## L 526 - L 546

## LIEBHERR

**Wheel loaders** 



## **Performance**

Versatile all-rounders – wheel loaders for every application

## **Economy**

Efficient powerhouse – low costs with high handling capacity

## Reliability

Reliable performers – proven quality for durable machines

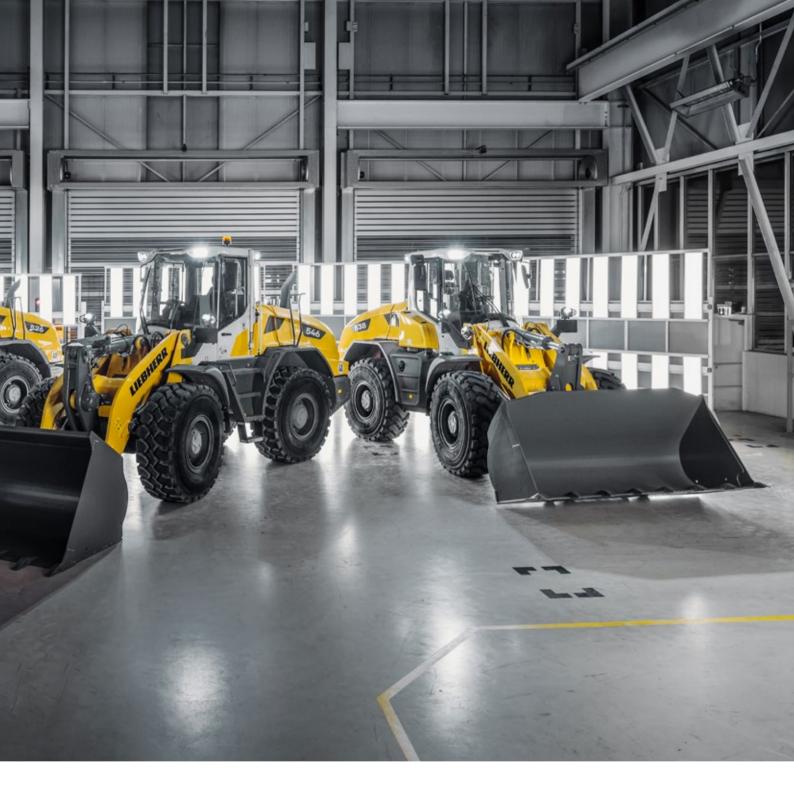
## **Comfort**

Intelligent engineering – when technology delivers comfort and safety

## Maintainability

Secure both time and cost savings – thanks to quick and simple maintenance





#### L 526

Tipping load, articulated 8,730 kg Bucket capacity 2.2 m³ Operating weight 13,170 kg Engine output 116 kW / 158 HP

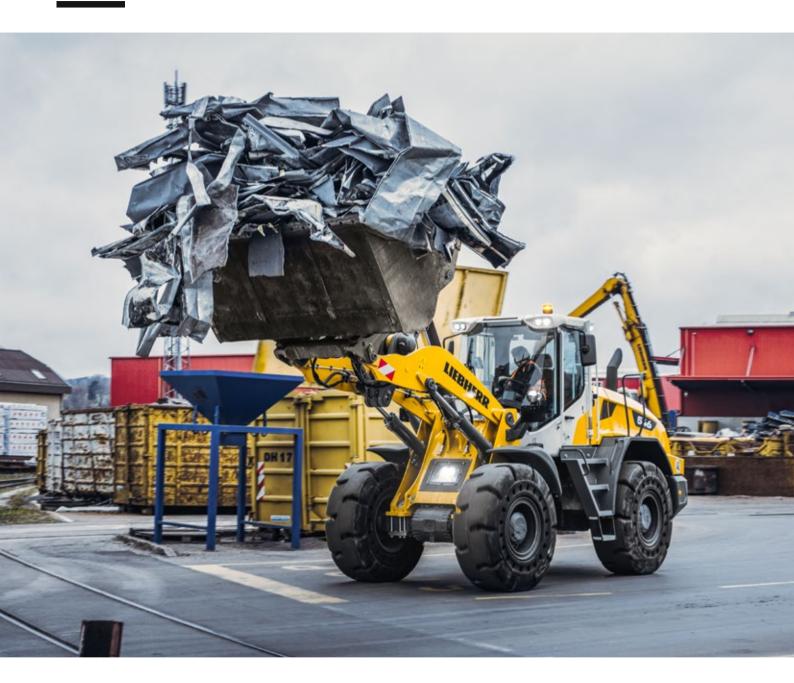
#### L 538

Tipping load, articulated 9,650 kg Bucket capacity 2.6 m³ Operating weight 14,520 kg Engine output 129 kW / 175 HP

#### L 546

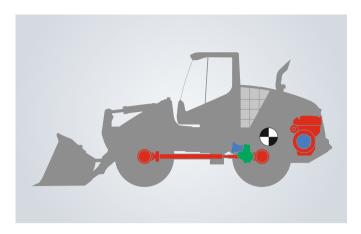
Tipping load, articulated 11,010 kg Bucket capacity 3.0 m³ Operating weight 15,410 kg Engine output 138 kW/188 HP

## **Performance**



# Versatile all-rounders – wheel loaders for every application

The optimised z-bar kinematics on Liebherr's mid-sized wheel loaders is powerful and performance-oriented and can be used in countless ways. In combination with the proven Liebherr travel drive and the wide selection of now-larger standard buckets, the variety of possible applications is taken to a new level.



## Powerful machine design

- The drive components installed in the rear of the wheel loader serve as a natural counterweight and are part of the sophisticated counterweight design
- Ideal weight distribution leads to higher tipping loads and thus greater productivity
- The balanced weight distribution increases efficiency and saves fuel
- Strong designs and robust steel ensure reliable and powerful performance



#### Hydrostatic travel drive

- The Liebherr travel drive enables continuous acceleration in all speed ranges, without noticeable gear changes or loss of tractive force
- Increased torque enable even better acceleration and faster operation
- Reduced engine speeds provide further fuel savings, lowering operating costs



#### Powerful, optimised z-bar kinematics

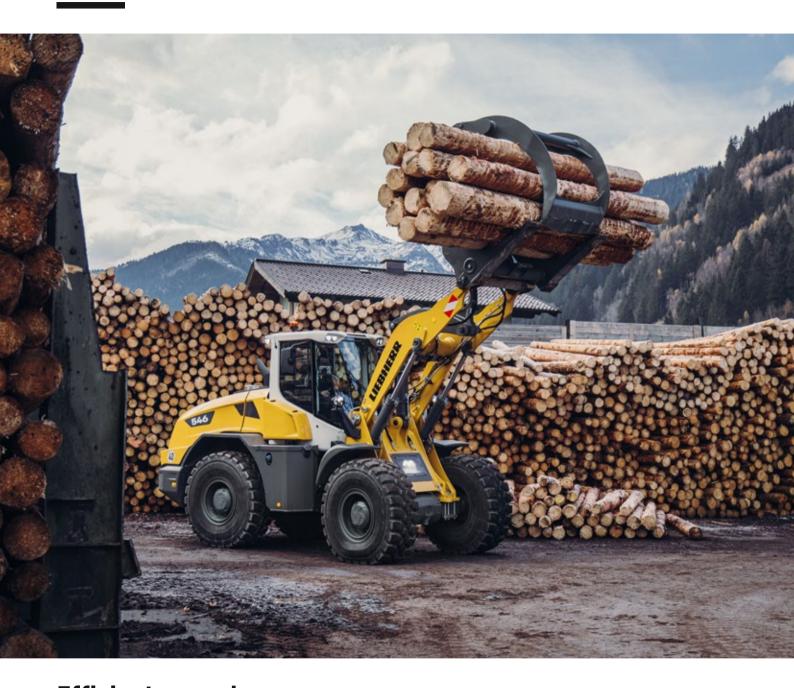
- New, optimised z-bar kinematics enables roughly 20% more breakout force than the previous generation
- Faster tilting movements and cycle times means more efficient operation
- Longer lift arms and the resulting higher reach and dump over heights makes daily operation even easier
- State-of-the-art electro-hydraulic components enable functions such as optimum parallel fork guidance prongs at the touch of a button



#### A plethora of options, configurable to your needs

- The diverse selection of factory equipment means that the right tool is always available
- Larger standard buckets ensure greater handling performance in the same amount of time
- The robust bucket design enables fast, efficient bucket filling
- Modular bucket construction allows for individual configuration, suitable for any application

## **Economy**



# Efficient powerhouse – low costs with high handling capacity

Power, speed, and durability, combined with innovative technology, results in an optimum machine design. The efficient hydrostatic travel drive and robust components reduce operating costs in a sustainable way, putting more money in your pocket.



