

LIEBHERR

Wheel loaders

Generation 8 **Diesel engine** Stage V EBHIER

546

40

Tipping load 8,000 kg-11,010 kg

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 performanceoriented 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





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



Liebherr Connect

- Intelligent machine networking with digital services and machine and process data
- For use in fleet and asset management systems and monitoring the condition of machines and components
- Efficient data exchange with customisation of the machine

MyLiebherr Portal

- Extensive benefits, digital services and software solutions for efficient machine operation
- Machine management, spare part orders and licence acquisition following one-time registration



Solidlink

- 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 optimallyadapted 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 ideallycoordinated 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 maintenance points are accessible from the ground
- Safe access to the articulation area of the wheel loader
- Simplified accessibility of the refuelling pump enables quick and easy fuel filling



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
- Access to the SCR tank is in an optimal position directly next to the diesel tank nozzle



MyLiebherr Maintenance

- Current information on the condition of the machine and attachments
- Reduced unplanned machine standstills thanks to practical recommendations and proactive maintenance planning
- Time saved when identifying, evaluating and solving problems

My Liebherr Performance

- Information on the performance data from the machines and attachments
- Efficient solutions for saving fuel and reducing idle times



Liebherr-Service

- Effective and timely support from a well-staffed service network
- Fast and safe service provision by qualified service specialists

Focus on performance and power

LIEBHERI

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.



Machine networking

Liebherr Connect networks the machine into the digital world. Intelligent machine networking provides access to digital services as well as machine and process data. The system ensures an efficient data exchange and offers various options to further develop the machine and customise it to individual customer requirements.

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

•						
		L 526 L 538 L 546				
Diesel engine		4045CB551 4045CB551 6068HB551				
Design		Water-cooled turbo	charged in-series e	ngine with cooled		
		exhaust gas recircu	ulation			
Cylinder inline		4	4	6		
Fuel injection process		Electronic Common	n 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 regula	ation (EU) 2016/162	8		
Emission control		SCR technology and	d closed diesel parti	cle filter system		
Air cleaner system		Dry type filter with	main and safety ele	ment, pre-cleaner,		
		service indicator or	n the Liebherr displa	у		
Electrical system						
Operating voltage	V	24	24	24		
Battery	Ah	2x135	2x135	2x135		
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 trans- fer 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 step- lessly at full engine speed. The Liebherr control lever is used to control forward and reverse travel					
Travel speed range	Speed range 1 0- 8 km/h Speed range A1-2 0-16 km/h Speed range A1-3 0-40 km/h* forward and reverse Speeds quoted apply with the tyres indicated as stand- ard on loader model.					

* Configuration, tyres and mounting tools can influence the maximum speed.

Brakes

Wear-free service brake

Parking 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 differential housing (two separate brake circuits) Electro-hydraulically actuated spring-loaded disc brake system on the front axle

The braking system meets the requirements of the ISO 3450.







l⊧≃U Axles						
		L 526	L 538	L 546		
Four-wheel drive						
Front axle		Fixed				
Rear axle		Centre pivot, with 10° oscillating angle to each side				
Height of obstacles	m m	470	/ 70	470		
WHICH CALL DE UNVEIL OVEL	111111	with all four wheel	s remaining in conta	act with the ground		
Differentials		Automatic limited-slip differentials with 45 % locking action in both axles				
Reduction gear		Planetary final drive in wheel hubs				
Track width		1,900 mm with all	types of tyres			

Steering

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

		L 526	L 538	L 546			
Design	ign "Load-sensing" variable axial piston pump and flow control, and pressure cut-off in t block						
Cooling		Hydraulic oil cooli fan and oil cooler	ng using thermostat	ically controlled			
Filtration	Return line filter in the hydraulic reservoir						
Control	Liebherr control lever, electro-hydraulically opera						
Lifting function	Ig function Auto lifting and lowering using Liebherr contro float position using Liebherr control lever						
Tilt function		Tilt back, neutral, dump Automatic bucket return-to-dig for tilting in and out using Liebherr control lever					
Max. flow	l/min.	170	200	200			
Max. pressure	bar	350	350	350			

