Wheel Loaders L 524 - L 580

Tipping load, articulated: 7,500 kg - 18,000 kg

Stage II / Tier 2
Stage IIIA / Tier 3

Efficiency as Standard

LIEBHERR

L 524

Tipping load, articulated:	7,500 kg
Bucket capacity:	2.0 m³
Operating weight:	10,400 kg
Engine output:	86 kW / 117 HP

L 538

Tipping load, articulated:	9,500 kg
Bucket capacity:	2.5 m³
Operating weight:	12,800 kg
Engine output:	104 kW / 141 HP

L 550

Tipping load, articulated:	12,350 kg
Bucket capacity:	3.2 m³
Operating weight:	17,350 kg
Engine output:	147 kW / 200 HP

L 566

Tipping load, articulated:	15,550 kg
Bucket capacity:	4.0 m³
Operating weight:	23,100 kg
Engine output:	209 kW / 284 HP

L 580

Tipping load, articulated:	18,000 kg
Bucket capacity:	5.0 m³
Operating weight:	24,720 kg
Engine output:	209 kW / 284 HP

Economy

With Liebherr wheel loaders it is simple to do more, moving larger volumes of material with less fuel compared with conventional wheel loaders. In fact, your production costs are greatly reduced with each bucket you load and, at the same time, lower fuel consumption means active protection of the environment.

Performance

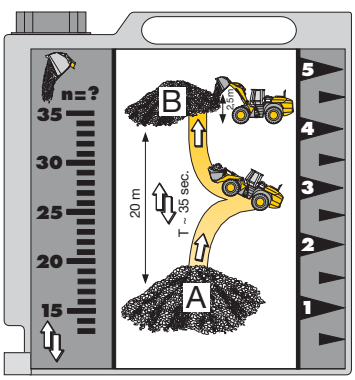
Liebherr wheel loaders are specially designed for your market to meet the highest requirements. The ideal positioning of the Liebherr driveline moves the center of gravity to the rear of the wheel loader – meaning increased stability and no lifting of the rear. This greatly increases the handling capacity per operating hour compared with conventional wheel loaders.

Reliability

All the materials used have passed long-term tests to ensure that they comply with Liebherr's high quality standards in even the toughest conditions. A sophisticated concept and proven quality mean that Liebherr wheel loaders are specially designed for your market to set the standard when it comes to reliability.

Comfort

The ultra-modern cabin design with advanced ergonomics, Liebherr driveline, optimal weight distribution and excellent maintenance access lead to unequalled overall comfort and simple service.



Lower Fuel Consumption

- A fuel saving of up to 5 litres per operating hour represents a cost saving of up to 25%.
- The Liebherr standard test demonstrates the operating efficiency of Liebherr wheel loaders.

Economy

With Liebherr wheel loaders it is simple to do more, moving larger volumes of material with less fuel compared with conventional wheel loaders. In fact, your production costs are greatly reduced with each bucket you load and, at the same time, lower fuel consumption means active protection of the environment.

Low Operating Costs

Moving Material at Lower Costs

When it comes to economy, conventional wheel loaders are no match for Liebherr machines, mainly due to the following factors:

– Low fuel consumption as a result of higher efficiency and a lower operating weight.

– Virtually no brake wear, thanks to the hydraulic braking action of the driveline. This means no brake repair costs resulting from wear and tear.

– Continuous traction control for reduced tyre wear. Depending on the working conditions, tyre wear can be up to 25% lower than with conventional wheel loaders.

– Liebherr quality ensures high durability and reliability in even the toughest applications and therefore less downtime and more productivity.

Active Environmental Protection

Economical Use of Resources

Reduced fuel consumption means lower emissions, which leads to the active and economical use of resources.

Low Noise Emissions

The innovative driveline concept also cuts noise emissions considerably: Liebherr wheel loaders are significantly quieter in operation.

An All-Purpose Loader

- The use of innovative Liebherr driveline and high quality hydraulic components mean increased stability, no lifting of the rear and faster work cycles – perfectly matched for your applications and thus increasing efficiency.

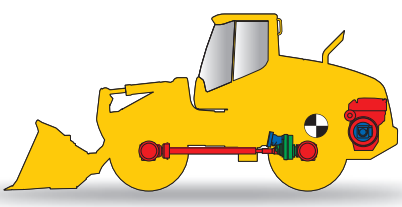
Reduced Tyre Wear

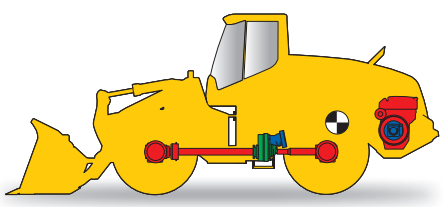
- The tractive force can be adjusted continuously. This prevents wheelspin and reduces tyre wear by up to 25%.

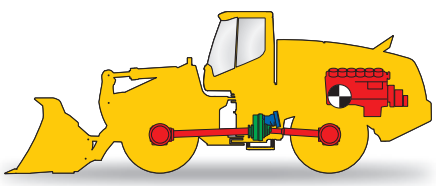
Reduced Brake Wear

- Even in the toughest working conditions, the Liebherr travel drive is always braked hydraulically. The mechanical service brake is used only as a secondary braking function, so the brakes are virtually wear-free.


LIEBHERR
550
LIEBHERR







Performance

Liebherr wheel loaders are specially designed for your market to meet the highest requirements. The ideal positioning of the Liebherr driveline moves the center of gravity to the rear of the wheel loader – meaning increased stability and no lifting of the rear. This greatly increases the handling capacity per operating hour compared with conventional wheel loaders.

Higher Performance

Higher Productivity

The ideal positioning of the Liebherr driveline reduces the need to carry unnecessary counterweight on the machine compared with conventional wheel loaders – leading to reduced operating weight and increased productivity.

Ultra-Modern Liebherr Driveline

Innovative Hydrostatic Technology

Tractive force and speed are adapted to suit demand – automatically and without gear changes. Even the change from forward to reverse travel is controlled hydraulically, so that no mechanical reverse gear is required.

Powerful Hydraulics

Reduced Input, Higher Output

The use of high quality hydraulic components combined with the innovative Liebherr driveline result in less need of engine power – leading to an easy filling of the bucket, faster work cycles and perfectly matched engine performance.

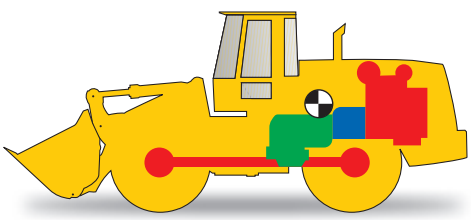
Flexibility Puts Them Ahead

An All-Purpose Loader

The parallel linkage for L 524 - L 538 or the industrial lift arm for L 550 - L 580 are available as an alternative to the standard Z-bar linkage, at no additional cost. The parallel linkage or the industrial lift arm feature a parallel guide arrangement and high torque in the upper lifting range – ideal properties for attaching larger, heavier equipment and transporting heavy loads. With their compact design, Liebherr wheel loaders can manoeuvre quickly and efficiently – the best choice for high handling capacity.

