L 538

LIEBHERR

Wheel loader

Generation
8

Diesel engine
Stage V

Tipping load
9,650 kg

Performance

Versatile all-rounder –
wheel loader for every application

Economy

Efficient powerhouse –
low costs with high handling capacity

Reliability

Reliable performer –
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 538

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

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.

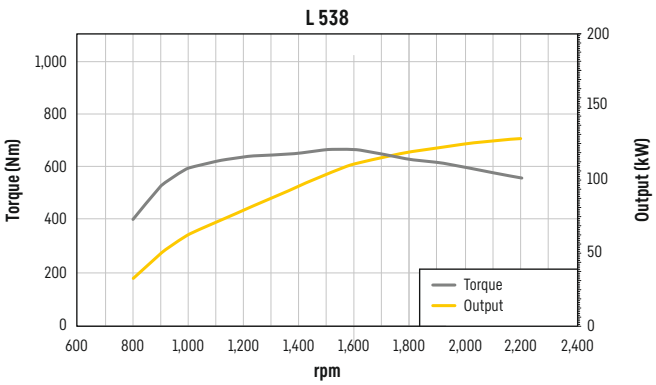
Technology

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

		L 538
Diesel engine		4045CB551
Design		Water-cooled turbocharged in-series engine with cooled exhaust gas recirculation
Cylinder inline		4
Fuel injection process		Electronic Common Rail high-pressure injection
Output to	kW / HP	126 / 171
ISO 9249 ~ SAE J1349	at RPM	1,800
Rated output to ISO 14396 / ECE-R.120	kW / HP	129 / 175
Nominal speed	at RPM	2,200
Max. torque to	Nm	667
ISO 14396	at RPM	1,600
Displacement	litres	4.5
Bore / Stroke	mm	106 / 127
Stage V		
Harmful emissions values		According to regulation (EU) 2016/1628
Emission control		SCR technology and closed diesel particle filter system
Air cleaner system		Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display
Electrical system		
Operating voltage	V	24
Battery	Ah	2 x 135
Alternator	V / A	24 / 100
Starter	V / kW	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	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 standard on loader model.

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

Brakes

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 differential 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 538
Four-wheel drive		
Front axle		Fixed
Rear axle		Centre pivot, with 10° oscillating angle to each side
Height of obstacles which can be driven over	mm	470 with all four wheels remaining in contact 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 538
Design		"Load-sensing" variable axial piston pump with output and flow control, and pressure cut-off in the control block
Cooling		Hydraulic oil cooling using thermostatically controlled fan and oil cooler
Filtration		Return line filter in the hydraulic reservoir
Control		Liebherr control lever, electro-hydraulically operated
Lifting function		Lifting, neutral, lowering Auto lifting and lowering using Liebherr control lever, 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.	200
Max. pressure	bar	350

Attachment

		L 538
Geometry		Powerful, optimised z-bar kinematics with one tilt cylinder, optional hydraulic quick coupler
Bearings		
Cycle time at nominal load		ZK
Lifting	s	5.5
Dumping	s	1.9
Lowering (empty)	s	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/s^2 ≤ 2.5
Vibrations through the whole body	m/s^2 ≤ 0.5

Sound level

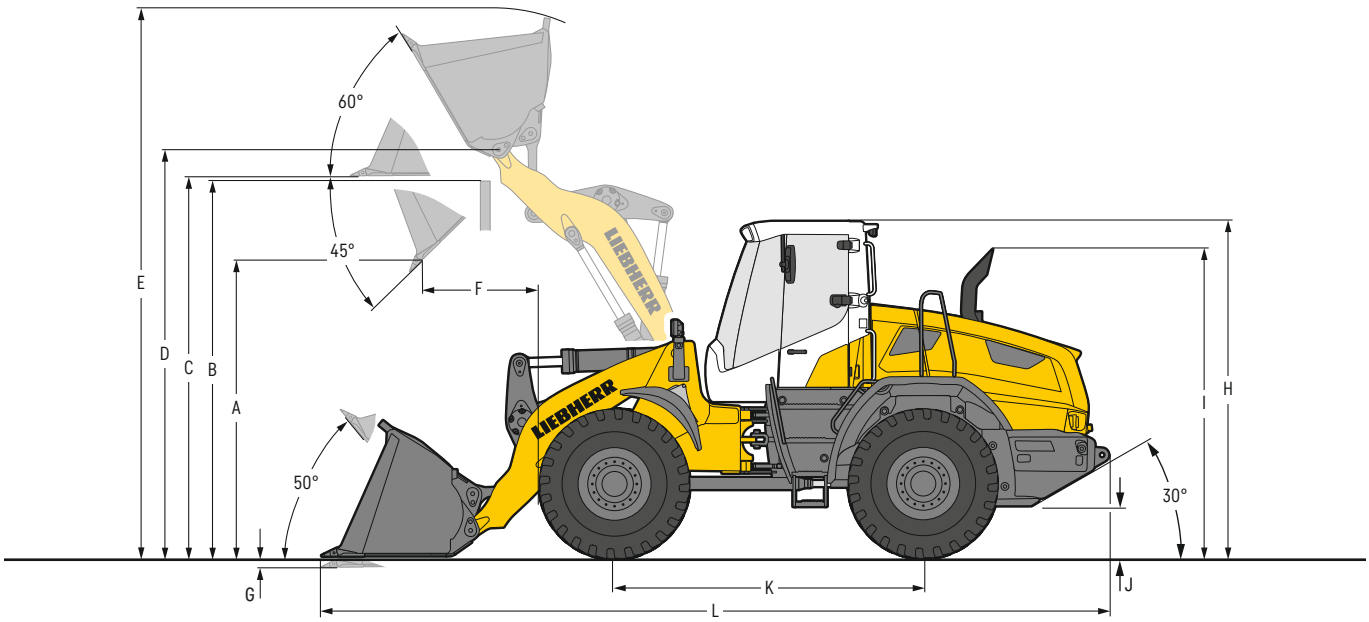
		L 538
Sound pressure level to ISO 6396		
L_{pA} (inside cab)	dB(A)	69
Sound power level to 2000/14/EG		
L_{WA} (surround noise)	dB(A)	102

