

Wheel Loaders

L 550 - L 580

Tipping load, articulated: 12,150 kg – 18,500 kg



**New
Generation**

LIEBHERR

L 550

Tipping load, articulated: 12,150 kg
Bucket capacity: 3.2 m³
Operating weight: 17,300 kg
Engine output: 129 kW

L 556

Tipping load, articulated: 13,550 kg
Bucket capacity: 3.6 m³
Operating weight: 17,900 kg
Engine output: 140 kW

L 566

Tipping load, articulated: 15,750 kg
Bucket capacity: 4.0 m³
Operating weight: 23,150 kg
Engine output: 190 kW

L 576

Tipping load, articulated: 17,500 kg
Bucket capacity: 4.5 m³
Operating weight: 24,450 kg
Engine output: 205 kW

L 580

Tipping load, articulated: 18,500 kg
Bucket capacity: 5.0 m³
Operating weight: 25,180 kg
Engine output: 215 kW



reddot design award
winner 2013



Economy

Compared to conventional transmission systems, the hydrostatic driveline with Liebherr Power Efficiency achieves a reduction in fuel consumption for wheel loaders of up to 25%. This reduces operating costs and environmental pollution.

Performance

The Liebherr driveline allows different orientation for the Liebherr diesel engine. In the wheel loaders L 550 - L 556 the diesel engine is rotated through 90° and mounted transverse to the direction of travel, in the L 566 - L 580 it is mounted lengthways in the rear, with the output shaft facing backwards. Compared to conventionally driven wheel loaders, the operating weight is much lower, the tipping load is higher, and more material can be moved each operating hour.

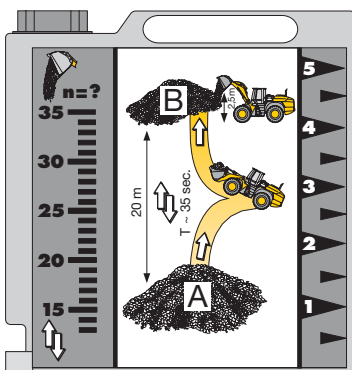
Reliability

All the materials used in Liebherr wheel loaders have passed long-term tests to ensure that they match up to Liebherr's exacting standards in even the toughest conditions. The mature concept and proven quality make Liebherr wheel loaders the benchmark of reliability.

Comfort

The ultra-modern cab design with advanced ergonomics, continuously variable Liebherr driveline for uninterrupted tractive force, standard Liebherr ride control, optimum weight distribution and easy service access thanks to unique engine installation position lead to extraordinary overall comfort.

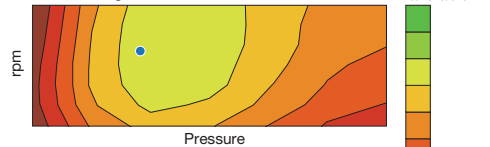




Fuel efficiency

- Up to 5 litres reduction in consumption per operating hour resulting in a fuel saving of up to 25%.
- The Liebherr wheel loaders demonstrate their fuel efficiency in the Liebherr standard Normtest.

Efficiency behaviour without LPE



Efficiency behaviour with LPE



• Working point

Economy

Compared to conventional transmission systems, the hydrostatic driveline with Liebherr Power Efficiency achieves a reduction in fuel consumption for wheel loaders of up to 25%. This reduces operating costs and environmental pollution.

Low operating costs

**Minimum costs,
High handling capacity**

Liebherr wheel loaders are unbeatable for economy compared to conventionally driven wheel loaders. This is due to the following factors:

- Low fuel consumption thanks to higher efficiency and low operating weight. Liebherr wheel loaders use up to 5 litres less fuel per operating hour in the same working conditions. Thanks to the newly developed Liebherr Power Efficiency system the large wheel loaders use the same amount of fuel compared to their predecessors in the Stage IIIA generation.
- Hardly any brake wear due to the hydraulic braking action of the driveline and therefore minimal repair costs.
- Reduced tyre wear due to continuous traction control. Depending on the working conditions, there is up to 25% less wear.

Active environmental protection

**Economical use
of resources**

The reduction in fuel lowers emissions, thus actively protecting resources:
1 litre of fuel produces up to 3 kg of carbon dioxide (CO₂). By saving up to 5 litres per operating hour, up to 15,000 kg less CO₂ is produced in 1,000 operating hours – that means lower costs and active environmental protection.

Low noise emission

The innovative driveline concept means much lower noise emission – Liebherr wheel loaders are significantly quieter in operation.



Liebherr Power Efficiency (LPE)

- The newly developed system known as Liebherr Power Efficiency (LPE) optimizes the interaction between the drive components, and therefore also optimizes the position of the working point in the characteristic map with regard to the degree of efficiency.
- Thanks to this technology it was possible to prevent an increase of fuel consumption from Stage IIIA to Stage IIIB. LPE also saves up to an additional 8% in fuel compared to wheel loaders where the system is not used.



Reduced tyre wear

- The tractive force can be adjusted continuously. This stops wheel spins and reduced tyre wear by up to 25%.

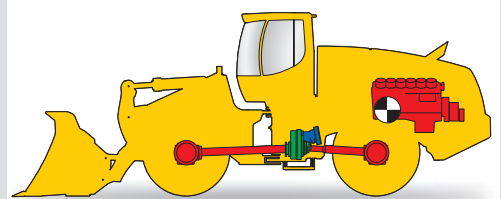
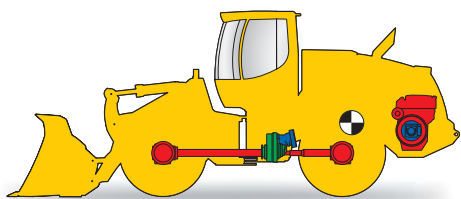
Reduced brake wear

- Even under the toughest working conditions, the Liebherr travel drive always brakes hydraulically. The mechanical service brake only acts as a support and is therefore subject to hardly any wear.



Liebherr driveline L 550 - L 556

- Optimum weight distribution thanks to transverse installation of the diesel engine.
- The diesel engine as well as the variable displacement pumps mounted on the engine act as counterweight, thus allowing higher tipping loads at low operating weight.
- Compact design improves visibility in all directions.



Performance

The Liebherr driveline allows different orientation for the Liebherr diesel engine. In the wheel loaders L 550 - L 556 the diesel engine is rotated through 90° and mounted transverse to the direction of travel, in the L 566 - L 580 it is mounted lengthways in the rear, with the output shaft facing backwards. Compared to conventionally driven wheel loaders, the operating weight is much lower, the tipping load is higher, and more material can be moved each operating hour.

Higher performance, lower weight

Higher productivity

The combination of the Liebherr driveline and the unique position of the Liebherr diesel engine allows higher tipping loads at low operating weight. This leads to significantly higher productivity, because there is no need for unnecessary counterweight.

Ultra modern Liebherr driveline

Innovative technology

Tractive force and speed are automatically adjusted to the requirements of the operator without shifting. There is no need for a mechanical reverse gear because the travel direction is changed hydraulically.

Flexibility puts them ahead

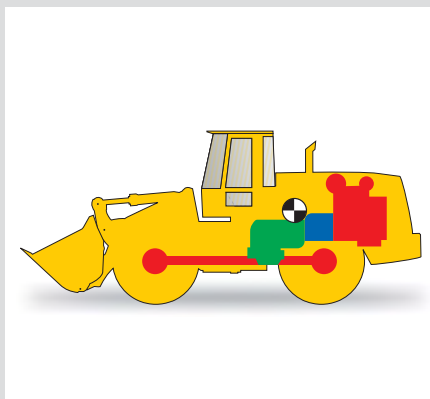
An all-purpose loader

The industrial lift arm is available as an alternative to the standard Z-bar linkage, at no additional cost. The industrial lift arm features a parallel guide arrangement and high torque in the upper lifting range - ideal properties for attaching larger, heavier equipment and transporting heavy loads. With its industrial lift arm Liebherr can now offer a continuous and uniform solution for industrial operations over the entire range of large machines. With their compact design, Liebherr wheel loaders can manoeuvre quickly and efficiently - the best choice for high handling capacity.



Liebherr driveline L 566 - L 580

- Optimum weight distribution thanks to lengthways-installed Liebherr diesel engine, output shaft is facing to the rear.
- The diesel engine as well as the variable displacement pumps mounted on the engine act as counterweight, thus allowing higher tipping loads at low operating weight.
- Compact design improves visibility in all directions.



Conventional travel gear

- Longitudinally mounted diesel engine moves the centre of gravity further forward.
- Additional counterweight is needed to maintain stability and to increase the tipping load.
- This results in high operating weight and bad visibility.



Cooling system

- The cooling system is mounted between the diesel engine and the cab on the rear carriage, where it can draw in clean air. The speed of the fan is dependent on the cooling capacity, with thermosensors ensuring optimum fan speed.
- To improve visibility, the cooler package has been mounted lengthways, and the unit has been redesigned to make cleaning and maintenance even easier, achieving greatest possible convenience.
- The cooling system has been adjusted to meet the demands of the new engine technology.
- A reversible fan drive, a fluff trap for the radiator and a large-mesh radiator are also available as options to prevent contamination especially in dusty atmospheres and to make cleaning easier. Minimum cleaning effort translates into more efficient work.

Reliability

All the materials used in Liebherr wheel loaders have passed long term tests to ensure that they meet Liebherr's exacting standards in even the toughest conditions. The mature concept and proven quality make Liebherr wheel loaders the benchmark of reliability.

Reliable Liebherr driveline

Fewer components

The Liebherr driveline includes a self-locking hydraulic brake, which means the additional wet brake discs are effectively wear-free. There is no need for a reversing gear unit – thus minimizing the number of parts susceptible to wear and tear.

Controlled cooling

The intelligent answer

The cooling fan is driven independently from the Liebherr diesel engine and produces only the cooling air output which is actually required. Heat sensors ensure reliable control. If overheating should occur, the wheel loader automatically shifts down to first travel speed range. The reduced power consumption protects the engine from overheating. At the same time, the fan speed increases to maximum output to prevent the engine from overheating.

Components meet manufacturer's quality standards

Everything from a single source

Important components such as the engine, hydraulic rams and electronics are developed and manufactured by Liebherr. This ensures coordinated quality from the manufacturer down to the smallest detail. Liebherr components guarantee maximum performance and reliability.

Optimized engine technology

As well as further developments towards greater environmental compatibility, the new generation of diesel engines has been optimized in a number of other respects. In addition to Common Rail technology a diesel particle filter with oxidation catalytic converter reduces pollutant emissions. With active regeneration, in most operational circumstances this filtration process can also undergo deposit scavenging, which means that work can continue without interruption.



Liebherr's own components

- Liebherr has many years of experience in design, development and construction of diesel engines, hydraulic rams and electronic components. They are matched together down to the smallest detail for use to guarantee optimum interaction and performance.

Liebherr diesel engine

- Common Rail technology optimizes the combustion process and therefore reduces emissions.
- Further reduction of particle emissions due to the diesel particle filter with oxidation catalytic converter. Active regeneration ensures efficient, uninterrupted work.
- Proactive intervention of Liebherr Power Efficiency (LPE) in the engine management to increase efficiency.