Attachment

		L 526	L 538	L 546			
Geometry		Powerful, optimised z-bar kinematics with one tilt cylinder, optional hydraulic quick coupler					
Bearings		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's cab		
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/s²	≤ 2.5
Vibrations through the whole body	m/s²	≤ 0.5

${\mathfrak D}$ Sound level

		L 526	L 538	L 546
Sound pressure level to ISO 6396				
L _{pA} (inside cab)	dB(A)	69	69	69
Sound power level to 2000/14/EG				
L _{WA} (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)	ι	205	205	205
DEF tank	ι	20	20	20
Engine oil				
(inclusive filter change)	l	21	21	23.5
Transmission	ι	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





	L 526			L 538			L 546		
Geometry	ZK	ZK-QH	ZK	ZK	ZK-QH	ZK	ZK	ZK-QH	ZK
Cutting tools	T	Т	Т	T	Т	T	T	Т	Т
Lift arm length mn	2,550	2,550	2,550	2,650	2,650	2,650	2,650	2,650	2,650
Bucket capacity according to ISO 7546** m	2.2	2.0	2.4	2.6	2.4	2.8	3.0	2.8	3.2
Specific material density t/m	1.8	1.8	1.6	1.8	1.8	1.6	1.8	1.8	1.6
Bucket width mn	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 mn	2,900	2,815	2,855	2,960	2,830	2,935	2,900	2,800	2,860
B Dump-over height mn	3,450	3,450	3,450	3,540	3,540	3,540	3,540	3,540	3,540
C Max. height of bucket bottom mn	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 mn	3,875	3,875	3,875	3,980	3,980	3,980	3,980	3,980	3,980
E Max. operating height mn	5,100	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 mn	945	1,020	990	1,085	1,210	1,110	1,150	1,235	1,190
G Digging depth mn	100	100	100	100	100	100	100	100	100
H Height above operator's cab ¹⁾ mn	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250
I Height above exhaust mn	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950	2,950
J Ground clearance mn	440	440	440	430	430	430	430	430	430
K Wheelbase mn	2,975	2,975	2,975	3,025	3,025	3,025	3,025	3,025	3,025
L Overall length mn	1 7,480	7,600	7,550	7,630	7,810	7,670	7,720	7,850	7,780
Turning circle radius over tyres mn	5,365	5,365	5,365	5,420	5,420	5,420	5,420	5,420	5,420
Turning circle radius over outside bucket edge mn	ı 5,950	5,990	5,970	6,140	6,100	6,150	6,165	6,200	6,180
Breakout force (SAE) ki	1 110	100	105	125	115	120	140	130	135
Tipping load, straight* k	10,100	9,350	10,050	11,200	10,400	11,150	12,500	11,600	12,400
Tipping load, fully articulated* k	8,730	8,000	8,650	9,650	8,880	9,610	11,010	10,250	10,900
Operating weight* k	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. ¹⁾ With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 130 mm when door is open.

 ZK
 = Z-bar linkage

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

 T
 = Welded-on tooth holder with add-on teeth

Dimensions

High lift arm/standard bucket





		L 526		L 5	38	L 546	
Geometry		ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools		Т	Т	Т	Т	T	Т
Lift arm length	mm	3,000	3,000	3,000	3,000	3,000	3,000
Bucket capacity according to ISO 7546**	m ³	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 ¹⁾	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 tyres	mm	5,365	5,365	5,420	5,420	5,420	5,420
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		20.5	R25 L3	20.5R	25 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. ¹⁾ With the optional "comfort safety door (can be opened 180°)", the "H" value increases by 130 mm when door is open.