Capacities

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

Dimensions

Loading bucket



Loading bucket

		L 538		
Geometry		ZK	ZK-QH	ZK
Cutting tools		T	T	T
Lift arm length	mm	2,650	2,650	2,650
Bucket capacity according to ISO 7546**	m^3	2.6	2.4	2.8
Specific material density	t/m^3	1.8	1.8	1.6
Bucket width	mm	2,720	2,520	2,720
A Dumping height at max. lift height and 45° discharge	mm	2,960	2,830	2,935
B Dump-over height	mm	3,540	3,540	3,540
C Max. height of bucket bottom	mm	3,720	3,720	3,720
D Max. height of bucket pivot point	mm	3,980	3,980	3,980
E Max. operating height	mm	5,270	5,390	5,310
F Reach at max. lift height and 45° discharge	mm	1,085	1,210	1,110
G Digging depth	mm	100	100	100
H Height above operator's cab[1)]	mm	3,250	3,250	3,250
I Height above exhaust	mm	2,950	2,950	2,950
J Ground clearance	mm	430	430	430
K Wheelbase	mm	3,025	3,025	3,025
L Overall length	mm	7,630	7,810	7,670
Turning circle radius over tyres	mm	5,420	5,420	5,420
Turning circle radius over outside bucket edge	mm	6,140	6,100	6,150
Breakout force (SAE)	kN	125	115	120
Tipping load, straight*	kg	11,200	10,400	11,150
Tipping load, fully articulated*	kg	9,650	8,880	9,610
Operating weight*	kg	14,520	14,900	14,550
Tyre size			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)

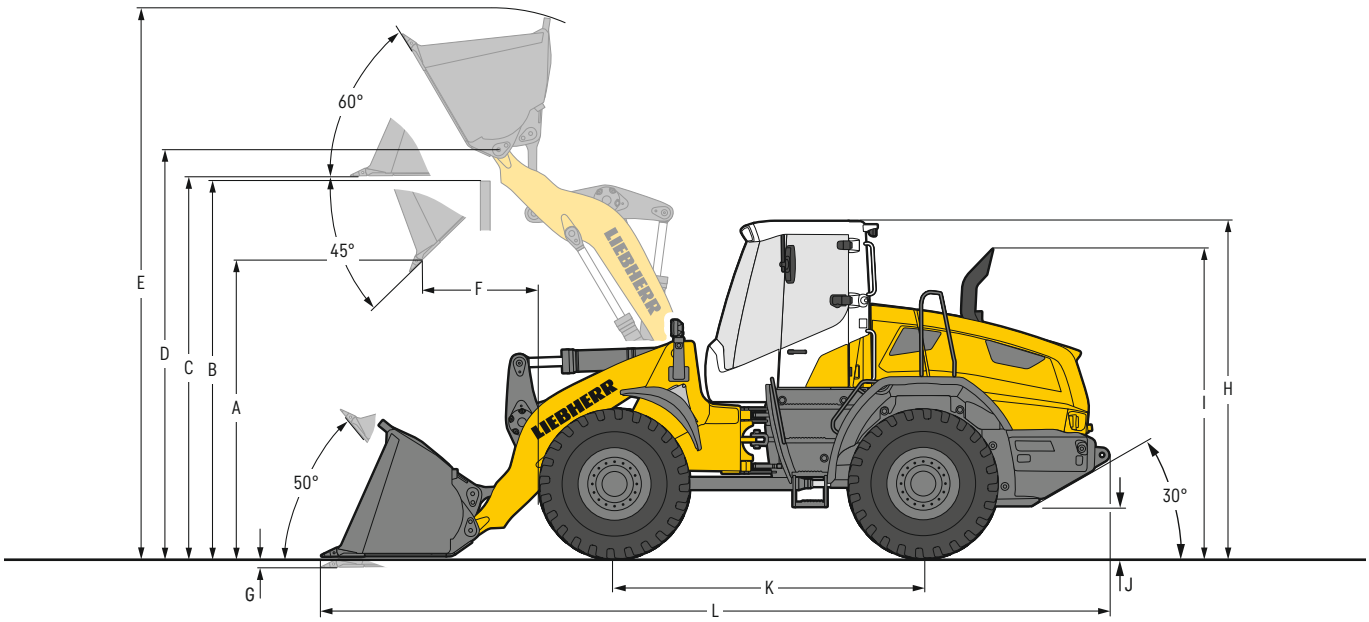
** Actual bucket capacity may be approx. 10 % larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see page 12.