Liebherr Driveline L 524 - L 580

- Optimum weight distribution thanks to the intelligent installation of the diesel engine. L 524 - L 550: transverse installation / L 566 - L 580: lengthways-installed, 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 leads to high operating weight and bad visibility.

Cooling System L 524 - L 550

- The radiator is installed at the cleanest position of the wheel loader, between the diesel engine and the cabin. Cooling air is drawn in directly behind the cabin and blown out upwards at the rear. The fan speed is varied automatically by heat sensors that determine the amount of cooling needed.

Reliability

All the materials used have passed long-term tests to ensure that they comply with Liebherr's high quality standards in even the toughest conditions. A sophisticated concept and proven quality mean that Liebherr wheel loaders are specially designed for your market to set the standard when it comes to reliability.

Reliable Liebherr Driveline

Fewer Components

Liebherr's driveline includes a self-locking hydraulic brake, with the result that the additional wet brake discs are effectively wear-free. A reversing gear unit is not required, so less parts are affected by wear.

Components to Liebherr's Quality Standards

Engineered by Liebherr

Engineered by Liebherr means co-ordinated quality from the manufacture down to the smallest detail to ensure the highest possible performance and reliability for the market.

Keep on Working – in the Toughest Conditions

Liebherr wheel loaders are built to keep on working and prevent costly downtime. No matter how tough the conditions are.

Controlled Cooling

The Intelligent Answer

Wheel loaders usally work in dusty environments, so the Liebherr cooling system is located directly behind the cab, which is the cleanest area of the wheel loader. This greatly increases the service life and ensures the most reliable cooling. The cooling fan is driven independently from the 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 is increased to maximum output, thus preventing the engine from overheating.

Cooling System L 566 - L 580

- 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.

Liebherr Quality

- Liebherr has many years of experience in the design, development and construction of wheel loaders. The high quality of steel structures, equipments and the use of components that are all matched together down to the smallest detail set the standard when it comes to reliability.


LIEBHERR
538


LIEBHERR
550


580

Comfort

The ultra-modern cabin design with advanced ergonomics, Liebherr driveline, optimal weight distribution and excellent maintenance access lead to unequalled overall comfort and simple service.

Top-Class Cabin Design

Comfortable Cabin – Productive Operator

The ultra modern cabin is especially designed for the operator's needs and ensures increased performance and productivity, as well as safe operation. ROPS and FOPS are standard on Liebherr wheel loaders.

Improved Visibility

The advanced cab design, combined with the compact dimensions of the wheel loader, provide unequalled visibility in all directions.

Liebherr Joystick

All working and travel functions are operated precisely and sensitively from a single control lever. This means accurate and safe handling, and the left hand always remains on the steering wheel. This increases the safety at the job site.

Liebherr Driveline

Continuously Variable Acceleration

Liebherr's driveline enables the wheel loader to accelerate smoothly and continuously in all speed ranges, with no discernable gear shifts and no interruptions to tractive force.

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 524 - L 550

All the points for daily maintenance can be reached from ground level by opening a single compartment hood. 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 safety standard.

L 566 - L 580

Most access points for daily maintenance can be reached from ground level, by opening a single engine compartment. 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

- Due to the unique position of the diesel engine, Liebherr wheel loaders offer excellent service accessibility and thus increase efficiency for daily maintenance.
- The clever positioning of the cooling package, directly behind the cab, reduces maintenance and cleaning.

Liebherr Joystick

- 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
- Fill and dump the bucket
- Automatic bucket return to dig (optional)
- Change of travel direction with simultaneous travel start

Efficiency as Standard

Operator's Cab

- ++ Increased performance and productivity
- ++ Excellent all-round visibility
- ++ Safe operation
- ++ The operator's concentration is enhanced
- ✓ Ergonomic cab design
- ✓ High proportion of glass in the cab
- ✓ ROPS / FOPS as standard
- ✓ Control of working and travel functions with one single joystick

Lift Arm / Equipment

- ++ Faster working cycles
- ++ Long lasting working equipment
- ++ Flexibility in use
- ✓ High quality hydraulic components
- ✓ Strong steel structure
- ✓ Wide range of working equipment

Liebherr Driveline

- ++ Fuel saving of up to 25%
- ++ Maximum productivity: High tipping loads at comparable low operating weight
- ++ Excellent manoeuvrability
- ++ Tyre wear reduced by up to 25%
- ++ Practically no brake wear
- ++ Safe machine operation even when driving over rough terrain and steep slopes
- ✓ Compact machine design due to the unique position of the drive components
- ✓ No need for additional counter weight due to the ideal weight distribution
- ✓ Continuous tractive force prevents wheelspin
- ✓ Wear free hydrostatic self-braking system

Cooling System

- Reliable cooling, no overheating even in hard applications and hot outside temperatures
- Increased service life
- Less service time due to less cleaning requirements
- The cooling system is driven independently from the diesel engine
- Heat sensors ensure reliable control
- The radiator is installed at the cleanest position of the wheel loader, directly behind the cab

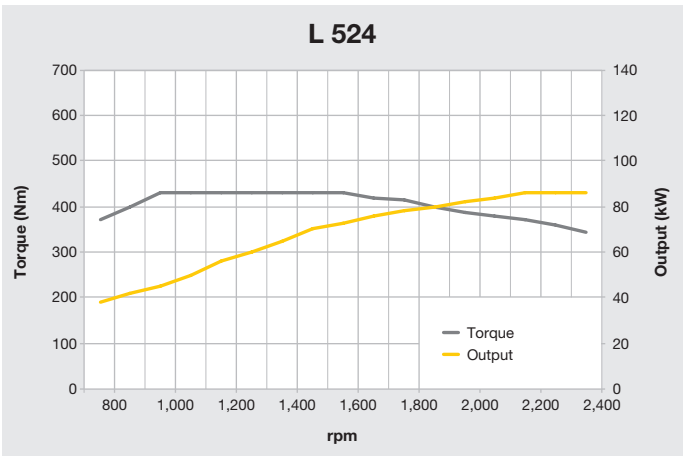
Service Accessibility

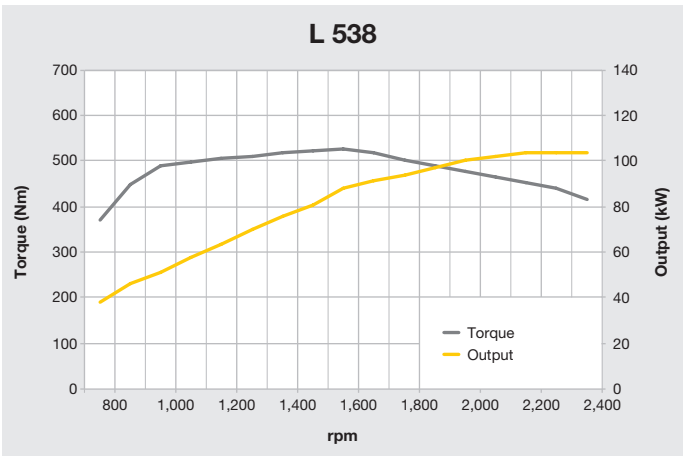
- Time savings in daily maintenance
- Extremely low downtime due to minimal maintenance requirements
- Daily maintenance points can be reached from the ground by opening a single hood
- Unique positioning of the cooling system, directly behind the cab