#### Maximum productivity with minimum fuel consumption

- Liebherr power efficiency (LPE) optimises the interaction between the diesel engine, transmission, and working hydraulics for maximum efficiency
- Liebherr travel drive with LPE provides enormous fuel savings
- At the highest efficiency, operating costs are reduced, and profitability is increased



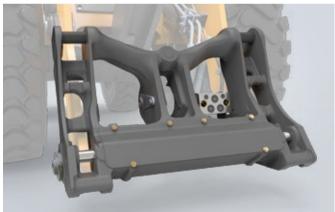
#### Intelligent solutions for limiting wear

- The Liebherr travel drive brakes automatically, the service brakes only have a supporting effect, meaning they remain almost wear-free
- Continuous tractive force control combined with limited slip differentials prevents wheel spin, thereby increasing productivity and significantly reducing tyre wear



#### **Efficient management with LiDAT**

- Liebherr's data transmission and tracking system
- Optimal management, monitoring, and control of the entire fleet in terms of machine data acquisition, data analysis and service
- Evaluations of machine use and fuel consumption ensure the machines are managed economically
- One year of complimentary LiDAT included with every new machine



#### LIKUFIX

- Optional hydraulic quick coupler with integrated, automatic 3rd & 4th hydraulic circuit
- Hydraulic working tools can be changed in seconds directly from the cab
- The changeover is fully automatic, safe and leak-free
- Time savings thanks to greater convenience lead to increased productivity, saving time and money

## Reliability



# Reliable performers – proven quality for durable machines

The development of Liebherr's next generation of mid-sized wheel loaders centered around feedback from those most important to us, our customers. This, combined with decades of industry experience, has resulted in Liebherr's most powerful and high-performance mid-sized wheel loaders ever. The machines' premium quality and reliability stems from the integration of sophisticated technology and benchmark-setting componentry.



#### High-performance, durable components

- Decades of experience in the development, design, and manufacture of components ensures robustness and durability
- Ideal coordination of the individual components for maximum performance
- High-quality Liebherr standards ensure reliability even under the toughest operating conditions



#### Uninterrupted operation

- The diesel oxidation catalyst (DOC), diesel particle filter (DPF), and selective catalytic reduction (SCR) are installed for exhaust gas treatment, effectively reducing emissions
- The diesel particle filter can be cleaned during operation via active regeneration, thus enabling uninterrupted work
- Longer intervals between regenerations increases productivity, saves fuel, and reduces operating costs



#### Reliable Liebherr drive design

- The proven Liebherr hydrostatic travel drive is extremely robust and powerful, ensuring a long service life
- The enlarged travel pumps and motors effectively increase the tractive force, providing greater power output



#### Optimal cooling capacity

- The radiator is installed behind the cab the cleanest spot on the wheel loader
- Cooling air is drawn into the system behind the operator's cab and flows through the entire engine compartment
- Demand-controlled cooling via thermostatic control for reliable operation
- High machine availability due to less radiator contamination

## **Comfort**



# Intelligent engineering – when technology delivers comfort and safety

Get in the comfort zone – get in a Liebherr wheel loader cab. The modern cab design is optimally-adapted to the day-to-day needs of machine operators. The spacious and ergonomically-designed operator's cab provides the perfect conditions for comfortable and productive working and can be individually adjusted to the respective operator.





#### Modern cab design for greater productivity

- The modern, ergonomic cab design enables concentrated and fatigue-free work
- The displays, controls, and the operator's seat are ideally-coordinated and form an ergonomic unit
- Individual adjustment options for the operator's seat and the steering wheel mean the operator has a relaxed working atmosphere with plenty of legroom
- Numerous storage compartments and well-thought-out solutions provide plenty of space throughout the cab

#### Keep an eye on everything - for hazard-free work

- The extensive use of glass in the cab provides excellent all-round visibility
- The engine bonnet was designed to optimize visibility.
   This, together with the integrated back-up camera, ensures excellent lines of sight and provides for greater safety



#### Innovative joystick steering

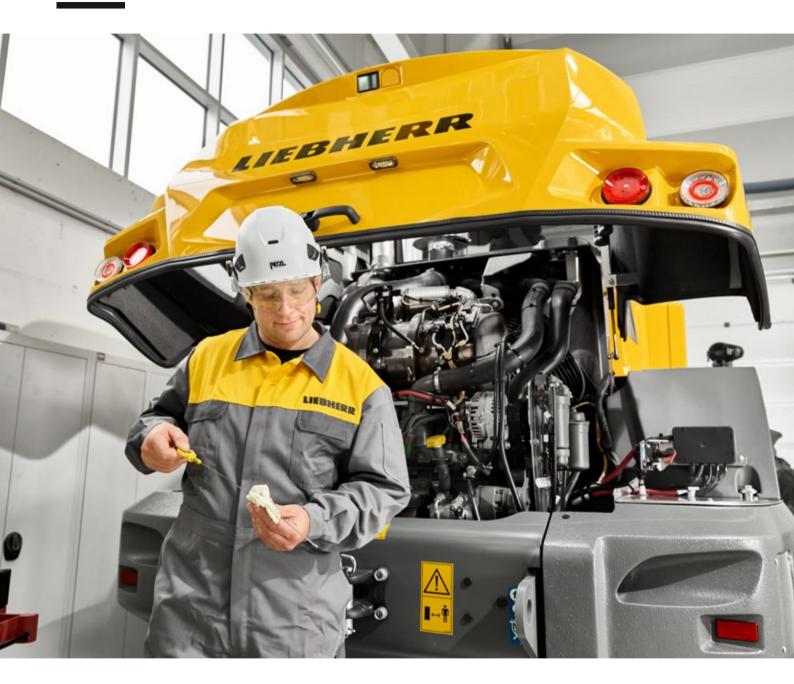
- Optional joystick steering is integrated into the operator's seat for ergonomic and comfortable operation
- Intuitive operating behaviour resembles that of a steering wheel
- The angle of the joystick corresponds to the desired machine articulation angle
- Speed-dependent force feedback ensures precise and safe steering behaviour
- The machine can also be ordered without a steering wheel, thanks to joystick steering only, making constant switching between the wheel and the controls a thing of the past



#### Assistance systems: increase safety - conveniently

- Active personnel detection monitors the rear area of the wheel loader and warns of hazards with a visual and acoustic signal
- Front space monitoring ensures optimised visibility when using large attachments
- Skyview 360° simplifies monitoring of the machine surroundings environment on a separate display in the cab
- The weighing system with "Truck Payload Assist" ensures faster and more accurate loading cycles
- Further assistance systems are available upon customer request

## **Maintainability**



## Secure both time and cost savings – thanks to quick and simple maintenance

Intelligent component instillation, quick and easy access to the engine compartment, and attention to every last detail are crucial for effective maintenance work. All installed parts which require servicing can be reached safely and comfortably, saving time and money.



#### Safe and easy service access

- All maintenance points are accessible safely, easily, quickly and cleanly
- Non-slip treads and sturdy handrails ensure maximum safety when cleaning
- The entire engine compartment can be accessed by opening just one bonnet
- All points for daily maintenance are conveniently accessible from the ground



#### Low maintenance due to intelligent design

- Simple and safe maintenance ensures less downtime
- Less radiator contamination due to its well thought-out position directly behind the operator's cab
- Active regeneration of exhaust gas saves time and money



#### Increased efficiency down to the smallest detail

- Safe access to the articulation area of the wheel loader
- Simplified accessibility of the refuelling pump enables quick and easy fuel filling
- Access to the SCR tank is in an optimal position directly next to the diesel tank nozzle



#### 24h Liebherr-Service

- Effective and timely support from a well-staffed service network
- Spare parts service with delivery in 24 hours
- Fast and safe service provision by qualified service specialists

# Focus on performance and power

## Lift arms

Solid and versatile – the intelligently-designed lift arms with the newly-optimized z-bar kinematics stand out for their faster tilting movements and cycle times. The increased range in roll out and roll back, increased digging depth, and push-button parallel guidance for fork operation increase productivity tremendously. Further-refined lift arms and tilt cylinders as well as a stronger front frame design makes the wheel loader a veritable powerhouse with unlimited application possibilities.

## Performance bucket

Configurable and durable – the enlarged standard buckets provide more bucket capacity as well as a greater tire clearance, resulting in significantly more handling capacity per loading cycle. The modular bucket design allows individual configuration for each application and ensures maximum handling performance. The optimised design of the quick coupler improves visibility and provides an optimal view of the load, thereby increasing safety. The optional bucket tilt assist, with automatic metered dump and bucket shake features, makes easy even the toughest of applications.





## **Design**

All-round dynamic – the new wheel loaders stand out thanks to their well thought-out design, which begins with the modern exterior styling, and finishes with the dynamic travel drive at the heart of the machine. Optimised and further developed all around, Liebherr wheel loaders offer state-of-the-art engineering down to the smallest detail.

## **Technology**

Powerful and robust – the enlarged working hydraulic pumps and automatic pressure relief for auxiliary hydraulic circuits ensure that work can be undertaken in a safe and comfortable manner. The same tasks can thus be completed in less time. The optimised driving dynamics ensures that any material can be moved from point A to point B – quickly. The longer wheelbase delivers increased stability and ride comfort.