ZK = Z-bar linkage

ZK-QH = Z-bar linkage incl. quick hitch T = Welded-on tooth holder with add-on teeth

Light material bucket



Heavy material density

		L 526		L 538		546
Geometry	ZK	ZK-QH	ZK	ZK-QH	ZK	ZK-QH
Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity m	3 3.5	3.5	4.0	4.0	4.5	4.5
Specific material density t/m	1,05	1,0	1,05	1,0	1,05	1,0
Bucket width mr	2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height mn	a 2,590	2,490	2,595	2,520	2,510	2,440
E Max. operating height mm	ı 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	n 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	j 13,450	13,890	14,790	15,220	15,700	16,120
Tyre size	:	20.5R25 L3	20.5	R25 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	n ³ 5.5	6.5	7.5
Specific material density t/	n ³ 0.5	0.5	0.5
Bucket width n	m 2,700	2,700	3,000
A Dumping height at max. lift height n	m 2,210	2,190	2,160
E Max. operating height n	m 5,800	6,080	6,110
F Reach at maximum lift height n	m 1,610	1,830	1,855
L Overall length n	m 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

* 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)

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

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 n	1 ³ 3.5	3.5	4.0	4.0	4.5	4.5
Specific material density t/n	1 ³ 0.85	0.8	0.85	0.8	0.85	0.8
Bucket width m	m 2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height mi	m 3,170	3,080	3,135	3,060	3,050	2,985
E Max. operating height mi	m 5,880	5,970	6,060	6,160	6,170	6,280
F Reach at maximum lift height mi	m 1,180	1,270	1,275	1,340	1,360	1,420
L Overall length m	m 8,310	8,450	8,420	8,530	8,540	8,640
Tipping load, straight*	g 7,400	6,800	8,730	8,200	9,800	9,240
Tipping load, fully articulated* k	g 6,280	5,720	7,450	6,920	8,350	7,820
Operating weight*	ig 13,750	14,190	14,990	15,420	15,900	16,330
Tyre size		20.5R25 L3	20	20.5R25 L3		.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 m ³	4.5	5.5	6.5
Specific material density t/m ³	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

* 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)

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

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 ³	3.0	3.0	3.5	3.5	4.0	4.0
Specific material density t/m ³	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	2	0.5R25 L3	20.5	R25 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	m ³	5.0	6.0	7.0
Specific material density t	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

* 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)

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

ZK = Z-bar linkage

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

High lift arm/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	3 3.0	3.0	3.5	3.5	4.0	4.0
Specific material density t/m	3 0.85	0.8	0.85	0.8	0.85	0.8
Bucket width mr	n 2,700	2,700	2,700	2,700	2,700	2,700
A Dumping height at max. lift height mr	n 5,090	5,200	5,090	5,220	5,030	5,145
E Max. operating height mr	n 6,800	6,940	6,900	7,090	6,990	7,140
F Reach at maximum lift height mr	n 1,230	1,300	1,285	1,325	1,365	1,420
L Overall length mr	n 8,450	8,580	8,490	8,580	8,590	8,700
Tipping load, straight* k	g 6,600	6,100	8,000	7,540	9,100	8,600
Tipping load, fully articulated* k	g 5,490	5,030	6,740	6,300	7,640	7,160
Operating weight* k	g 14,420	14,770	15,650	15,990	16,560	16,910
Tyre size		20.5R25 L3	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 m ³	4.0	5.0	6.0
Specific material density t/m ³	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

* 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)

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

ZK = Z-bar linkage

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

Fork carrier and fork



ho Fork carrier and fork

		L 5	26	L 5	38	L 54	46	L 5	38	L 54	46
		STD	HL	STD	HL	STD	HL	STD	HL	STD	HL
Fork		FEM III	FEM III	FEM III	FEM III	FEM III	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	mm	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	mm	1,700	1,700	1,780	1,780	1,780	1,780	1,740	1,740	1,740	1,740
C Max. lifting height	mm	3,675	4,250	3,780	4,310	3,780	4,310	3,740	4,270	3,740	4,270
E Max. operating height	mm	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	mm	1,030	1,590	1,070	1,510	1,070	1,510	1,090	1,530	1,090	1,530
F max. Max. reach	mm	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	mm	700	650	790	650	790	650	770	630	770	630
G Fork length	mm	1,200	1,200	1,200	1,200	1,200	1,200	1,500	1,500	1,500	1,500
L Length – basic machine	mm	6,590	7,150	6,670	7,120	6,670	7,120	6,700	7,140	6,700	7,140
Tipping load, straight*	kg	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 ¹⁾	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 ¹⁾	kg	5,000 ²⁾	4,050	5,000 ²⁾	4,900	5,000 ²⁾	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		20.5R	25 L3	20.5R	25 L3	20.5R2	25 L3	20.5R	25 L3	20.5R2	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)