Technical Data

Engine	L 524	L 538
Diesel engine	4045HF286	4045HF286
Design	Water-cooled, turbo charged, intercooled	
Cylinders inline	4	4
Fuel injection process	Electronic Common Rail high-pressure injection	
Max. gross output to ISO 3046 and SAE J1995	kW/HP 86/117 at RPM 2,200	104/141 2,200
Max. net output to ISO 9249 and SAE J1349	kW/HP 85/116 at RPM 2,200	102/139 2,200
Rated output to ISO 3046 and SAE J1995	kW/HP 86/117 at RPM 2,400	104/141 2,400
Max. net torque to ISO 9249 and SAE J1349	Nm 416 at RPM 1,400	508 1,400
Displacement	litres 4.5	4.5
Bore/Stroke	mm 106/127	106/127
Air cleaner system	Dry air filter with main and safety element, pre-cleaner, service indicator	
Electrical system		
Operating voltage	V 24	24
Battery	Ah 2 x 135	2 x 135
Alternator	V/A 28/100	28/100
Starter motor	V/kW 24/7	24/7

The exhaust emissions are below the limits in Stage IIIA/Tier 3.





Technical Data

Driveline

Stepless hydrostatic travel drive

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
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 – 4.0 km/h Speed range A1-2 0 – 15.0 km/h Speed range A1-3 0 – 40.0 km/h The quoted speeds apply with the tyres that are standard equipment on the loader

Axles

Four-wheel drive

Front axle	Fixed
Rear axle	Centre pivot, with 10° oscillating angle to each side. 470 mm in height can be driven over (with all four wheels remain in contact with the ground)
Differentials	Automatic limited-slip differentials
Reduction gear	Planetary final drive in wheel hubs
Track width	1,960 mm with all types of tyres (L 524) 1,900 mm with all types of tyres (L 538)

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

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

Tyres

Standard size L 524	17.5R25 L3
Standard size L 538	20.5R25 L3
Special tyres	By arrangement with the manufacturer

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, optional

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
Filteration	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 as standard

		L 524	L 538
Max. flow	l/min.	102	170
Max. pressure	bar	315	350

Attachment

Geometry can be chosen	Powerfull Z-bar linkage with tilt cylinder and steel cross-tube
	Parallel linkage with two tilt cylinders and steel cross-tube
Bearings	Sealed

Cycle time at nominal load	L 524		L 538	
	ZK	PK	ZK	PK
Lifting	6.6 s	6.6 s	5.3 s	5.3 s
Dumping	1.8 s	3.5 s	1.6 s	3.5 s
Lowering (empty)	4.0 s	4.0 s	4.0 s	4.0 s

Operator’s Cab

Design	On elastic bearing on rear section, soundproof ROPS/FOPS cab. Operator’s door with 105° opening angle, ventilation opening on the right hand side, 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, heatable rear window ROPS roll over protection per DIN/ISO 3471/EN 474-1 FOPS falling objects protection per DIN/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, mechanical controlled heating and air-condition as standard

Noise Emission

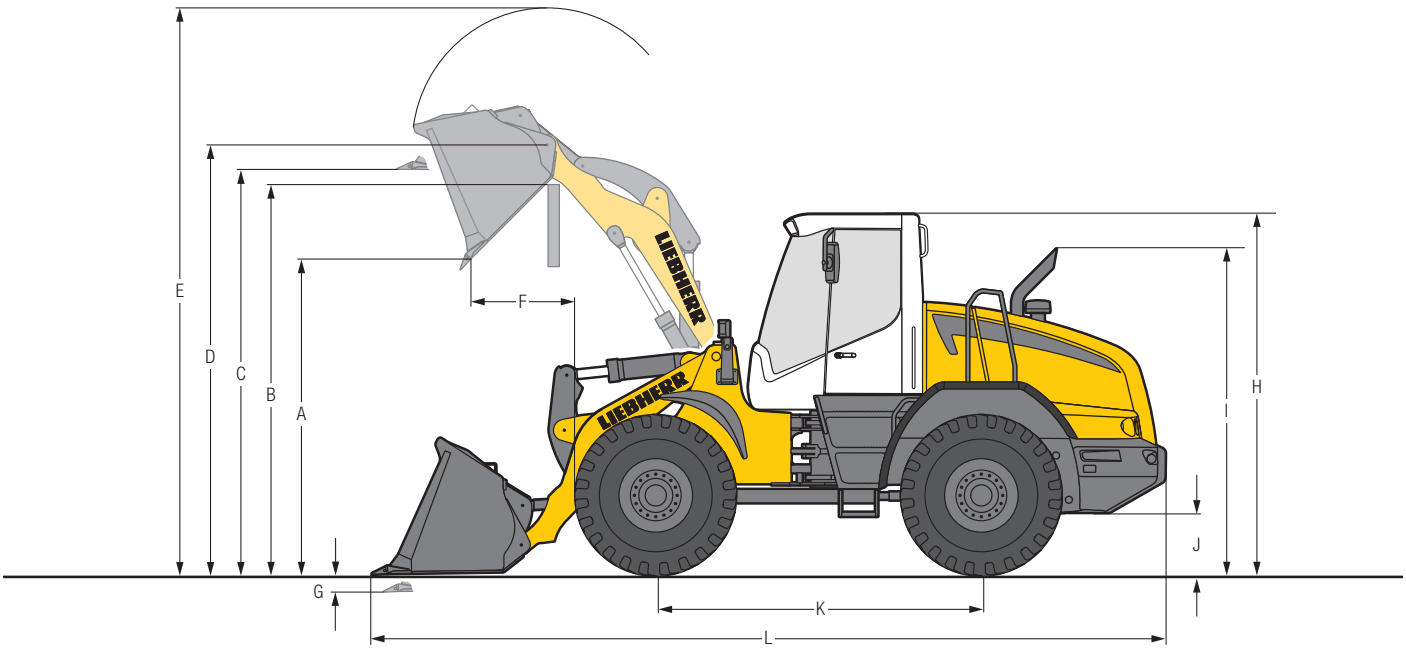
	L 524	L 538
Sound pressure, measured according to ISO 6396 (inside cab):	L_{pA} 69 dB(A)	69 dB(A)
Sound power, measured according to ISO 6395 (emitted by wheel loader):	L_{WA} 102 dB(A)	103 dB(A)