## **Technical data**

## Diesel engine

Diesel engine							
Water-cooled turbocharged in-series engine with cooled exhaust gas recirculation			L 526	L 538	L 546		
Exhaust gas recirculation   Cylinder inline	Diesel engine						
Cylinder inline         4         4         6           Fuel injection process         Electronic Common Rail high-pressure injection           Output to         kW/HP         114/155         126/171         148/201           ISO 9249 ~ SAE J1349         at RPM         1,800         1,800         2,000           Rated output to         ISO 14396/ECE-R.120         kW/HP         116/158         129/175         138/188           Nominal speed         at RPM         2,200         2,200         2,200           Max. torque to         Nm         667         667         809           ISO 14396         at RPM         1,600         1,600         1,600           Displacement         litres         4.5         4.5         6.8           Bore/Stroke         mm         106/127         106/127         106/127           Stage V         Harmful emissions values         According to regulation (EU) 2016/1628           Emission control         SCR technology and closed diesel particle filter system           Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display           Electrical system         Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display           Electrical system         24<	Design		Water-cooled turbocharged in-series engine with cooled				
Fuel injection process         Electronic Common Rail high-pressure injection           Output to         kW/HP         114/155         126/171         148/201           ISO 9249 ~ SAE J1349         at RPM         1,800         1,800         2,000           Rated output to         ISO 14396/ECE-R.120         kW/HP         116/158         129/175         138/188           Nominal speed         at RPM         2,200         2,200         2,200           Max. torque to         Nm         667         667         809           ISO 14396         at RPM         1,600         1,600         1,600           Displacement         litres         4.5         4.5         6.8           Bore / Stroke         mm         106/127         106/127         106/127           Stage V         Harmful emissions values         According to regulation (EU) 2016/1628         SCR technology and closed diesel particle filter system           Emission control         SCR technology and closed diesel particle filter system         Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display           Electrical system         Operating voltage         V         24         24         24           Alternator         V/A         24/100         24/100 <t< td=""><td></td><td></td><td>exhaust gas recirc</td><td>ulation</td><td></td></t<>			exhaust gas recirc	ulation			
Output to ISO 9249 ~ SAE J1349         kW/HP at RPM Rated output to ISO 14396/ECE-R.120         kW/HP kW/HP ISO 14396/ECE-R.120         116/158         129/175         138/188           Nominal speed         at RPM ISO 14396         2,200         2,200         2,200           Max. torque to Max. torque to Mor. Store V         nm Iso 14396         667         667         809           ISO 14396         at RPM Iso 14396         1,600         1,600         1,600           Stage V         4.5         4.5         6.8           Harmful emissions values Emission control Air cleaner system         According to regulation (EU) 2016/1628           SCR technology and closed diesel particle filter system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display           Electrical system Operating voltage         V         24         24         24           Alternator         V/A         24/100         24/100         24/100	Cylinder inline		4	4	6		
SO 9249 ~ SAE J1349	Fuel injection process		Electronic Commo	n Rail high-pressure	injection		
Rated output to   ISO 14396/ECE-R.120	Output to	kW/HP	114/155	126/171	148/201		
SO 14396/ECE-R.120	ISO 9249 ~ SAE J1349	at RPM	1,800	1,800	2,000		
Nominal speed	Rated output to		·				
Max. torque to ISO 14396         Nm at RPM ISO 14396         667 at RPM ISO 14396         667 at RPM ISO 14396         667 at RPM ISO 14396         809 at RPM ISO 0 at RPM ISO 0 at Stage V           Bore / Stroke         mm Stage V         4.5 at Celevition (EU) 2016/1628         6.8 at Celevition (EU) 2016/1628           Emission control         According to regulation (EU) 2016/1628 SCR technology and closed diesel particle filter system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display           Electrical system Operating voltage         V 24         24 24 24 24 24         24 24 24           Battery         Ah 2x 135 2x 135 2x 135 2x 135         2x 135 2x 135           Alternator         V/A         24/100 24/100         24/100	ISO 14396/ECE-R.120	kW/HP	116/158	129/175	138/188		
Score   Scor	Nominal speed	at RPM	2,200	2,200	2,200		
Displacement   Litres   4.5   4.5   6.8	Max. torque to	Nm	667	667	809		
Bore / Stroke mm Stage V Harmful emissions values Emission control SCR technology and closed diesel particle filter system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display  Electrical system Operating voltage V 24 24 24 Battery Ah Alternator V/A 24/100 24/100 24/100	ISO 14396	at RPM	1,600	1,600	1,600		
Stage V       Harmful emissions values     According to regulation (EU) 2016/1628       Emission control     SCR technology and closed diesel particle filter system       Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display       Electrical system     V       Operating voltage     V       Battery     Ah       Alternator     V/A       24/100     24/100       24/100     24/100	Displacement	litres	4.5	4.5	6.8		
Harmful emissions values Emission control  Air cleaner system  Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display  Electrical system  Operating voltage V Battery Ah Alternator V/A  According to regulation (EU) 2016/1628 SCR technology and closed diesel particle filter system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display  24 24 24 24 24 24 24 24 24 24 24 24 24	Bore / Stroke	mm	106/127	106/127	106/127		
Emission control Air cleaner system SCR technology and closed diesel particle filter system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display    Electrical system Operating voltage V 24 24 24 24	Stage V						
Air cleaner system Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display  Electrical system   Operating voltage	Harmful emissions values		According to regula	ation (EU) 2016/162	28		
service indicator on the Liebherr display           Electrical system         V         24         24         24           Operating voltage         V         2x 135         2x 135         2x 135           Battery         Ah         2x 135         2x 135         2x 135           Alternator         V/A         24/100         24/100         24/100	Emission control		SCR technology an	d closed diesel part	icle filter system		
Electrical system           Operating voltage         V         24         24         24           Battery         Ah         2 x 135         2 x 135         2 x 135           Alternator         V/A         24/100         24/100         24/100	Air cleaner system		Dry type filter with	main and safety ele	ment, pre-cleaner,		
Operating voltage         V         24         24         24           Battery         Ah         2 x 135         2 x 135         2 x 135           Alternator         V/A         24/100         24/100         24/100			service indicator o	n the Liebherr displa	ay		
Battery         Ah         2 x 135         2 x 135         2 x 135           Alternator         V/A         24/100         24/100         24/100	Electrical system						
Alternator V/A 24/100 24/100 24/100	Operating voltage	V	24	24	24		
	Battery	Ah	2 x 135	2 x 135	2 x 135		
Starter V/kW 24/7.8 24/7.8 24/7.8	Alternator	V/A	24/100	24/100	24/100		
	Starter	V/kW	24/7.8	24/7.8	24/7.8		

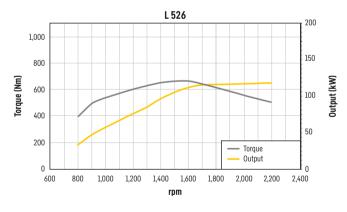
## Driveline

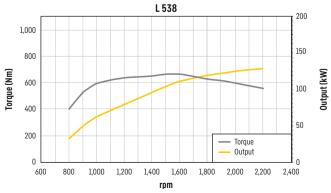
Continuous hydrostatic driveline						
Design	Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit and axle transfer case. Direction of travel is reversed by changing the flow-direction of the variable-displacement pump					
Filtration	Suction return line filter for closed circuit					
Control	By travel and inching pedal. The inching pedal makes it possible to control the tractive and thrust forces steplessly at full engine speed. The Liebherr control lever is used to control forward and reverse travel					
Travel speed range	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$					

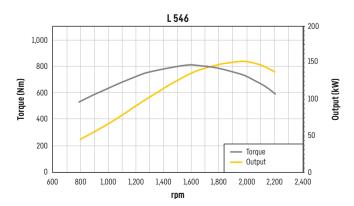


Wear-free service brake	Self-locking of the hydrostatic driveline (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes located in the differ- ential housing (two separate brake circuits)
Parking brake	Electro-hydraulically actuated spring-loaded disc brake system on the front axle

The braking system meets the requirements of the ISO 3450.







## - Axles

		L 526	L 538	L 546
Four-wheel drive				
Front axle		Fixed		
Rear axle		Centre pivot, with	10° oscillating angl	e to each side
Height of obstacles		470	470	470
which can be driven over	mm	470	470	470
		with all four wheel	s remaining in conta	act with the ground
Differentials		Automatic limited- action in both axle	slip differentials wi s	th 45 % locking
Reduction gear		Planetary final driv	e in wheel hubs	
Track width		1,900 mm with all	types of tyres	



Design	"Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting steering cylinders
Angle of articulation	40° to each side
Emergency steering	Electro-hydraulic emergency steering system

## Attachment hydraulics

Attachinent	iiyurauii	53			
		L 526	L 538	L 546	
Design		I	sing" variable axial pis ontrol, and pressure cu		
Cooling		Hydraulic of fan and oil	oil cooling using therm cooler	ostatically controlled	
Filtration		Return line	e filter in the hydraulic	reservoir	
Control		Liebherr control lever, electro-hydraulically operated			
Lifting function		Auto lifting	utral, lowering g and lowering using Li ion using Liebherr cont		
Tilt function		Automatic	neutral, dump bucket return-to-dig fo herr control lever	or tilting in and out	
Max. flow	l/min.	170	200	200	
Max. pressure	bar	350	350	350	

## **//** Attachment

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		L 526	L 538	L 546		
Geometry		Powerful, optim cylinder, option		ematics with one tilt uick coupler		
Bearings	earings Sealed					
Cycle time at nominal load		ZK	ZK	ZK		
Lifting	S	5.0	5.5	5.5		
Dumping	S	1.2	1.9	2.2		
Lowering (empty)	S	3.9	4.9	4.9		