Liebherr control lever

• The Liebherr control lever is used to manage all travel and working movements of the wheel loader. This ensures the operator's left hand always remains on the steering wheel and therefore increases safety. The operator controls the following functions with his right hand:

- Raise and lower attachment
- Tilt and crowd
- Automatic bucket return to dig
- Kick down and Gear hold function
- Auxiliary control buttons for additional hydraulic functions
- Change of travel direction with simultaneous travel start



Comfort

The ultra modern cab design with advanced ergonomics, continuously variable Liebherr driveline for uninterrupted tractive force, standard Liebherr ride control, optimum weight distribution and easy service access thanks to unique engine installation position lead to extraordinary overall comfort.

Top-class cabin design

Comfort cab

The ultra-modern, ergonomically planned cabin design allows the operator to achieve better performance and productivity in the greatest possible comfort. The displays, controls and operator's seat are carefully coordinated to form a perfect ergonomic unit. The newly developed mounting system substantially reduces noise and vibration in the cab's interior.

Liebherr control lever

All the working and travel functions are operated precisely and sensitively from a single control lever. This ensures accurate and safe handling, and the left hand always remains on the steering wheel. Safety at the job site is therefore increased.

Liebherr driveline

Continuously variable transmission

The Liebherr driveline allows continuous regulation of acceleration in all speed ranges, without noticeable gear shifting or interruption in tractive force.

Liebherr Power Efficiency

Liebherr Power Efficiency (LPE) optimizes the efficiency and effectiveness of the travel drive, which places less stress on the components. The operator actuates the accelerator pedal in the usual way, and obtains the full desired power performance. The machine software takes the electronic signal from the pedal and calculates the most efficient way of putting the drive command into practice, by making a proactive intervention into the engine management system. The usual high performance as well as the drive behaviour of the machine as a whole remain unchanged. If anything, the response is even faster.



LPE accelerator pedal

- The operator actuates the accelerator pedal as usual. The machine software calculates the most efficient way of putting the drive command into practice.
- The effectiveness and efficiency of the Liebherr travel drive are further optimized by LPE - the familiar, comfortable driving behaviour of the wheel loader remains unchanged, while agility and response are improved.



Powerful air-conditioning system

- The standard equipped air-conditioning system of the large wheel loaders provides the greatest operator comfort for high productivity.
- The air flow is controlled at 4 different levels – an automatic air-conditioning system is available as an option.

- Air flow in the feet area
- Defroster
- Air flow in the head area
- Air flow in the body area



Service accessibility L 550 - L 556



Opening stage 2

Opening stage 1



Service / Maintenance

LiDAT

Efficient management

With LiDAT, Liebherr's own data transmission and positioning system, you can manage, monitor and control your entire fleet efficiently.

LiDAT allows you to access machine data records, perform data analysis, and review service records within the fleet management system. All machine data can be accessed at anytime simply, via the internet. The system provides you with comprehensive documentation about operating hours, increased availability through shorter downtimes, and faster support from the manufacturer. There is also faster detection of stress and overloading, which extends the machine's service life to provide more efficient planning for your company. The LiDAT service is standard for the L 550 - L 580 wheel loaders.

Service accessibility

Easy maintenance

With the unique position of the diesel engine, Liebherr wheel loaders provide outstanding accessibility for maintenance. The positioning of the cooling system directly behind the cab results in less contamination, which in turn reduces maintenance and cleaning; a clear benefit which saves time and money.

L 550 - L 556

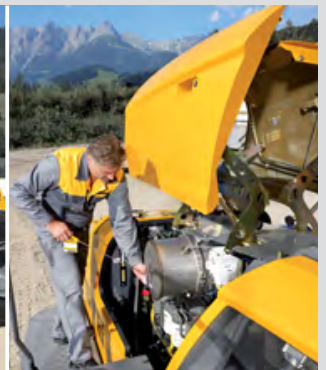
All the points for daily maintenance can be reached from ground level. The engine cover can be opened in two stages. Cleaning of the cooling system is carried out while standing on the machine, anti-slip step surfaces and strong handrails in the access area ensure a high standard of safety.

L 566 - L 580

By opening a single engine compartment hood, the hydraulic pumps, hydraulic tank cut-off valve, air filter, and battery main switch can be reached easily from ground level. As with previous models, work on the cooler unit, diesel engine and pump distributor gear is carried out while standing on the machine. Great care has been taken to ensure maximum safety in these areas as well.



Service accessibility L 566 - L 580



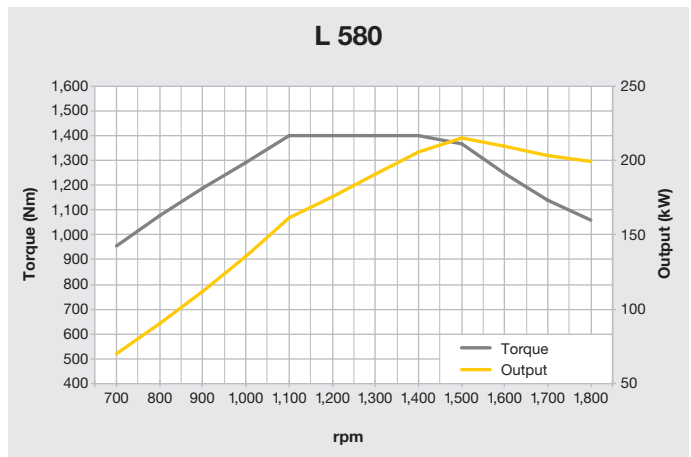
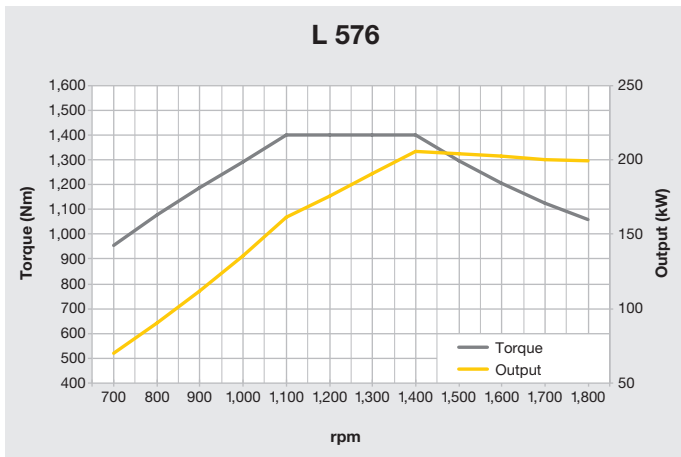
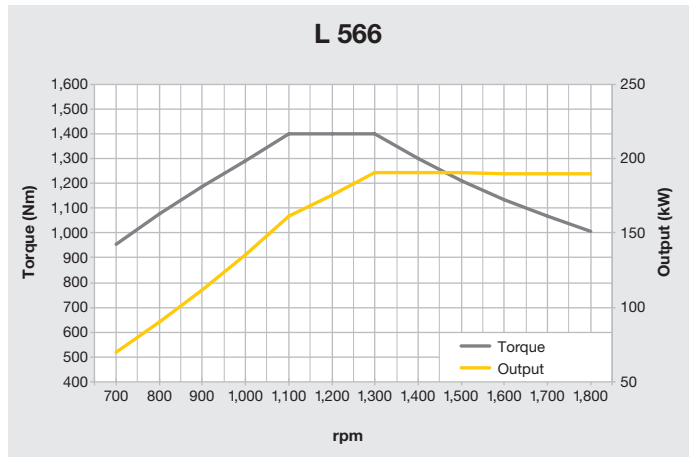
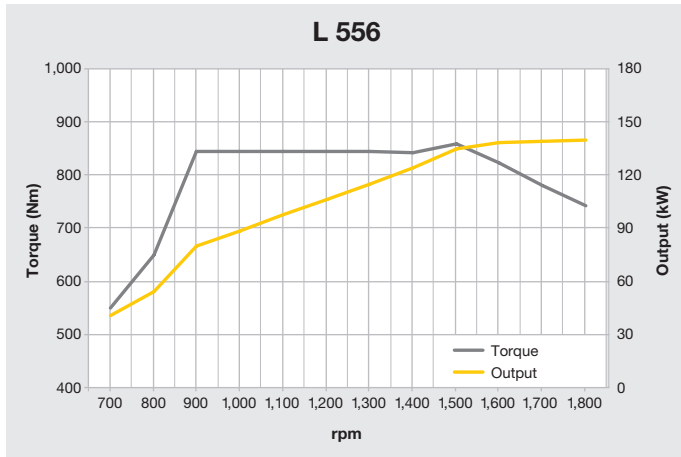
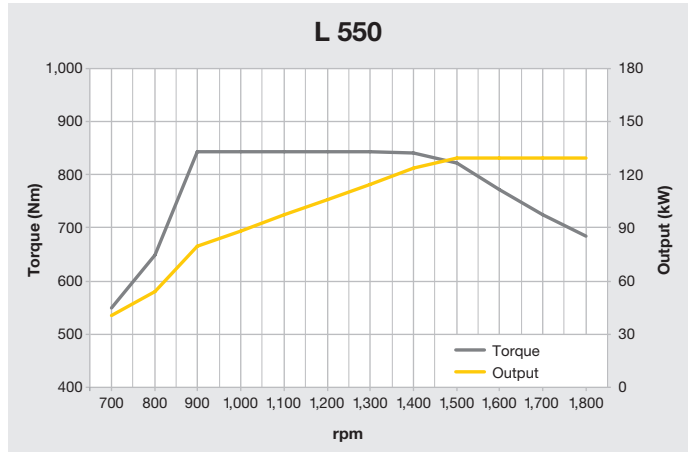
Technical Data



Engine L 550 L 556 L 566 L 576 L 580

Liebherr diesel engine	D934 A7	D934 A7	D936 A7	D936 A7	D936 A7
Design	water-cooled with 2-stage turbo charging, externally cooled exhaust gas recirculation and diesel particle filter				
Cylinder inline	4	4	6	6	6
Fuel injection process	electronic Common Rail high-pressure injection				
Max. output to ISO 9249	kW 129	140	190	205	215
at RPM 1,500	1,800	1,300	1,400	1,500	1,500
Max. torque	Nm 843	857	1,400	1,400	1,400
at RPM 1,300	1,500	1,300	1,200	1,100	1,100
Displacement	litres 7.01	7.01	10.52	10.52	10.52
Bore/Stroke	mm 122/150	122/150	122/150	122/150	122/150
Air cleaner	Dry type with main and safety element, pre-cleaner, service indicator on the display				
Electrical system					
Operating voltage	V 24	24	24	24	24
Battery	Ah 2 x 140	2 x 140	2 x 180	2 x 180	2 x 180
Alternator	V/A 28/100	28/100	28/100	28/100	28/100
Starter motor	V/kW 24/7.8	24/7.8	24/7.8	24/7.8	24/7.8

The exhaust emissions are below the limits in stage IIIB/Tier 4i.