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



Loading bucket

		L 538	
Geometry		ZK	ZK-QH
Cutting tools		T	T
Lift arm length	mm	3,000	3,000
Bucket capacity according to ISO 7546**	m^3	2.4	2.2
Specific material density	t/m^3	1.6	1.6
Bucket width	mm	2,520	2,520
A Dumping height at max. lift height and 45° discharge	mm	3,500	3,415
B Dump-over height	mm	4,070	4,070
C Max. height of bucket bottom	mm	4,260	4,260
D Max. height of bucket pivot point	mm	4,520	4,520
E Max. operating height	mm	5,820	5,870
F Reach at max. lift height and 45° discharge	mm	935	1,010
G Digging depth	mm	120	120
H Height above operator's cab[1)]	mm	3,250	3,250
I Height above exhaust	mm	2,950	2,950
J Ground clearance	mm	430	430
K Wheelbase	mm	3,025	3,025
L Overall length	mm	8,080	8,200
Turning circle radius over tyres	mm	5,420	5,420
Turning circle radius over outside bucket edge	mm	6,260	6,300
Breakout force (SAE)	kN	130	120
Tipping load, straight*	kg	9,300	8,620
Tipping load, fully articulated*	kg	7,990	7,350
Operating weight*	kg	14,670	15,070
Tyre size		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)

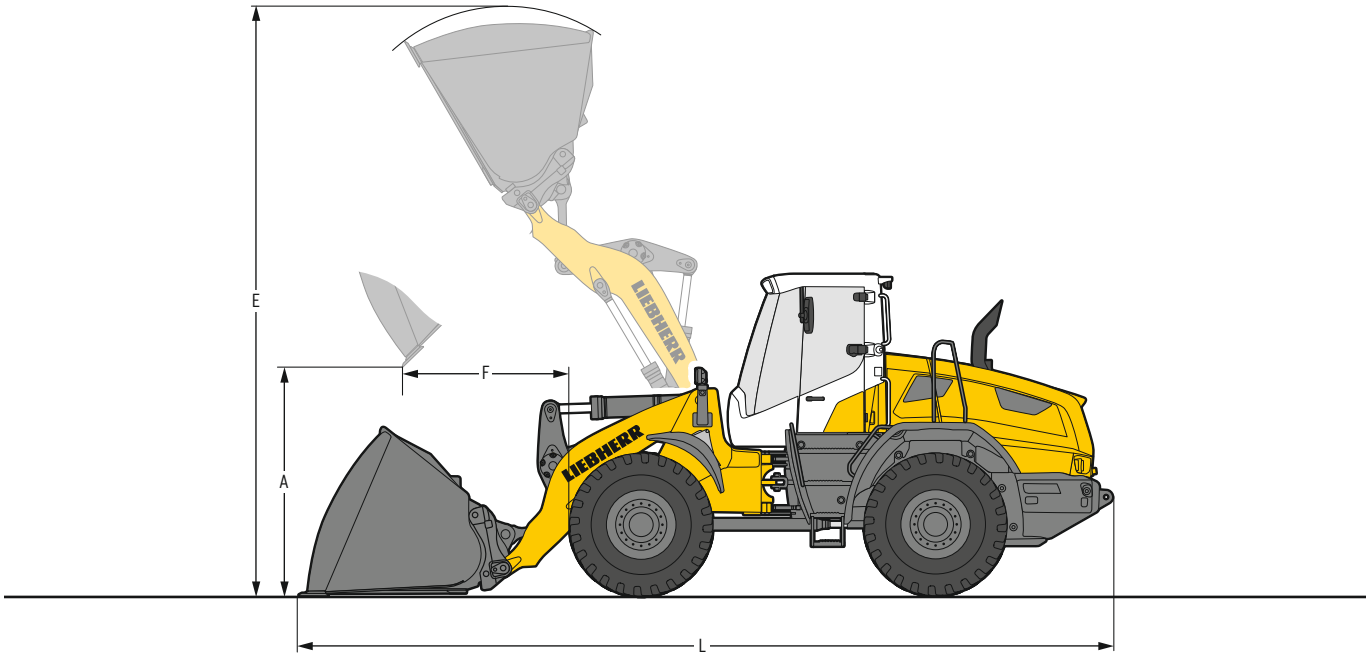
** Actual bucket capacity may be approx. 10 % larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see page 12.

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

Attachment

Light material bucket



Heavy material density

		L 538	
Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	m³	4.0	4.0
Specific material density	t/m³	1,05	1,0
Bucket width	mm	2,700	2,700
A Dumping height at max. lift height	mm	2,595	2,520
E Max. operating height	mm	5,510	5,610
F Reach at maximum lift height	mm	1,420	1,490
L Overall length	mm	7,970	8,080
Tipping load, straight*	kg	10,600	10,000
Tipping load, fully articulated*	kg	9,090	8,520
Operating weight*	kg	14,790	15,220
Tyre size		20.5R25 L3	