Capacities

	L 524	L 538
Fuel tank	l 225	225
Engine oil (including filter change)	l 14.7	14.7
Transmission	l 3.8	3.8
Coolant	l 36	36
Front axle	l 16.3/2.6	16.3/2.6
Rear axle	l 15/2.6	15/2.6
Hydraulic tank	l 110	110
Hydraulic system, total	l 170	180

Dimensions

Z-bar Linkage



Loading Bucket			L 524		L 538		
	Geometry		ZK	ZK-QC	ZK	ZK	ZK-QC
	Cutting tool		T	T	T	T	T
	Lift arm length	mm	2,400	2,400	2,500	2,500	2,500
	Bucket capacity according to ISO 7546**	m^3	2.0	1.7	2.5	2.7	2.2
	Bucket width	mm	2,500	2,500	2,500	2,500	2,500
A	Dumping height at max. lift height and 45° discharge	mm	2,870	2,765	2,900	2,845	2,770
B	Dump-over height	mm	3,335	3,320	3,480	3,480	3,475
C	Max. height of bucket bottom	mm	3,530	3,530	3,680	3,680	3,680
D	Max. height of bucket pivot point	mm	3,775	3,775	3,930	3,930	3,930
E	Max. operating height	mm	4,860	4,915	5,170	5,260	5,230
F	Reach at max. lift height and 45° discharge	mm	850	900	960	1,005	1,015
G	Digging depth	mm	80	80	80	80	80
H	Height above cab	mm	3,200	3,200	3,250	3,250	3,250
I	Height above exhaust	mm	2,860	2,860	2,910	2,910	2,910
J	Ground clearance	mm	460	460	490	490	490
K	Wheelbase	mm	2,850	2,850	2,975	2,975	2,975
L	Overall length	mm	6,820	6,935	7,150	7,225	7,280
	Turning circle radius over outside bucket edge	mm	5,690	5,720	5,840	5,870	5,880
	Turning circle radius over tyres	mm	5,170	5,170	5,350	5,350	5,350
	Width over tyres	mm	2,460	2,460	2,470	2,470	2,470
	Breakout force (SAE)	kN	91	85	117	114	109
	Tipping load, straight*	kg	8,500	7,900	10,700	10,500	10,200
	Tipping load, articulated at 40°*	kg	7,500	7,000	9,500	9,300	9,000
	Operating weight*	kg	10,400	10,800	12,800	13,000	13,200
	Tyre sizes		17.5R25 L3	17.5R25 L3	20.5R25 L3	20.5R25 L3	20.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, 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 page 26/27.

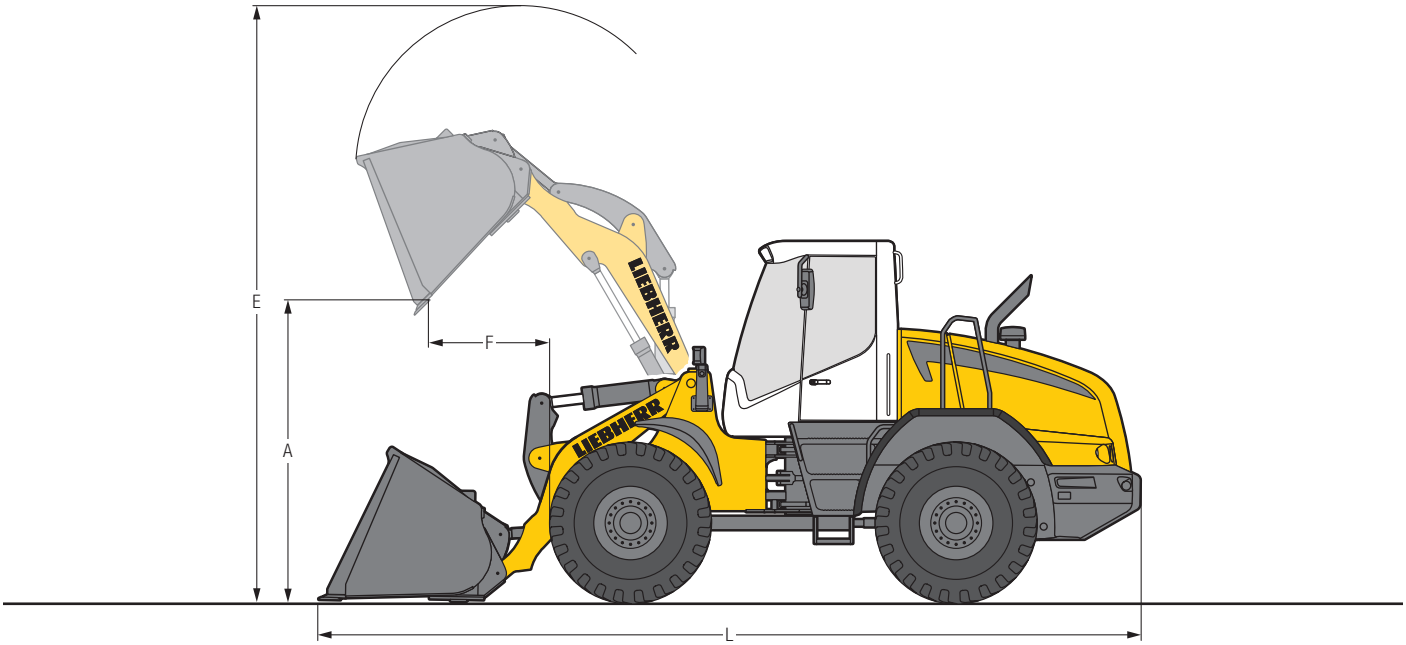
= Excavation bucket with back grading edge for direct mounting

= Excavation bucket with back grading edge for quick coupler

ZK = Z-bar linkage
ZK-QC = Z-bar linkage including quick coupler
T = Welded-on tooth holder with add-on teeth

