

# Product Information Crawler Excavator

## R 918

Litronic®

**Motor**

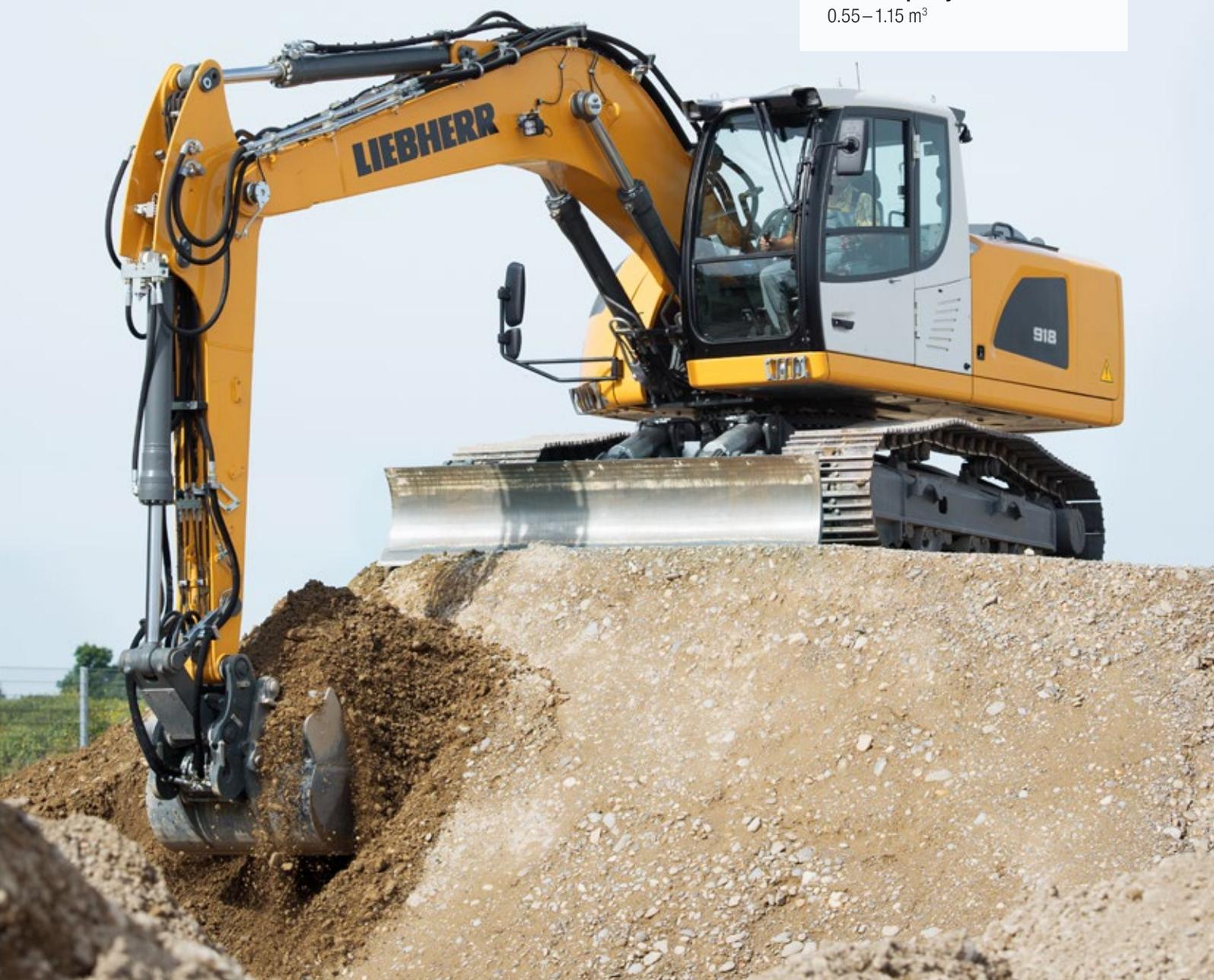
120 kW / 163 HP  
Stage IV

**Operating Weight**

19,550–22,650 kg

**Bucket Capacity**

0.55–1.15 m<sup>3</sup>



# LIEBHERR

# Experience the Progress

## R 918

### Equipment

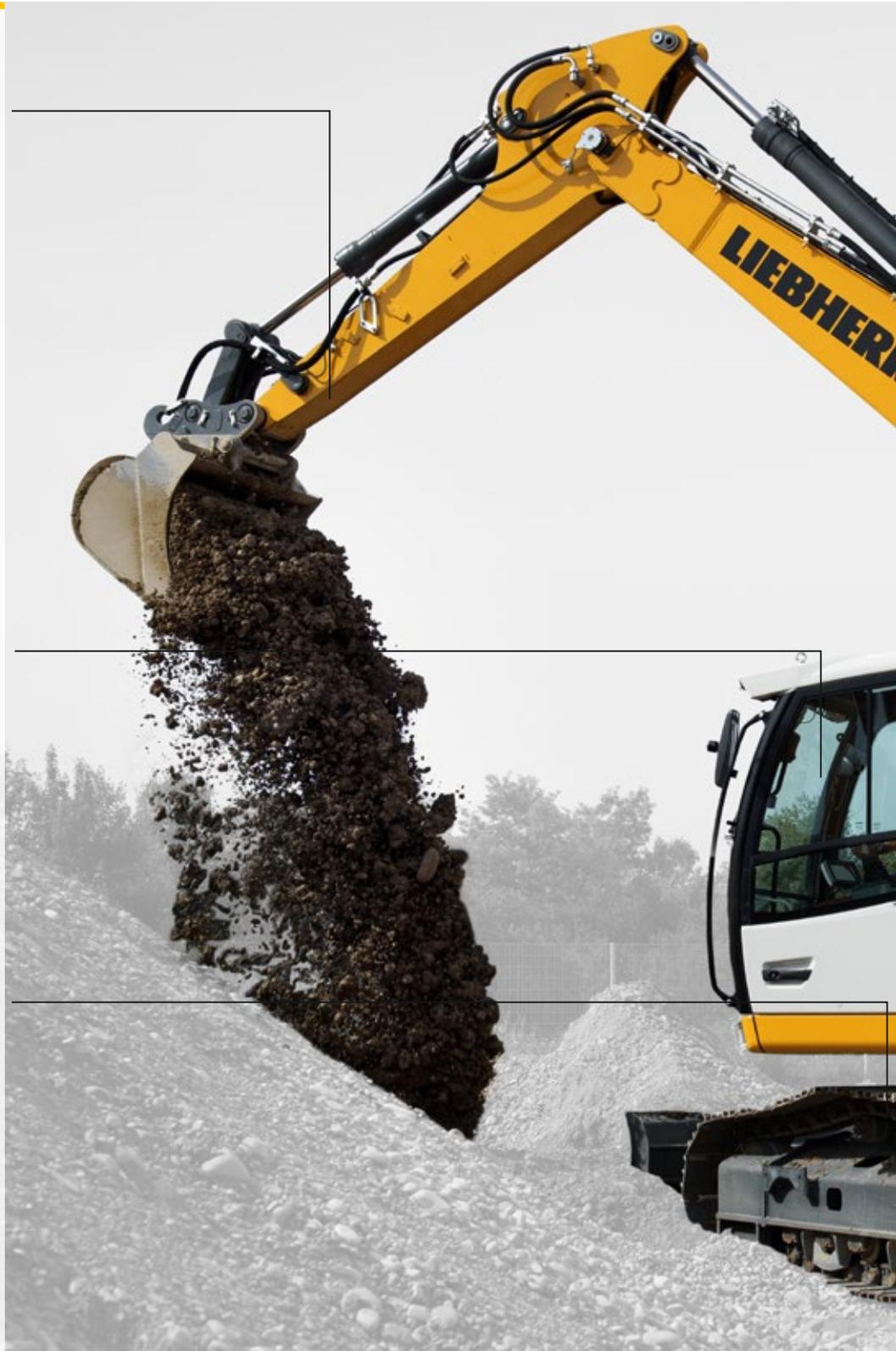
- Broad range of equipment to adapt the excavator to different applications
- Increased durability and longevity of parts thanks to automatic lubrication as standard equipment