Light material density

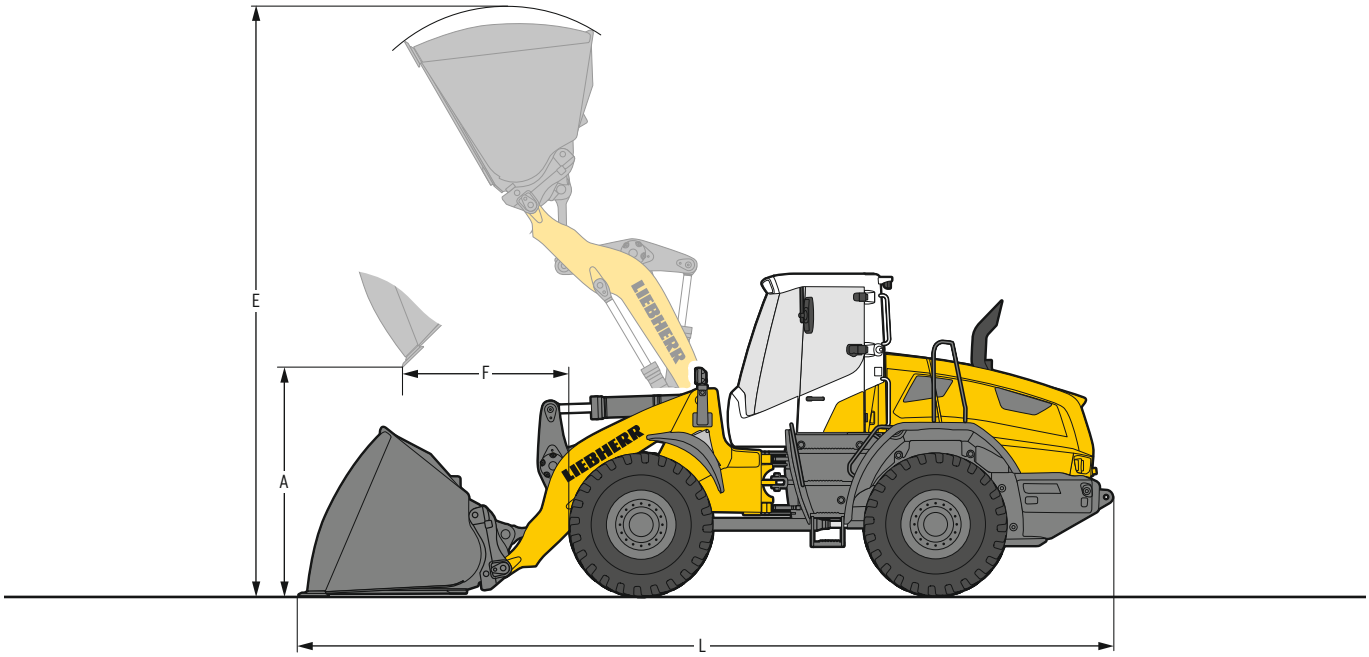
		L 538
Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	m³	6.5
Specific material density	t/m³	0.5
Bucket width	mm	2,700
A Dumping height at max. lift height	mm	2,190
E Max. operating height	mm	6,080
F Reach at maximum lift height	mm	1,830
L Overall length	mm	8,550
Tipping load, straight*	kg	9,500
Tipping load, fully articulated*	kg	8,020
Operating weight*	kg	15,620
Tyre size		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)

ZK = Z-bar linkage
ZK-QH = Z-bar linkage incl. quick hitch
BOCE = Bolt-on cutting edge

Attachment

High lift arm/light material bucket



Heavy material density

		L 538	
Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	m³	4.0	4.0
Specific material density	t/m³	0.85	0.8
Bucket width	mm	2,700	2,700
A Dumping height at max. lift height	mm	3,135	3,060
E Max. operating height	mm	6,060	6,160
F Reach at maximum lift height	mm	1,275	1,340
L Overall length	mm	8,420	8,530
Tipping load, straight*	kg	8,730	8,200
Tipping load, fully articulated*	kg	7,450	6,920
Operating weight*	kg	14,990	15,420
Tyre size		20.5R25 L3	

Light material density

		L 538
Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	m³	5.5
Specific material density	t/m³	0.5
Bucket width	mm	2,700
A Dumping height at max. lift height	mm	2,850
E Max. operating height	mm	6,440
F Reach at maximum lift height	mm	1,555
L Overall length	mm	8,830
Tipping load, straight*	kg	7,900
Tipping load, fully articulated*	kg	6,610
Operating weight*	kg	15,650
Tyre size		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)