Attachment

Light Material Bucket



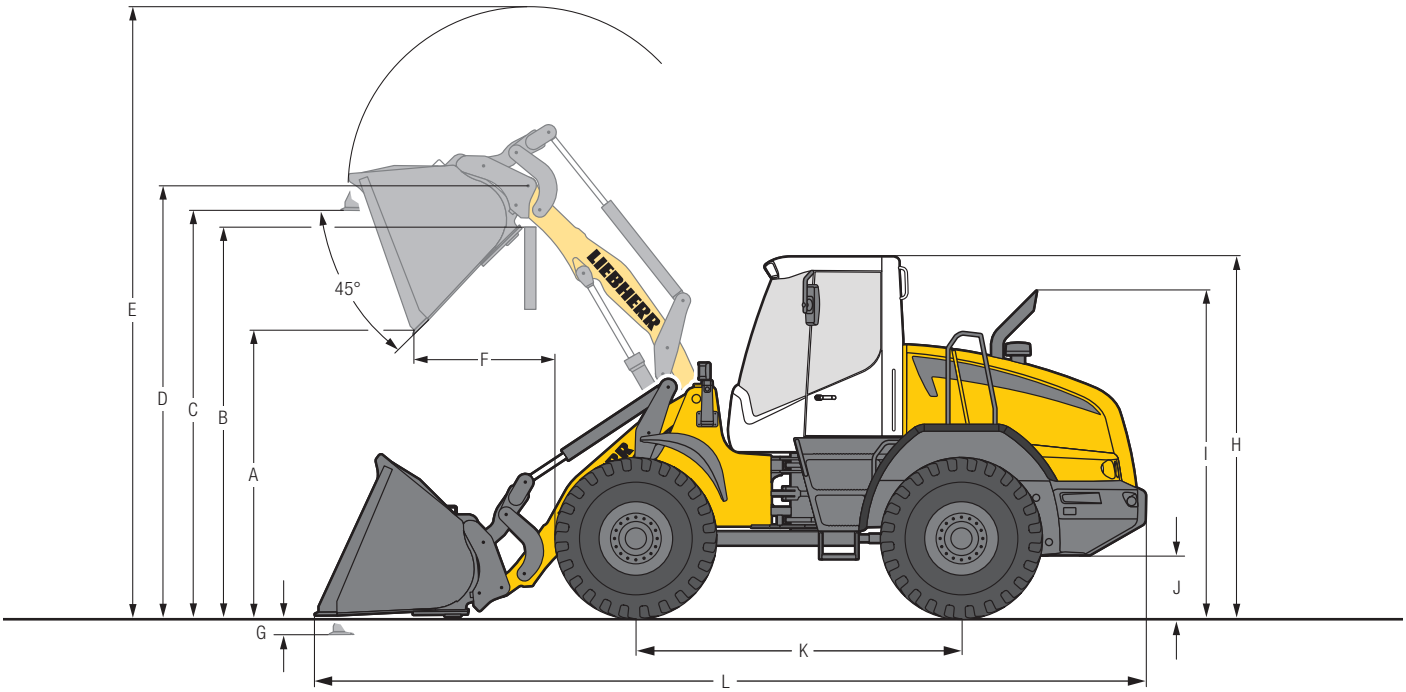
Light Material Bucket			L 524				L 538		
	Geometry		ZK	ZK	ZK	ZK-QC	ZK	ZK	ZK-QC
	Cutting tool		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
	Bucket capacity	m^3	2.4	3.0	4.0	4.0	3.5	4.0	4.0
	Bucket width	mm	2,500	2,500	2,700	2.700	2,700	2,700	2,700
A	Dumping height at max. lift height	mm	2,755	2,640	2,490	2,370	2,730	2,715	2,520
E	Max. operating height	mm	5,025	5,160	5,300	5,430	5,360	5,440	5,590
F	Reach at maximum lift height	mm	990	1,110	1,260	1,300	1,140	1,300	1,285
L	Overall length	mm	7,345	7,130	7,340	7,410	7,360	7,695	7,700
	Tipping load, straight*	kg	8,450	8,260	7,970	7,370	10,420	10,190	9,520
	Tipping load, articulated at 40°*	kg	7,450	7,290	7,040	6,510	9,190	9,000	8,390
	Operating weight*	kg	10,850	10,980	11,105	11,290	13,180	13,300	13,470
	Tyre sizes		17.5R25 L3	17.5R25 L3	17.5R25 L3	17.5R25 L3	20.5R25 L3	20.5R25 L3	20.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, articulated at 40° according to ISO 14397-1)

ZK = Z-bar linkage
ZK-QC = Z-bar linkage including quick coupler
BOCE = Bolt-on cutting edge

Dimensions

Parallel Linkage



Loading Bucket			L 524		L 538	
	Geometry		PK-QC	PK-QC	PK-QC	PK-QC
	Bucket type		LMB	LMB	LMB	LMB
	Cutting tool		BOCE	BOCE	BOCE	BOCE
	Lift arm length	mm	2,500	2,500	2,500	2,500
	Bucket capacity according to ISO 7546**	m^3	3.0	5.5	4.0	6.5
	Bucket width	mm	2,750	2,750	2,750	2,750
A	Dumping height at max. lift height and 45° discharge	mm	2,630	2,230	2,520	2,185
B	Dump-over height	mm	3,380	3,380	3,430	3,430
C	Max. height of bucket bottom	mm	3,595	3,595	3,645	3,645
D	Max. height of bucket pivot point	mm	3,835	3,835	3,890	3,890
E	Max. operating height	mm	5,290	5,670	5,460	5,925
F	Reach at max. lift height and 45° discharge	mm	1,220	1,630	1,300	1,650
G	Digging depth	mm	55	55	35	35
H	Height above cab	mm	3,200	3,200	3,250	3,250
I	Height above exhaust	mm	2,860	2,860	2,910	2,910
J	Ground clearance	mm	460	460	490	490
K	Wheelbase	mm	2,850	2,850	2,975	2,975
L	Overall length	mm	7,355	7,930	7,765	8,250
	Turning circle radius over outside bucket edge	mm	5,765	5,930	6,070	6,240
	Turning circle radius over tyres	mm	5,170	5,170	5,350	5,350
	Width over tyres	mm	2,460	2,460	2,470	2,470
	Breakout force (SAE)	kN	63		87	
	Tipping load, straight*	kg	7,920	7,330	9,900	9,400
	Tipping load, articulated at 40°*	kg	6,980	6,470	8,730	8,300
	Operating weight*	kg	11,800	12,200	13,600	13,950
	Tyre sizes		17.5R25 L3	17.5R25 L3	20.5R25 L3	20.5R25 L3