### Comfort

- Spacious, air-conditioned operator's cab for increased productivity
- Air suspended seat with vertical and horizontal damping as standard equipment
- Easy-to-use high resolution 7" color touchscreen
- Completely retractable front operators cab window

### Undercarriage

- Robust, reliable X-frame undercarriage, easy to transport and secure thanks to its integrated eyelets
- Easy maintenance
- Several combinations of undercarriage and levellers available
- Extra storage option available
- Track components maintenance-free and track rollers lifetime-lubricated for easy maintenance





### **Safety**

- Panoramic visibility with no obstructions and camera on the rear and the right side as standard equipment for enhanced safety
- Retractable console for easy and secure cabin access
- ROPS-certified operator's cab structure: rollover protection
- Emergency exit via the rear cab window, in all excavator's configurations
- Right window and windshield with tinted laminated safety glass as standard equipment for more safety in case of impact

### **Engine**

- New Stage IV compliant technology, including a urea injection SCR system and oxidation catalyst
- Particulate filter available as an option
- Automatic idle-stop when the engine is inactive

### **Maintenance**

- Innovative servicing concept, with service points accessible from ground level
- Engine oil level can be checked and topped up from the ground
- Increased productivity thanks to automatic lubrication as standard
- Shut-off valve between hydraulic tank and pumps

# Technical Data



## Engine

<b>Rating per ISO 9249</b>	120 kW (163 HP) at 1,800 RPM
<b>Torque</b>	682 Nm at 1,400 RPM
<b>Model</b>	Liebherr D924 A7-04
<b>Type</b>	4 cylinder in-line
Bore	104 mm
Stroke	132 mm
Displacement	4.5 l
<b>Engine operation</b>	4-stroke diesel Common-Rail turbo-charged and after-cooler reduced emissions
<b>Exhaust gas treatment</b>	SCR with urea injection emission standard stage IV
Option	particle filter
<b>Cooling system</b>	water-cooled and integrated motor oil cooler
<b>Air cleaner</b>	dry-type air cleaner with pre-cleaner, primary and safety elements
<b>Fuel tank</b>	369 l
<b>Urea tank</b>	46 l
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 135 Ah/ 12 V
Alternator	three-phase current 28 V/ 140 A
Engine idling	sensor controlled



## Hydraulic Controls

<b>Power distribution</b>	via control valves with integrated safety valves, simultaneous and independent actuation of chassis, swing drive and attachment
<b>Servo circuit</b>	
Attachment and swing	proportional via joystick levers
Chassis	– with proportionally functioning foot pedals or adjusted with a plugable lever – speed pre-selection
<b>Additional functions</b>	proportional regulation via foot pedals or rocker



## Hydraulic System

<b>Hydraulic pump</b>	Liebherr, variable displacement, swashplate pump
Max. flow	390 l/min.
Max. pressure	350 bar
<b>Hydraulic pump regulation and control</b>	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, torque controlled swing drive priority
<b>Hydraulic tank</b>	170 l
<b>Hydraulic system</b>	max. 350 l
<b>Hydraulic oil filter</b>	1 main return filter with integrated partial micro filtration (5 µm)
<b>Cooling system</b>	compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled fan
<b>MODE selection</b>	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
<b>Engine speed and performance setting</b>	stepless alignment of engine output and hydraulic power via engine speed



## Swing Drive

<b>Drive</b>	Liebherr swashplate motor with integrated brake valve and torque control
<b>Transmission</b>	Liebherr compact planetary reduction gear
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0 – 10.0 RPM stepless
<b>Swing torque</b>	51 kNm
<b>Holding brake</b>	wet multi-disc (spring applied, pressure released)



## Operator's Cab

<b>Cab</b>	ROPS safety cab structure (roll-over protection system) with individual windscreens or featuring a slide-in subpart under the ceiling, work headlights integrated in the ceiling, a door with a sliding 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, cigarette lighter and 12 V plug, cup holder
<b>Operator's seat</b>	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination, seat heating as standard, folding console
<b>Control system</b>	joysticks with arm consoles and swivel seat
<b>Operation and displays</b>	large high-resolution operating unit, self-explanatory, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and tool parameters
<b>Air-conditioning</b>	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) the air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1430
Quantity at 25 °C*	1,260 <sup>+20</sup> g
CO <sub>2</sub> equivalent	1.80 t
<b>Vibration emission</b>	
Hand/arm vibrations	< 2,5 m/s <sup>2</sup> , according with ISO 5349-1:2001
Whole-body vibrations	conforms to technical report ISO/TR 25398:2006
Measuring inaccuracy	according with standard EN 12096:1997

\* valid for standard machine without operator's cab elevation and without height adjustable cab



