	20.4 25.6*			9.3 12.0*		16.6* 16.6* 32"
-3.0 m t -10 ft lb	18.2 18.2*	16.1 18.8*	11.9 14.7*	9.3 12.0*			8.3* 8.3*	9.5	18.3* 18.3* 31.2"
-4.5 m t -15 ft lb	42.4* 42.4*	34.5 40.7*	25.6 31.7*	20.1 26.0*					18.3* 18.3* 31.2"
-6.0 m t -20 ft lb	15.5* 15.5*	24.6 24.7*	16.0 18.6*	11.8 14.5*			9.4 9.6*	9.0	
-1.5 m t -5 ft lb	34.9* 34.9*	52.8 53.4*	34.3 40.1*	25.3 31.3*			20.8 21.3* 29.6"		
-3.0 m t -10 ft lb	26.0* 26.0*	22.4* 22.4*	16.1 17.2*	11.9 13.3*			10.9 11.8*	8.2	10.9 11.8* 8.2
-4.5 m t -15 ft lb	58.8* 58.8*	48.4* 48.4*	34.7 37.0*	25.7 28.4*			24.1 26.0* 26.7"		
-6.0 m t -20 ft lb	24.1* 24.1*	18.4* 18.4*	14.0* 14.0*				11.6* 11.6*	6.9	11.6* 11.6* 6.9
-1.5 m t -5 ft lb	51.6* 51.6*	39.4* 39.4*	29.6* 29.6*				25.6* 25.6* 22.4"		
-3.0 m t -10 ft lb	17.7* 17.7*	15.4 18.8*	11.4 14.6*	8.9 12.0*			8.2* 8.2*	9.5	
-4.5 m t -15 ft lb	41.2* 41.2*	33.2 40.6*	24.5 31.6*	19.2 26.0*			18.1* 18.1* 31.2"		
-6.0 m t -20 ft lb	14.8* 14.8*	23.6 24.8*	15.3 18.6*	11.3 14.6*			9.0 9.5*	9.0	
-1.5 m t -5 ft lb	33.4* 33.4*	50.6 53.7*	32.9 40.2*	24.3 31.4*			19.7 21.0* 29.6"		
-3.0 m t -10 ft lb	25.2* 25.2*	22.6* 22.6*	15.4 17.3*	11.4 13.4*			10.3 11.8*	8.2	
-4.5 m t -15 ft lb	57.0* 57.0*	48.9* 48.9*	33.2 37.3*	24.6 28.8*			22.8 26.0* 26.7"		
-6.0 m t -20 ft lb	24.6* 24.6*	18.8* 18.8*	14.3* 14.3*				11.7* 11.7*	6.9	11.7* 11.7* 6.9
-1.5 m t -5 ft lb	52.8* 52.8*	40.2* 40.2*	30.4* 30.4*				25.7* 25.7* 22.4"		



Height Can be slewed through 360°



In longitudinal position of undercarriage



Max. reach * Limited by hydr. capacity

The load values are quoted in tons (t)/lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 750 mm/30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 825 kg/1,820 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift Capacities

with Mono Boom Straight 8.00 m/26'3", Counterweight 11.0 t/24,250 lb and Track Pads 750 mm/30"