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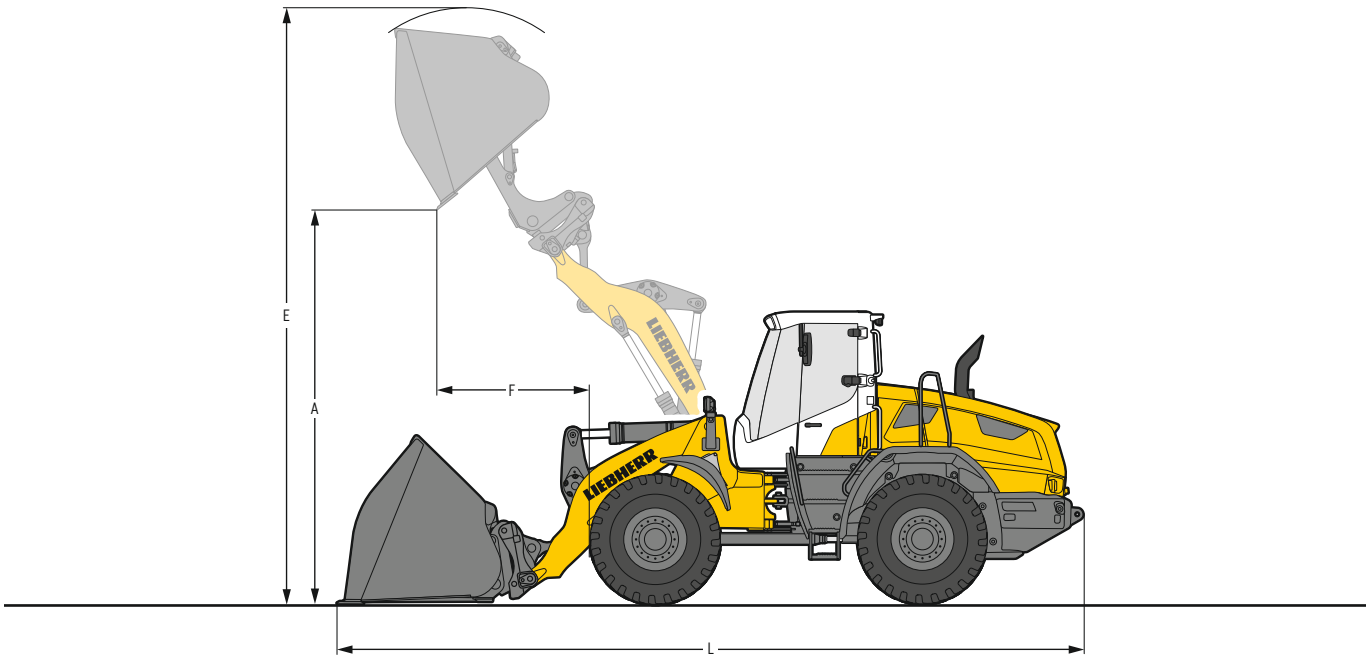
ZK-QH = Z-bar linkage incl. quick hitch
BOCE = Bolt-on cutting edge

Attachment

High-Dump bucket



Heavy material density

		L 538	
Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	m^3	3.5	3.5
Specific material density	t/m^3	1.1	1.05
Bucket width	mm	2,700	2,700
A Dumping height at max. lift height	mm	4,550	4,680
E Max. operating height	mm	6,360	6,550
F Reach at maximum lift height	mm	1,430	1,470
L Overall length	mm	8,060	8,140
Tipping load, straight*	kg	9,800	9,300
Tipping load, fully articulated*	kg	8,340	7,860
Operating weight*	kg	15,440	15,780
Tyre size		20.5R25 L3	

Light material density

		L 538
Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	m^3	6.0
Specific material density	t/m^3	0.5
Bucket width	mm	2,700
A Dumping height at max. lift height	mm	4,385
E Max. operating height	mm	6,910
F Reach at maximum lift height	mm	1,750
L Overall length	mm	8,510
Tipping load, straight*	kg	9,130
Tipping load, fully articulated*	kg	7,680
Operating weight*	kg	15,930
Tyre size		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)

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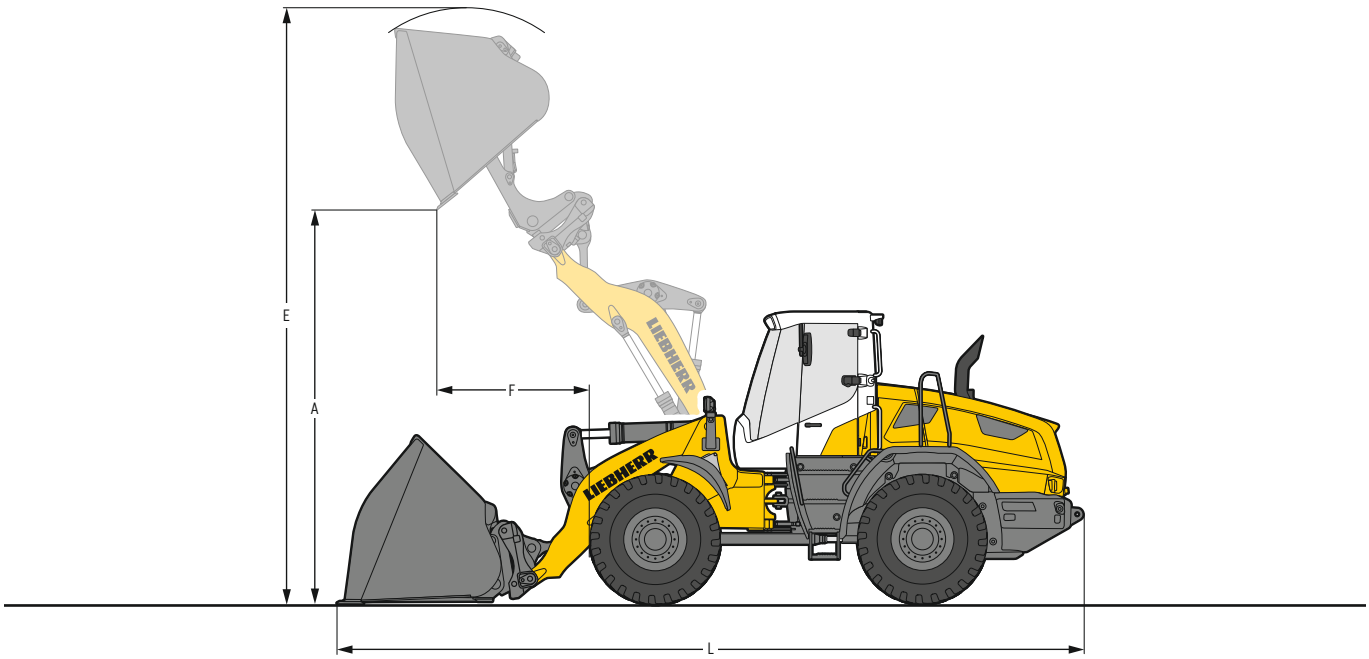
ZK-QH = Z-bar linkage incl. quick hitch
BOCE = Bolt-on cutting edge