## Undercarriage

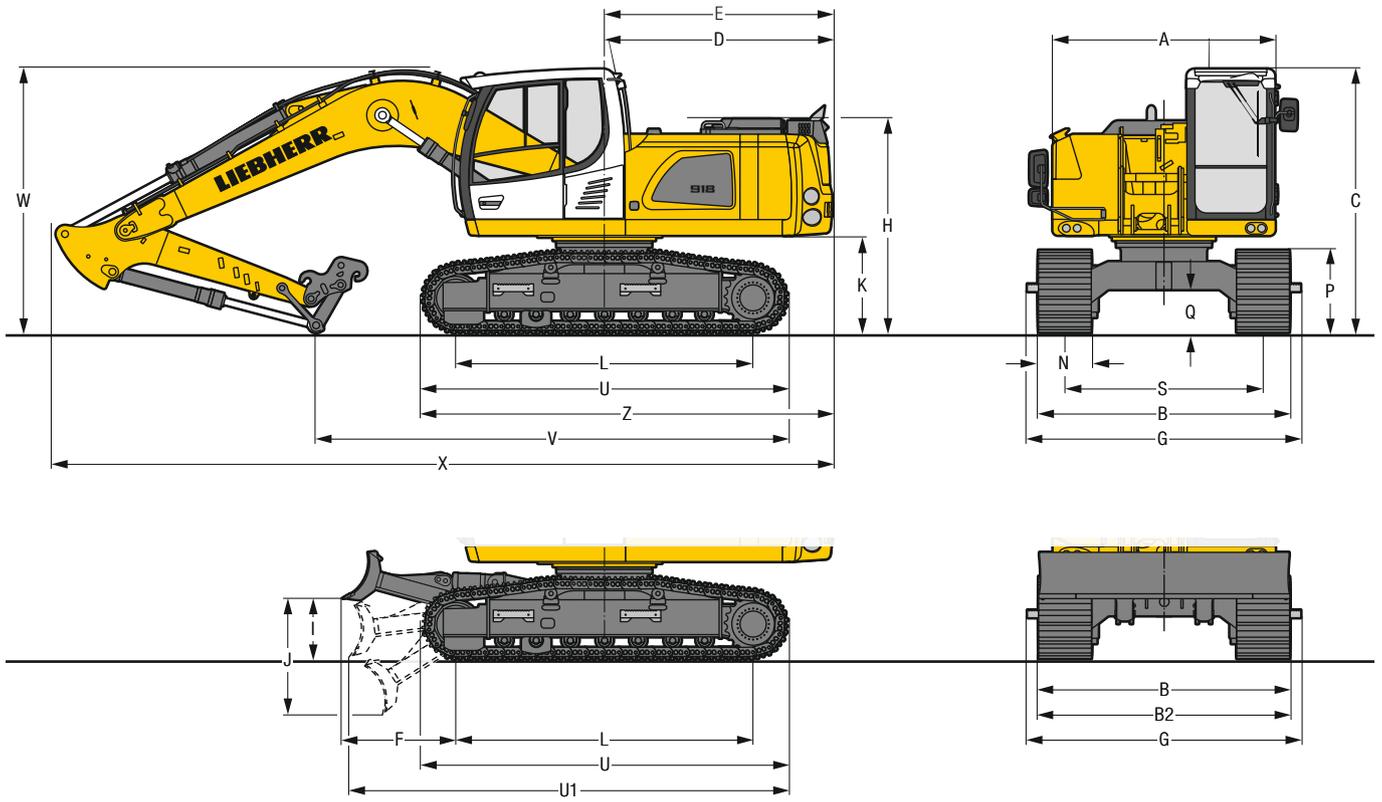
<b>Versions</b>	
NLC	gauge 2,000 mm
LC	standard gauge 2,250 mm
<b>Drive</b>	Liebherr swashplate motors with integrated brake valves on both sides
<b>Transmission</b>	Liebherr compact planetary reduction gear
<b>Maximum travel speed</b>	low range 3.2 km/h high range 6.0 km/h
<b>Net drawbar pull on crawler</b>	192 kN
<b>Track components</b>	B60, maintenance-free
<b>Track rollers/ Carrier rollers</b>	7 / 2
<b>Tracks</b>	sealed and greased
<b>Track pads</b>	triple grouser
<b>Holding brake</b>	wet multi-disc (spring applied, pressure released)
<b>Brake valves</b>	integrated into travel motor
<b>Lashing eyes</b>	integrated



## Attachment

<b>Hydraulic cylinders</b>	Liebherr cylinders with special seal-system, shock protection
<b>Bearings</b>	sealed, low maintenance
<b>Lubrication</b>	Liebherr central lubrication system

# Dimensions



	<b>NLC</b>			<b>NLC with blade</b>			<b>LC</b>			<b>LC with blade</b>				
	<b>mm</b>			<b>mm</b>			<b>mm</b>			<b>mm</b>				
<b>A</b>	2,525			2,525			2,525			2,525				
<b>C</b>	3,030			3,030			3,030			3,030				
<b>D</b>	2,580			2,580			2,580			2,580				
<b>E</b>	2,580			2,580			2,580			2,580				
<b>F</b>	–			1,355			–			1,280				
<b>H</b>	2,455			2,455			2,455			2,455				
<b>I</b>	–			685			–			685				
<b>J</b>	–			1,320			–			1,320				
<b>K</b>	1,100			1,100			1,100			1,100				
<b>L</b>	3,370			3,370			3,370			3,370				
<b>P</b>	955			955			955			955				
<b>Q</b>	490			490			490			490				
<b>S</b>	2,000			2,000			2,250			2,250				
<b>U</b>	4,150			4,150			4,150			4,150				
<b>U1</b>	–			5,040			–			4,965				
<b>N</b>	500	600	750	500	600	750	500	600	750	900	500	600	750	900
<b>B</b>	2,500	2,600	2,750	2,500	2,600	2,750	2,750	2,850	3,000	3,150	2,750	2,850	3,000	3,150
<b>B2</b>	–			2,500	2,600	2,850	–			–	2,850	2,850	3,000	–
<b>G</b>	2,490	2,660*	2,660*	2,490	2,660*	2,660*	2,800	2,800	3,000*	3,100*	2,800	2,800	3,000*	3,100*
<b>Z</b>	4,655			4,655			4,655			4,655				

E = Back tail radius

\* Width with removable steps

	<b>Stick length</b>	<b>Mono boom 5.20 m</b>		<b>Two-piece boom 5.40 m</b>
		<b>m</b>	<b>mm</b>	<b>mm</b>
<b>V</b>	2.25	5,350		6,000
	2.45	5,200		5,850
	2.65	5,050		5,750
	3.05	6,750		5,000
<b>W</b>	2.25	3,050		3,050
	2.45	3,100		3,100
	2.65	3,150		3,150
<b>X</b>	2.25	2,950		3,000
	2.25	8,900		9,200
<b>X</b>	2.45	8,900		9,200
	2.65	8,900		9,200
	3.05	8,900		9,200