Technical Data



Travel Drive

Stepless hydrostatic travel drive

Design _____ Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit with one axle transfer case. Direction of travel in reversed by changing the flow-direction of the variable-displacement pump

Filtering system _____ 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 joystick is used to control forward and reverse travel

Travel speed range _____ Speed range 1 _____ 0 – 10.0 km/h
 Speed range 2 and A2 _____ 0 – 20.0 km/h
 Speed range A3 _____ 0 – 40.0 km/h
 The quoted speeds apply with the tyres that are standard equipment on the loader



Axles

Four-wheel drive _____ Fixed

Front axle _____ Centre pivot, with 13° oscillating angle to each side

Rear axle _____ L 550 | L 556 | L 566 | L 576 | L 580

Height of obstacles which can be driven over _____ mm 460 | 460 | 490 | 490 | 490
 With all four wheels remaining in contact with the ground

Differentials _____ Automatic limited-slip differentials

Reduction gear _____ Planetary final drive in wheel hubs

Track width _____ 2,000 mm with all types of tyres (L 550, L 556)
 2,230 mm with all types of tyres (L 566, L 576, L 580)



Brakes

Wear-free service brake _____ Self-locking of the hydrostatic travel drive (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes (two separate brake circuits)

Parking brake _____ Electro-hydraulically actuated spring-loaded disc brake system on the transmission

The braking system meets the requirements of the EC guidelines 71/320.



Steering

Design _____ "Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders

Angle of articulation _____ 40° (to each side)

Emergency steering _____ Electro-hydraulic emergency steering system



Attachment Hydraulics

Design _____ "Load-sensing" swash plate type variable flow 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

Filtering _____ Return line filter in the hydraulic reservoir

Control _____ "Liebherr-Joystick" with hydraulic servo control

Lift circuit _____ Lifting, neutral, lowering and float positions controlled by Liebherr joystick with detent

Tilt circuit _____ Tilt back, neutral, dump
 Automatic bucket return to dig

	L 550	L 556	L 566	L 576	L 580
Max. flow _____ l/min.	234	234	290	290	290
Max. pressure					
Z-bar linkage _____ bar	330	360	350	350	380
Industrial lift arm _____ bar	350	380	380	380	380



Attachment

Geometry _____ Powerful Z-bar linkage with tilt cylinder and cast steel cross-tube

Bearings _____ Sealed

Cycle time at nominal load _____	L 550	L 556	L 566	L 576	L 580
Z-bar linkage					
Lifting _____	5.5 s	5.5 s	5.5 s	5.5 s	5.5 s
Dumping _____	2.3 s	2.3 s	2.0 s	2.0 s	2.0 s
Lowering (empty) _____	2.7 s	2.7 s	3.5 s	3.5 s	3.5 s
Industrial lift arm					
Lifting _____	5.5 s	5.5 s	5.5 s	5.5 s	5.5 s
Dumping _____	3.5 s	3.5 s	3.0 s	3.0 s	3.2 s
Lowering (empty) _____	2.7 s	2.7 s	3.5 s	3.5 s	3.5 s



Operator's Cab

Design _____ On elastic bearing on rear section, soundproof ROPS/FOPS cab. Operator's door with optional sliding window, 180° opening angle, fold-out window on right side with opening angle, front windscreen made of compound safety glass, green tinted as standard, side windows made of single-pane safety glass, grey tinted, continuously adjustable steering column and joystick control as standard, heated rear window

ROPS roll over protection per EN/ISO 3471/EN 474-1

FOPS falling objects protection per EN/ISO 3449/EN 474-1

Liebherr Operator's seat _____ 6 way adjustable seat with lap belt, vibration damping and suspension adjustable for the operator's weight (mechanically sprung)

Cab heating and ventilation _____ Operator's cab with 4-level air control, cooling water heating, defroster and air conditioning with electronic valve control, as well as electronic fresh/recirculated air control, filter system with pre-filter, fresh air filter and recirculated air filter, easily replaced, air conditioning as standard



Noise Emission

ISO 6396	L 550	L 556	L 566	L 576	L 580
L_{PA} (inside cab) _____	68 dB(A)	68 dB(A)	68 dB(A)	68 dB(A)	68 dB(A)
2000/14/EC					
L_{WA} (surround noise) _____	104 dB(A)	104 dB(A)	105 dB(A)	105 dB(A)	105 dB(A)

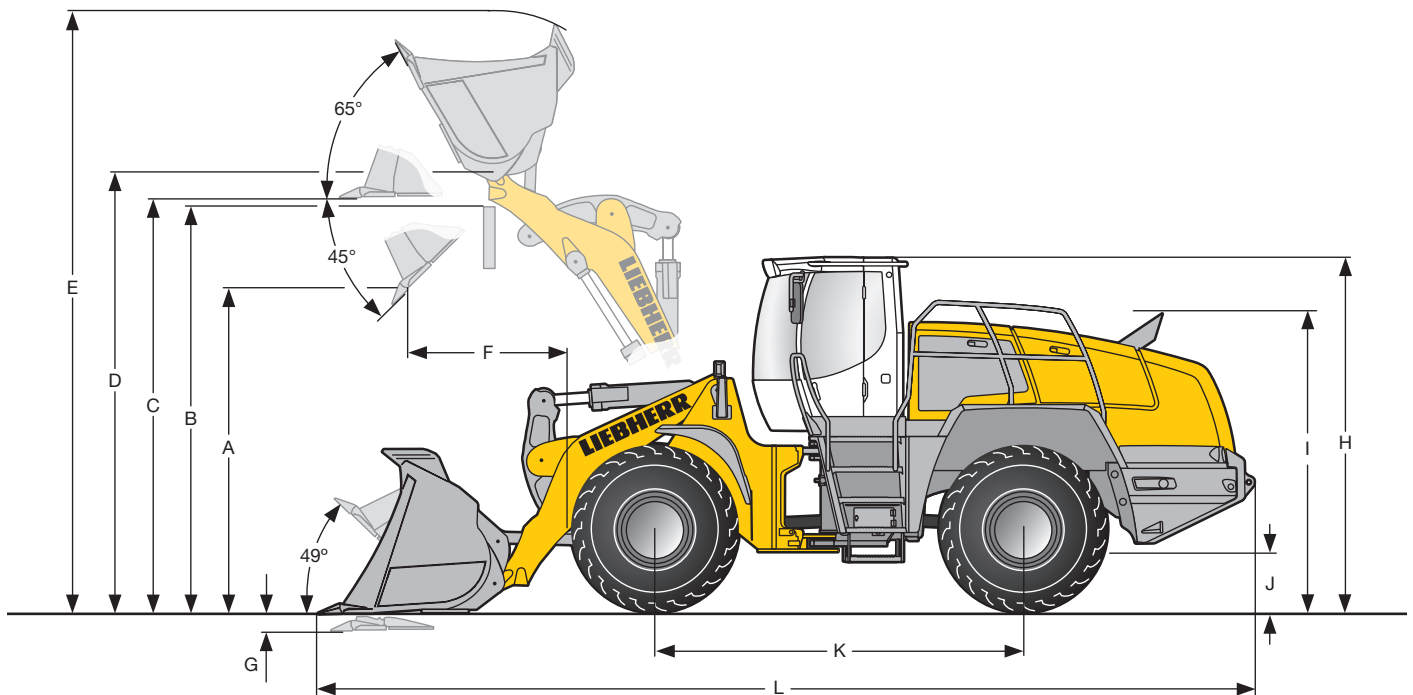


Capacities

	L 550	L 556	L 566	L 576	L 580
Fuel tank _____	1300	300	400	400	400
Engine oil					
(including filter change) _____	140	40	44	44	44
Pump distribution gearbox _____	12.5	2.5	2.5	2.5	2.5
Transmission _____	111.5	11.5	11.5	11.5	11.5
Coolant _____	142	42	52	52	52
Front axle _____	135	35	42	42	42
Rear axle _____	135	35	40	42	42
Hydraulic tank _____	135	135	135	135	135
Hydraulic system, total _____	245	245	265	265	265
Air condition system R134a _____ g	1,250	1,250	1,250	1,250	1,250

Dimensions

Z-bar linkage




Loading Bucket

		L 550		L 556		L 566		L 576		L 580	
		ZK	T	ZK	T	ZK	T	ZK	T	ZK	T
Geometry											
Cutting tools											
Lift arm length	mm	2,600	2,600	2,600	2,600	2,920	2,920	2,920	2,920	3,050	3,050
Bucket capacity according to ISO 7546 **	m ³	3.2	3.6	3.6	4.0	4.0	4.5	4.5	5.0	5.0	5.5
Bucket width	mm	2,700	2,700	2,700	2,700	3,000	3,000	3,000	3,000	3,300	3,300
A Dumping height at max. lift height and 45° discharge	mm	2,880	2,790	2,850	2,760	3,240	3,185	3,185	3,105	3,320	3,250
B Dump-over height	mm	3,500	3,500	3,500	3,500	3,900	3,900	3,900	3,900	4,100	4,100
C Max. height of bucket bottom	mm	3,645	3,645	3,645	3,645	4,050	4,050	4,050	4,050	4,270	4,270
D Max. height of bucket pivot point	mm	3,915	3,915	3,915	3,915	4,360	4,360	4,360	4,360	4,580	4,580
E Max. operating height	mm	5,395	5,410	5,460	5,480	5,870	5,960	5,960	6,040	6,340	6,420
F Reach at max. lift height and 45° discharge	mm	1,095	1,225	1,160	1,230	1,180	1,240	1,235	1,320	1,150	1,220
G Digging depth	mm	85	85	85	85	100	100	100	100	100	100
H Height above cab	mm	3,360	3,360	3,360	3,360	3,590	3,590	3,590	3,590	3,590	3,590
I Height above exhaust	mm	3,015	3,015	3,015	3,015	3,000	3,000	3,000	3,000	3,000	3,000
J Ground clearance	mm	490	490	490	490	535	535	535	535	535	535
K Wheelbase	mm	3,305	3,305	3,305	3,305	3,780	3,780	3,780	3,780	3,900	3,900
L Overall length	mm	8,270	8,290	8,290	8,400	9,260	9,340	9,340	9,460	9,645	9,745
Turning circle radius over outside bucket edge	mm	6,450	6,480	6,480	6,510	7,580	7,600	7,600	7,630	7,910	7,940
Breakout force (SAE)	kN	140	130	150	140	200	190	190	175	190	175
Tipping load, straight *	kg	13,785	13,520	15,370	15,075	18,195	17,780	20,180	19,880	21,225	20,990
Tipping load, articulated at 37° *	kg	12,310	12,150	13,745	13,550	16,100	15,760	17,850	17,590	18,850	18,660
Tipping load, articulated at 40° *	kg	12,150	11,930	13,550	13,300	15,750	15,430	17,500	17,230	18,500	18,300
Operating weight *	kg	17,300	17,405	17,900	18,020	23,150	23,250	24,450	24,575	25,180	25,330
Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3		26.5R25 L3	

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° 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 pages 24/25.