Attachment

High lift arm/high dump bucket



Heavy material density

		L 538	
Geometry		ZK	ZK-QH
Cutting tools		BOCE	BOCE
Bucket capacity	m³	3.5	3.5
Specific material density	t/m³	0.85	0.8
Bucket width	mm	2,700	2,700
A Dumping height at max. lift height	mm	5,090	5,220
E Max. operating height	mm	6,900	7,090
F Reach at maximum lift height	mm	1,285	1,325
L Overall length	mm	8,490	8,580
Tipping load, straight*	kg	8,000	7,540
Tipping load, fully articulated*	kg	6,740	6,300
Operating weight*	kg	15,650	15,990
Tyre size		20.5R25 L3	

Light material density

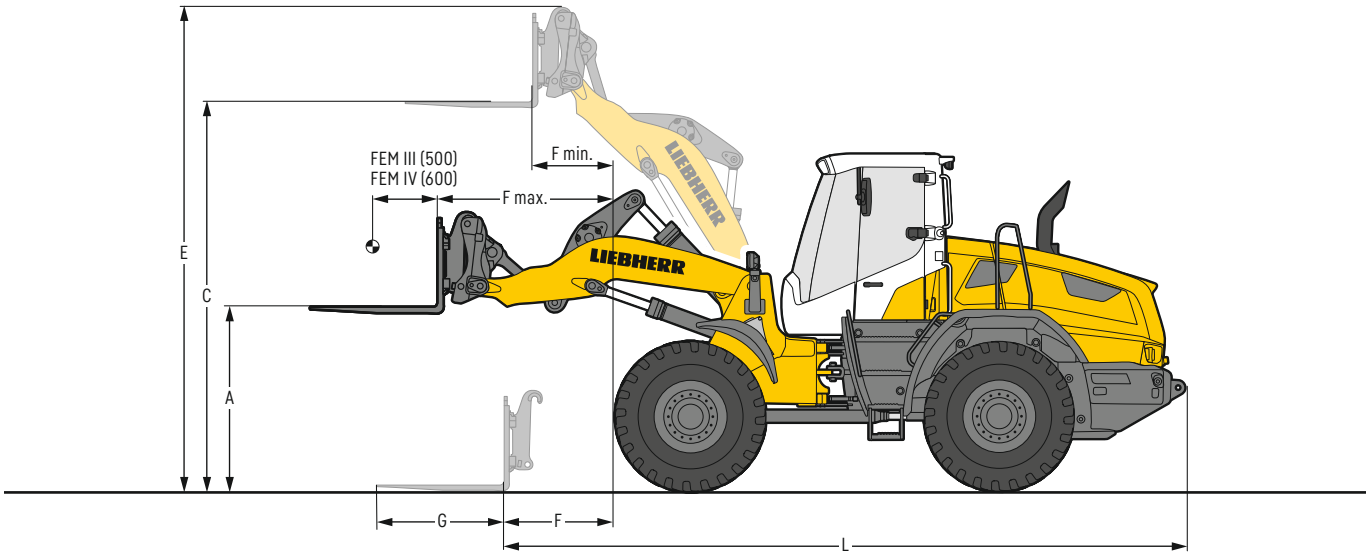
		L 538
Geometry		ZK-QH
Cutting tools		BOCE
Bucket capacity	m³	5.0
Specific material density	t/m³	0.5
Bucket width	mm	2,700
A Dumping height at max. lift height	mm	5,000
E Max. operating height	mm	7,300
F Reach at maximum lift height	mm	1,510
L Overall length	mm	8,825
Tipping load, straight*	kg	7,500
Tipping load, fully articulated*	kg	6,220
Operating weight*	kg	16,050
Tyre size		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)

ZK = Z-bar linkage
ZK-QH = Z-bar linkage incl. quick hitch
BOCE = Bolt-on cutting edge

Attachment

Fork carrier and fork



Fork carrier and fork

		L 538		L 538	
		STD	HL	STD	HL
Fork		FEM III	FEM III	FEM IV	FEM IV
Geometry		ZK-QH	ZK-QH	ZK-QH	ZK-QH
Lift arm length	mm	2,650	3,000	2,650	3,000
A Lifting height at max. reach	mm	1,780	1,780	1,740	1,740
C Max. lifting height	mm	3,780	4,310	3,740	4,270
E Max. operating height	mm	4,705	5,250	4,740	5,285
F Reach at loading position	mm	1,070	1,510	1,090	1,530
F max. Max. reach	mm	1,710	2,050	1,690	2,030
F min. Reach at max. lifting height	mm	790	650	770	630
G Fork length	mm	1,200	1,200	1,500	1,500
L Length – basic machine	mm	6,670	7,120	6,700	7,140
Tipping load, straight*	kg	8,300	7,150	7,900	6,800
Tipping load, fully articulated*	kg	7,190	6,150	6,780	5,780
Recommended payload for uneven ground = 60 % of tipping load, articulated[1)]	kg	4,300	3,650	4,000	3,450
Recommended payload for smooth surfaces = 80 % of tipping load, articulated[1)]	kg	5,000[2)]	4,900	5,400	4,600
Operating weight*	kg	14,390	14,570	14,620	14,830
Tyre size		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)