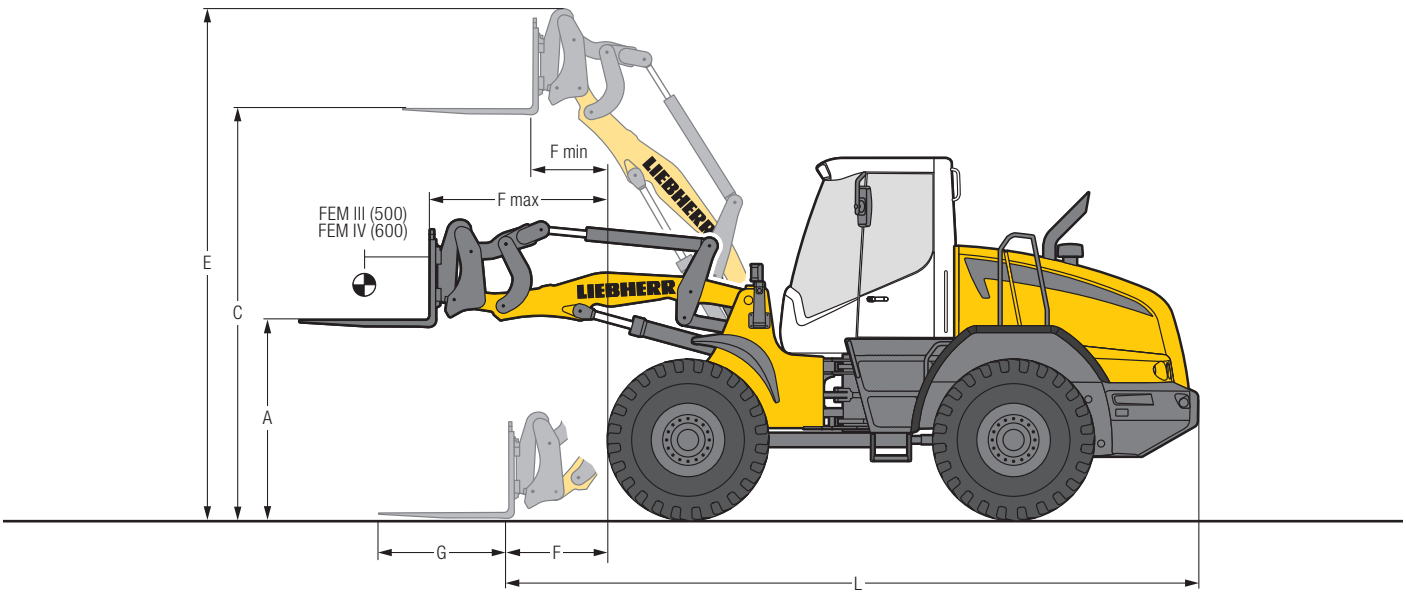
* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load. (Tipping load, articulated 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 page 26/27.

PK-QC = Parallel linkage including quick coupler
LMB = Light material bucket
BOCE = Bolt-on cutting edge

Attachment

Fork Carrier and Fork



FEM III Fork Carrier and Fork			L 524		L 538	
	Geometry		ZK-QC	PK-QC	ZK-QC	PK-QC
A	Lifting height at max. reach	mm	1,690	1,690	1,781	1,739
C	Max. lifting height	mm	3,580	3,645	3,738	3,697
E	Max. operating height	mm	4,510	4,560	4,662	4,612
F	Reach at loading position	mm	975	1,110	939	975
F max.	Max. reach	mm	1,625	1,720	1,635	1,635
F min.	Reach at max. lifting height	mm	695	780	694	695
G	Fork length	mm	1,200	1,200	1,200	1,200
L	Length – basic machine	mm	6,190	6,325	6,350	6,390
	Tipping load, straight*	kg	6,000	6,480	7,880	8,150
	Tipping load, articulated at 40°*	kg	5,300	5,700	6,940	7,200
	Recommended payload for uneven ground = 60 % of tipping load, articulated [1]	kg	3,180	3,420	4,150	4,320
	Recommended payload for smooth surfaces = 80 % of tipping load, articulated [1]	kg	4,010 [3]	4,580	5,000 [2]	5,000 [3]
	Operating weight*	kg	10,600	11,260	12,700	12,900
	Tyre sizes		17.5R25 L3	17.5R25 L3	20.5R25 L3	20.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, articulated at 40° according to ISO 14397-1)

[1] According to EN 474-3

[2] Load capacity for the fork carrier and forks is limited to 5,000 kg

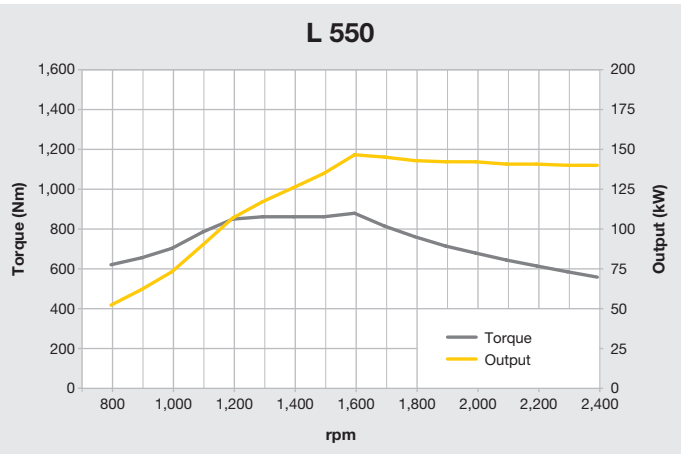
[3] Payload on forks is limited by tilt cylinder

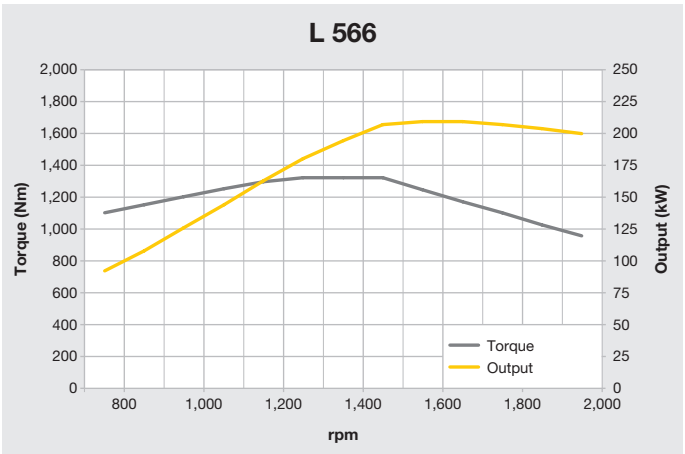
ZK-QC = Z-bar linkage including quick coupler
PK-QC = Parallel linkage including quick coupler