# Lift Capacities

with Mono Boom 5.20 m, Counterweight 3.1 t and Track Pads 600 mm

## Stick 2.25 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		m			
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC <sup>1)</sup>	7.5									4.2*	4.2*	4.7	
	6.0									3.4	3.7*	6.2	
	4.5									2.8	3.5*	7.0	
	3.0				5.5	6.9*	3.6	5.9			2.4	3.6*	7.4
	1.5				4.7	8.5	3.2	5.5	2.3	4.0	2.3	3.8*	7.5
	0				4.5	8.3	3.1	5.4			2.4	4.1	7.3
NLC with blade <sup>1)</sup>	7.5									4.2*	4.2*	4.7	
	6.0									3.7	3.7*	6.2	
	4.5				5.9	6.9*	3.8	6.0			3.0	3.5*	7.0
	3.0				5.5	8.5*	3.6	5.8			2.6	3.6*	7.4
	1.5				5.1	8.7	3.5	5.6	2.5	4.0*	2.5	3.8*	7.5
	0				4.9	8.5	3.3	5.5			2.6	4.1	7.3
LC	7.5									4.2*	4.2*	4.7	
	6.0									3.7	3.7*	6.2	
	4.5				6.3	6.9*	4.1	6.0			3.2	3.5*	7.0
	3.0				5.9	8.5*	3.9	5.8			2.8	3.6*	7.4
	1.5				5.5	8.7	3.7	5.6	2.7	4.0*	2.7	3.8*	7.5
	0				5.3	8.5	3.6	5.5			2.8	4.1	7.3
LC with blade	7.5									4.2*	4.2*	4.7	
	6.0									3.7	3.7*	6.2	
	4.5				6.8	6.9*	4.4	6.0*			3.4	3.5*	7.0
	3.0				6.3	8.5*	4.2	5.9			3.0	3.6*	7.4
	1.5				5.9	8.8	4.0	5.7	2.9	4.0*	2.9	3.8*	7.5
	0				5.7	8.6	3.9	5.6			3.0	4.2	7.3

## Stick 2.45 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		m			
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC <sup>1)</sup>	7.5									3.8*	3.8*	5.0	
	6.0									3.2	3.3*	6.4	
	4.5									2.6	3.2*	7.2	
	3.0				5.6	6.7*	3.6	5.8*			2.4	4.0	7.6
	1.5				4.7	8.6	3.2	5.5	2.3	3.9	2.2	3.4*	7.7
	0				5.1*	5.1*	4.5	8.3	3.1	5.3	2.3	3.8*	7.5
NLC with blade <sup>1)</sup>	7.5									3.8*	3.8*	5.0	
	6.0									3.3*	3.3*	6.4	
	4.5				5.9	6.7*	3.8	5.8*			2.8	3.2*	7.2
	3.0				5.5	8.2*	3.6	5.8	2.6	4.1	2.5	3.2*	7.6
	1.5				5.1	8.7	3.4	5.6	2.5	4.0	2.4	3.4*	7.7
	0				4.9	8.4	3.3	5.4			2.5	3.8*	7.5
LC	7.5									3.8*	3.8*	5.0	
	6.0									3.3*	3.3*	6.4	
	4.5				6.4	6.7*	4.1	5.8*			3.0	3.2*	7.2
	3.0				5.9	8.2*	3.9	5.8	2.8	4.1	2.7	3.2*	7.6
	1.5				5.5	8.7	3.7	5.6	2.7	4.0	2.6	3.4*	7.7
	0				5.1*	5.1*	5.3	8.4	3.6	5.4	2.6	3.8*	7.5
LC with blade	7.5									3.8*	3.8*	5.0	
	6.0									3.3*	3.3*	6.4	
	4.5				6.7*	6.7*	4.4	5.8*			3.2*	3.2*	7.2
	3.0				6.4	8.2*	4.2	5.9	3.0	4.1*	2.9	3.2*	7.6
	1.5				5.9	8.9	4.0	5.7	2.9	4.1	2.8	3.4*	7.7
	0				5.1*	5.1*	5.7	8.6	3.9	5.5	2.9	3.8*	7.5

## Stick 2.65 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		m			
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC <sup>1)</sup>	7.5									3.4*	3.4*	5.3	
	6.0									3.0*	3.0*	6.6	
	4.5									2.5	2.9*	7.4	
	3.0				5.2	7.9*	3.4	5.7	2.4	4.0	2.2	2.9*	7.8
	1.5				4.7	8.6	3.2	5.5	2.3	3.9	2.1	3.1*	7.9
	0				4.5	8.3	3.0	5.3	2.2	3.9	2.2	3.5*	7.7
NLC with blade <sup>1)</sup>	7.5									3.4*	3.4*	5.3	
	6.0									3.0*	3.0*	6.6	
	4.5									2.7	2.9*	7.4	
	3.0				5.5	7.9*	3.6	5.8	2.6	4.1	2.4	2.9*	7.8
	1.5				5.1	8.7	3.4	5.6	2.5	4.0	2.3	3.1*	7.9
	0				4.8	8.4	3.3	5.4	2.4	3.9	2.4	3.5*	7.7
LC	7.5									3.4*	3.4*	5.3	
	6.0									3.0*	3.0*	6.6	
	4.5									2.9	2.9*	7.4	
	3.0				6.0	7.9*	3.9	5.8	2.8	4.1	2.6	2.9*	7.8
	1.5				5.5	8.7	3.7	5.6	2.7	4.0	2.5	3.1*	7.9
	0				5.3	8.4	3.5	5.4	2.6	3.9	2.5	3.5*	7.7
LC with blade	7.5									3.4*	3.4*	5.3	
	6.0									3.0*	3.0*	6.6	
	4.5									2.9	2.9*	7.4	
	3.0				6.4	7.9*	4.2	5.9	3.0	4.2	2.8	2.9*	7.8
	1.5				6.0	8.9	4.0	5.7	2.9	4.1	2.7	3.1*	7.9
	0				5.7	8.6	3.8	5.5	2.8	4.0	2.7	3.5*	7.7

## Stick 3.05 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		m			
		↕	↔	↕	↔	↕	↔	↕	↔	↕	↔		
NLC <sup>1)</sup>	7.5									2.7*	2.7*	5.6	
	6.0									2.5*	2.5*	6.8	
	4.5									2.4*	2.4*	7.6	
	3.0				9.7	11.2*	5.2	7.4*	3.4	5.7	2.4	4.0	8.0
	1.5				6.8*	6.8*	4.8	8.6	3.2	5.5	2.3	3.9	8.1
	0				7.1*	7.1*	4.5	8.3	3.0	5.3	2.2	3.8	7.9
NLC with blade <sup>1)</sup>	7.5									2.7*	2.7*	5.6	
	6.0									2.5*	2.5*	6.8	
	4.5									2.4*	2.4*	7.6	
	3.0				10.3	11.2*	5.6	7.4*	3.7	5.8	2.6	4.1	8.0
	1.5				6.8*	6.8*	5.1	8.8	3.4	5.6	2.5	4.0	8.1
	0				7.1*	7.1*	4.8	8.4	3.3	5.4	2.4	3.9	7.9
LC	7.5									2.7*	2.7*	5.6	
	6.0									2.5*	2.5*	6.8	
	4.5									2.4*	2.4*	7.6	
	3.0				11.2*	11.2*	6.0	7.4*	3.9	5.8	2.8	4.1	8.0
	1.5				6.8*	6.8*	5.6	8.8	3.7	5.6	2.7	4.0	8.1
	0				7.1*	7.1*	5.2	8.4	3.5	5.4	2.6	3.9	7.9
LC with blade	7.5									2.7*	2.7*	5.6	
	6.0									2.5*	2.5*	6.8	
	4.5									2.4*	2.4*	7.6	
	3.0				11.2*	11.2*	6.5	7.4*	4.2	5.9	3.0	4.2	8.0
	1.5				6.8*	6.8*	6.0	8.9	4.0	5.7	2.9	4.1	8.1
	0				7.1*	7.1*	5.7	8.6	3.8	5.5	2.8	4.0	7.9