== operator o cas		
Design		Elastic mounted, noise-proof cab ROPS roll over protection per EN ISO 3471/EN 474-1 FOPS falling objects protection per EN ISO 3449/ EN 474-1, Cat. II Driver's cab door with 105° opening angle and opening window with 5° gap opener or 170° opening, right side sliding side window, front windscreen made of laminated safety glass, green tinted as standard, side panels with single-pane safety glass ESG, green tinted, heated rear window ESG. Continuously adjustable steering column
Liebherr operator's seat		6 way adjustable, vibration-damped operator's seat "Comfort" with seat, depth and incline adjustment as standard (air-cushioned with seat heating adjustable to operator's weight), Liebherr control lever mounted into the operator's seat as standard
Cab heating andventilation		2-level air control, cooling water heating, defroster and air conditioning via manual nozzle position or electronic valve control for head and front area, as well as electronic fresh / recirculated air control, electrically heated rear window, filter system with pre-filter, fresh air filter and recirculated air filter, easily replaced, air condition / automatic air conditioning system with new improved cooling output optional
Vibration emissions		• • •
Vibrations in the hand/arm	m/s <sup>2</sup>	≤ 2.5
Vibrations through		
the whole body	m/s <sup>2</sup>	≤ 0.5

## Sound level

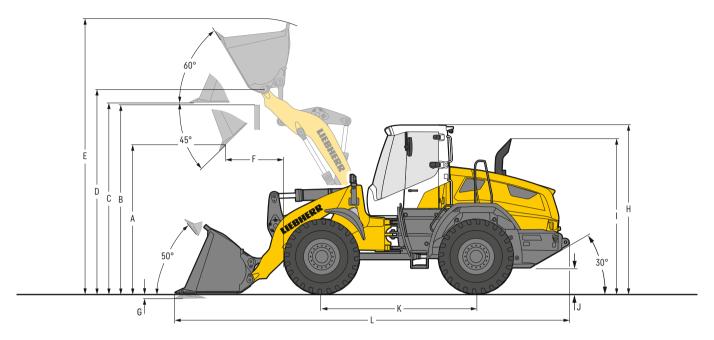
		L 526	L 538	L 546
Sound pressure level to ISO 6396				
L <sub>pA</sub> (inside cab)	dB(A)	69	69	69
Sound power level to 2000/14/EG				
L <sub>WA</sub> (surround noise)	dB(A)	102	102	104

## Capacities

		L 526	L 538	L 546
Fuel tank (plastic design)	l	205	205	205
Fuel tank				
(steel version, optional)	l	205	205	205
DEF tank	l	20	20	20
Engine oil		21	21	23.5
(inclusive filter change)	l			
Transmission	l	2.5	2.5	2.5
Coolant	l	26.5	26.5	26.5
Front axle / wheel hubs	l	16/2.5	19/3.5	19/3.5
Rear axle / wheel hubs	l	16/2.5	19/3.5	19/3.5
Hydraulic tank	l	95	95	95
Hydraulic system, total	l	170	180	180

## **Dimensions**

## **Loading bucket**



## Loading bucket

		L 526		L 538			L 546		
Geometry	ZK	ZK-QH	ZK	ZK	ZK-QH	ZK	ZK	ZK-QH	ZK
Cutting tools	T	T	T	T	T	T	T	T	T
Lift arm length m	n 2,550	2,550	2,550	2,650	2,650	2,650	2,650	2,650	2,650
Bucket capacity according to ISO 7546**	3 2.2	2.0	2.4	2.6	2.4	2.8	3.0	2.8	3.2
Specific material density t/r	1.8	1.8	1.6	1.8	1.8	1.6	1.8	1.8	1.6
Bucket width m	n 2,520	2,520	2,520	2,720	2,520	2,720	2,720	2,720	2,720
A Dumping height at max. lift height and 45° discharge m	n 2,900	2,815	2,855	2,960	2,830	2,935	2,900	2,800	2,860
B Dump-over height m	n 3,450	3,450	3,450	3,540	3,540	3,540	3,540	3,540	3,540
C Max. height of bucket bottom m	n 3,615	3,615	3,615	3,720	3,720	3,720	3,720	3,720	3,720
D Max. height of bucket pivot point m	n 3,875	3,875	3,875	3,980	3,980	3,980	3,980	3,980	3,980
E Max. operating height m	- /	5,150	5,170	5,270	5,390	5,310	5,360	5,430	5,420
F Reach at max. lift height and 45° discharge m	n 945	1,020	990	1,085	1,210	1,110	1,150	1,235	1,190
G Digging depth m		100	100	100	100	100	100	100	100
H Height above operator's cab <sup>1)</sup> m	-,	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250
I Height above exhaust m	n 2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950
J Ground clearance m		440	440	430	430	430	430	430	430
K Wheelbase m	, ,	2,975	2,975	3,025	3,025	3,025	3,025	3,025	3,025
L Overall length m	,	7,600	7,550	7,630	7,810	7,670	7,720	7,850	7,780
Turning circle radius over outside bucket edge m	-,	5,990	5,970	6,140	6,100	6,150	6,165	6,200	6,180
	N 110	100	105	125	115	120	140	130	135
	g 10,100	9,350	10,050	11,200	10,400	11,150	12,500	11,600	12,400
	<b>g</b> 8,730	8,000	8,650	9,650	8,880	9,610	11,010	10,250	10,900
	g 13,170	13,570	13,210	14,520	14,900	14,550	15,410	15,810	15,440
Tyre size		20.5R25 L3			20.5R25 L3			20.5R25 L3	

The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)
 \*\* Actual bucket capacity may be approx. 10 % larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see page 12.

= Z-bar linkage

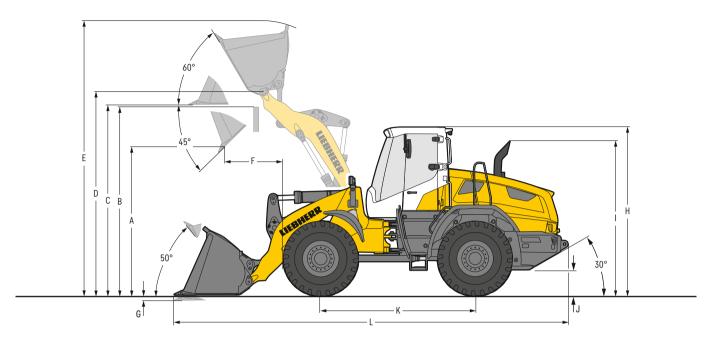
ZK-QH = Z-bar linkage incl. quick hitch

= Welded-on tooth holder with add-on teeth

With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 130 mm when door is open.

## **Dimensions**

## High lift arm/standard bucket



## Loading bucket

		L 526		L 538		L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		Ţ	T	T	T	T	T
Lift arm length	mm	3,000	3,000	3,000	3,000	3,000	3,000
Bucket capacity according to ISO 7546**	m³	2.0	2.0	2.4	2.2	2.8	2.6
Specific material density	t/m³	1.6	1.5	1.6	1.6	1.6	1.6
Bucket width	mm	2,520	2,520	2,520	2,520	2,720	2,720
A Dumping height at max. lift height and 45° discharge	mm	3,530	3,400	3,500	3,415	3,470	3,370
B Dump-over height	mm	4,015	4,015	4,070	4,070	4,070	4,070
C Max. height of bucket bottom	mm	4,200	4,200	4,260	4,260	4,260	4,260
D Max. height of bucket pivot point	mm	4,460	4,460	4,520	4,520	4,520	4,520
E Max. operating height	mm	5,620	5,740	5,820	5,870	5,850	5,930
F Reach at max. lift height and 45° discharge	mm	850	975	935	1,010	960	1,060
G Digging depth	mm	120	120	120	120	120	120
H Height above operator's cab <sup>1)</sup>	mm	3,250	3,250	3,250	3,250	3,250	3,250
I Height above exhaust	mm	2,950	2,950	2,950	2,950	2,950	2,950
J Ground clearance	mm	440	440	430	430	430	430
K Wheelbase	mm	2,975	2,975	3,025	3,025	3,025	3,025
L Overall length	mm	7,980	8,160	8,080	8,200	8,120	8,260
Turning circle radius over outside bucket edge	mm	6,200	6,260	6,260	6,300	6,360	6,400
Breakout force (SAE)	kN	115	105	130	120	145	135
Tipping load, straight*	kg	7,900	7,200	9,300	8,620	10,410	9,700
Tipping load, fully articulated*	kg	6,760	6,100	7,990	7,350	9,200	8,540
Operating weight*	kg	13,430	13,870	14,670	15,070	15,580	16,000
Tyre size		20.5F	R25 L3	20.5R	25 L3	20.5R	25 L3

The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)
 \*\* Actual bucket capacity may be approx. 10 % larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see page 12.

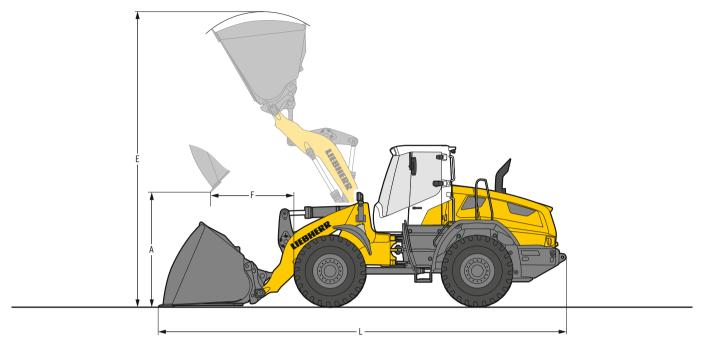
= Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch

= Welded-on tooth holder with add-on teeth

With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 130 mm when door is open.