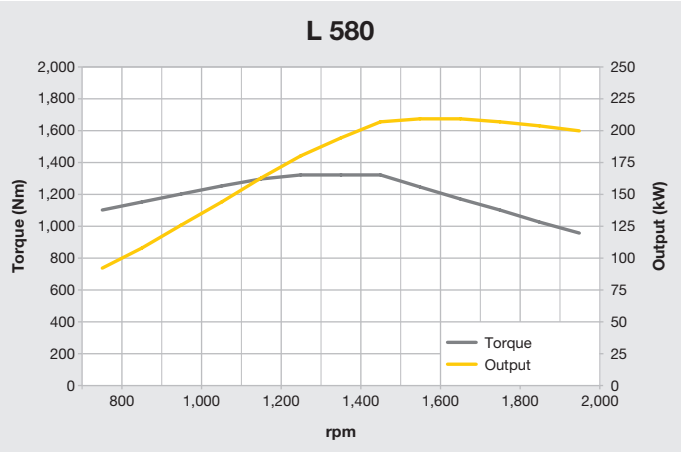
Technical Data

Engine	L 550	L 566	L 580
Diesel engine	6068HFL84	Stage II: 6090HFL75 Stage IIIA: 6090HFL85	Stage II: 6090HFL75 Stage IIIA: 6090HFL85
Design	Water-cooled, turbo charged, intercooled		
Cylinders inline	6	6	6
Fuel injection process	Electronic Common Rail high-pressure injection		
Max. gross output to ISO 3046 and SAE J1995 kW/HP	147/200	209/284	209/284
at RPM	1,600	1,600	1,600
Max. net output to ISO 9249 and SAE J1349 kW/HP	146/199	206/280	206/280
at RPM	2,000	1,600	1,600
Rated output to ISO 3046 and SAE J1995 kW/HP	140/190	200/272	200/272
at RPM	2,400	2,000	2,000
Max. net torque to ISO 9249 and SAE J1349 Nm	848	1,300	1,300
at RPM	1,300	1,500	1,500
Displacement litres	6.8	9.0	9.0
Bore/Stroke mm	106/127	118.4/136	118.4/136
Air cleaner system	Dry air filter with main and safety element, pre-cleaner, service indicator		
Electrical system			
Operating voltage V	24	24	24
Battery Ah	2 x 140	2 x 180	2 x 180
Alternator V/A	28/100	28/100	28/100
Starter motor V/kW	24/7.8	24/7.8	24/7.8

L 550: Available for exhaust emission limits of Stage II/Tier 2.
L 566/L 580: Availability of models with exhaust standards of Stage II/Tier 2 or Stage IIIA/Tier 3 depends on emission regulations in respective countries.







Technical Data

Driveline

Stepless hydrostatic travel drive

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
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

L 550	Speed range 1	0 – 4.0 km/h
	Speed range A1-2	0 – 15.0 km/h
	Speed range A1-3	0 – 40.0 km/h
L 566/L 580	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

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

Height of obstacles which can be driven over	mm	L 550	L 566	L 580
		460	490	490

(with all fourwheels remain 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) 2,230 mm with all types of tyres (L 566, 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 seperate 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.

Tyres

Standard size L 550	23.5R25 L3
Standard size L 566	26.5R25 L3
Standard size L 580	26.5R25 L3
Special tyres	By arrangement with the manufacturer

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, optional

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
Filtration	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 as standard

		L 550	L 566	L 580
Max. flow	l/min.	234	290	290
Max. pressure	bar	360	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 566		L 580	
	ZK	IND	ZK	IND	ZK	IND
Lifting	5.5 s	5.5 s	5.5 s	5.5 s	5.5 s	5.5 s
Dumping	2.3 s	3.5 s	2.0 s	3.0 s	2.0 s	3.2 s
Lowering (empty)	2.7 s	2.7 s	3.5 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 105° (L 550)/180° (L 566, L 580) opening angle, ventilation opening on the right hand side, 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, heatable rear window ROPS roll over protection per DIN/ISO 3471/EN 474-1 FOPS falling objects protection per DIN/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, mechanical controlled heating and air-condition as standard

Noise Emission

	L 550	L 566	L 580
Sound pressure, measured according to ISO 6396 (inside cab):	L_{pA} 75 dB(A)	71 dB(A)	71 dB(A)
Sound power, measured according to ISO 6395 (emitted by wheel loader):	L_{WA} 105 dB(A)	106 dB(A)	106 dB(A)

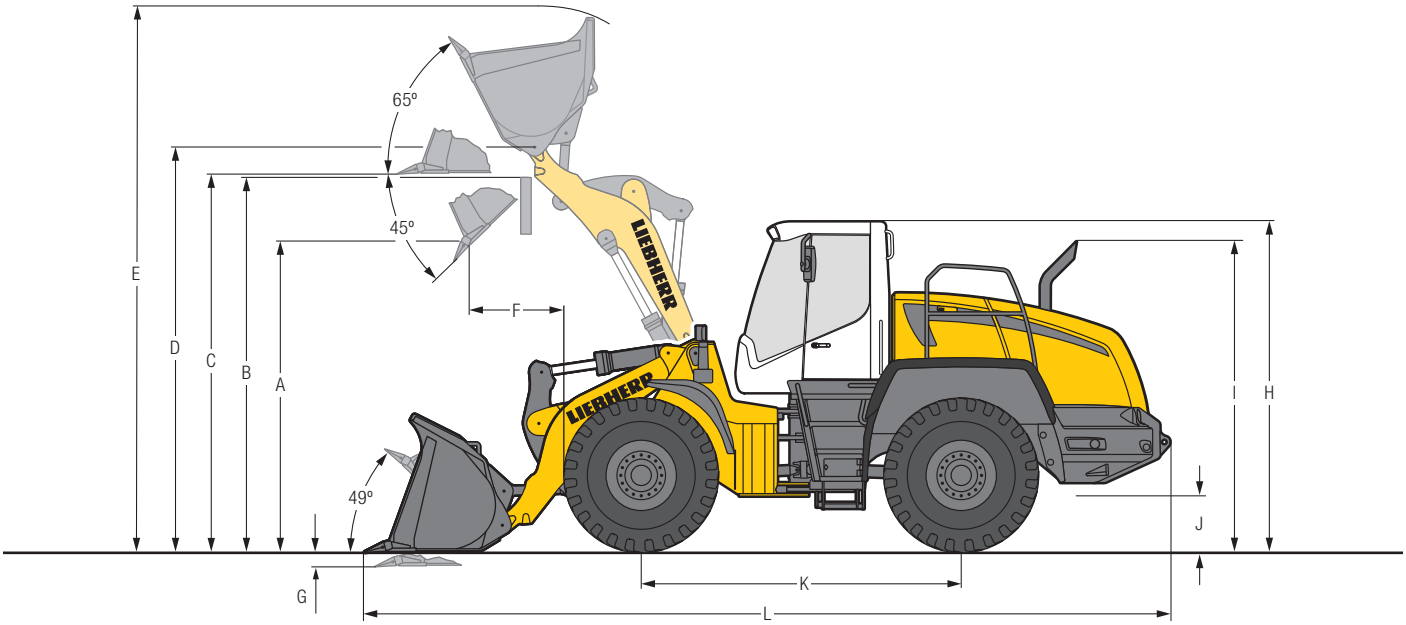
Capacities

		L 550	L 566	L 580
Fuel tank	l	300	400	400
Engine oil (including filter change)	l	19.5	34	34
Pump distribution gearbox	l		2.5	2.5
Transmission	l	4.1	11.5	11.5
Coolant	l	38	42	42
Front axle	l	35	42	42
Rear axle	l	35	42	42
Hydraulic tank	l	135	135	135
Hydraulic system, total	l	240	290	290