 = Excavation bucket with back grading edge for direct mounting

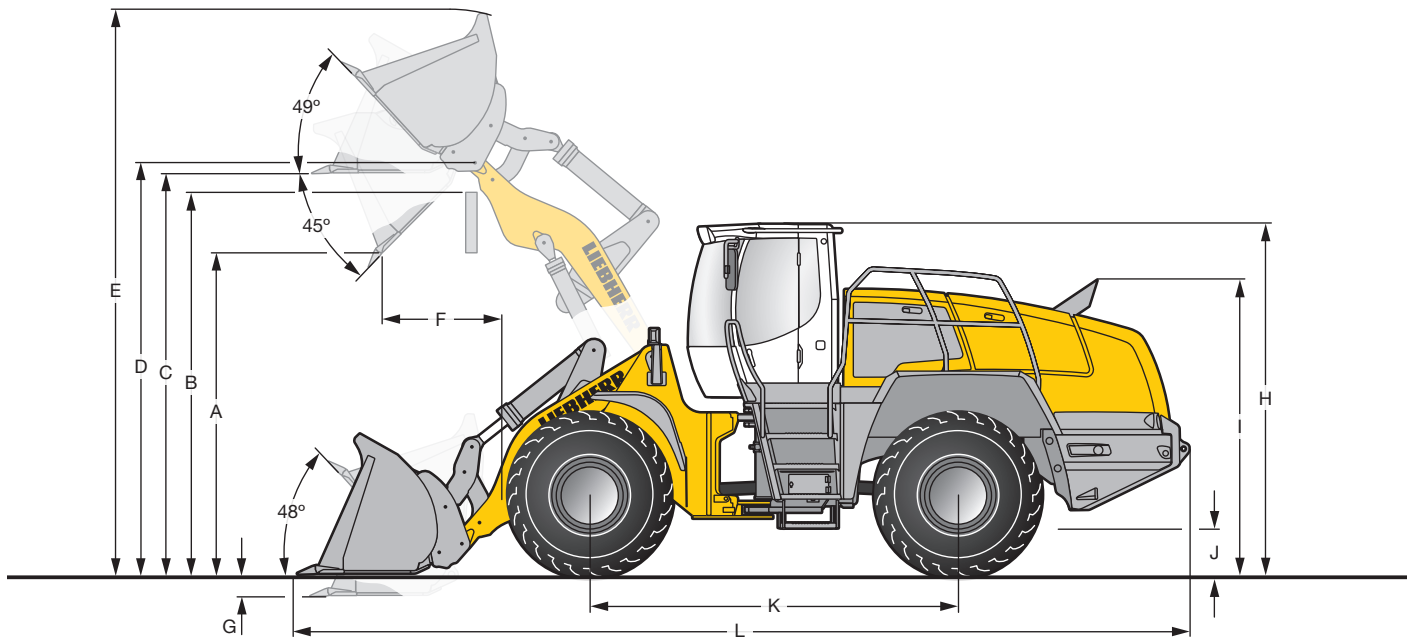
 = Rehandling bucket for direct mounting

ZK = Z-bar linkage

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

Dimensions

Industrial lift arm



Loading Bucket

		L 550	L 556	L 566	L 576	L 580
Geometry		IND	IND	IND	IND	IND
Cutting tools		T	T	T	T	T
Lift arm length	mm	2,600	2,600	2,900	2,900	2,900
Bucket capacity according to ISO 7546 **	m ³	3.0	3.3	3.5	4.0	4.5
Bucket width	mm	2,700	2,700	3,000	3,000	3,000
A Dumping height at max. lift height and 45° discharge	mm	2,880	2,850	3,210	3,140	3,070
B Dump-over height	mm	3,500	3,500	3,900	3,900	3,900
C Max. height of bucket bottom	mm	3,795	3,795	4,145	4,145	4,145
D Max. height of bucket pivot point	mm	4,075	4,075	4,490	4,490	4,490
E Max. operating height	mm	5,580	5,620	6,045	6,165	6,265
F Reach at max. lift height and 45° discharge	mm	1,135	1,174	1,270	1,340	1,290
G Digging depth	mm	80	80	100	100	100
H Height above cab	mm	3,360	3,360	3,590	3,590	3,590
I Height above exhaust	mm	3,015	3,015	3,000	3,000	3,000
J Ground clearance	mm	490	490	535	535	535
K Wheelbase	mm	3,305	3,305	3,780	3,780	3,900
L Overall length	mm	8,350	8,405	9,345	9,445	9,545
Turning circle radius over outside bucket edge	mm	6,500	6,530	7,575	7,600	7,720
Breakout force (SAE)	kN	125	130	200	190	200
Tipping load, straight *	kg	12,310	13,445	15,870	17,435	20,210
Tipping load, articulated at 37° *	kg	11,050	12,070	13,950	15,250	18,000
Tipping load, articulated at 40° *	kg	10,850	11,850	13,600	14,900	17,650
Operating weight *	kg	17,850	18,550	24,150	25,490	26,060
Tyre sizes		23.5R25 L3	23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° 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 pages 24/25.



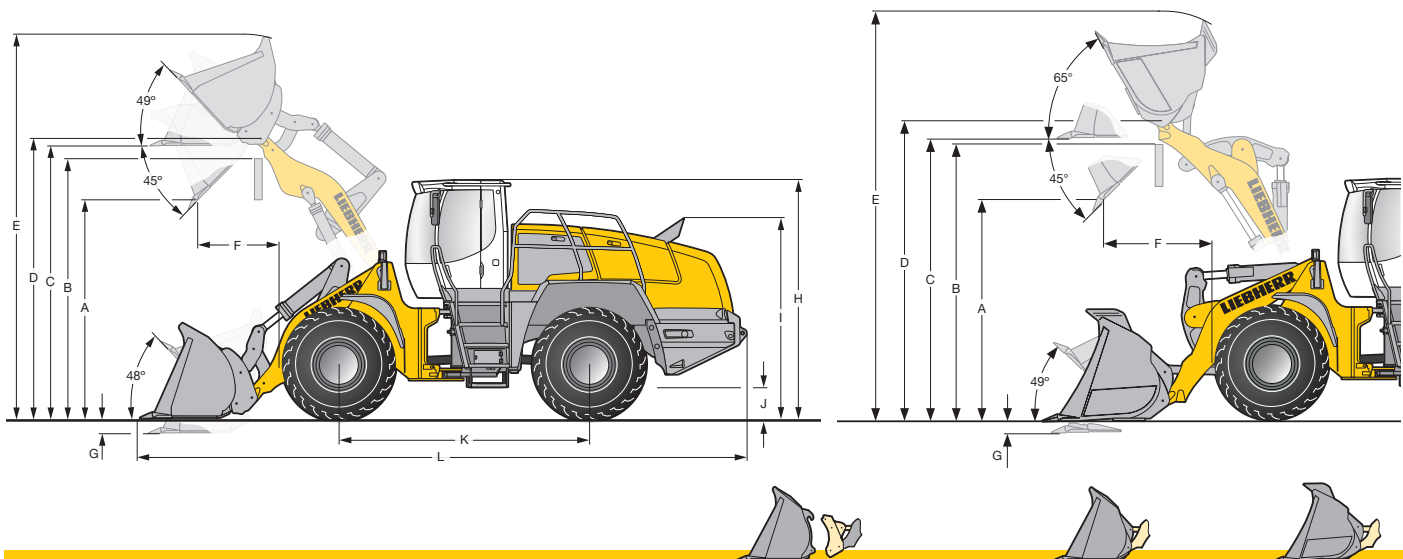
= Excavation bucket with back grading edge for hydraulic quick-hitch

IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

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

Dimensions


High Lift




Loading Bucket	L 550		L 556		L 566		L 576		L 580		
	IND	IND	IND	IND	ZK	ZK	ZK	ZK	ZK	ZK	
Geometry	IND	IND	IND	IND	ZK	ZK	ZK	ZK	ZK	ZK	
Cutting tools	T	T	T	T	T	T	T	T	T	T	
Lift arm length	mm	3,000	3,000	3,000	3,000	3,000	3,250	3,250	3,250	3,250	
Bucket capacity according to ISO 7546 **	m ³	2.6	2.8	2.8	3.0	3.5	4.0	4.0	4.5	5.0	
Bucket width	mm	2,700	2,700	2,700	2,700	3,000	3,000	3,000	3,000	3,300	
A Dumping height at max. lift height and 45° discharge	mm	3,550	3,520	3,520	3,460	3,745	3,665	3,665	3,610	3,530	
B Dump-over height	mm	4,100	4,100	4,100	4,100	4,300	4,300	4,300	4,300	4,300	
C Max. height of bucket bottom	mm	4,360	4,360	4,360	4,360	4,470	4,470	4,470	4,470	4,470	
D Max. height of bucket pivot point	mm	4,640	4,640	4,640	4,640	4,780	4,780	4,780	4,780	4,780	
E Max. operating height	mm	6,090	6,120	6,120	6,160	6,180	6,285	6,285	6,375	6,540	
F Reach at max. lift height and 45° discharge	mm	940	960	960	1,015	980	1,070	1,070	1,125	1,215	
G Digging depth	mm	80	80	80	80	140	140	140	140	140	
H Height above cab	mm	3,360	3,360	3,360	3,360	3,590	3,590	3,590	3,590	3,590	
I Height above exhaust	mm	3,015	3,015	3,015	3,015	3,000	3,000	3,000	3,000	3,000	
J Ground clearance	mm	490	490	490	490	535	535	535	535	535	
K Wheelbase	mm	3,305	3,305	3,305	3,305	3,780	3,780	3,780	3,780	3,900	
L Overall length	mm	8,755	8,785	8,785	8,865	9,595	9,715	9,715	9,795	9,915	
Turning circle radius over outside bucket edge	mm	6,700	6,720	6,720	6,760	7,730	7,765	7,765	7,790	7,895	
Breakout force (SAE)	kN	115	110	120	115	190	175	175	160	175	
Tipping load, straight *	kg	10,400	10,250	11,500	11,320	15,270	15,015	16,890	16,680	19,335	
Tipping load, articulated at 40° *	kg	9,165	9,040	10,135	10,015	13,470	13,245	14,900	14,715	17,125	
Operating weight *	kg	18,130	18,200	18,840	18,920	23,505	23,620	24,810	24,910	25,390	
Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3		26.5R25 L3	

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° 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 pages 24/25.