## Light material bucket





## Heavy material density

		L 526		L 538		L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	m <sup>3</sup>	3.5	3.5	4.0	4.0	4.5	4.5
Specific material density	t/m³	1,05	1,0	1,05	1,0	1,05	1,0
Bucket width	mm	2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height	mm	2,590	2,490	2,595	2,520	2,510	2,440
E Max. operating height	mm	5,300	5,400	5,510	5,610	5,620	5,730
F Reach at maximum lift height	mm	1,230	1,320	1,420	1,490	1,510	1,570
L Overall length	mm	7,750	7,890	7,970	8,080	8,090	8,190
Tipping load, straight*	kg	9,600	8,900	10,600	10,000	11,820	11,200
Tipping load, fully articulated*	kg	8,230	7,590	9,090	8,520	10,140	9,560
Operating weight*	kg	13,450	13,890	14,790	15,220	15,700	16,120
Tyre size		20.58	22513	20.56	225   3	20 5R25 L3	



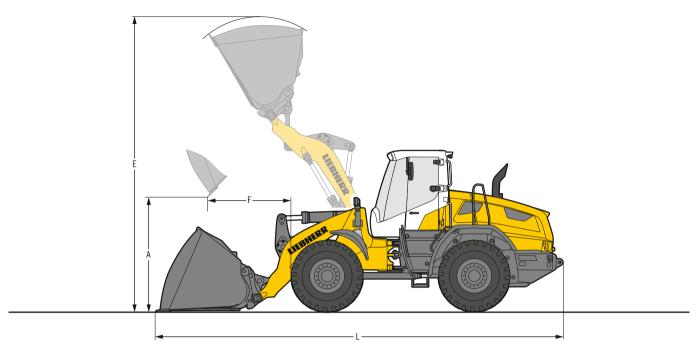
## E Light material density

,				
		L 526	L 538	L 546
Geometry		ZK-QH	ZK-QH	ZK-QH
Cutting tools		BOCE	BOCE	BOCE
Bucket capacity	m³	5.5	6.5	7.5
Specific material density	t/m³	0.5	0.5	0.5
Bucket width	mm	2,700	2,700	3,000
A Dumping height at max. lift height	mm	2,210	2,190	2,160
E Max. operating height	mm	5,800	6,080	6,110
F Reach at maximum lift height	mm	1,610	1,830	1,855
L Overall length	mm	8,300	8,550	8,590
Tipping load, straight*	kg	8,500	9,500	10,600
Tipping load, fully articulated*	kg	7,170	8,020	8,960
Operating weight*	kg	14,200	15,620	16,620
Tyre size		20.5R25 L3	20.5R25 L3	20.5R25 L3

<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

ZK = Z-bar linkage ZK-QH = Z-bar linkage incl. quick hitch

## High lift arm/light material bucket





## Heavy material density

		L 526		L 538		L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	m <sup>3</sup>	3.5	3.5	4.0	4.0	4.5	4.5
Specific material density	t/m³	0.85	0.8	0.85	0.8	0.85	0.8
Bucket width	mm	2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height	mm	3,170	3,080	3,135	3,060	3,050	2,985
E Max. operating height	mm	5,880	5,970	6,060	6,160	6,170	6,280
F Reach at maximum lift height	mm	1,180	1,270	1,275	1,340	1,360	1,420
L Overall length	mm	8,310	8,450	8,420	8,530	8,540	8,640
Tipping load, straight*	kg	7,400	6,800	8,730	8,200	9,800	9,240
Tipping load, fully articulated*	kg	6,280	5,720	7,450	6,920	8,350	7,820
Operating weight*	kg	13,750	14,190	14,990	15,420	15,900	16,330
Tyre size		20 50	22513	20 5R25 L3		20 5R25 L3	



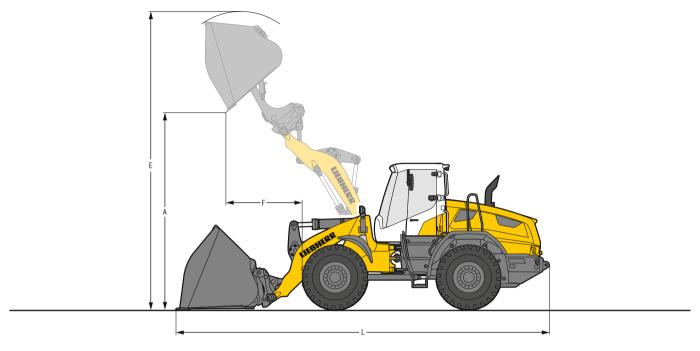
## E Light material density

		L 526	L 538	L 546
Geometry		ZK-QH	ZK-QH	ZK-QH
Cutting tools		BOCE	BOCE	BOCE
Bucket capacity	m³	4.5	5.5	6.5
Specific material density	t/m³	0.5	0.5	0.5
Bucket width	mm	2,700	2,700	2,700
A Dumping height at max. lift height	mm	2,925	2,850	2,730
E Max. operating height	mm	6,210	6,440	6,625
F Reach at maximum lift height	mm	1,430	1,555	1,680
L Overall length	mm	8,670	8,830	8,995
Tipping load, straight*	kg	6,610	7,900	8,900
Tipping load, fully articulated*	kg	5,540	6,610	7,450
Operating weight*	kg	14,350	15,650	16,650
Tyre size		20.5R25 L3	20.5R25 L3	20.5R25 L3

<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

ZK = Z-bar linkage ZK-QH = Z-bar linkage incl. quick hitch

## **High-Dump bucket**





## Heavy material density

		L 526		L 538		L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	m <sup>3</sup>	3.0	3.0	3.5	3.5	4.0	4.0
Specific material density	t/m³	1.1	1.05	1.1	1.05	1.1	1.05
Bucket width	mm	2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height	mm	4,495	4,600	4,550	4,680	4,490	4,605
E Max. operating height	mm	6,210	6,350	6,360	6,550	6,450	6,600
F Reach at maximum lift height	mm	1,280	1,350	1,430	1,470	1,510	1,560
L Overall length	mm	7,900	8,030	8,060	8,140	8,160	8,260
Tipping load, straight*	kg	8,700	8,100	9,800	9,300	11,100	10,500
Tipping load, fully articulated*	kg	7,350	6,830	8,340	7,860	9,390	8,850
Operating weight*	kg	14,110	14,460	15,440	15,780	16,350	16,700
Tyre size		20 56	22513	20 5R25 L3		20 5R25 L3	



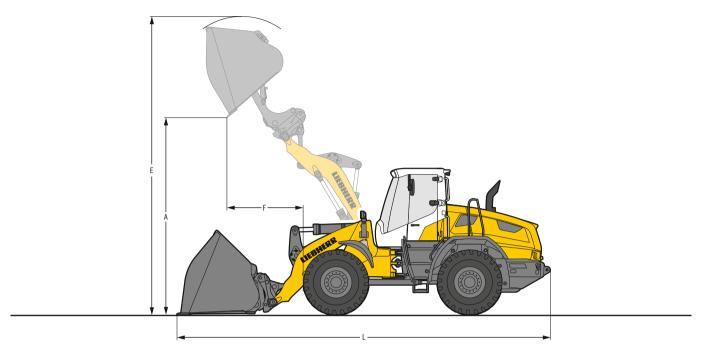
## Light material density

		L 526	L 538	L 546
Geometry		ZK-QH	ZK-QH	ZK-QH
Cutting tools		BOCE	BOCE	BOCE
Bucket capacity	m³	5.0	6.0	7.0
Specific material density	t/m³	0.5	0.5	0.5
Bucket width	mm	2,700	2,700	3,000
A Dumping height at max. lift height	mm	4,360	4,385	4,365
E Max. operating height	mm	6,660	6,910	6,950
F Reach at maximum lift height	mm	1,560	1,750	1,770
L Overall length	mm	8,300	8,510	8,540
Tipping load, straight*	kg	8,100	9,130	10,400
Tipping load, fully articulated*	kg	6,780	7,680	8,720
Operating weight*	kg	14,590	15,930	16,880
Tyre size		20.5R25 L3	20.5R25 L3	20.5R25 L3

<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

ZK = Z-bar linkage ZK-QH = Z-bar linkage incl. quick hitch

## High lift arm/high dump bucket





## 

		L 526		L 538		L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	m <sup>3</sup>	3.0	3.0	3.5	3.5	4.0	4.0
Specific material density	t/m³	0.85	0.8	0.85	0.8	0.85	0.8
Bucket width	mm	2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height	mm	5,090	5,200	5,090	5,220	5,030	5,145
E Max. operating height	mm	6,800	6,940	6,900	7,090	6,990	7,140
F Reach at maximum lift height	mm	1,230	1,300	1,285	1,325	1,365	1,420
L Overall length	mm	8,450	8,580	8,490	8,580	8,590	8,700
Tipping load, straight*	kg	6,600	6,100	8,000	7,540	9,100	8,600
Tipping load, fully articulated*	kg	5,490	5,030	6,740	6,300	7,640	7,160
Operating weight*	kg	14,420	14,770	15,650	15,990	16,560	16,910
Tyre size		20.58	22513	20 5R25 L3		20 5R25 L3	