↕ 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) 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 600 mm 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 excavators the lift capacities will increase by 285 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage



# Lift Capacities

with Two-Piece Boom 5.40 m, Counterweight 3.1 t and Track Pads 600 mm

### Stick 2.25 m

Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
	m	°	m	°	m	°	m	°	m	°	
NLC <sup>1)</sup>	9.0								4.6	4.7*	5.2
	7.5			5.9	6.7*				3.1	4.1*	6.5
	6.0			6.0	6.9*	3.7	6.1		2.5	3.8*	7.4
	4.5	10.7	11.6*	5.8	8.2*	3.8	6.1		2.2	3.8*	7.8
	3.0	10.3	11.7*	5.7	9.2	3.8	6.0	2.4	2.1	3.7	7.9
	1.5	10.1	12.7*	5.6	9.1	3.7	6.0	2.3	2.1	3.7	7.9
	0	9.8	15.3*	5.4	9.2	3.4	5.9	2.3	2.1	3.8	7.7
	-1.5	9.4	17.2*	5.2	9.3	3.2	5.6		2.4	4.1	7.2
	-3.0	9.4	17.7*	4.9	8.9	3.1	5.4*		2.9	4.3*	6.3
	-4.5										
NLC with blade <sup>1)</sup>	9.0								4.7*	4.7*	5.2
	7.5			6.3	6.7*				3.3	4.1*	6.5
	6.0			6.3	6.9*	3.9	6.2		2.7	3.8*	7.4
	4.5	11.3	11.6*	6.2	8.2*	4.0	6.2		2.4	3.8*	7.8
	3.0	10.8	11.7*	6.0	9.3	4.0	6.1	2.6	2.5	4.1	7.2
	1.5	10.7	12.7*	6.0	9.2	3.9	6.1	2.5	2.3	3.7	7.9
	0	10.5	15.3*	5.8	9.3	3.7	6.0	2.5	2.3	3.8	7.7
	-1.5	10.1	17.2*	5.5	9.4	3.5	5.7		2.6	4.2	7.2
	-3.0	10.1	17.7*	5.2	9.0	3.4	5.4*		3.1	4.3*	6.3
	-4.5										
LC	9.0								4.7*	4.7*	5.2
	7.5			6.7	6.7*				3.5	4.1*	6.5
	6.0			6.7	6.9*	4.2	6.1		2.8	3.8*	7.4
	4.5	11.6*	11.6*	6.6	8.2*	4.3	6.1		2.5	3.8*	7.8
	3.0	11.7*	11.7*	6.4	9.2	4.3	6.0	2.7	2.4	3.7	7.9
	1.5	11.6	12.7*	6.3	9.1	4.1	6.0	2.7	2.4	3.7	7.9
	0	11.6	15.3*	6.2	9.2	3.9	5.9	2.6	2.5	3.8	7.7
	-1.5	11.1	17.2*	5.9	9.3	3.7	5.6		2.7	4.2	7.2
	-3.0	11.1	17.7*	5.6	8.9	3.6	5.4*		3.3	4.3*	6.3
	-4.5										
LC with blade	9.0								4.7*	4.7*	5.2
	7.5			6.7*	6.7*				3.8	4.1*	6.5
	6.0			6.9*	6.9*	4.5	6.2		3.1	3.8*	7.4
	4.5	11.6*	11.6*	6.9	8.2*	4.6	6.2		2.8	3.8*	7.8
	3.0	11.7*	11.7*	6.8	9.4	4.6	6.1	3.0	2.9	4.1	7.2
	1.5	12.2	12.7*	6.7	9.3	4.4	6.1	2.9	2.6	3.7	7.9
	0	12.4	15.3*	6.6	9.3	4.2	6.0	2.8	2.7	3.8	7.7
	-1.5	12.0	17.2*	6.4	9.5	4.0	5.7		3.0	4.2	7.2
	-3.0	11.9	17.7*	6.1	9.1	3.9	5.4*		3.6	4.3*	6.3
	-4.5										

### Stick 2.45 m

Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
	m	°	m	°	m	°	m	°	m	°	
NLC <sup>1)</sup>	9.0								4.2	4.2*	5.5
	7.5			6.0	6.3*				2.9	3.7*	6.8
	6.0			6.0	6.3*	3.7	6.0*		2.4	3.5*	7.6
	4.5	8.2*	8.2*	5.8	7.7*	3.8	6.1	2.4	2.1	3.4*	8.0
	3.0	10.3	11.7*	5.7	9.2	3.8	6.0	2.4	2.1	3.4*	8.0
	1.5	10.1	12.6*	5.6	9.1	3.7	6.0	2.4	2.0	3.5	8.1
	0	9.9	14.9*	5.4	9.1	3.5	5.9	2.3	2.0	3.6	7.9
	-1.5	9.4	17.1*	5.2	9.3	3.2	5.6		2.2	3.9	7.4
	-3.0	9.4	17.7*	4.9	8.9	3.1	5.5		2.7	4.3*	6.5
	-4.5	9.1	11.5*						6.8	8.6*	3.6
NLC with blade <sup>1)</sup>	9.0								4.2*	4.2*	5.5
	7.5			6.3*	6.3*				3.1	3.7*	6.8
	6.0			6.3*	6.3*	4.0	6.0*		2.6	3.5*	7.6
	4.5	8.2*	8.2*	6.2	7.7*	4.1	6.2	2.6	2.3	3.4*	8.0
	3.0	10.8	11.7*	6.0	9.3	4.1	6.1	2.6	2.2	3.6*	8.1
	1.5	10.6	12.6*	6.0	9.2	4.0	6.1	2.6	2.2	3.7	7.9
	0	10.5	14.9*	5.8	9.2	3.7	6.0	2.5	2.4	3.7	7.9
	-1.5	10.1	17.1*	5.5	9.4	3.5	5.7		2.4	4.0	7.4
	-3.0	10.0	17.7*	5.3	9.1	3.3	5.6		2.9	4.3*	6.5
	-4.5	9.8	11.5*						7.3	8.6*	3.6
LC	9.0								4.2*	4.2*	5.5
	7.5			6.3*	6.3*				3.3	3.7*	6.8
	6.0			6.3*	6.3*	4.2	6.0*		2.7	3.5*	7.6
	4.5	8.2*	8.2*	6.6	7.7*	4.3	6.1	2.8	2.4	3.4*	8.0
	3.0	11.7	11.7*	6.4	9.2	4.3	6.0	2.8	2.4	3.4*	8.0
	1.5	11.5	12.6*	6.3	9.1	4.2	6.0	2.7	2.3	3.5	8.1
	0	11.6	14.9*	6.2	9.2	4.0	5.9	2.6	2.4	3.6	7.9
	-1.5	11.1	17.1*	5.9	9.3	3.7	5.7		2.6	4.0	7.4
	-3.0	11.0	17.7*	5.6	9.0	3.6	5.5		3.1	4.3*	6.5
	-4.5	10.8	11.5*						8.0	8.6*	3.6
LC with blade	9.0								4.2*	4.2*	5.5
	7.5			6.3*	6.3*				3.6	3.7*	6.8
	6.0			6.3*	6.3*	4.5	6.0*		2.9	3.5*	7.6
	4.5	8.2*	8.2*	6.9	7.7*	4.6	6.2	3.0	2.6	3.4*	8.0
	3.0	11.7*	11.7*	6.8	9.3	4.6	6.1	3.0	2.5	3.6*	8.1
	1.5	12.2	12.6*	6.7	9.2	4.5	6.1	2.9	2.6	3.7	7.9
	0	12.3	14.9*	6.6	9.3	4.3	6.0	2.8	2.6	3.7	7.9
	-1.5	11.9	17.1*	6.4	9.5	4.0	5.8		2.8	4.0	7.4
	-3.0	11.9	17.7*	6.1	9.1	3.9	5.6		3.4	4.3*	6.5
	-4.5	11.5*	11.5*						8.6	8.6*	3.6