Stick 2.35 m/7'9"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb							
10.5 m t	15.0* 15.0*						
35 ft lb	33.2* 33.2*						
9.0 m t	14.7* 14.7*	12.8* 12.8*					
30 ft lb	32.1* 32.1*	27.8 28.0*					
7.5 m t	20.0* 20.0*	15.4* 15.4*	12.7 12.9*	9.4 11.3*			
25 ft lb	42.9* 42.9*	33.4* 33.4*	27.4 28.0*	20.2 24.8*			
6.0 m t	16.7* 16.7*	12.2 13.4*	9.3 11.4*				
20 ft lb	35.9* 35.9*	26.3 29.0*	19.9 24.7*				
4.5 m t		11.5 13.9*	8.9 11.5*				
15 ft lb	33.4 38.7*	24.9 30.1*	19.3 25.0*				
3.0 m t	10.9 14.1*	8.6 11.6*	6.9 9.6*				
10 ft lb	23.6 30.6*	18.6 25.1*	15.0 20.5*				
1.5 m t		10.6 13.8*	8.4 11.3*	6.8 9.2*			
5 ft lb	22.8 30.0*	18.1 24.5*	14.8 19.5*				
0 m t	10.4 12.9*	8.2 10.6*					
0 ft lb	29.4* 29.4*	22.5 27.9*	17.8 22.9*				
-1.5 m t	12.5* 12.5*	10.5 11.3*	8.3 9.3*				
-5 ft lb	27.5* 27.5*	22.6 24.5*	17.9 19.9*				
-3.0 m t	9.9* 9.9*	9.0* 9.0*	6.7* 6.7*				
-10 ft lb	21.5* 21.5*	19.3* 19.3*	13.5* 13.5*				
-4.5 m t							
-15 ft lb							

Stick 2.90 m/9'6"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb	31.0* 31.0*						
10.5 m t	14.0* 14.0*						
35 ft lb	30.8* 30.8*						
9.0 m t	14.0* 14.0*	12.1* 12.1*					
30 ft lb	30.4* 30.4*	26.5* 26.5*					
7.5 m t	15.3* 15.3*	14.7* 14.7*	12.4* 12.4*	9.6 10.9*			
25 ft lb	32.7* 32.7*	31.8* 31.8*	26.9* 26.9*	20.5 23.7*			
6.0 m t	16.0* 16.0*	12.3 12.9*	9.3 11.0*	7.2 8.6*			
20 ft lb	34.5* 34.5*	26.6 28.0*	20.1 24.0*				
4.5 m t	15.8 17.4*	11.6 13.6*	9.0 11.3*	7.1 9.7*			
15 ft lb	34.3 37.5*	25.2 29.4*	19.3 24.5*	15.2 21.0*			
3.0 m t	11.0 14.0*	8.6 11.4*	6.9 9.6*				
10 ft lb	31.8 37.7*	23.8 30.3*	18.6 24.8*	14.9 20.8*			
1.5 m t		10.6 13.9*	8.3 11.3*	6.8 9.4*			
5 ft lb	28.1* 28.1*	22.8 30.1*	18.0 24.5*	14.6 20.1*			
0 m t	14.1 15.4*	10.4 13.2*	8.2 10.8*	6.7 8.7*			
0 ft lb	30.4 34.5*	22.4 28.6*	17.6 23.4*	14.4 18.5*			
-1.5 m t	13.8* 13.8*	10.3 11.9*	8.1 9.7*	6.8 7.2*			
-5 ft lb	30.2* 30.2*	22.3 25.7*	17.6 20.9*				
-3.0 m t	11.2* 11.2*	9.8* 9.8*	7.8* 7.8*				
-10 ft lb	24.5* 24.5*	21.2* 21.2*	16.5* 16.5*				
-4.5 m t		7.8* 7.8*	6.7* 6.7*				
-15 ft lb		14.1* 14.1*					