 = Excavation bucket with back grading edge for hydraulic quick-hitch / for direct mounting

 = Rehandling bucket for direct mounting

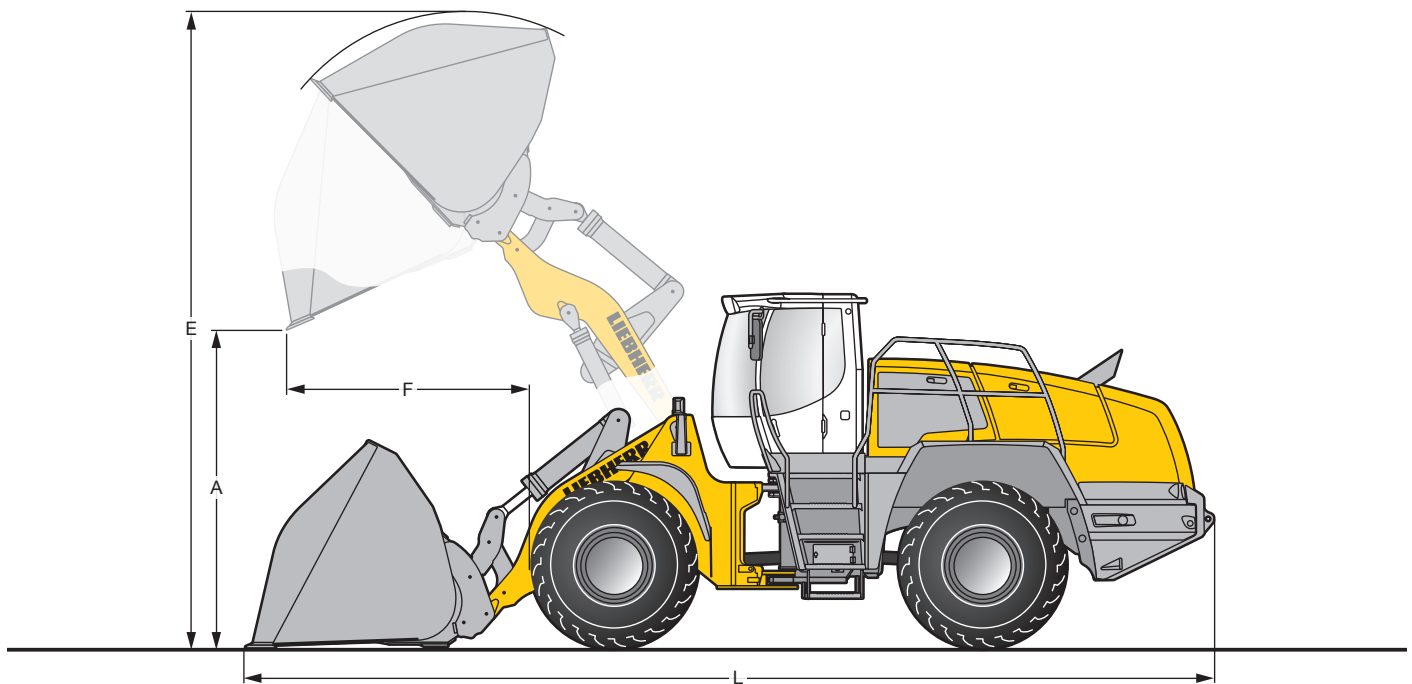
IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

ZK = Z-bar linkage

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

Attachment

Light Material Bucket



heavy material density

	L 550		L 556		L 566	L 576	L 580	
	STD	HL	STD	HL	STD	STD	STD	
Geometry	IND	IND	IND	IND	IND	IND	IND	
Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	
Bucket capacity	m ³	5.0	4.5	5.5	5.0	6.5	7.0	7.5
Bucket width	mm	2,950	2,950	2,950	2,950	3,200	3,400	3,400
A Dumping height at max. lift height	mm	2,550	3,220	2,450	3,130	2,885	2,885	2,810
E Max. operating height	mm	5,900	6,320	6,060	6,480	6,470	6,470	6,580
F Reach at maximum lift height	mm	1,450	1,250	1,550	1,330	1,485	1,485	1,550
L Overall length	mm	8,600	9,000	8,730	9,110	9,620	9,620	9,715
Tipping load, straight *	kg	11,430	9,320	12,460	10,580	14,990	16,550	19,050
Tipping load, articulated at 40° *	kg	10,075	8,215	10,980	9,325	13,225	14,600	16,870
Operating weight *	kg	18,315	18,630	19,180	19,335	24,680	26,060	26,630
Tyre sizes		23.5R25 L3		23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3



light material density

	L 550		L 556		L 566	L 576	L 580	
	STD	HL	STD	HL	STD	STD	STD	
Geometry	IND	IND	IND	IND	IND	IND	IND	
Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	
Bucket capacity	m ³	9.0	8.0	10.0	9.0	12.0	13.0	14.0
Bucket width	mm	3,400	3,400	3,400	3,400	3,700	4,000	4,000
A Dumping height at max. lift height	mm	2,340	2,920	2,265	2,840	2,620	2,620	2,480
E Max. operating height	mm	6,110	6,470	6,250	6,600	6,700	6,700	6,800
F Reach at maximum lift height	mm	1,705	1,520	1,780	1,600	1,860	1,860	1,950
L Overall length	mm	8,970	9,400	9,080	9,520	10,100	10,100	10,200
Tipping load, straight *	kg	10,620	8,890	11,530	10,140	13,955	15,580	16,880
Tipping load, articulated at 40° *	kg	9,365	7,870	10,160	8,950	12,310	13,740	14,950
Operating weight *	kg	18,870	19,130	19,570	19,890	25,780	27,110	27,680
Tyre sizes		23.5R25 L3		23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° according to ISO 14397-1)

STD = Standard lift arm length

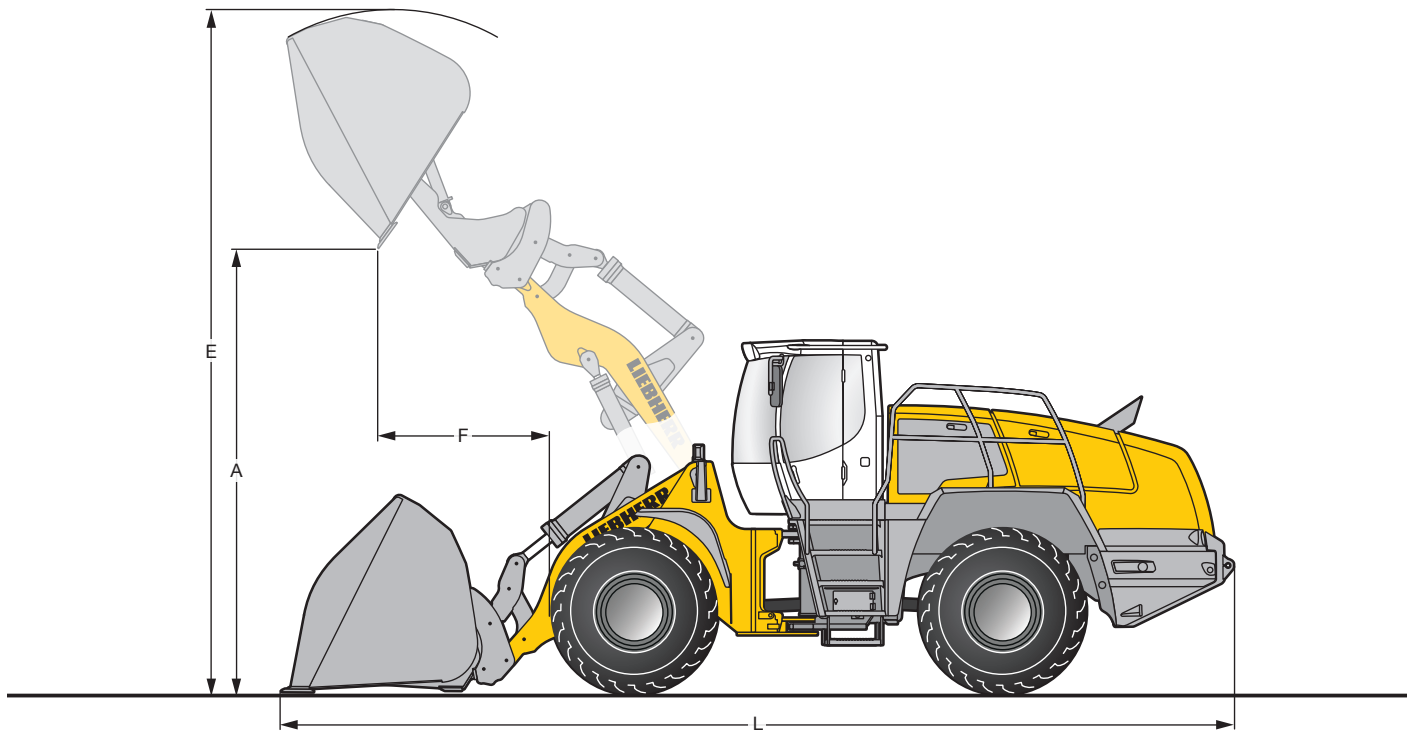
HL = High Lift

IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

BOCE = Bolt-on cutting edge

Attachment

High-Dump Bucket



heavy material density

		L 550		L 556		L 566	L 576	L 580	
		STD	HL	STD	HL	STD	STD	STD	
	Geometry	IND	IND	IND	IND	IND	IND	IND	
	Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	
	Bucket capacity	m ³	4.5	4.0	5.0	4.5	6.0	6.5	7.0
	Bucket width	mm	2,700	2,700	2,700	2,700	3,200	3,200	3,200
A	Dumping height at max. lift height	mm	4,550	5,040	4,590	5,160	5,130	5,050	4,970
E	Max. operating height	mm	6,680	7,120	6,850	7,300	7,215	7,320	7,420
F	Reach at maximum lift height	mm	1,790	1,560	1,820	1,650	1,780	1,960	2,040
L	Overall length	mm	8,880	9,290	9,000	9,400	9,890	9,980	10,060
	Tipping load, straight *	kg	10,240	8,850	11,060	9,520	13,665	15,200	16,235
	Tipping load, articulated at 40° *	kg	9,025	7,805	9,750	9,495	12,050	13,405	14,410
	Operating weight *	kg	18,920	18,985	19,870	19,925	25,780	27,110	27,680
	Tyre sizes	23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3	26.5R25 L3	

light material density

		L 550		L 556		L 566	L 576	L 580	
		STD	HL	STD	HL	STD	STD	STD	
	Geometry	IND	IND	IND	IND	IND	IND	IND	
	Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	
	Bucket capacity	m ³	8.5	7.5	9.5	8.5	11.0	12.0	13.0
	Bucket width	mm	3,400	3,400	3,400	3,400	3,700	4,000	4,000
A	Dumping height at max. lift height	mm	4,450	4,800	4,610	4,950	4,840	4,840	4,780
E	Max. operating height	mm	6,900	7,200	7,150	7,500	7,490	7,490	7,650
F	Reach at maximum lift height	mm	1,800	1,580	1,860	1,650	2,140	2,140	2,060
L	Overall length	mm	9,000	9,400	9,100	9,550	10,200	10,200	10,300
	Tipping load, straight *	kg	9,880	7,950	10,615	9,370	12,500	13,875	14,915
	Tipping load, articulated at 40° *	kg	8,710	7,010	9,355	8,260	11,020	12,240	13,210
	Operating weight *	kg	19,270	19,530	19,980	20,040	26,080	27,410	27,980
	Tyre sizes	23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3	26.5R25 L3	

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° according to ISO 14397-1)