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) 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 600 mm wide track pads with adjusting cylinder in optimal position. 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 285 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Lift Capacities

with Two-Piece Boom 5.40 m, Counterweight 3.1 t and Track Pads 600 mm

## Stick 2.65 m

Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		m			
	m	°	m	°	m	°	m	°	m	°		
NLC <sup>1)</sup>	9.0								5.5*	5.5*	3.4	
	7.5			5.8*	5.8*				3.8*	3.8*	5.8	
	6.0			5.7*	5.7*	3.8	5.7*		2.7	3.3*	7.0	
	4.5	6.4*	6.4*	5.9	6.8*	3.8	6.1	2.5	4.2	2.3	3.1*	7.8
	3.0	10.3	11.7*	5.7	9.1*	3.8	6.0	2.5	4.1	2.0	3.1*	8.2
	1.5	10.0	12.5*	5.6	9.0	3.7	5.9	2.4	4.1	1.9	3.2*	8.3
	0	9.9	14.6*	5.4	9.1	3.5	5.9	2.3	4.0	1.9	3.4	8.1
	-1.5	9.4	16.9*	5.2	9.3	3.3	5.7	2.2	3.9	2.1	3.8	7.6
	-3.0	9.3	17.5*	4.9	9.0	3.1	5.5			2.5	4.2*	6.8
	-4.5	9.1	13.1*							5.0	6.7*	4.4
NLC with blade <sup>1)</sup>	9.0			5.8*	5.8*					5.5*	5.5*	3.4
	7.5			5.7*	5.7*					3.8*	3.8*	5.8
	6.0			5.7*	5.7*	4.0	5.7*			3.0	3.3*	7.0
	4.5	6.4*	6.4*	6.2	6.8*	4.1	6.1	2.6	4.2	2.4	3.1*	7.8
	3.0	10.8	11.7*	6.0	9.1*	4.1	6.1	2.6	4.2	2.2	3.1*	8.2
	1.5	10.6	12.5*	5.9	9.2	4.0	6.0	2.6	4.1	2.1	3.2*	8.3
	0	10.6	14.6*	5.8	9.2	3.8	6.0	2.5	4.0	2.1	3.5*	8.1
	-1.5	10.1	16.9*	5.5	9.4	3.5	5.8	2.4	3.9	2.3	3.8	7.6
	-3.0	9.9	17.5*	5.3	9.1	3.3	5.6			2.8	4.2*	6.8
	-4.5	9.8	13.1*							5.4	6.7*	4.4
LC	9.0			5.8*	5.8*					5.5*	5.5*	3.4
	7.5			5.7*	5.7*					3.8*	3.8*	5.8
	6.0			5.7*	5.7*	4.3	5.7*			3.1	3.3*	7.0
	4.5	6.4*	6.4*	6.6	6.8*	4.3	6.1	2.8	4.2	2.6	3.1*	7.8
	3.0	11.7*	11.7*	6.4	9.1*	4.3	6.0	2.8	4.2	2.3	3.1*	8.2
	1.5	11.5	12.5*	6.3	9.1	4.2	6.0	2.7	4.1	2.2	3.2*	8.3
	0	11.6	14.6*	6.2	9.1	4.0	6.0	2.6	4.0	2.3	3.5	8.1
	-1.5	11.1	16.9*	5.9	9.3	3.7	5.7	2.5	3.9	2.5	3.8	7.6
	-3.0	11.0	17.5*	5.7	9.0	3.6	5.5			2.9	4.2*	6.8
	-4.5	10.8	13.1*							5.8	6.7*	4.4
LC with blade	9.0			5.8*	5.8*					5.5*	5.5*	3.4
	7.5			5.7*	5.7*					3.8*	3.8*	5.8
	6.0			5.7*	5.7*	4.6	5.7*			3.3*	3.3*	7.0
	4.5	6.4*	6.4*	6.8*	6.8*	4.6	6.2	3.0	4.2	2.8	3.1*	7.8
	3.0	11.7*	11.7*	6.8	9.1*	4.5	6.1	3.0	4.2	2.5	3.1*	8.2
	1.5	12.1	12.5*	6.7	9.2	4.5	6.0	3.0	4.2	2.4	3.2*	8.3
	0	12.2	14.6*	6.7	9.2	4.3	6.0	2.8	4.0	2.5	3.5*	8.1
	-1.5	11.9	16.9*	6.4	9.5	4.0	5.8	2.7	3.9	2.7	3.8	7.6
	-3.0	11.8	17.5*	6.1	9.1	3.9	5.6			3.2	4.2*	6.8
	-4.5	11.6	13.1*							6.2	6.7*	4.4