Stick 3.80 m/12'6"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb	10.9* 10.9*	22.7* 22.7*					
10.5 m t		10.3* 10.3*					
35 ft lb	22.2* 22.2*						
9.0 m t		10.6* 10.6*	9.8* 9.8*				
30 ft lb	23.4* 23.4*	23.4* 23.4*	20.7* 20.7*				
7.5 m t	10.6* 10.6*	11.2* 11.2*	9.8 10.2*	7.5 8.2*			
25 ft lb	23.3* 23.3*	24.6* 24.6*	21.1 22.2*	15.0* 15.0*			
6.0 m t	18.0* 18.0*	14.7* 14.7*	12.2* 12.2*	9.5 10.5*	7.4 9.3*		
20 ft lb	35.3* 35.3*	31.1* 31.1*	26.4* 26.4*	20.5 22.8*	15.8 20.2*		
4.5 m t	16.4* 16.4*	16.4* 16.4*	12.0 13.0*	9.1 10.9*	7.2 9.4*		
15 ft lb	35.5* 35.5*	25.8 28.1*	19.7 23.6*	15.4 20.4*			
3.0 m t	15.3 17.7*	11.3 13.6*	8.7 11.2*	6.9 9.5*	5.6 6.3*	4.8* 4.8*	12.1
10 ft lb	33.0 38.2*	24.3 29.5*	18.8 24.3*	14.9 20.6*		10.7* 10.7*	39.8*
1.5 m t	14.4 17.9*	10.7 13.9*	8.4 11.3*	6.7 9.4*	5.5 6.4*	5.0* 5.0*	12.1
5 ft lb	31,1 38,7*	23,1 30,1*	18,0 24,5*	14,5 20,4*		10,9* 10,9*	39,8*
0 m t	14,1 17,0*	10,4 13,6*	8,1 11,0*	6,6 9,1*		5,2* 5,2*	11,9
0 ft lb	30,3 37,0*	22,4 29,4*	17,5 23,9*	14,2 19,6*		11,5* 11,5*	39*
-1.5 m t	9.9* 14.0	15.5* 16.2*	10.2 12.7*	8.0 10.3*	6.5 8.3*	5.6* 5.6*	11.5
-5 ft lb	22,9* 32,3*	30,2 33,6*	22,1 27,4*	17,3 22,3*	14,1 17,7*	12,4* 12,4*	37,8*
-3.0 m t	14,8* 14,8*	13,2* 13,2*	10,3 11,1*	8,0 9,0*	6,6 6,7*	5,7* 5,7*	10,9
-10 ft lb	32,3* 32,3*	28,7* 28,7*	22,2 23,9*	17,4 19,2*	13,6* 13,6*	12,5* 12,5*	35,6*
-4.5 m t	10,9* 10,9*	10,2* 10,2*	8,6* 8,6*	6,6* 6,6*		4,5* 4,5*	10,0
-15 ft lb	23,6* 23,6*	21,9* 21,9*	18,4* 18,4*	13,8* 13,8*		9,7* 9,7*	32,5*

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

The load values are quoted in tons (t) /lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 750 mm/30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 825 kg/1,820 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift Capacities

with Mono Boom Straight 8.00 m/26'3", Removable Counterweight 12.0 t/26,460 lb and Track Pads 750 mm/30"

Stick 2.35 m/7'9"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb							
10.5 m t	15.0* 15.0*						
35 ft lb	33.2* 33.2*						
9.0 m t	14.7* 14.7*	12.8* 12.8*					
30 ft lb	32.1* 32.1*	28.0* 28.0*					
7.5 m t	20.0* 20.0*	15.4* 15.4*	12.9* 12.9*	10.0 11.3*			
25 ft lb	42.9* 42.9*	33.4* 33.4*	28.0* 28.0*	21.4 24.8*			
6.0 m t	16.7* 16.7*	12.9 13.4*	9.8 11.4*				
20 ft lb	35.9* 35.9*	27.8 29.0*	21.1 24.7*				
4.5 m t		12.2 13.9*	9.5 11.5*				
15 ft lb	35.3 38.7*	26.4 30.1*	20.5 25.0*				
3.0 m t		11.6 14.1*	9.1 11.6*	7.4 9.6*			
10 ft lb		25.1 30.6*	19.8 25.1*	16.0 20.5*			
1.5 m t		11.3 13.8*	8.9 11.3*	7.3 9.2*			
5 ft lb		24.3 30.0*	19.2 24.5*	15.8 19.5*			
0 m t		11.1 12.9*	8.8 10.6*				
0 ft lb		29.4* 29.4*	24.0 27.9*	19.0 22.9*			
-1.5 m t		12.5* 12.5*	11.2 11.3*	8.8 9.3*			
-5 ft lb		27.5* 27.5*	24.1 24.5*	19.1 19.9*			
-3.0 m t		9.9* 9.9*	9.0* 9.0*	6.7* 6.7*			
-10 ft lb		21.5* 21.5*	19.3* 19.3*	13.5* 13.5*			
-4.5 m t							
-15 ft lb							