¹⁾ According to EN 474-3

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

STD = Standard lift arm length

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

Log grapple



Dr 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
C	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 ²	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	ize		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)

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

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

L 526 Lift	Bu	cket			ı	1ate	rial de	Material density (t / m³)									
			0.4	0.6	0.8	1.	0 1	.2 1	.4 1	.6	1.8	2.0					
	GPB	2.2 m³							2.4		2.2						
¥	GPB	2.4 m³						2.6		2.4							
И	LMB	3.5 m³			3.9	• 📕	3.5										
	HDB	3.0 m³			3	.3	3.0)									
	GPB	2.0 m³							2.2		2.0						
		3.5 m³			3.9		3.5										
ZK-QH	LMR	5.5 m³	5.5														
		3.0 m³			3.3	5	3.0										
	HDR	5.0 m³	5.0														
	GPB	2.0 m³						2.2	2	2.0							
ZK-HL	LMB	3.5 m³		3.9	9 📕 3	.5											
	HDB	3.0 m³		3.3	3 3	.0											
	GPB	2.0 m³						2.2	2.0)							
-		3.5 m³		3.9	3.5	;											
H0	LMR	4.5 m³	4.5														
ZK-Q		3.0 m³		3.3	3.0)											
	HDR	4.0 m³	4.0														

L 538 Lift arm	Bu	cket			Ma	ateria	l densi	ty (t /	m³)		
			0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
	GPB	2.6 m³							2.9	2.6	
×	GPB	2.8 m³						3.1	2.8	3	
Z	LMB	4.0 m³			4.4	4	.0				
	HDB	3.5 m³			3.9	,	3.5				
	GPB	2.4 m³							2.6	2.4	
		4.0 m ³			4.4	4.0					
ZK-QH	LMR	6.5 m³	6.5								
	ממוו	3.5 m³			3.9	3	.5				
	прр	6.0 m³	6.0								
	GPB	2.4 m³						2.6	2.4	, +	
ZK-HL	LMB	4.0 m ³		4.4	4.()					
	HDB	3.5 m³		3.9	3.5	5					
	GPB	2.2 m³						2.4	2.2	2	
≠	LMD	4.0 m ³		4.4	4.0						
H0-)	LMB	5.5 m³	5.5								
Ϋ́Ζ		3.5 m³		3.9	3.5						
	нυв	5.0 m³	5.0								

L 546

Lift

Bucket

Material density (t/m³)

arm			0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
	GPB	3.0 m³							3.3	3.0	
¥	GPB	3.2 m³						3.5	3.2		
Z	LMB	4.5 m³			5.0	4	.5				
	HDB	4.0 m³			4	.4	4.0				
	GPB	2.8 m³							3.1	2.8	
	IMD	4.5 m³			5.0	4.5					
ZK-QH	LMD	7.5 m³	7.5								
	ПОВ	4.0 m³			4.4	4	.0				
	прр	7.0 m³	7.0								
	GPB	2.8 m³						3.1	2.8		
TH-XZ	LMB	4.5 m³		5.0	0	.5					
	HDB	4.0 m³		4.4	4	.0					
	GPB	2.6 m³						2.9	2.6		
Ŧ	LMD	4.5 m³		5.0	4.5						
H0-)	LMB	6.5 m³	6.5								
Ϋ́		4.0 m³		4.4	4.0						
	нрв	6.0 m³	6.0								

Bucket filling factor



Lift orm

Lift arm		Bucket	
ZK	Z-bar linkage, standard lift arm length	GPB	General purpose bucket (Excavation bucket)
ZK-QH	Z-bar linkage with quick hitch, standard lift arm length	LMB	Light material bucket
ZK-HL	Z-bar linkage, High Lift	HDB	High-dump bucket
ZK-QH-HL	Z-bar linkage, with quick hitch, High Lift		

For wheel loaders with large light material buckets and high-dump buckets or log grapples, we supply visual aids such as mirrors or cameras for front area monitoring that meet the requirements of the ISO 5006:2017 field of vision test.