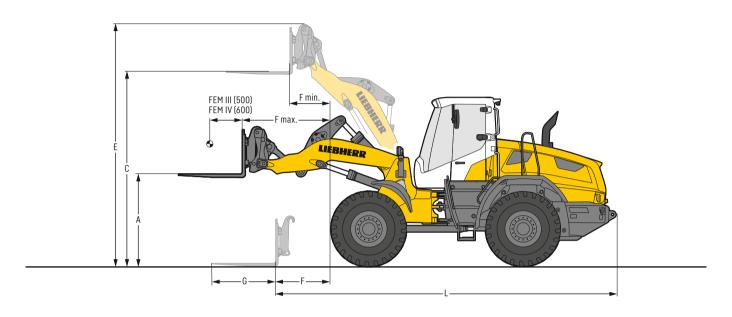
## Light material density

,				
		L 526	L 538	L 546
Geometry		ZK-QH	ZK-QH	ZK-QH
Cutting tools		BOCE	BOCE	BOCE
Bucket capacity	m³	4.0	5.0	6.0
Specific material density	t/m³	0.5	0.5	0.5
Bucket width	mm	2,700	2,700	2,700
A Dumping height at max. lift height	mm	5,080	5,000	4,925
E Max. operating height	mm	7,070	7,300	7,440
F Reach at maximum lift height	mm	1,360	1,510	1,600
L Overall length	mm	8,660	8,825	8,945
Tipping load, straight*	kg	6,200	7,500	8,550
Tipping load, fully articulated*	kg	5,100	6,220	7,130
Operating weight*	kg	14,750	16,050	16,970
Tyre size		20.5R25 L3	20.5R25 L3	20.5R25 L3

<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

ZK = Z-bar linkage ZK-QH = Z-bar linkage incl. quick hitch

#### Fork carrier and fork



## Fork carrier and fork

	L!	526	L 5	38	L 5	46	L 538		L 546	
	STD	HL	STD	HL	STD	HL	STD	HL	STD	HL
Fork	FEM III	FEM IV	FEM IV	FEM IV	FEM IV					
Geometry	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH	ZK-QH
Lift arm length mn	2,550	3,000	2,650	3,000	2,650	3,000	2,650	3,000	2,650	3,000
A Lifting height at max. reach mn	1,700	1,700	1,780	1,780	1,780	1,780	1,740	1,740	1,740	1,740
C Max. lifting height mn	3,675	4,250	3,780	4,310	3,780	4,310	3,740	4,270	3,740	4,270
E Max. operating height mn	4,605	5,190	4,705	5,250	4,705	5,250	4,740	5,285	4,740	5,285
F Reach at loading position mn	1,030	1,590	1,070	1,510	1,070	1,510	1,090	1,530	1,090	1,530
F max. Max. reach mn	1,640	2,080	1,710	2,050	1,710	2,050	1,690	2,030	1,690	2,030
F min. Reach at max. lifting height mn	700	650	790	650	790	650	770	630	770	630
G Fork length mn	1,200	1,200	1,200	1,200	1,200	1,200	1,500	1,500	1,500	1,500
L Length - basic machine mn	6,590	7,150	6,670	7,120	6,670	7,120	6,700	7,140	6,700	7,140
Tipping load, straight* k	7,350	6,000	8,300	7,150	9,350	8,100	7,900	6,800	8,900	7,700
Tipping load, fully articulated* kg	6,320	5,100	7,190	6,150	8,080	6,950	6,780	5,780	7,650	6,560
Recommended payload for uneven ground										
= 60 % of tipping load, articulated <sup>1)</sup> kg	3,750	3,000	4,300	3,650	4,800	4,150	4,000	3,450	4,550	3,900
Recommended payload for smooth surfaces										
= 80 % of tipping load, articulated <sup>1)</sup> kg		4,050	5,0002)	4,900	5,0002)	5,0002)	5,400	4,600	6,100	5,200
Operating weight* kg	13,110	13,410	14,390	14,570	15,190	15,400	14,620	14,830	15,450	15,660
Tyre size	20.5	R25 L3	20.58	25 L3	20.5R	25 L3	20.5R	25 L3	20.5R	25 L3

<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

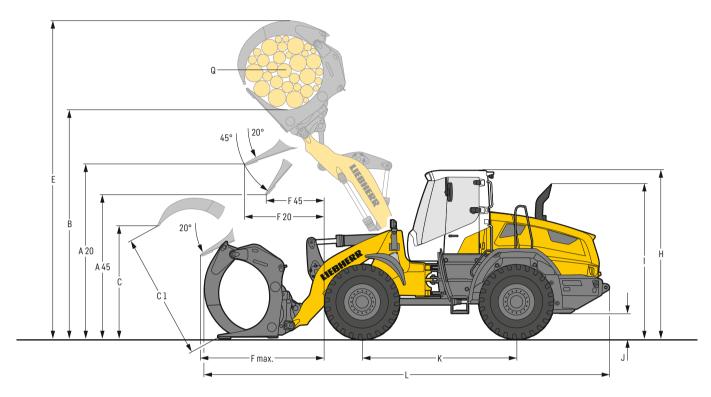
STD = Standard lift arm length

HL = High Lift
ZK-QH = Z-bar linkage incl. quick hitch

<sup>1)</sup> According to EN 474-3

<sup>2)</sup> Payload is limited by FEM III fork carrier and forks to 5,000 kg

## Log grapple





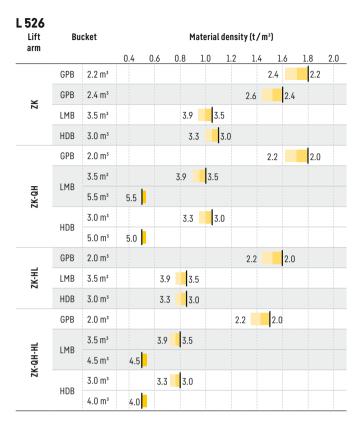
			L 526	L 538	L 546
Geom	etry		ZK-QH	ZK-QH	ZK-QH
A20	Discharge height at 20°	mm	3,205	3,260	3,260
A45	Discharge height at 45°	mm	2,785	2,790	2,790
В	Manipulation height	mm	4,290	4,440	4,440
С	Max. grapple opening in loading position	mm	1,910	2,395	2,395
C1	Max. grapple opening	mm	2,140	2,590	2,590
E	Max. height	mm	5,840	6,240	6,240
F20	Reach at max. lifting height at 20° discharge	mm	1,425	1,650	1,650
F45	Reach at max. lifting height at 45° discharge	mm	1,035	1,230	1,230
F max	. Max. reach	mm	2,360	2,575	2,575
Н	Height above operator's cab 1)	mm	3,250	3,250	3,250
1	Height above exhaust	mm	2,950	2,950	2,950
J	Ground clearance	mm	440	430	430
K	Wheelbase	mm	2,975	3,025	3,025
L	Overall length	mm	7,720	7,950	7,950
Width	over tyres	mm	2,480	2,480	2,480
Q	Grapple diameter	m <sup>2</sup>	1.3	1.8	1.8
Grapp	le width	mm	1,600	1,600	1,600
Paylo	ad*	kg	3,400	4,100	4,800
Opera	ting weight*	kg	13,900	15,290	16,120
Tyre s	iize		20.5R25 L3	20.5R25 L3	20.5R25 L3

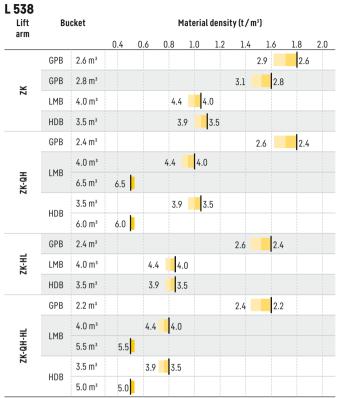
<sup>\*</sup> The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

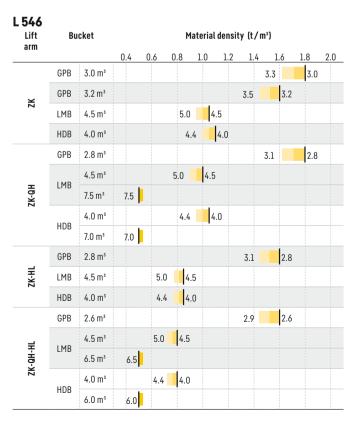
1) With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 130 mm when door is open.

ZK-QH = Z-bar linkage incl. quick hitch

## **Bucket selection**







#### **Bucket filling factor**



110% 105% 100% 95%

## Lift arm

ZK Z-bar linkage, standard lift arm length
ZK-QH Z-bar linkage with quick hitch, standard lift arm length
ZK-HL Z-bar linkage, High Lift

**ZK-QH-HL** Z-bar linkage, with quick hitch, High Lift

#### **Bucket**

GPB General purpose bucket (Excavation bucket)
LMB Light material bucket
HDB High-dump bucket

#### Bulk material densities and bucket filling factors

		t/m³	%			t/m³	%
Gravel	moist	1,9	105	Earth	dry	1,3	115
	dry	1,6	105		wet excavated	1,6	110
	crushed stone	1,5	100	Topsoil		1,1	110
Sand	dry	1,5	105	Basalt		1,95	100
	wet	1,9	110	Granite		1,8	95
<b>Gravel and Sand</b>	dry	1,7	105	Sandstone		1,6	100
	wet	2,0	100	Slate		1,75	100
Sand/Clay		1,6	110	Bauxite		1,4	100
Clay	natural	1,6	110	Limestone		1,6	100
	dry	1,4	110	Gypsum	broken	1,8	100
Clay / Gravel	dry	1,4	110	Coke		0,5	110
	wet	1,6	100	Slag	broken	1,8	100

		t/m³	%
Glass waste	broken	1,4	100
	solid	1,0	100
Compost	dry	0,8	105
	wet	1,0	110
Wood chips / Saw	0,5	110	
Paper	shredded/loose	0,6	110
	recovered paper / cardboard	1,0	110
Coal	heavy material density	1,2	110
	light material density	0,9	110
Waste	domestic waste	0,5	100
	bulky waste	1,0	100

## **Tipping load**



#### What is tipping load?

Load at centre of gravity of working equipment, so that the wheel loader just begins to tip over the front axle.