Stick 2.90 m/9'6"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb							
10.5 m t	14.0* 14.0*						
35 ft lb	30.8* 30.8*						
9.0 m t	14.0* 14.0*	12.1* 12.1*					
30 ft lb	30.4* 30.4*	26.5* 26.5*					
7.5 m t	15.3* 15.3*	14.7* 14.7*	12.4* 12.4*	10.1 10.9*			
25 ft lb	32.7* 32.7*	31.8* 31.8*	26.9* 26.9*	21.7 23.7*			
6.0 m t	16.0* 16.0*	12.9 12.9*	9.9 11.0*	7.7 8.6*			
20 ft lb	34.5* 34.5*	28.0* 28.0*	21.3 24.0*				
4.5 m t	16.7 16.7	29.4* 29.4*	20.5 24.5*	16.2 21.0*			
15 ft lb	36.2 37.5*	26.7 27.7*	21.0 24.0*				
3.0 m t		11.7 14.0*	9.1 11.4*	7.4 9.6*			
10 ft lb	33.8 37.7*	25.3 30.3*	19.8 24.8*	15.9 20.8*			
1.5 m t		11.3 13.9*	8.9 11.3*	7.2 9.4*			
5 ft lb	28.1* 28.1*	24.3 30.1*	19.1 24.5*	15.6 20.1*			
0 m t	15.0 15.4*	11.0 13.2*	8.7 10.8*	7.1 8.7*			
0 ft lb	32.4 34.5*	23.9 28.6*	18.8 23.4*	15.4 18.5*			
-1.5 m t	13.8* 13.8*	11.0 11.9*	8.7 9.7*	7.2* 7.2*			
-5 ft lb	30.2* 30.2*	23.8 25.7*	18.8 20.9*				
-3.0 m t	11.2* 11.2*	9.8* 9.8*	7.8* 7.8*				
-10 ft lb	24.5* 24.5*	21.2* 21.2*	16.5* 16.5*				
-4.5 m t		7.8* 7.8*	6.7* 6.7*				
-15 ft lb		14.1* 14.1*					

Stick 3.80 m/12'6"