STD = Standard lift arm length

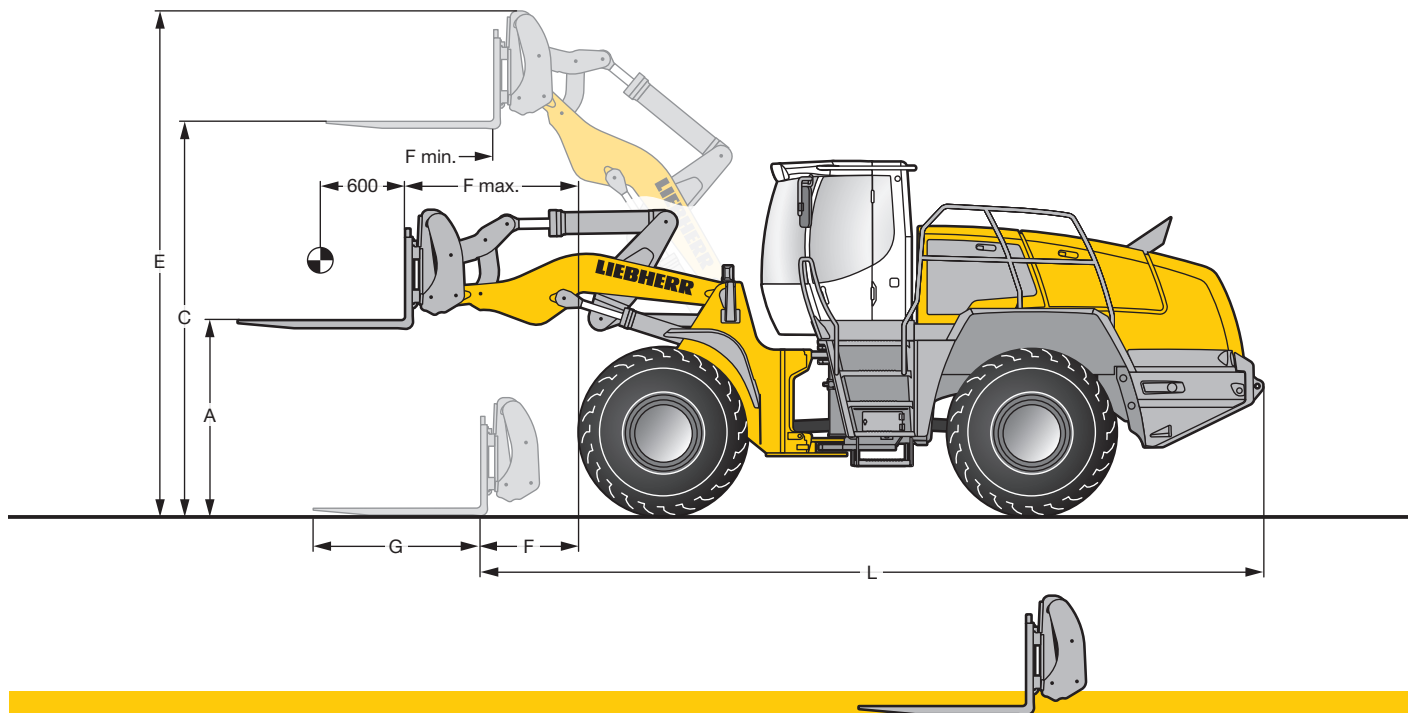
HL = High Lift

IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

BOCE = Bolt-on cutting edge

Attachment

Fork Carrier and Fork



FEM IV Fork Carrier and Fork

		L 550	L 556	L 566	L 576	L 580
	Geometry	IND	IND	IND	IND	IND
A	Lifting height at max. reach	mm	1,840	1,840	2,075	2,075
C	Max. lifting height	mm	3,835	3,835	4,220	4,220
E	Max. operating height	mm	4,825	4,825	5,200	5,200
F	Reach at loading position	mm	985	985	1,145	1,025
F max.	Max. reach	mm	1,680	1,680	1,925	1,805
F min.	Reach at max. lifting height	mm	750	750	980	860
G	Fork length	mm	1,500	1,500	1,800	1,800
L	Length – basic machine	mm	7,210	7,210	8,170	8,170
	Tipping load, straight *	kg	9,190	10,260	12,180	13,630
	Tipping load, articulated at 40° *	kg	8,100	9,050	10,745	12,020
	Recommended payload for uneven ground = 60% of tipping load, articulated ¹⁾	kg	4,860	5,430	6,445	7,215
	Recommended payload for smooth surfaces = 80% of tipping load, articulated ¹⁾	kg	6,480	7,240	8,595	9,620
	Operating weight *	kg	17,410	18,040	23,435	24,665
	Tyre sizes		23.5R25 L3	23.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. (Tipping load, articulated at 40° according to ISO 14397-1)

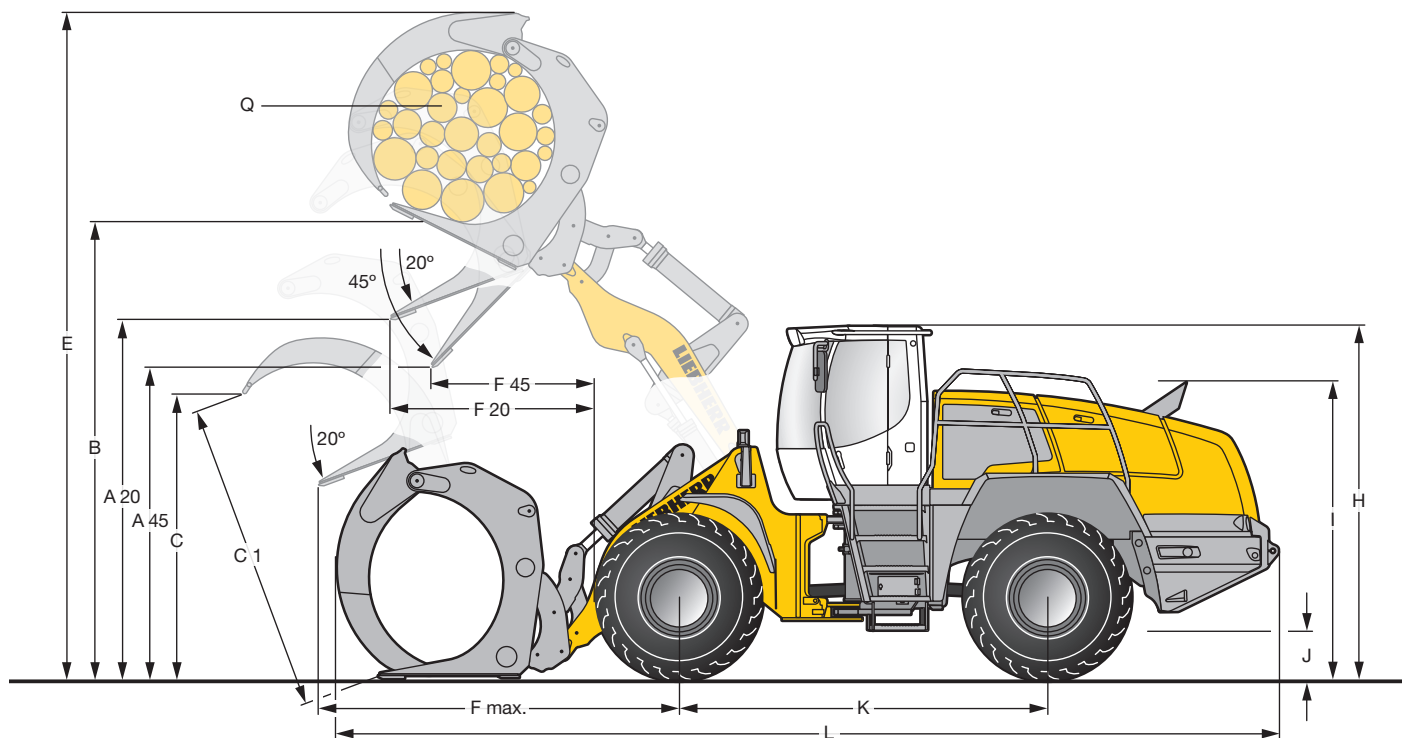
IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

¹⁾ According to EN 474-3

²⁾ Payload is limited by FEM IV fork carrier and forks

Attachment

Log Grapple



Log Grapple			L 550	L 556	L 566	L 576	L 580
	Geometry		IND	IND	IND	IND	IND
A20	Discharge height at 20°	mm	3,590	3,570	3,570	3,570	3,520
A45	Discharge height at 45°	mm	3,020	2,950	2,930	2,930	2,805
B	Manipulation height	mm	4,530	4,530	5,125	5,125	5,125
C	Max. grapple opening in loading position	mm	2,395	2,740	2,650	2,650	2,930
C1	Max. grapple opening	mm	2,590	2,990	3,050	3,050	3,340
E	Max height	mm	6,320	6,480	7,400	7,400	7,500
F20	Reach at max. lifting height at 20° discharge	mm	1,740	1,890	2,165	2,165	2,215
F45	Reach at max. lifting height at 45° discharge	mm	1,410	1,530	1,620	1,620	1,625
F max.	Max. reach	mm	2,670	2,820	3,110	3,110	3,160
H	Height above cab	mm	3,360	3,360	3,590	3,590	3,590
I	Height above exhaust	mm	3,015	3,015	3,000	3,000	3,000
J	Ground clearance	mm	490	490	535	535	535
K	Wheelbase	mm	3,305	3,305	3,780	3,780	3,900
L	Overall length	mm	8,550	8,700	9,880	9,880	10,050
	Width over tyres	mm	2,650	2,650	2,970	2,970	2,970
Q	Grapple diameter	m ²	1.8	2.4	3.1	3.1	3.5
	Grapple width	mm	1,600	1,600	1,800	1,800	1,800
	Payload *	kg	6,300	6,400	8,200	8,650	9,200
	Operating weight *	kg	18,490	19,350	25,640	26,900	27,670
	Tyre sizes		23.5R25 L3	23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 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 payload. (Tipping load, articulated at 40° according to ISO 14397-1)