## Stick 3.05 m

Under-carriage	3.0 m		4.5 m		6.0 m		7.5 m		m			
	m	°	m	°	m	°	m	°	m	°		
NLC <sup>1)</sup>	9.0								3.8*	3.8*	4.0	
	7.5					3.3*	3.3*		3.0*	3.0*	6.1	
	6.0					3.9	4.8*		2.6	2.7*	7.3	
	4.5			5.9	6.0*	3.8	5.7*	2.5	4.2	2.2	2.6*	8.0
	3.0	10.3	13.6*	5.7	8.6*	3.8	6.0	2.5	4.2	1.9	2.7*	8.4
	1.5	10.0	13.0*	5.5	9.0	3.8	5.9	2.4	4.1	1.8	2.8*	8.5
	0	10.0	14.4*	5.5	9.0	3.6	5.9	2.3	4.0	1.8	3.1*	8.3
	-1.5	9.5	16.5*	5.2	9.2	3.3	5.7	2.2	3.8	2.0	3.5	7.9
	-3.0	9.2	17.2*	4.9	9.0	3.0	5.4			2.3	4.2	7.0
	-4.5	9.0	15.2*	4.6	8.0*					3.6	5.2*	5.3
NLC with blade <sup>1)</sup>	9.0								3.8*	3.8*	4.0	
	7.5					3.3*	3.3*		3.0*	3.0*	6.1	
	6.0					4.1	4.8*		2.7*	2.7*	7.3	
	4.5			6.0*	6.0*	4.1	5.7*	2.7	4.2	2.3	2.6*	8.0
	3.0	10.9	13.6*	6.0	8.6*	4.0	6.0	2.7	4.2	2.1	2.7*	8.4
	1.5	10.5	13.0*	5.9	9.1	4.0	6.0	2.6	4.2	2.0	2.8*	8.5
	0	10.5	14.4*	5.9	9.1	3.8	6.0	2.5	4.0	2.0	3.1*	8.3
	-1.5	10.1	16.5*	5.5	9.3	3.5	5.8	2.4	3.9	2.2	3.6	7.9
	-3.0	9.9	17.2*	5.3	9.1	3.3	5.5			2.5	4.2	7.0
	-4.5	9.6	15.2*	5.0	8.0*					3.9	5.2*	5.3
LC	9.0								3.8*	3.8*	4.0	
	7.5					3.3*	3.3*		3.0*	3.0*	6.1	
	6.0					4.3	4.8*		2.7*	2.7*	7.3	
	4.5			6.0*	6.0*	4.3	5.7*	2.9	4.2	2.5	2.6*	8.0
	3.0	11.8	13.6*	6.4	8.6*	4.2	6.0	2.9	4.2	2.2	2.7*	8.4
	1.5	11.4	13.0*	6.2	9.0	4.2	5.9	2.8	4.1	2.1	2.8*	8.5
	0	11.4	14.4*	6.2*	9.0	4.1	6.0	2.6	4.0	2.1	3.1*	8.3
	-1.5	11.2	16.5*	5.9	9.2	3.8	5.7	2.5	3.9	2.3	3.5	7.9
	-3.0	10.9	17.2*	5.7	9.0	3.5	5.4			2.7	4.2	7.0
	-4.5	10.6	15.2*	5.4	8.0*					4.2	5.2*	5.3
LC with blade	9.0								3.8*	3.8*	4.0	
	7.5					3.3*	3.3*		3.0*	3.0*	6.1	
	6.0					4.6	4.8*		2.7*	2.7*	7.3	
	4.5			6.0*	6.0*	4.6	5.7*	3.1	4.3	2.6*	2.6*	8.0
	3.0	12.4	13.6*	6.8	8.6*	4.5	6.1	3.1	4.3	2.4	2.7*	8.4
	1.5	12.1	13.0*	6.6	9.1	4.5	6.0	3.0	4.2	2.3	2.8*	8.5
	0	12.1	14.4*	6.6	9.1	4.4	6.0	2.9	4.1	2.3	3.1*	8.3
	-1.5	12.0	16.5*	6.4	9.3	4.1	5.8	2.7	3.9	2.5	3.6	7.9
	-3.0	11.7	17.2*	6.1	9.2	3.8	5.5			2.9	4.3	7.0
	-4.5	11.4	15.2*	5.8	8.0*					4.5	5.2*	5.3

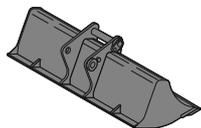
 Height
  Can be slewed through 360°
  In longitudinal position of undercarriage
  Max. reach
 \* Limited by hydr. capacity

The load values are quoted in tons (t) 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 600 mm wide track pads with adjusting cylinder in optimal position. 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 285 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Available Tools



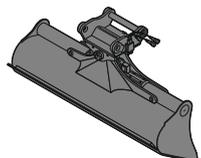
## Rigid Ditch Cleaning Bucket

### GRL 90, for direct mounting

Cutting width	mm	1,500	2,000	2,000			
Capacity	m <sup>3</sup>	0.50	0.70	0.85			
Weight	kg	400	506	586			

### GRL 90, for mounting to quick coupler SWA 48

Cutting width	mm	1,500	1,500	2,000	2,400	2,400	
Capacity	m <sup>3</sup>	0.50	0.95	0.70	0.85	1.15	
Weight	kg	430	560	400	600	650	



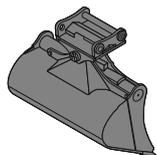
## Ditch Cleaning Bucket

### GRL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm	1,600	1,600	2,000	2,000	2,000	2,200	2,400
Capacity	m <sup>3</sup>	0.55	0.80	0.50	0.70	1.00	0.80	0.85
Weight	kg	650	790	670	800	870	800	870

### GRL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

Cutting width	mm	1,600	1,600	2,000	2,000	2,000	2,200	2,400
Capacity	m <sup>3</sup>	0.55	0.80	0.50	0.70	1.00	0.80	0.85
Weight	kg	730	850	740	870	940	870	930



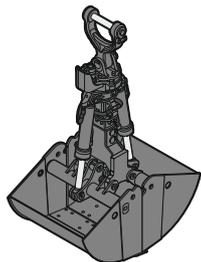
## Tilt Bucket

### SL 90, 2 x 50° tiltable, for direct mounting

Cutting width	mm	1,500		1,600		1,600	
Capacity	m <sup>3</sup>	0.60		0.80		1.00	
Weight	kg	680		750		810	

### SL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

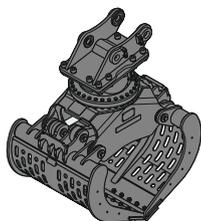
Cutting width	mm	1,500		1,600		1,600	
Capacity	m <sup>3</sup>	0.60		0.80		1.00	
Weight	kg	680		820		870	



## Clamshells

### GM 10B, earthmoving shell, for mounting to quick coupler SWA 48

Cutting width	mm	320	400	500	600	800	1,000
Capacity	m <sup>3</sup>	0.17	0.22	0.30	0.35	0.45	0.60
Weight	kg	800	840	945	890	940	1,000

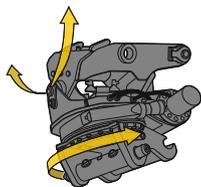


## Sorting Grab

**ribbed** **perforated** **stone tong**

### SG 25B, for mounting to quick coupler SWA 48

Cutting width	mm	800	1,000	800	1,000	1,200	800
Capacity	m <sup>3</sup>	0.50	0.65	0.55	0.75	0.90	0.55
Weight	kg	1,210	1,295	1,170	1,230	1,325	1,350