Under-carriage	4.5 m 15 ft	6.0 m 20 ft	7.5 m 25 ft	9.0 m 30 ft	10.5 m 35 ft	12.0 m 40 ft	m ft in
12.0 m t							
40 ft lb		10.9* 10.9*	22.7* 22.7*				
10.5 m t		10.3* 10.3*					
35 ft lb		22.2* 22.2*					
9.0 m t		10.6* 10.6*	9.8* 9.8*				
30 ft lb		23.4* 23.4*	20.7* 20.7*				
7.5 m t	10.6* 10.6*	11.2* 11.2*	10.2* 10.2*	7.9 8.2*			
25 ft lb	23.3* 23.3*	24.6* 24.6*	22.2* 22.2*	15.0* 15.0*			
6.0 m t	18.0* 18.0*	14.7* 14.7*	12.2* 12.2*	10.1 10.5*	7.8 9.3*		
20 ft lb	35.3* 35.3*	31.1* 31.1*	26.4* 26.4*	21.7 22.8*	16.8 20.2*		
4.5 m t	16.4* 16.4*	12.7 13.0*	9.7 10.9*	7.6 9.4*			
15 ft lb	35.5* 35.5*	27.3 28.1*	20.8 23.6*	16.4 20.4*			
3.0 m t	16.2 17.7*	12.0 13.6*	9.3 11.2*	7.4 9.5*	6.0 6.3*	4.8* 4.8*	12.1
10 ft lb	35.0 38.2*	25.8 29.5*	20.0 24.3*	15.9 20.6*		10.7* 10.7*	39.8*
1.5 m t	15.3 17.9*	11.4 13.9*	8.9 11.3*	7.2 9.4*	5.9 6.4*	5.0* 5.0*	12.1
5 ft lb	33.1 38.7*	24.6 30.1*	19.2 24.5*	15.5 20.4*		10.9* 10.9*	39.8*
0 m t	15.0 17.0*	11.1 13.6*	8.7 11.0*	7.0 9.1*		5.2* 5.2*	11.9
0 ft lb	32.3 37.0*	23.9 29.4*	18.7 23.9*	15.2 19.6*		11.5* 11.5*	39*
-1.5 m t	9.9* 9.9*	14.9 15.5*	10.9 12.7*	8.6 10.3*	7.0 8.3*	5.6* 5.6*	11.5
-5 ft lb	22.9* 22.9*	32.2 33.6*	23.6 27.4*	18.5 22.3*	15.1 17.7*	12.4* 12.4*	37.8*
-3.0 m t	14.8* 14.8*	13.2* 13.2*	11.0 11.1*	8.6 9.0*	6.7* 6.7*	5.7* 5.7*	10.9
-10 ft lb	32.3* 32.3*	28.7* 28.7*	23.7 23.9*	18.6 19.2*	13.6* 13.6*	12.5* 12.5*	35.7*
-4.5 m t	10.9* 10.9*	10.2* 10.2*	8.6* 8.6*	6.6* 6.6*		4.5* 4.5*	10.0
-15 ft lb	23.6* 23.6*	21.9* 21.9*	18.4* 18.4*	13.8* 13.8*		9.7* 9.7*	32.6*

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

The load values are quoted in tons (t) /lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 750 mm/30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 825 kg/1,820 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Available Buckets

Sticks 2.35 m / 7'9" / 2.90 m / 9'6" / 3.80 m / 12'6"

Mounting	Execution	Width (mm/in)	Capacity (m³/yd³)	Teeth	Number of teeth	Weight (kg/lb)
Direct	STD	1,350/53"	1.65/ 2.16	Z 70	3	2,100/ 4,630
Direct	STD	1,550/61"	2.00/ 2.62	Z 70	4	2,250/ 4,960
Direct	STD	1,750/69"	2.35/ 3.07	Z 70	4	2,450/ 5,400
Direct	STD	1,950/77"	2.70/ 3.53	Z 70	5	2,650/ 5,840
Direct	STD	1,950/77"	3.00/ 3.92	Z 70	5	2,750/ 6,060
Direct	STD	2,100/83"	3.30/ 4.32	Z 70	5	2,850/ 6,280
Direct	HD	1,350/53"	1.65/ 2.16	Z 70	3	2,350/ 5,180
Direct	HD	1,550/61"	2.00/ 2.62	Z 70	4	2,650/ 5,840
Direct	HD	1,750/69"	2.35/ 3.07	Z 70	4	2,850/ 6,280
Direct	HD	1,950/77"	2.70/ 3.53	Z 70	5	3,100/ 6,830
Direct	HD	1,950/77"	3.00/ 3.92	Z 70	5	3,200/ 7,050
Direct	HD	1,950/77"	3.30/ 4.32	Z 70	5	3,250/ 7,170
Direct	HD	2,100/83"	3.50/ 4.58	Z 70	5	3,500/ 7,720
SWA 77	STD	1,350/53"	1.65/ 2.16	Z 70	3	2,250/ 4,960
SWA 77	STD	1,550/61"	2.00/ 2.62	Z 70	4	2,400/ 5,290
SWA 77	STD	1,750/69"	2.35/ 3.07	Z 70	4	2,550/ 5,620
SWA 77	STD	1,950/77"	2.70/ 3.53	Z 70	5	2,800/ 6,170
SWA 77	STD	1,950/77"	3.00/ 3.92	Z 70	5	2,900/ 6,390
SWA 77	HD	1,350/53"	1.65/ 2.16	Z 70	3	2,350/ 5,180
SWA 77	HD	1,550/61"	2.00/ 2.62	Z 70	4	2,700/ 5,950
SWA 77	HD	1,750/69"	2.35/ 3.07	Z 70	4	2,900/ 6,390
SWA 77	HD	1,950/77"	2.70/ 3.53	Z 70	5	3,150/ 6,950