Bulk material densities and bucket filling factors

		t/m³	%			t/m³	%			t/m³	%
Gravel	moist	1,9	105	Earth	dry	1,3	115	Glass waste	broken	1,4	100
	dry	1,6	105		wet excavated	1,6	110		solid	1,0	100
	crushed stone	1,5	100	Topsoil		1,1	110	Compost	dry	0,8	105
Sand	dry	1,5	105	Basalt		1,95	100		wet	1,0	110
	wet	1,9	110	Granite		1,8	95	Wood chips / Saw o	lust	0,5	110
Gravel and Sand	dry	1,7	105	Sandstone		1,6	100	Paper	shredded/loose	0,6	110
	wet	2,0	100	Slate		1,75	100		recovered paper / cardboard	1,0	110
Sand / Clay		1,6	110	Bauxite		1,4	100	Coal	heavy material density	1,2	110
Clay	natural	1,6	110	Limestone		1,6	100		light material density	0,9	110
	dry	1,4	110	Gypsum	broken	1,8	100	Waste	domestic waste	0,5	100
Clay / Gravel	dry	1,4	110	Coke		0,5	110		bulky waste	1,0	100
	wet	1,6	100	Slag	broken	1,8	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.

Tipping load, articulated Pay load = 2

Bucket capacity =

Pay load (t) Specific bulk weight of material (t/m³)