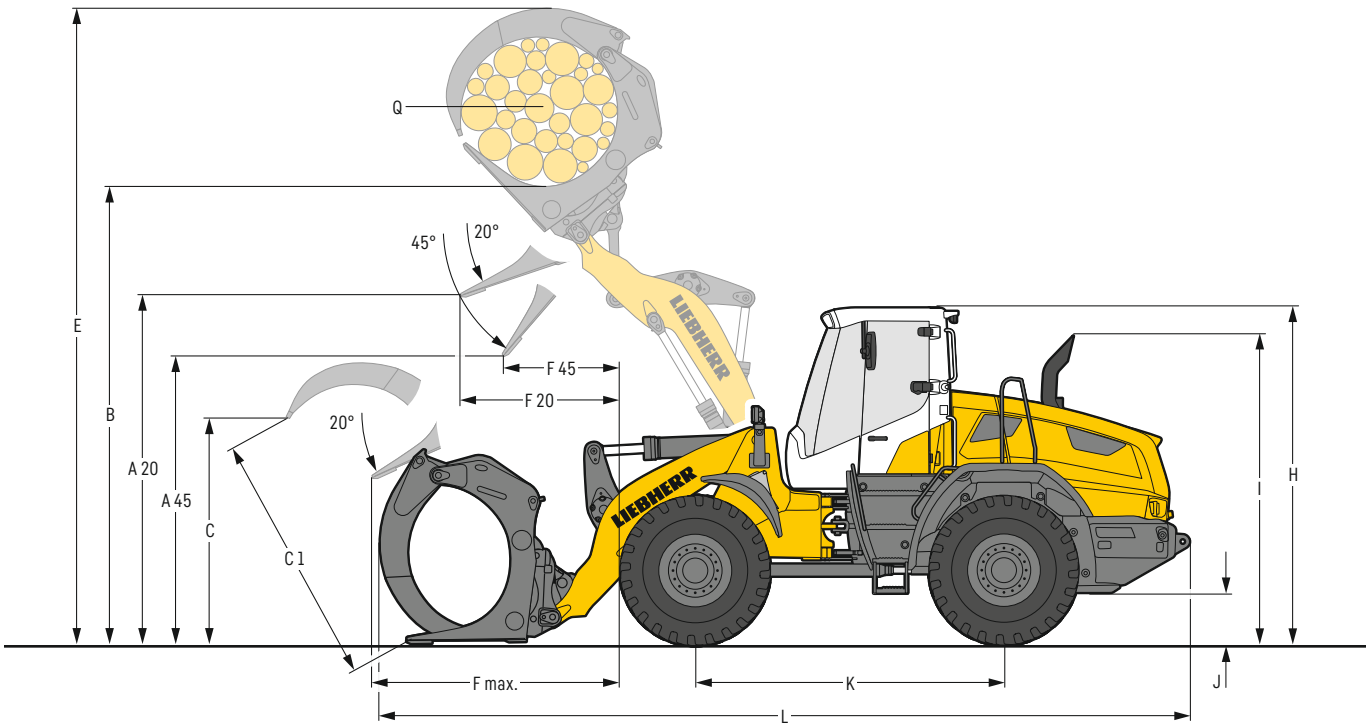
[1)] According to EN 474-3

[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

Attachment

Log grapple



Log grapple

			L 538
Geometry			ZK-QH
A20	Discharge height at 20°	mm	3,260
A45	Discharge height at 45°	mm	2,790
B	Manipulation height	mm	4,440
C	Max. grapple opening in loading position	mm	2,395
C1	Max. grapple opening	mm	2,590
E	Max. height	mm	6,240
F20	Reach at max. lifting height at 20° discharge	mm	1,650
F45	Reach at max. lifting height at 45° discharge	mm	1,230
F max.	Max. reach	mm	2,575
H	Height above operator's cab [1)]	mm	3,250
I	Height above exhaust	mm	2,950
J	Ground clearance	mm	430
K	Wheelbase	mm	3,025
L	Overall length	mm	7,950
Width over tyres		mm	2,480
Q	Grapple diameter	m²	1.8
Grapple width		mm	1,600
Payload*		kg	4,100
Operating weight*		kg	15,290
Tyre size			20.5R25 L3