Stick 5.00 m / 16'5" (Kinematic R 946 Litronic®)

Mounting	Execution	Width (mm/in)	Capacity (m³/yd³)	Teeth	Number of teeth	Weight (kg/lb)
Direct	STD	1,200/47"	1.25/ 1.63	Z 50	4	1,300/ 2,865
Direct	STD	1,350/53"	1.50/ 1.96	Z 50	4	1,400/ 3,085
Direct	STD	1,500/59"	1.75/ 2.29	Z 50	4	1,500/ 3,305
Direct	STD	1,650/65"	2.00/ 2.62	Z 50	4	1,600/ 3,525

Serial Equipment

Undercarriage

- Lashing eyes
- Sprocket with dirt ejector
- Track and carrier rollers, sealed and lifetime-lubricated

Uppercarriage

- Access platforms without protruding parts
- Anti-skid surfaces
- Automatic swing brake lock
- Centralized lubrication system (automatic)
- DEF tank filling indicator
- DEF tank lockable access hatch
- Engine hood with gas spring opening
- Extended tool set including tool box
- Handrails
- Lockable fuel tank cap with padlock
- Lockable service doors
- Lockable storage box
- Main switch, manual, lockable
- Protection grid on radiator fan
- Sound insulation
- Swing-out radiators

Hydraulic System

- Dedicated swing circuit
- Filter with integrated fine filters
- Hydraulic pressure measuring ports
- Hydraulic tank shut-off valve
- Magnetic rod
- Pressure accumulator for controlled lowering of equipment with engine turned off

Engine

- Air filter with automatic dust ejector
- Automatic engine idling/speed increase, controlled via joystick sensors
- Common-Rail injection system
- Exhaust gas after-treatment system – SCR
- Fixed geometry turbocharger
- Fuel fine filter
- Fuel pre-filter and water separator
- Fuel priming pump
- Intercooler
- Power Pack US EPA Tier 4 Final
- Stepless adjustable engine speed



Operator's Cab

- 7" multifunction color touchscreen
- Air conditioning, automatic, tri-zone, controlled via display
- Armrests adjustable in width, height and inclination
- Bottle holder
- Cab air filters housing, accessible from ground level
- Cab door sliding windows
- Cigarette lighter
- Coat hook
- DEF consumption on touchscreen
- DEF level on touchscreen
- Electric socket in cabin (12 V)
- Electric socket in cabin (24 V)
- Emergency hammer
- Engine oil level on touchscreen
- Footrest
- Fuel consumption on touchscreen
- Fuel level on touchscreen
- Interior lighting
- Laminated right hand side window
- LiDAT Plus (Liebherr data transfer system)*
- Mechanical hour meters, visible from ground level
- Movement priority for stick-in, adjustable via touchscreen
- Rain hood over front window opening
- Rearview mirror
- Rear view monitoring camera
- Rear window emergency exit
- Right hand side view monitoring camera
- Roll-down sun blinds for windscreen and roof window
- Rubber floor mat, fixed on floor and removable
- Storage box
- Storage nets
- Storage spaces
- Tilttable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer
- Work mode selector



Equipment

- Anti-drift system boom cylinders
- Anti-drift system stick cylinder
- Boom cylinders regeneration
- Pipe fracture safety valve for stick cylinder
- Pipe fracture safety valves for boom cylinders
- Pivot points made of cast steel
- SAE split flanges on high pressure lines
- Stick cylinder regeneration

* optionally extendable after one year