Tyres

L 526 – L 546

Tyre types

	Size and tread		Change of	Width over tyres	Change in vertical dimensions*	Use
			kg	mm	mm	
1 526	1				1	
Bridgestone	17 5R25 V.IT	13	- 394	2 440	- 44	Bulk material (firm ground conditions)
Bridgestone	17.5R25 VSDI	15	119	2,110	- 5	Stone Scrap Recycling (firm ground conditions)
Bridgestone	20 5R25 V.IT	13	17	2,480	8	Bulk material (firm ground conditions)
Bridgestone	20 5R25 VSDI	15	680	2 480	60	Stone Scran Recycling (firm ground conditions)
Bridgestone	20.5R25 VSDR	15	688	2,180	60	Stone Scrap Recycling (firm ground conditions)
Bridgestone	550/65R25 VTS	13	- 132	2,100	- 50	Gravel (all ground conditions)
Bridgestone	650/65R25 VTS	13	605	2,650	16	Gravel (all ground conditions)
Continental	20 5R25 FM-Master	13	166	2,000	26	Bulk material (firm ground conditions)
Goodyear	17 5R25 TI-3A+	13	- 252	2,100	- 39	Sand Gravel Earthworks Clay (all ground conditions)
Goodyear	17 5R25 RI-5K	15	160	2,460	- 20	Stone Scran Recycling (firm ground conditions)
Goodyear	20 5R25 TI-3A+	13	156	2 500	11	Sand Gravel Farthworks Clay (all ground conditions)
Goodyear	20.5R25 GP-4D	14	328	2,000	20	Gravel Industry Wood (firm ground conditions)
Goodyear	20 5R25 RI-5K	15	752	2 500	49	Stone Scran Recycling (firm ground conditions)
Michelin	17 5R25 XTLA	12	- 555	2,000	- 44	Gravel Earthworks Clay (all ground conditions)
Michelin	17 5R25 XHA2	13	- 528	2,100	- 61	Sand Gravel (all ground conditions)
Michelin	17.5R25 XI D D2A	15	- 232	2,100	- 25	Stone Mining spoil (firm ground conditions)
Michelin	17 5R25 X MINE PRO	15	32	2,100	- 17	Stone Scrap Recycling (firm ground conditions)
Michelin	20 5R25 XTLA	12	- 121	2,480	- 7	Gravel Earthworks Clay (all ground conditions)
Michelin	20.5R25 XHA2	13	0	2,180	0	Sand Gravel (all ground conditions)
Michelin	20.5R25 XI D D24	15	431	2,400	30	Stone Mining spoil (firm ground conditions)
Michelin	20.5R25 X MINE PRO	15	616	2,400	48	Stone Scran Recycling (firm ground conditions)
Michelin	550/65R25 XI D65	13	- 82	2,510	- 44	Gravel (all ground conditions)
Michelin	650/65R25 XLD65	13	488	2,660	- 7	Gravel (all ground conditions)
Nokian	17 5R25 Hakkapeliitta	12	- 488	2,610	- 51	Winter tyres Gravel Asphalt (all ground conditions)
Nokian	20 5R25 Hakkapeliitta	12	- 104	2,100	6	Winter tyres, Gravel, Asphalt (all ground conditions)
	20.0120 10.000000		101	2,170	0	
L 536 / L 540		17	17	2 / 00	0	Dully material (firm around conditions)
Bridgestone	20.5K25 VJ1	LS	17	2,460	6	Stope Seren Recycling (firm ground conditione)
Bridgestone		LD	200	2,400	60	Stone, Scrap, Recycling (firm ground conditions)
Dridgestone		17	000	2,400	50	Stone, Scidp, Recycling (Inni ground conditions)
Bridgestone	000/00R20 VI0	L3	- 44	2,300	- 50	Gravel (all ground conditions)
Continental	000/00K20 VIS	LJ	090 164	2,000	10	Graver (all ground conditions)
Continental	20.5R25 EM-Master	L3	100	2,460	20	Bulk Material (MM ground conditions)
Goodyear	20.5R25 1L-5A+	LS	100	2,300	11	Sanu, Gravel, Earlinworks, Clay (all ground conditions)
Goodyear	20.5K25 GP-4D	L4	328	2,470	20	Gravel, Industry, wood (Irrm ground conditions)
Guuyear	20.5K25 KL-5K	LD	/02	2,300	49	Stone, Scrap, Recycling (Inni ground conditions)
Michelin	ZU.SKZS XILA	LZ	- 121	2,510	- /	Gravel, Earthworks, Clay (all ground conditions)
Michelin	20.5K25 XHAZ	LS	U (71	2,480	70	Sand, Gravel (all ground conditions)
Michelin		LD	431	2,480	50	Stone, mining spoil (Imm ground conditions)
Michelin	ZU.5KZ5 X MINE PRU	LD	000	2,510	48	Stone, Scrap, Recycling (firm ground conditions)
Michelin	550/65K25 XLD65	L3	- 82	2,500	- 44	Gravel (all ground conditions)
Michellin		L3	4/8	2,040	- /	Graver (an ground conditions)
Nokian	20.5K25 Hakkapeliitta	L2	- 114	2,490	6	winter tyres, Gravel, Asphalt (all ground conditions)

* 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	m ³	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							Molect
		L 518 Stereo	L 526	L	538	L 546	L 550 XPower
Tipping load	kg	6,550	8,730	9,0	650	11,010	12,500
Bucket capacity	m ³	1.7	2.2	2		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		Maria					
		L 556 XPower	L 566 XPowe	r L 576)	KPower	L 580 XPower	L 586 XPower
Tipping load	kg	13,750	15,900	17,	,600	19,200	21,600
Bucket capacity	m ³	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: 2.2 m ³	5.92
L 538: 2.6 m ³	6.53
L 546: 3.0 m ³	7.51
L 550: 3.4 m ³	9.59
L 556: 3.7 m ³	10.63
L 566: 4.2 m ³	12.79
L 576: 4.7 m ³	13.69
L 580: 5.2 m ³	14.31
L 586: 6.0 m ³	17.56

* Wheel loader in operation with a customer-specific machine design. Averages data from MyLiebherr Performance, calculated on 19/11/2024.