IND = Industrial lift arm with parallel guidance including hydraulic quick-hitch

Tyres



	Size and tread code		Change of operating weight kg	Width over tyres mm	Change in vertical dimensions mm	Use
L 550						
Bridgestone	20.5R25 VJT	L3	- 571	2,660	- 38	Bulk material (firm ground conditions)
Bridgestone	20.5R25 VSDL	L5	+ 80	2,440	+ 14	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	20.5R25 RT-3B	L3	- 404	2,670	- 30	Gravel (all ground conditions)
Goodyear	20.5R25 TL-3A+	L3	- 432	2,680	- 35	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	20.5R25 GP-4D	L4	- 260	2,650	- 26	Gravel, Industry, Wood (firm ground conditions)
Goodyear	20.5R25 RL-4K	L4	0	2,690	- 11	Gravel, Industry, Stone (firm ground conditions)
Goodyear	20.5R25 RL-5K	L5	+ 164	2,690	+ 3	Stone, Scrap, Recycling (firm ground conditions)
Michelin	20.5R25 XHA2	L3	- 588	2,660	- 46	Sand, Gravel (all ground conditions)
Michelin	20.5R25 XLD D2A	L5	- 156	2,670	- 16	Stone, Mining spoil (firm ground conditions)
Michelin	20.5R25 XMINE	L5	+ 112	2,660	+ 11	Stone, Scrap, Recycling (firm ground conditions)
L 550/L 556						
Bridgestone	23.5R25 VJT	L3	+ 138	2,670	+ 6	Bulk material (firm ground conditions)
Bridgestone	23.5R25 VSDL	L5	+ 898	2,660	+ 65	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	23.5R25 VSDT	L5	+ 851	2,670	+ 55	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	650/65R25 VTS	L3	+ 4	2,700	- 30	Gravel (all ground conditions)
Bridgestone	750/65R25 VTS	L3	+ 792	2,880	+ 11	Gravel, Industry, Wood (all ground conditions)
Goodyear	23.5R25 RT-3B	L3	+ 188	2,670	+ 20	Gravel (all ground conditions)
Goodyear	23.5R25 TL-3A+	L3	+ 284	2,670	+ 36	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	23.5R25 GP-4D	L4	+ 328	2,690	+ 25	Gravel, Industry, Wood (firm ground conditions)
Goodyear	23.5R25 RL-4K	L4	+ 500	2,680	+ 39	Gravel, Industry, Stone (firm ground conditions)
Goodyear	23.5R25 RL-5K	L5	+ 928	2,680	+ 57	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	23.5R25 RT-5C	L5	+ 620	2,660	+ 55	Stone, Mining spoil (firm ground conditions)
Goodyear	750/65R25 TL-3A+	L3	+ 744	2,910	+ 24	Sand, Gravel, Industry, Wood (all ground conditions)
Michelin	23.5R25 XHA2	L3	0	2,650	0	Sand, Gravel (all ground conditions)
Michelin	23.5R25 XTLA	L2	- 60	2,650	- 4	Gravel, Earthworks, Clay (all ground conditions)
Michelin	23.5R25 XLD D2A	L5	+ 612	2,670	+ 26	Stone, Mining spoil (firm ground conditions)
Michelin	23.5R25 XMINE	L5	+ 760	2,690	+ 61	Stone, Scrap, Recycling (firm ground conditions)
Michelin	650/65R25 XLD65	L3	- 112	2,690	- 53	Gravel (all ground conditions)
Michelin	750/65R25 XLD65	L3	+ 588	2,870	- 7	Gravel, Industry, Wood (all ground conditions)
L 566						
Bridgestone	23.5R25 VJT	L3	- 458	2,980	- 44	Bulk material (firm ground conditions)
Bridgestone	23.5R25 VSDL	L5	+ 302	2,970	+ 15	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	23.5R25 VSDT	L5	+ 255	2,990	+ 5	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	23.5R25 RT-3B	L3	- 408	2,980	- 30	Gravel (all ground conditions)
Goodyear	23.5R25 GP-4D	L4	- 268	3,000	- 25	Gravel, Industry, Wood (firm ground conditions)
Goodyear	23.5R25 RL-4K	L4	- 96	2,990	- 11	Gravel, Industry, Stone (firm ground conditions)
Goodyear	23.5R25 RL-5K	L5	+ 332	2,990	+ 7	Stone, Scrap, Recycling (firm ground conditions)
Michelin	23.5R25 XHA2	L3	- 596	2,970	- 50	Sand, Gravel (all ground conditions)
Michelin	23.5R25 XLD D2A	L5	+ 12	2,980	- 24	Stone, Mining spoil (firm ground conditions)
Michelin	23.5R25 XMINE	L5	+ 164	3,000	+ 11	Stone, Scrap, Recycling (firm ground conditions)
L 566/L 576/L 580						
Bridgestone	26.5R25 VJT	L3	+ 160	2,970	+ 14	Bulk material (firm ground conditions)
Bridgestone	26.5R25 VSDL	L5	+ 1,290	2,970	+ 57	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	26.5R25 VSDT	L5	+ 1,038	2,970	+ 50	Stone, Mining spoil (firm ground conditions)
Bridgestone	750/65R25 VTS	L3	+ 194	3,070	- 39	Gravel, Industry, Wood (all ground conditions)
Goodyear	26.5R25 RT-3B	L3	+ 328	2,970	+ 25	Gravel (all ground conditions)
Goodyear	26.5R25 GP-4D	L4	+ 436	2,980	+ 26	Gravel, Industry, Wood (firm ground conditions)
Goodyear	26.5R25 TL-3A+	L3	+ 348	2,980	+ 30	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	26.5R25 RL-4K	L4	+ 776	2,990	+ 63	Gravel, Industry, Stone (firm ground conditions)
Goodyear	26.5R25 RL-5K	L5	+ 1,244	2,990	+ 63	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	26.5R25 RT-5C	L5	+ 960	2,970	+ 59	Stone, Mining spoil (firm ground conditions)
Goodyear	750/65R25 TL-3A+	L3	+ 148	3,100	- 26	Sand, Gravel, Industry, Wood (all ground conditions)
Michelin	26.5R25 XHA2	L3	0	2,960	0	Sand, Gravel (all ground conditions)
Michelin	26.5R25 XLD D2A	L5	+ 696	2,970	+ 38	Stone, Mining spoil (firm ground conditions)
Michelin	26.5R25 XMINE	L5	+ 1,092	3,000	+ 67	Stone, Scrap, Recycling (firm ground conditions)
Michelin	750/65R25 XLD65	L3	- 8	3,060	- 57	Gravel, Industry, Wood (all ground conditions)

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

Bucket selection

L 550

Lift arm	Bucket	Material density (t/m³)									
		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	
ZK	GPB ₁	3.2 m³							3.6		3.2
		3.6 m³						4.0		3.6	
IND	GPB ₁	3.0 m³						3.3		3.0	
		LMB	5.0 m³			5.5		5.0			
	HDB	4.5 m³				5.0		4.5			
		8.5 m³	9.0								
IND-HL	GPB ₁	2.6 m³						2.8		2.6	
		2.8 m³						3.0		2.8	
	LMB	4.5 m³				5.0		4.5			
		8.0 m³	8.0								
	HDB	4.0 m³				4.5		4.0			
		7.5 m³	7.5								

L 556

Lift arm	Bucket	Material density (t/m³)									
		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	
ZK	GPB ₁	3.6 m³							4.0		3.6
		4.0 m³						4.5		4.0	
IND	GPB ₁	3.3 m³						3.6		3.3	
		LMB	5.5 m³				6.0		5.5		
	HDB	10.0 m³	10.0								
		5.0 m³				5.5		5.0			
IND-HL	GPB ₁	2.8 m³						3.0		2.8	
		3.0 m³						3.3		3.0	
	LMB	5.0 m³				5.5		5.0			
		9.0 m³	9.0								
	HDB	4.5 m³				5.0		4.5			
		8.5 m³	8.5								

L 566

Lift arm	Bucket	Material density (t/m³)									
		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	
ZK	GPB ₁	4.0 m³							4.5		4.0
		4.5 m³						5.0		4.5	
ZK-HL	GPB ₁	3.5 m³						4.0		3.5	
		4.0 m³						4.5		4.0	
IND	GPB ₁	3.5 m³						4.0		3.5	
		LMB	6.5 m³				7.2		6.5		
	HDB	12.0 m³	12.0								
		6.0 m³				6.6		6.0			
	11.0 m³	11.0									

L 576

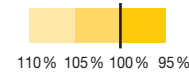
Lift arm	Bucket	Material density (t/m³)									
		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	
ZK	GPB ₁	4.5 m³							5.0		4.5
		5.0 m³						5.5		5.0	
ZK-HL	GPB ₁	4.0 m³						4.5		4.0	
		4.5 m³						5.0		4.5	
IND	GPB ₁	4.0 m³						4.5		4.0	
		LMB	7.0 m³				7.7		7.0		
	HDB	13.0 m³	13.0								
		6.5 m³				7.2		6.5			
	12.0 m³	12.0									

Bucket selection

L 580

Lift arm	Bucket	Material density (t/m ³)									
		0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	
ZK	GPB ₂	5.0 m ³						5.5	5.0		
		5.5 m ³						6.0	5.5		
ZK-HL	GPB ₂	4.5 m ³						5.0	4.5		
		5.0 m ³						5.5	5.0		
IND	GPB ₁	4.5 m ³						5.0	4.5		
		7.5 m ³				8.3	7.5				
	LMB	14.0 m ³	14.0								
	HDB	7.0 m ³				7.7	7.0				
13.0 m ³		13.0									

Bucket Filling Factor



Lift arm

ZK	Z-bar linkage, standard lift arm length
IND	Industrial lift arm including quick-hitch, standard lift arm length
ZK-HL	Z-bar linkage, High Lift
IND-HL	Industrial lift arm including quick-hitch, High Lift

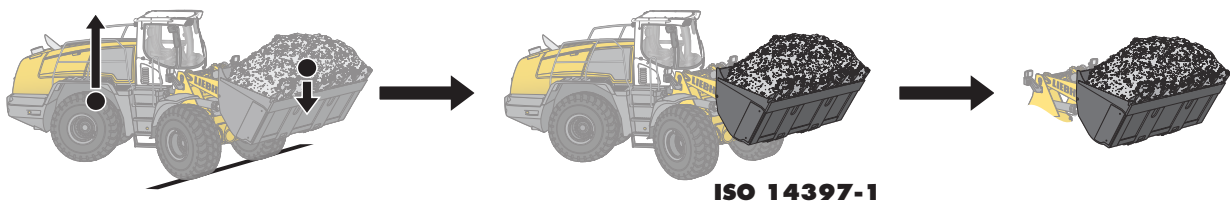
Bucket

GPB ₁	General purpose bucket (Excavation)
GPB ₂	General purpose bucket (Rehandling)
LMB	Light material bucket
HDB	High-dump bucket

Bulk Material Densities and Bucket Filling Factors

		t/m ³	%			t/m ³	%		t/m ³	%	
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
Sand,	dry	1.5	105	Basalt	1.95	100		wet	1.0	110	
	wet	1.9	110	Granite	1.8	95	Wood chips / saw dust		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.

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

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

The Liebherr Wheel Loaders

Wheel Loader



		L 506 _{Compact}	L 507 _{Stereo}	L 508 _{Compact}	L 509 _{Stereo}	L 514 _{Stereo}
Tipping load	kg	3,450	3,712	3,850	4,430	5,680
Bucket capacity	m ³	0.8	0.9	1.0	1.2	1.5
Operating weight	kg	5,180	5,470	5,600	6,390	8,350
Engine output	kW/HP	46/63	50/68	50/68	54/73	77/105

Wheel Loader



		L 524	L 528	L 538	L 542	L 550
Tipping load	kg	7,500	8,500	9,500	10,200	12,150
Bucket capacity	m ³	2.1	2.3	2.6	2.8	3.2
Operating weight	kg	10,400	10,900	12,800	13,400	17,300
Engine output	kW/HP	90/122	100/136	115/156	120/163	129/175

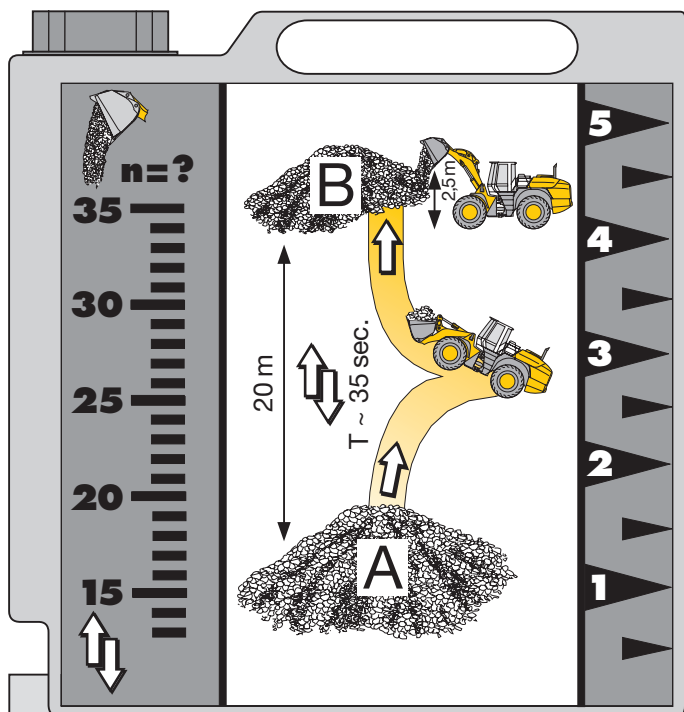
Wheel Loader



		L 556	L 566	L 576	L 580	L 586
Tipping load	kg	13,550	15,750	17,500	18,500	20,430
Bucket capacity	m ³	3.6	4.0	4.5	5.0	5.5
Operating weight	kg	17,900	23,150	24,450	25,180	31,380
Engine output	kW/HP	140/191	190/259	205/279	215/292	250/340

07.13

Environmental protection can help you earn money!