This is the most unfavourable static-load position for the wheel loader. Lifting arms horizontal, wheel loader fully articulated at centre pivot.

#### Pay load.

The pay load must not exceed 50 % of the tipping load when articulated.

This is equivalent to a static stability-margin factor of 2.0.

#### Bucket capacity.

The bucket volume is determined from the pay load.

Pay load =	Tipping load, articulated
Bucket capacity =	Pay load (t) Specific bulk weight of material (t/m³)

## **Tyres**

## Tyre types

	Size and tread code		Change of operating weight	Width over tyres	Change in vertical dimensions*	Use
			kg	mm	mm	
. 526						
Bridgestone	17.5R25 VJT	L3	- 394	2,440	- 44	Bulk material (firm ground conditions)
Bridgestone	17.5R25 VSDL	L5	119	2,450	- 5	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	20.5R25 VJT	L3	17	2,480	8	Bulk material (firm ground conditions)
ridgestone	20.5R25 VSDL	L5	680	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
ridgestone	20.5R25 VSDR	L5	688	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
ridgestone	550/65R25 VTS	L3	- 132	2,500	- 50	Gravel (all ground conditions)
	650/65R25 VTS	L3	605	2,650	16	Gravel (all ground conditions)
	20.5R25 EM-Master	L3	166	2,480	26	Bulk material (firm ground conditions)
	17.5R25 RT-3B	L3	- 320	2,460	- 41	Gravel (all ground conditions)
oodyear	17.5R25 TL-3A+	L3	- 252	2,460	- 39	Sand, Gravel, Earthworks, Clay (all ground conditions)
	17.5R25 RL-4K	L4	36	2,460	- 20	Gravel, Industry, Stone (firm ground conditions)
oodyear	17.5R25 RL-5K	L5	160	2,460	- 20	Stone, Scrap, Recycling (firm ground conditions)
oodyear	20.5R25 RT-3B	L3	11	2,490	16	Gravel (all ground conditions)
oodyear	20.5R25 TL-3A+	L3	156	2,500	11	Sand, Gravel, Earthworks, Clay (all ground conditions)
oodyear	20.5R25 GP-4D	L4	328	2,470	20	Gravel, Industry, Wood (firm ground conditions)
oodyear	20.5R25 RL-4K	L4	588	2,500	35	Gravel, Industry, Stone (firm ground conditions)
oodyear	20.5R25 RL-5K	L5	752	2,500	49	Stone, Scrap, Recycling (firm ground conditions)
1ichelin	17.5R25 XTLA	L2	- 555	2,460	- 44	Gravel, Earthworks, Clay (all ground conditions)
	17.5R25 XHA2	L3	- 528	2,460	-61	Sand, Gravel (all ground conditions)
	17.5R25 XLD D2A	L5	- 232	2,460	- 25	Stone, Mining spoil (firm ground conditions)
	17.5R25 X MINE PRO	L5	32	2,490	- 17	Stone, Scrap, Recycling (firm ground conditions)
ichelin	20.5R25 XTLA	L2	- 121	2,480	- 7	Gravel, Earthworks, Clay (all ground conditions)
ichelin	20.5R25 XHA2	L3	0	2,480	0	Sand, Gravel (all ground conditions)
lichelin	20.5R25 XLD D2A	L5	431	2,480	30	Stone, Mining spoil (firm ground conditions)
1ichelin	20.5R25 X MINE PRO	L5	616	2,510	48	Stone, Scrap, Recycling (firm ground conditions)
lichelin	550/65R25 XLD65	L3	- 82	2,510	- 44	Gravel (all ground conditions)
ichelin	650/65R25 XLD65	L3	488	2,640	- 7	Gravel (all ground conditions)
okian	17.5R25 Hakkapeliitta	L2	- 488	2,450	- 51	Winter tyres, Gravel, Asphalt (all ground conditions)
	20.5R25 Hakkapeliitta	L2	- 104	2,490	6	Winter tyres, Gravet, Asphalt (all ground conditions)  Winter tyres, Gravet, Asphalt (all ground conditions)
	20.5к25 паккарешна	LZ	- 104	2,490	0	willer tyres, Gravet, Aspiratt (all ground conditions)
538/L546						
	20.5R25 VJT	L3	17	2,480	8	Bulk material (firm ground conditions)
ridgestone	20.5R25 VSDL	L5	680	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
ridgestone	20.5R25 VSDR	L5	688	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
	550/65R25 VTS	L3	- 44	2,500	- 50	Gravel (all ground conditions)
ridgestone	650/65R25 VTS	L3	595	2,650	16	Gravel (all ground conditions)
ontinental	20.5R25 EM-Master	L3	156	2,480	26	Bulk material (firm ground conditions)
oodyear	20.5R25 RT-3B	L3	11	2,490	16	Gravel (all ground conditions)
oodyear	20.5R25 TL-3A+	L3	156	2,500	11	Sand, Gravel, Earthworks, Clay (all ground conditions)
oodyear	20.5R25 GP-4D	L4	328	2,470	20	Gravel, Industry, Wood (firm ground conditions)
oodyear	20.5R25 RL-4K	L4	588	2,500	35	Gravel, Industry, Stone (firm ground conditions)
oodyear	20.5R25 RL-5K	L5	752	2,500	49	Stone, Scrap, Recycling (firm ground conditions)
ichelin	20.5R25 XTLA	L2	- 121	2,510	- 7	Gravel, Earthworks, Clay (all ground conditions)
ichelin	20.5R25 XHA2	L3	0	2,480	0	Sand, Gravel (all ground conditions)
ichelin	20.5R25 XLD D2A	L5	431	2,480	30	Stone, Mining spoil (firm ground conditions)
ichelin	20.5R25 X MINE PRO	L5	606	2,510	48	Stone, Scrap, Recycling (firm ground conditions)
ichelin	550/65R25 XLD65	L3	- 82	2,500	- 44	Gravel (all ground conditions)
	650/65R25 XLD65	L3	478	2,640	- 7	Gravel (all ground conditions)
	20.5R25 Hakkapeliitta	L2	- 114	2,490	6	Winter tyres, Gravel, Asphalt (all ground conditions)

 $<sup>\</sup>ensuremath{^{*}}$  The stated values are theoretical and may deviate in practice.

 $Before \ operating \ the \ vehicle \ with \ tyre \ foam \ filling \ or \ tyre \ protection \ chains, please \ discuss \ this \ with \ the \ Liebherr-Werk \ Bischofshofen \ GmbH.$ 

## The Liebherr wheel loaders

Wheel loader							
		L 504 Compact	L 506 Compact	L 507 Stereo	L 508 Compact	L 509 Stereo	L 514 Stereo
Tipping load	kg	3,000	3,500	3,750	3,900	4,430	5,750
Bucket capacity	m³	0.7	0.8	0.9	1.0	1.2	1.5
Operating weight	kg	4,600	4,970	5,550	5,700	6,390	8,860
Engine output	kW/HP	34/46	47,5/64	50/68	47,5/64	54/73	76/103

Wheel loader						
		L 518 Stereo	L 526	L 538	L 546	L 550 XPower®
Tipping load	kg	6,550	8,730	9,650	11,010	12,500
Bucket capacity	m³	1.7	2.2	2.6	3.0	3.4
Operating weight	kg	9,190	13,170	14,520	15,410	18,550
Engine output	kW/HP	76/103	116/158	129/175	138/188	163/222

Wheel loader						
		L 556 XPower®	L 566 XPower®	L 576 XPower®	L 580 XPower®	L 586 XPower®
Tipping load	kg	13,750	15,900	17,600	19,200	21,600
Bucket capacity	m³	3.7	4.2	4.7	5.2	6.0
Operating weight	kg	19,600	23,900	25,700	27,650	32,600
Engine output	kW/HP	183/249	203/276	218/296	233/317	263/358

02.22

#### Environmental protection can help you earn money!



#### Always in fuel saving mode with the Liebherr fuel-saving calculator

100% power output with up to 30% less fuel consumption – the Liebherr fuel saving calculator shows how much fuel can be saved compared to similar machines. The online application is available free of charge and provides a quick and simple overview of fuel savings per year in euros. The calculation is based on average fuel consumption, operating hours per year and the current fuel price. The potential savings when operating a Liebherr wheel loader are impressive – see for yourself!