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

Equipment

Adjustable plastic mudguard++Air pre-cleaner TOP AIR++Automatic central lubrication system Liebherr++Automatic delayed engine stop (5 min.)++Automatic delayed engine stop (5 min.)++Automatic delayed engine stop (5 min.)++Automatic engine shutdown (after 5 minutes at idle speed < 1,000 rpm)++Auxiliary heater (Additional heating with engine preheating)++Combined inching-braking system•••Complete drive shaft protection+++Cosing water pre-heating 230 V+++Crash protection, rear+++Crash protection, rear with guard+++Electr. equipment for sweeper (socket for sweeper)+++Electronic tractive force regulation for difficult ground conditions•••External jump starter equipment++++Fire extinguisher 6 kg++++Fuel pre-filter••••Fuel pre-filter with pre-heating++++Liebherr biodegredable hydraulic oil++++Liebherr weighing system with "Truck Payload Assist"•••Liebherr weighing system vith "Truck Payload Assist"•••Plastic diesel exhaust fluid tank••••Plastic diesel exhaust fluid tank••• <t< th=""><th> =</th></t<>	=
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Automatic central lubrication system Liebherr++Automatic engine shutdown (after 5 minutes at idle speed < 1,000 rpm)	+
Automatic delayed engine stop (5min.)++Automatic engine shutdown (after 5 minutes at idle speed < 1,000 rpm)	+
Automatic engine shutdown (after 5 minutes at idle speed < 1,000 rpm))	+
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Combined inching-braking system•Complete drive shaft protection+Complete drive shaft protection+Complete drive shaft protection, rear+Crash protection, rear+Crash protection, rear with guard+Desingn exhaust tail pipe in stainless steel+Electr. equipment for sweeper (socket for sweeper)+Electronic tractive force regulation for difficult ground conditions•External jump starter equipment+'Tre extinguisher 6 kg+'Luft trap for radiator+'Euel pre-filter•'Euel pre-filter with pre-heating+'Suard for headlights+- arge-mesh radiator+'Liebherr biodegredable hydraulic oil+'Liebherr weighing system with "Truck Payload Assist"'Cannot be certified as a regulated weights and measure device)+'Nudguard in plastic design•'Plastic diesel exhaust fluid tank•'Plastic diesel exhaust fluid tank•'Plastic wheel case flare+'Recorrol+'SCR technology incl. diesel particle filter•Speed limitor 20km/h+'HSteel design adjustable wheel case flare'H+Steel duelank+'HSteel duelank'H+'HSteel duelank'H+'HSteel duelank'H+'H'H'H'H'H'H'H </td <td>+</td>	+
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P Equipment	L 526	L 538	L 546
1st and 2nd hydraulic additional function on the front incl. lines	+	+	+
1st hydraulic additional function on the front incl. lines	+	+	+
Adjustable tipping speed	٠	•	•
Automatic lift arm position and lowering programmable	٠	٠	•
Automatic return high dump bucket	+	+	+
Bucket bearing seal (standard)	٠	٠	•
Bucket return-to-dig (automatic and programmable)	٠	٠	•
Bucket return-to-dig via button	+	+	+
Bucket tilt assistant	+	+	+
Continuous mode, additional function	+	+	+
Float position	٠	٠	•
Fork carrier and pallet forks	+	+	+
High-dump bucket	+	+	+
Hydraulic quick change device preparation Solidlink	+	+	+
Hydraulic quick hitch	+	+	+
Hydraulic quick hitch Solidlink	+	+	+
Lift arms 2,550 mm	٠	-	-
Lift arms 2,650 mm	-	٠	•
Lift arms 3,000 mm	+	+	+
Light material bucket	+	+	+
Log grapple	+	+	+
Pipe break protection (lift and tilt cylinders)	+	+	+
Pressure relief for hydraulic additional function	٠	٠	•
Stroke limit damping	+	+	+
Sweeper mode	+	+	+
Tilt cylinder protection	+	+	+
Visualisation of the equipment position	•	•	•
Working hydraulics lockout	٠	٠	•