The Liebherr Standard Consumption Test – easy to reproduce and practical.

Every Liebherr dealer will provide you with this measuring-tank kit free of charge or, on request, will carry out the standard fuel consumption test on your premises. It's so easy: you simply determine the number of loading cycles that can be carried out with 5 litres of diesel. The material is taken from pile A and carried over a distance of 20 metres to point B. The time needed for each working cycle should be 35 seconds. Discharge at point B should take place from a height of 2.5 m. The working cycles continue until the 5 litres of diesel in the external measuring tank have been used up. The loader's fuel consumption per operating hour is calculated as follows:

$$\frac{400}{\text{Number of loading cycles}} = \text{consumption per hour}$$

Values for the Liebherr Wheel Loaders

	Numbers of working cycles	Litres/ 100 tons	Litres/ hour	Ø Litres/ hour**
L 524: 2.1 m ³	n = 47	2.8	8.5	7.1
L 528: 2.3 m ³	n = 46	2.6	8.7	7.2
L 538: 2.6 m ³	n = 39	2.7	10.3	8.5
L 542: 2.8 m ³	n = 38	2.6	10.5	8.7
L 550: 3.2 m ³	n = 31	2.8	12.9	10.9
L 556: 3.6 m ³	n = 27	2.9	14.5	12.1
L 566: 4.0 m ³	n = 22	3.2	18.2	15.1
L 576: 4.5 m ³	n = 21	2.9	19.1	15.8
L 580: 5.0 m ³	n = 20	2.8	20.0	16.2
L 586: 5.5 m ³	n = 14	3.6	28.5*	20.5

* Equipped with L5 tyres and 5.5 m³ HD bucket

** Wheel loader in practical customer applications (with individual machine configurations).

Equipment



Basic Machine

	550	556	566	576	580
Crash protection, rear	+	+	+	+	+
Access to facilitate windscreen cleaning	+	+	+	+	+
Exhaust pipe – stainless steel	•	•	•	•	•
Automatic central lubrication system	+	+	+	+	+
Battery master switch	•	•	•	•	•
Diesel particle filter	•	•	•	•	•
Electronic tractive force regulation for difficult ground conditions	•	•	•	•	•
Electronical theft protection	+	+	+	+	+
Automatic travel mode	•	•	•	•	•
Speed range selection	•	•	•	•	•
Driver identification (in conjunction with electronic theft lock)	+	+	+	+	+
Ride control	•	•	•	•	•
Parking brake	•	•	•	•	•
Fluff trap for radiator	+	+	+	+	+
Speed limitation, 20 km/h	+	+	+	+	+
Speed limitation Vmax	•	•	•	•	•
Large-mesh radiator	+	+	+	+	+
Pre-heat system for cold starting	•	•	•	•	•
Combined inching-braking system	•	•	•	•	•
Mudguard extension	+	+	+	+	+
Multi-disc limited slip differentials in both axles	•	•	•	•	•
Noise suppression package	+	+	+	+	+
LiDAT (Liebherr Data Transfer System) – one year free of charge	•	•	•	•	•
Liebherr biodegradable hydraulic oil	+	+	+	+	+
Reversible fan drive	+	+	+	+	+
Air cleaner system with pre-filter	•	•	•	•	•
Emergency steering system	•	•	•	•	•
Reversing obstruction detector	+	+	+	+	+
Back-up alarm audible / visual	+	+	+	+	+
Tail lights, single version	•	•	•	•	•
Rear area monitoring camera (integrated in display unit)	•	•	•	•	•
Headlights rear, single version (on tail flap) – halogen	•	•	•	•	•
Headlights rear, single version (on tail flap) – LED	+	+	+	+	+
Headlights front, single version (on front-chassis) – halogen	•	•	•	•	•
Counterweight for road travel	-	-	-	-	-
Lockable doors, service flap and engine hood	•	•	•	•	•
Rubber widening for rear mudguards	+	+	+	+	+
Air pre-cleaner Top-Air	•	•	•	•	•
Hazard warning lights	•	•	•	•	•
Toolbox with toolkit	•	•	•	•	•
Weighing device for approved or non-approved weighing (integrated in display unit)	+	+	+	+	+
Towing hitch	•	•	•	•	•



Operator's Cab

	550	556	566	576	580
Storage box	•	•	•	•	•
Ashtray	•	•	•	•	•
Exterior mirror, tiltable and heatable	•	•	•	•	•
Operator's package	•	•	•	•	•
Operator's seat – mechanically sprung	•	•	•	•	•
Operator's seat with active suspension, with seat climate control and seat heating	+	+	+	+	+
Operator's seat – air sprung with seat heating	+	+	+	+	+
Operator's seat – horizontal side-to-side suspension with control console moving as one	+	+	+	+	+
Fire extinguisher 2 kg	+	+	+	+	+
Cup holder	•	•	•	•	•
Rear window heater	•	•	•	•	•
Horn	•	•	•	•	•
Joystick steering	+	+	+	+	+
Floor mat	•	•	•	•	•
Clothes hook	•	•	•	•	•
Air conditioning system (manual)	•	•	•	•	•
Automatic air conditioning system	+	+	+	+	+
Storage box with cooling function	+	+	+	+	+
Steering column, height-adjustable	+	+	+	+	+
Steering column, adjustable	•	•	•	•	•
Liebherr joystick control – adjustable	•	•	•	•	•
Multi-lever control system	+	+	+	+	+
Premium Display, Touchscreen (display unit)	•	•	•	•	•
Radio set (CD/MP3)	+	+	+	+	+
Provision for radio including loudspeaker	+	+	+	+	+
Interior rear-view mirror	•	•	•	•	•
Amber beacon	+	+	+	+	+
Soundproof ROPS/FOPS cab	•	•	•	•	•
Wash/wipe system for windscreen and rear window	•	•	•	•	•
Headlights rear, double version – LED	+	+	+	+	+
Headlights rear, single version – halogen/LED	+	+	+	+	+
Headlights front, double version – LED	+	+	+	+	+
Headlights front, double version – halogen	•	•	•	•	•
Headlights front, single version – XENON	+	+	+	+	+
Sliding window	+	+	+	+	+
Protective ventilation system	+	+	+	+	+
Windscreen guard	+	+	+	+	+
Sun visor	•	•	•	•	•
Dust filter system	+	+	+	+	+
Plug 12 V	•	•	•	•	•
First aid kit	+	+	+	+	+
Wide angle mirror	+	+	+	+	+
2in1 steering system – changeable	+	+	+	+	+



Display unit

	550	556	566	576	580
Working hydraulics lockout	•	•	•	•	•
Automatic central lubrication system	+	+	+	+	+
Battery charge	•	•	•	•	•
Operating voltage	•	•	•	•	•
Timer for hours of operation	•	•	•	•	•
Indicator light / Hazard warning lights / High beam	•	•	•	•	•
Brake accumulator pressure	•	•	•	•	•
Diesel particle filter	•	•	•	•	•
Rev. Counter	•	•	•	•	•
Speed range indicator	•	•	•	•	•
Driver identification	+	+	+	+	+
Travel speed	•	•	•	•	•
Travel direction	•	•	•	•	•
Parking brake	•	•	•	•	•
Gear level	•	•	•	•	•
Heater / Air conditioning	•	•	•	•	•
Hydraulic oil temperature	•	•	•	•	•
Joystick steering	+	+	+	+	+
Fuel level	•	•	•	•	•
Fuel consumption	•	•	•	•	•
Coolant temperature	•	•	•	•	•
Reversible fan drive	+	+	+	+	+
Engine oil pressure	•	•	•	•	•
Emergency steering system	•	•	•	•	•
Service codes	•	•	•	•	•
System and function settings	•	•	•	•	•
Time/date/outside temperature	•	•	•	•	•
Weighing device	+	+	+	+	+
Tractive force regulation	•	•	•	•	•



Warning symbols for

	550	556	566	576	580
Battery charge	•	•	•	•	•
Brake accumulator pressure	•	•	•	•	•
Diesel particle filter	•	•	•	•	•
Air cleaner blockage	•	•	•	•	•
Engine oil pressure	•	•	•	•	•
Emergency steering system	•	•	•	•	•
Reversing obstruction detector	+	+	+	+	+
Engine overspeed	•	•	•	•	•



Audible Warnings for

	550	556	566	576	580
Quick-hitch, opened	•	•	•	•	•
Coolant level	•	•	•	•	•
Charge air/fuel temperature too high	•	•	•	•	•
Steering system / braking system	•	•	•	•	•
Engine oil pressure	•	•	•	•	•
Reversing obstruction detector	+	+	+	+	+
Back-up alarm	•	•	•	•	•
Service codes	•	•	•	•	•
Overheating of coolant, fuel, hydraulic oil or gearbox oil	•	•	•	•	•



Equipment

	550	556	566	576	580
Working hydraulics lockout	•	•	•	•	•
Automatic hoist kick out – adjustable	+	+	+	+	+
Automatic bucket return to dig – adjustable	•	•	•	•	•
Fork carrier and lift forks	+	+	+	+	+
High Lift arms	+	+	+	+	+
High-dump bucket	+	+	+	+	+
Log Grapple	+	+	+	+	+
Hydraulic quick-hitch	+	+	+	+	+
Industrial lift arm including quick-hitch	+	+	+	+	+
Tilt cylinder protection	+	+	+	+	+
Loading buckets with and without teeth, or bolt-on cutting edge	+	+	+	+	+
Country-specific versions	+	+	+	+	+
Light material bucket	+	+	+	+	+
Load holding valves	+	+	+	+	+
Float position	•	•	•	•	•
Z-bar linkage	•	•	•	•	•
3rd hydraulic control circuit	+	+	+	+	+
3rd and 4th hydraulic control circuits	+	+	+	+	+

• = Standard, + = Option, - = not available

The Liebherr Group of Companies



Wide Product Range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional Customer Benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

State-of-the-art Technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with over 38,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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