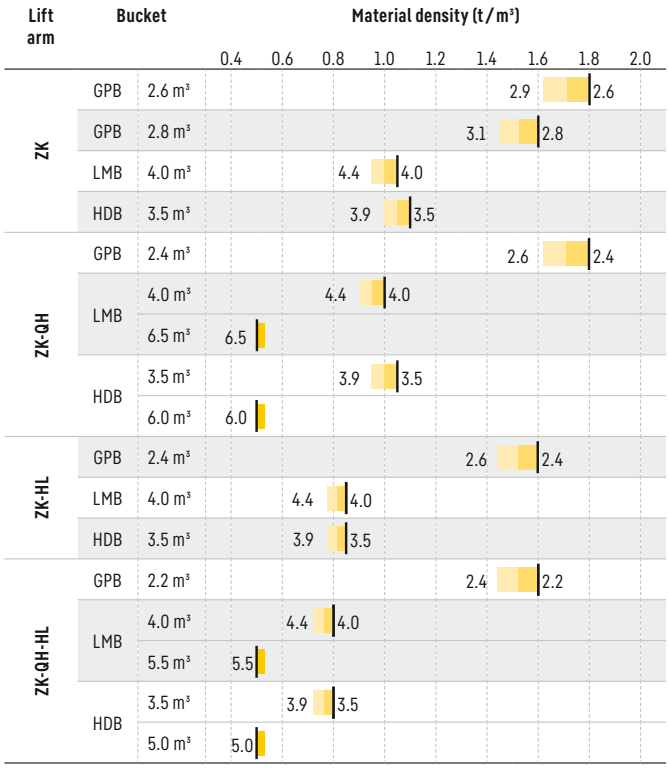
* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS / FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

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

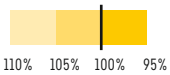
ZK-QH = Z-bar linkage incl. quick hitch

Bucket selection

L 538



Bucket filling factor



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	%
Gravel	moist	1,9	105
	dry	1,6	105
	crushed stone	1,5	100
Sand	dry	1,5	105
	wet	1,9	110
Gravel and Sand	dry	1,7	105
	wet	2,0	100
Sand / Clay		1,6	110
Clay	natural	1,6	110
	dry	1,4	110
Clay / Gravel	dry	1,4	110
	wet	1,6	100

		t/m³	%
Earth	dry	1,3	115
	wet excavated	1,6	110
Topsoil		1,1	110
Basalt		1,95	100
Granite		1,8	95
Sandstone		1,6	100
Slate		1,75	100
Bauxite		1,4	100
Limestone		1,6	100
Gypsum	broken	1,8	100
Coke		0,5	110
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 dust		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.

$$\text{Pay load} = \frac{\text{Tipping load, articulated}}{2}$$

$$\text{Bucket capacity} = \frac{\text{Pay load (t)}}{\text{Specific bulk weight of material (t/m}^3\text{)}}$$

Tyres

Tyre types

	Size and tread code		Change of operating weight kg	Width over tyres mm	Change in vertical dimensions* mm	Use
L 538						
Bridgestone	20.5R25 VJT	L3	17	2,480	8	Bulk material (firm ground conditions)
Bridgestone	20.5R25 VSDL	L5	680	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	20.5R25 VSDR	L5	688	2,480	60	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	550/65R25 VTS	L3	- 44	2,500	- 50	Gravel (all ground conditions)
Bridgestone	650/65R25 VTS	L3	595	2,650	16	Gravel (all ground conditions)
Continental	20.5R25 EM-Master	L3	156	2,480	26	Bulk material (firm ground conditions)
Goodyear	20.5R25 RT-3B	L3	11	2,490	16	Gravel (all ground conditions)
Goodyear	20.5R25 TL-3A+	L3	156	2,500	11	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	20.5R25 GP-4D	L4	328	2,470	20	Gravel, Industry, Wood (firm ground conditions)
Goodyear	20.5R25 RL-5K	L5	752	2,500	49	Stone, Scrap, Recycling (firm ground conditions)
Michelin	20.5R25 XTLA	L2	- 121	2,510	- 7	Gravel, Earthworks, Clay (all ground conditions)
Michelin	20.5R25 XHA2	L3	0	2,480	0	Sand, Gravel (all ground conditions)
Michelin	20.5R25 XLD D2A	L5	431	2,480	30	Stone, Mining spoil (firm ground conditions)
Michelin	20.5R25 X MINE PRO	L5	606	2,510	48	Stone, Scrap, Recycling (firm ground conditions)
Michelin	550/65R25 XLD65	L3	- 82	2,500	- 44	Gravel (all ground conditions)
Michelin	650/65R25 XLD65	L3	478	2,640	- 7	Gravel (all ground conditions)
Nokian	20.5R25 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 538	L 550 XPower®	L 566 XPower®	L 580 XPower®
Tipping load	**kg**	9,650	12,500	15,900	19,200
Bucket capacity	**m³**	2.6	3.4	4.2	5.2
Operating weight	**kg**	14,520	18,550	23,900	27,650
Engine output	**kW / HP**	129 / 175	163 / 222	203 / 276	233 / 317

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 538: 2.6 m³	7.0

* Wheel loader in practical customer applications with individual machine configurations. Average data from LiDAT from 13.04.2023.

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

Equipment

Basic wheel loader	L 538
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	●
Desingn 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)	+

Equipment	L 538
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 Solidlink	+
Hydraulic quick change device preparation Solidlink	+
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 538
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_{max} 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 538
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 538
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°	+

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

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 51,000 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

Liebherr-Werk Bischofshofen GmbH
Postfach 49 · 5500 Bischofshofen, Austria · Phone +43 50809 1-0 · Fax +43 50809 11385
info.lbh@liebherr.com · www.liebherr.com · www.facebook.com/LiebherrConstruction