Equipment

🕮 Operator's cab	L 526	L 538	L 546
Access assistance to facilitate cleaning windscreen	•	•	•
Adapter plate for additional fastening on the multi-function rail	•	٠	٠
Adaptive working lighting	+	+	+
Air conditioning system	+	+	+
Amber beacon swiveling LED	+	+	+
Automatic air conditioning system	+	+	+
Automatic driver identification	+	+	+
Beacon activation in reverse travel	+	+	+
Button-operated horn via right button	+	+	+
Cigarette lighter	٠	٠	٠
Clothes hook	•	•	•
Comfort Grammer operator's seat with longitudinal absorption,			
seat heating and 2-point seatbelt	•	•	•
Comfort Grammer operator's seat with longitudinal absorption,			
seat heating and 3-point seatbelt	+	+	+
Comfort Grammer operator's seat with longitudinal absorption,			
seat heating and 4-point seatbelt	+	+	+
Comfort safety door (open through 180°)	+	+	+
Cool box	+	+	+
Electronical theft protection with code	+	+	+
Electronical theft protection with key	+	+	+
Emergency steering pump	•	٠	•
Exterior mirror, electrical adjustable, with heating	+	+	+
Exterior mirrors, folding and heated	+	+	+
Fire extinguisher in cab 2 kg	+	+	+
First aid kit	•	•	•
Floor mat	•	•	٠
Folding exterior mirror	٠	•	•
Head rest	+	+	+
Headlights activation (on the cab) for reverse travel	+	+	+
Headlights activation for reverse travel (on the cab)	+	+	+
Headlights front, double design, halogen	•	•	•
Headlights front, double design, LED	+	+	+
Headlights rear, double design, halogen	+	+	+
Headlights rear, double design, LED	+	+	+
Headlights rear, single design, halogen	+	+	+
Headlights rear, single design, LED	+	+	+
Headlights rear, triple design, LED	+	+	+
Hinged window (left)	+	+	+
Interior mirror left	•	•	•
Joystick steering	+	+	+
Joystick steering only	+	+	+
Liebherr Connect			
MyLiebherr Maintenance	+	+	+
Myl jehherr Performance	+	+	+
MyLiebherr Portal*	•	•	•
Liebherr control lever with buttons	•	•	•
Liebherr control lever with mini-joystick	+	+	+
Manual driver identification	+	+	+
Multifunctional rail, right	•	•	•
. istancio conterente ingrie	-		

🕮 Operator's cab	L 526	L 538	L 546
perating hour meter (mechanic)	+	+	+
Operation with multi-lever control	+	+	+
Particle filter F7	•	•	•
Power socket 12V	•	•	•
Premium Grammer operator's seat with longitudinal and transverse absorption, seat climate control, and 2-point seatbelt	+	+	+
Premiumdisplay (Touchscreen), with height adjustment and tilting function	•	•	٠
Preparation for dust filtrating device	+	+	+
Preparation for protective ventilation device	+	+	+
Preparation for radio installation	+	+	+
Radio "Comfort" (DAB+ / USB / AUX / BLUETOOTH / handsfree set)	+	+	+
Radio "Standard"	+	+	+
Radio unit installation (preparation)	+	+	+
Rear window heated electrically	•	•	•
Seat belt warning device (visual) – green warning flashlight on cab	+	+	+
Sliding window right	•	•	•
Slipcover for operator seat	+	+	+
Soundproof ROPS / FOPS cab	•	•	•
Speed limit & fixed speed	+	+	+
Steering column folding	•	•	•
Steering column height-adjustable	+	+	+
Sunblind front	+	+	+
Sunblind rear	+	+	+
USB charging port	+	+	+
V _{max} speed limit adjustable via button on control unit	•	•	•
Wide angle mirror	+	+	+
Windscreen guard	+	+	+
Windscreen wiper single-sweep function with button	+	+	+
Wipe and wash system	•	•	•

🛱 Safety	L 526	L 538	L 546
Active personnel detection at the rear	+	+	+
Back-up alarm (acoustical)	+	+	+
Custom paintwork	+	+	+
Main battery switch (lockable)	+	+	+
Rear space monitoring with camera	•	•	•
Reversing alarm LED warning flashlight (visual)			
(adjustable to 0 - constant - reverse travel)	+	+	+
Roof camera for front area monitoring	+	+	+
Skyview 360°	+	+	+
Standard parking brake	•	٠	٠

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:



• = Standard

- + = Option
- = not available

* = activation required free of charge

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-run company which now has more than 50,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit

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 company founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified product programme

Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product programme includes earthmoving machinery, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value

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. For Liebherr, 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