## Tiltrotator

### LH-TR 25, for mounting to quick coupler SWA 48

Weight	kg	720
Rotation		360°
Tilt		2 x 50°

# Standard Equipment

## Undercarriage

- Chain guide 1 piece
- Lashing eyelets
- Sprocket with dirt ejector
- Track rollers, lifetime-lubricated
- Tracks, sealed and greased

## Uppercarriage

- Engine hood with gas spring opening
- Handrails
- Headlights on uppercarriage, front, halogen, 2 pieces, protections included
- Manual main switch
- Non slip surfaces
- Right-hand rearview mirror
- Service doors, lockable
- Tool set 32 pieces

## Hydraulic System

- Filter with integrated fine filter area
- Liebherr hydraulic oil
- Pressure storage for controlled lowering of equipment with engine turned off
- Pressure test ports for hydraulic
- Shut-off valve between hydraulic tank and pumps
- Work mode selector

## Engine

- Common-Rail injection system
- Conform with stage IV emission standard
- DOC/SCR exhaust gas after-treatment system
- Engine idling, automatic, sensor-controlled
- Fixed geometry turbo charger
- Fuel filter and water separator
- Intercooler
- Stepless adjustable engine speed

## Operator's Cab

- 7" colour multifunction display with touchscreen
- Air conditioning, automatic
- Camera for monitoring right side
- Coat hook
- Cup holder
- Electronic gauge for urea level
- Fuel consumption indicator on touchscreen
- Headlights on cab, front, halogen, 2 pieces
- Hydraulic suspension
- Interior light
- LiDAT Plus (Liebherr data transfer system) \*
- Mechanical hour meters, readable from outside the cab
- Operator seat Comfort with longitudinal and vertical damping
- Preparation for radio installation
- Rain hood over front window opening
- Rearview mirror
- Rear view monitoring camera
- Rear window emergency exit
- Retractable seat belt 51 mm
- Right window and windshield with laminated safety glass
- Roll-down sun blinds (front and roof windows)
- ROPS safety cab structure (ISO 12117-2)
- Rubber floor mat
- Sliding windows in cab door
- Storage bin
- Storage spaces
- Tilttable console left
- Tinted windows
- Windscreen, totally or partially retractable
- Wiper / washer

## Attachment

- Boom cylinders oil regeneration
- Centralised lubrication system (automatic)
- Headlights on boom, halogen, 2 pieces
- Safety check valves for hoist cylinders
- Safety check valves for stick cylinder
- Stick cylinder oil regeneration

Non-exhaustive list, please contact us for further information.

\* optionally extendable after one year

# Options

## Undercarriage

Chain guide 3 pieces
Dozer and stabilizer blade 2,500 mm
Dozer and stabilizer blade 2,600 mm
Dozer and stabilizer blade 2,850 mm
Dozer and stabilizer blade 3,000 mm
Reinforced cover and base plate for undercarriage centre section
Special painting
Steps, wide version
Track pads triple grouser 500 mm
Track pads triple grouser 600 mm
Track pads triple grouser 750 mm
Track pads triple grouser 900 mm
Undercarriage LC
Undercarriage NLC
Undercarriage storage compartment

## Uppercarriage

Amber beacons on counterweight, LED, 2 pieces
Electric socket on uppercarriage (24 V)
Extended tool set including tool box
Fuel anti-theft device
Headlight on uppercarriage, lateral right, LED, 1 piece
Headlights on counterweight, LED, 2 pieces
Headlights on uppercarriage, front, LED, 2 pieces, protections included
Pre-heating system for fuel (24 V)
Preparation for machine guidance system
Reflective warning stickers
Refuelling pump (electrical)
Reversible fan drive
Special painting

## Hydraulic System

Bypass filter for hydraulic oil
Liebherr hydraulic oil, adapted for extreme climate conditions
Liebherr hydraulic oil, biodegradable

## Engine

Air pre-filter with dust trap
Automatic engine shut-down after idling
Diesel particulate filter

## Operator's Cab

Acoustic travel alarm deactivatable
Amber beacon on cabin
Auxiliary heater (programmable)
Bottom windscreen wiper
Cool box (12 V)

## Operator's Cab

Dark tinted windows
Electronic immobilizer
Falling objects protection structure FOPS
Fire extinguisher
First-aid box
Footrest
Front guard protection structure FGPS
Front guard protection structure FGPS swivelable
Handrests elevated for joysticks
Headlights on cab roof, front, LED, 2 pieces
Headlights on cab roof, front, halogen, 2 pieces
Headlights on cab, front, LED, 2 pieces
Headlights on cab, rear, halogen, 2 pieces
Headlights on cab, rear, LED, 2 pieces
Impact-resistant 1 piece windscreen
Impact-resistant roof window
Liebherr proportional control (mini-joysticks 2 axis)
Operator seat Comfort with 4-points seat belt
Operator seat Premium with integrated ventilation
Radio Comfort
Retractable seat belt 76 mm, orange color
Roof window wiper
Skyview 360°
Special painting
Straight travel pedals
Sun visor
Sunshield on cab roof
Switchable high-pressure control
Windscreen bottom protection grid

## Attachment

Bottom protection for stick
Centralised lubrication extended for connecting link
Filter for hydraulic hammer return flow
Grapple hydraulic lines
Headlight guards on boom
Headlights on boom, LED, 2 pieces
Headlights on stick, right and left, LED, 2 pieces, protections included
High pressure circuit with Tool Control (10 tool adjustments on display)
Liebherr bucket range
Liebherr tooth system
LIKUFIX, quick coupling system for hydraulic tools
Load holding valve for bucket cylinder
Medium pressure circuit
Mono boom 5.20 m
Overload warning device
Protection for piston rod, bucket cylinder
Quick coupler SWA 48 hydraulic
Quick coupler SWA 48 mechanical
Security for hoist cylinders
Special painting
Stick 2.25 m
Stick 2.45 m
Stick 2.65 m
Stick 3.05 m
Tool Management, automatic tool recognition (in combination with LIKUFIX)
Two-piece boom 5,40 m
Work envelope limitation height restricted

Non-exhaustive list, please contact us for further information.

**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 applications.

## 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 41,000 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-France SAS

2 avenue Joseph Rey, B.P. 90287, FR-68005 Colmar Cedex  
☎ +33 389 21 30 30, Fax +33 389 21 37 93  
[www.liebherr.com](http://www.liebherr.com), E-Mail: [info.lfr@liebherr.com](mailto:info.lfr@liebherr.com)  
[www.facebook.com/LiebherrConstruction](https://www.facebook.com/LiebherrConstruction)