	Ø Litres/hour*
L 526: 2.1 m <sup>3</sup>	6.3
L 538: 2.6 m <sup>3</sup>	6.9
L 546: 2.8 m <sup>3</sup>	7.1
L 550: 3.4 m <sup>3</sup>	9.1
L 556: 3.7 m <sup>3</sup>	9.9
L 566: 4.2 m <sup>3</sup>	12.2
L 576: 4.7 m <sup>3</sup>	12.8
L 580: 5.2 m <sup>3</sup>	13.9
1 584· 4 0 m <sup>3</sup>	14.5

\* Wheel loader in practical customer applications with individual machine configurations. Average data from LiDAT from 10.01.2022.



**Experience just how much fuel you can save!** www.efficiencyplus.liebherr.com

## **Equipment**

Basic wheel loader	L 526	L 538	L 546
Tow hitch	•	•	•
Crash protection, rear	+	+	+
Crash protection, rear with guard	+	+	+
Automatic engine shutdown			
(after 5 minutes at idle speed < 1,000 rpm)	+	+	+
Automatic central lubrication system Liebherr	+	+	+
Electr. equipment for sweeper (socket for sweeper)	+	+	+
Electronic tractive force regulation for difficult ground conditions	•	•	•
Exhaust tail pipe in stainless steel	+	+	+
Travel light (with additional headlights) on front section halogen	+	+	+
Travel light (with additional headlights) on front section LED	+	+	+
Travel light on front section - halogen	•	•	•
Travel light on front section - LED	+	+	+
Ride control	+	+	+
Fire extinguisher 6 kg	+	+	+
Fluff trap for radiator	+	+	+
External jump starter equipment	+	+	+
Complete drive shaft protection	+	+	+
Speed limitor 20 km/h	+	+	+
Plastic diesel exhaust fluid tank	•	•	•
Integrated tyre pressure monitoring system	+	+	+
Rear license panel light	+	+	+
Combined inching-braking system	•	•	•
Mudguard in plastic design	•	•	•
Steel mudguard	+	+	+
Steel fuel tank	+	+	+
Fuel pre-filter	•	•	•
Fuel pre-filter with pre-heating	+	+	+
Large-mesh radiator	+	+	+
Cooling water pre-heating 230 V	+	+	+
Adjustable plastic mudguard	+	+	+
Multi-disc limited slip differentials in both axles	•	•	•
Liebherr biodegredable hydraulic oil	+	+	+
Reversible fan drive	+	+	+
Automatic delayed engine stop (5 min.)	+	+	+
Plastic wheel case flare	+	+	+
Steel design adjustable wheel case flare	+	+	+
Guard for headlights	+	+	+
SCR technology incl. diesel particle filter	•	•	•
Auxiliary heater (Additional heating with engine preheating)	+	+	+
Air pre-cleaner TOP AIR	+	+	+
Toolbox with toolkit	+	+	+
Liebherr weighing system with "Truck Payload Assist" (cannot be certified as a regulated weights and measure device)	+	+	+

<b>Equipment</b>	L 526	L 538	L 546
1st hydraulic additional function on the front incl. lines	+	+	+
1st and 2nd hydraulic additional function on the front incl. lines	+	+	+
Working hydraulics lockout	•	•	•
Continuous mode, additional function	+	+	+
Pressure relief for hydraulic additional function	•	•	•
Stroke limit damping	+	+	+
Fork carrier and pallet forks	+	+	+
High-dump bucket	+	+	+
Log grapple	+	+	+
Automatic lift arm position and lowering programmable	•	•	•
Lift arms 2,550 mm	•	-	-
Lift arms 2,650 mm	-	•	•
Lift arms 3,000 mm	+	+	+
Hydraulic quick hitch	+	+	+
Hydraulic quick hitch LIKUFIX	+	+	+
Hydraulic quick change device preparation LIKUFIX	+	+	+
Sweeper mode	+	+	+
Adjustable tipping speed	•	•	•
Tilt cylinder protection	+	+	+
Light material bucket	+	+	+
Pipe break protection (lift and tilt cylinders)	+	+	+
Automatic return high dump bucket	+	+	+
Bucket tilt assistant	+	+	+
Bucket bearing seal (standard)	•	•	•
Bucket return-to-dig (automatic and programmable)	•	•	•
Bucket return-to-dig via button	+	+	+
Float position	•	•	•
Visualisation of the equipment position	•	•	•

## **Equipment**

Operator's cab	L 526	L 538	7 24e
2-in-1 steering	+	+	+
Adapter plate for additional fastening on the multi-function rail	•	•	•
Adaptive working lighting	+	+	+
Exterior mirror, electrical adjustable, with heating	+	+	+
Exterior mirrors, folding and heated	+	+	+
Folding exterior mirror	•	•	•
Hinged window (left)	+	+	+
Access assistance to facilitate cleaning windscreen	•	•	•
Operation with multi-lever control	+	+	+
Operating hour meter (mechanic)	+	+	+
Electronical theft protection with code	+	+	+
Electronical theft protection with key	+	+	+
Automatic driver identification	+	+	+
Manual driver identification	+	+	+
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension			
Grammer (with seat heating and 3-point belt)	+	+	+
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension			
Grammer (with seat heating and 4-point belt)	+	+	+
"Comfort" operator's seat with "Comfort integrated" pneumatic suspension			
Grammer (with seat heating)	•	•	•
"Premium" operator's seat with low frequency suspension -			
with seat air conditioning, seat heating and head rest - Grammer	+	+	+
Particle filter F7	•	•	•
Fire extinguisher in cab 2 kg	+	+	+
Radio unit installation (preparation)	+	+	+
V <sub>max</sub> speed limit adjustable via button on control unit	•	•	•
Speed limit & fixed speed	+	+	+
Seat belt warning device (visual) - green warning flashlight on cab	+	+	+
Rear window heated electrically	•	•	•
Button-operated horn via right button	+	+	+
Interior mirror left	•	•	•
Joystick steering	+	+	+
Joystick steering only	+	+	+
Floor mat	•	•	•
Clothes hook	•	•	•
Air conditioning system	+	+	+
Automatic air conditioning system	+	+	+
Comfort safety door (open through 180°)	+	+	+
Head rest	+	+	+
Cool box	+	+	+
Steering column height-adjustable	+	+	+
Steering column folding	•	•	•
LiDAT hardware	•	•	•
Liebherr control lever with mini-joystick	+	+	+
Liebherr control lever with buttons	•	•	•
Multifunctional rail, right	•	•	•

Operator's cab	L 526	L 538	7 24e
Emergency steering pump	•	•	•
Premiumdisplay (Touchscreen), with height adjustment and tilting function	•	•	•
Radio "Comfort" (DAB+/USB/AUX/BLUETOOTH/handsfree set)	+	+	+
Radio "Standard"	+	+	+
Preparation for radio installation	+	+	+
Amber beacon swiveling LED	+	+	+
Headlights activation (on the cab) for reverse travel	+	+	+
Soundproof ROPS / FOPS cab	•	•	•
Wipe and wash system	•	•	•
Windscreen wiper single-sweep function with button	+	+	+
Headlights rear, triple design, LED	+	+	+
Headlights rear, single design, halogen	+	+	+
Headlights rear, single design, LED	+	+	+
Headlights rear, double design, halogen	+	+	+
Headlights rear, double design, LED	+	+	+
Headlights front, double design, halogen	•	•	•
Headlights front, double design, LED	+	+	+
Headlights activation for reverse travel (on the cab)	+	+	+
Sliding window right	•	•	•
Slipcover for operator seat	+	+	+
Windscreen guard	+	+	+
Beacon activation in reverse travel	+	+	+
Sunblind rear	+	+	+
Sunblind front	+	+	+
Power socket 12 V	•	•	•
USB charging port	+	+	+
First aid kit	•	•	•
Preparation for protective ventilation device	+	+	+
Preparation for dust filtrating device	+	+	+
Wide angle mirror	+	+	+
Cigarette lighter	•	•	•

Safety	L 526	L 538	L 546
Active personnel detection at the rear	+	+	+
Main battery switch (lockable)	+	+	+
Roof camera for front area monitoring	+	+	+
Standard parking brake	•	•	•
Custom paintwork	+	+	+
Back-up alarm (acoustical)	+	+	+
Reversing alarm LED warning flashlight (visual)			
(adjustable to 0 - constant - reverse travel)	+	+	+
Rear space monitoring with camera	•	•	•
Skyview 360°	+	+	+

• = Standard + = Option

- = not available

Further information can be found in the brochure "Assistance systems for wheel loaders" or you can find here:



Here you can download our wheel loader brochures:



# All illustrations and data may differ from the standard version. Subject to change without notice. RG-BK $\cdot$ LBH/PM-12286642-web-03.22\_enGB

## The Liebherr Group



#### Global and independent: more than 70 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family business now employing nearly 50,000 people and comprising over 140 companies across every continent.

The parent company is Liebherr-International AG in Bulle, Switzerland, whose associates are exclusively members of the Liebherr family.

#### Leaders and pioneers

Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

#### **Diversified portfolio**

The company is one of the world's biggest construction equipment manufacturers and provides high-quality, user-oriented products and services to sectors including: earthmoving, material handling, deep foundations, mining, mobile and crawler cranes, tower cranes, concrete production and distribution, maritime cranes, aerospace and transportation, gear technology and automation, refrigeration and freezing, components and hotels.

#### **Customised care**

Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. That customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

www.liebherr.com