Dimensions

Z-bar Linkage

L 550 / L 566 / L 580



Loading Bucket		L 550		L 566		L 580	
	Geometry	ZK	ZK	ZK	ZK	ZK	ZK
	Cutting tool	T	T	T	T	T	T
	Lift arm length mm	2,750	2,750	2,920	2,920	3,050	3,050
	Bucket capacity according to ISO 7546** m^3	3.2	3.6	4.0	4.5	5.0	5.5
	Bucket width mm	2,700	2,700	3,000	3,000	3,300	3,300
A	Dumping height at max. lift height and 45° discharge mm	3,140	3,050	3,240	3,185	3,320	3,250
B	Dump-over height mm	3,700	3,700	3,900	3,900	4,100	4,100
C	Max. height of bucket bottom mm	3,920	3,920	4,050	4,050	4,270	4,270
D	Max. height of bucket pivot point mm	4,180	4,180	4,360	4,360	4,580	4,580
E	Max. operating height mm	5,660	5,750	5,870	5,960	6,340	6,420
F	Reach at max. lift height and 45° discharge mm	1,020	1,100	1,180	1,240	1,150	1,220
G	Digging depth mm	85	85	100	100	100	100
H	Height above cab mm	3,360	3,360	3,590	3,590	3,590	3,590
I	Height above exhaust mm	3,015	3,015	3,000	3,000	3,000	3,000
J	Ground clearance mm	490	490	535	535	535	535
K	Wheelbase mm	3,305	3,305	3,780	3,780	3,900	3,900
L	Overall length mm	8,300	8,400	9,260	9,340	9,645	9,745
	Turning circle radius over outside bucket edge mm	6,480	6,540	7,580	7,600	7,910	7,940
	Turning circle radius over tyres mm	5,885	5,885	6,995	6,995	7,150	7,150
	Width over tyres mm	2,650	2,650	2,960	2,960	2,960	2,960
	Breakout force (SAE) kN	140	130	200	190	190	175
	Tipping load, straight* kg	14,150	13,950	18,000	17,800	20,750	20,550
	Tipping load, articulated at 37°* kg	12,600	12,400	15,900	15,700	18,350	18,150
	Tipping load, articulated at 40°* kg	12,350	12,150	15,550	15,350	18,000	17,800
	Operating weight* kg	17,350	17,450	23,100	23,200	24,720	24,870
	Tyre sizes	23.5R25 L3	23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, 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 page 26/27.

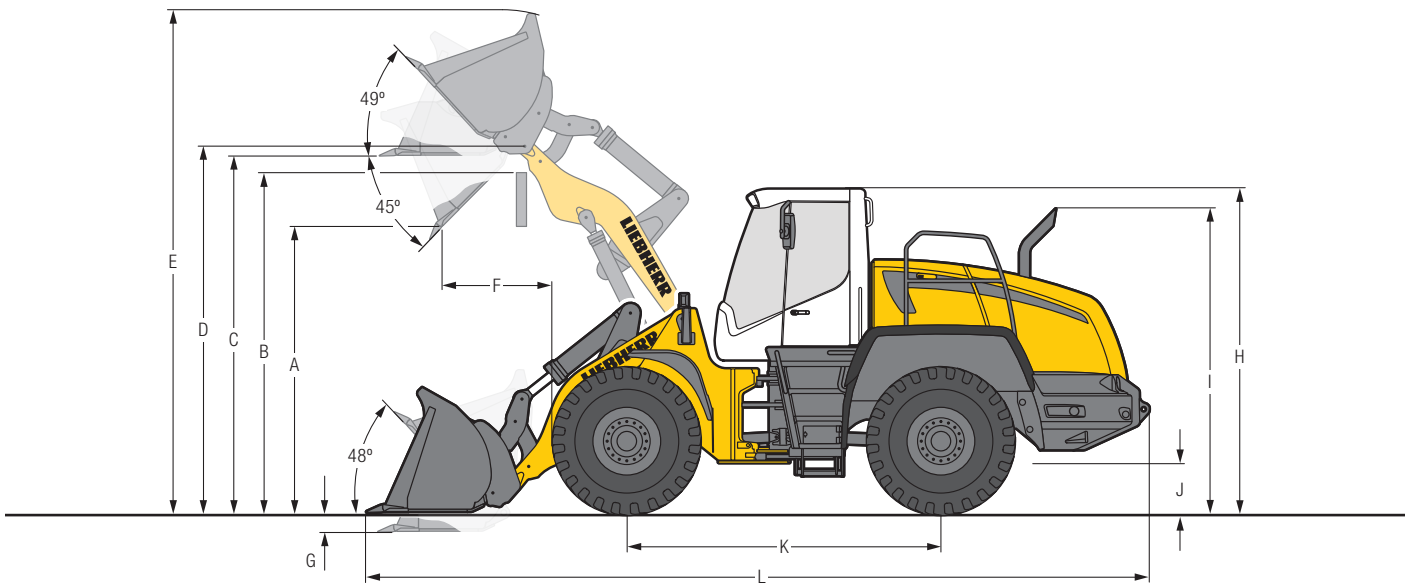
= Excavation bucket with back grading edge for direct mounting

ZK = Z-bar linkage

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

Dimensions

Industrial Lift Arm



L 550 / L 566 / L 580

Loading Bucket			L 550	L 566	L 580
	Geometry		IND-QC	IND-QC	IND-QC
	Cutting tool		T	T	T
	Lift arm length	mm	2,600	2,900	2,900
	Bucket capacity according to ISO 7546**	m³	3.0	3.5	4.5
	Bucket width	mm	2,700	3,000	3,000
A	Dumping height at max. lift height and 45° discharge	mm	2,880	3,210	3,070
B	Dump-over height	mm	3,500	3,900	3,900
C	Max. height of bucket bottom	mm	3,795	4,145	4,145
D	Max. height of bucket pivot point	mm	4,075	4,490	4,490
E	Max. operating height	mm	5,580	6,045	6,265
F	Reach at max. lift height and 45° discharge	mm	1,135	1,270	1,290
G	Digging depth	mm	80	100	100
H	Height above cab	mm	3,360	3,590	3,590
I	Height above exhaust	mm	3,015	3,000	3,000
J	Ground clearance	mm	490	535	535
K	Wheelbase	mm	3,305	3,780	3,900
L	Overall length	mm	8,350	9,345	9,545
	Turning circle radius over outside bucket edge	mm	6,500	7,575	7,720
	Turning circle radius over tyres	mm	5,885	6,995	7,150
	Width over tyres	mm	2,650	2,960	2,960
	Breakout force (SAE)	kN	125	200	200
	Tipping load, straight*	kg	12,700	15,650	19,800
	Tipping load, articulated at 37°*	kg	11,200	13,750	17,450
	Tipping load, articulated at 40°*	kg	10,950	13,400	17,100
	Operating weight*	kg	17,950	24,150	25,750
	Tyre sizes		23.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, 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 page 26/27.

= Excavation bucket with back grading edge for quick coupler

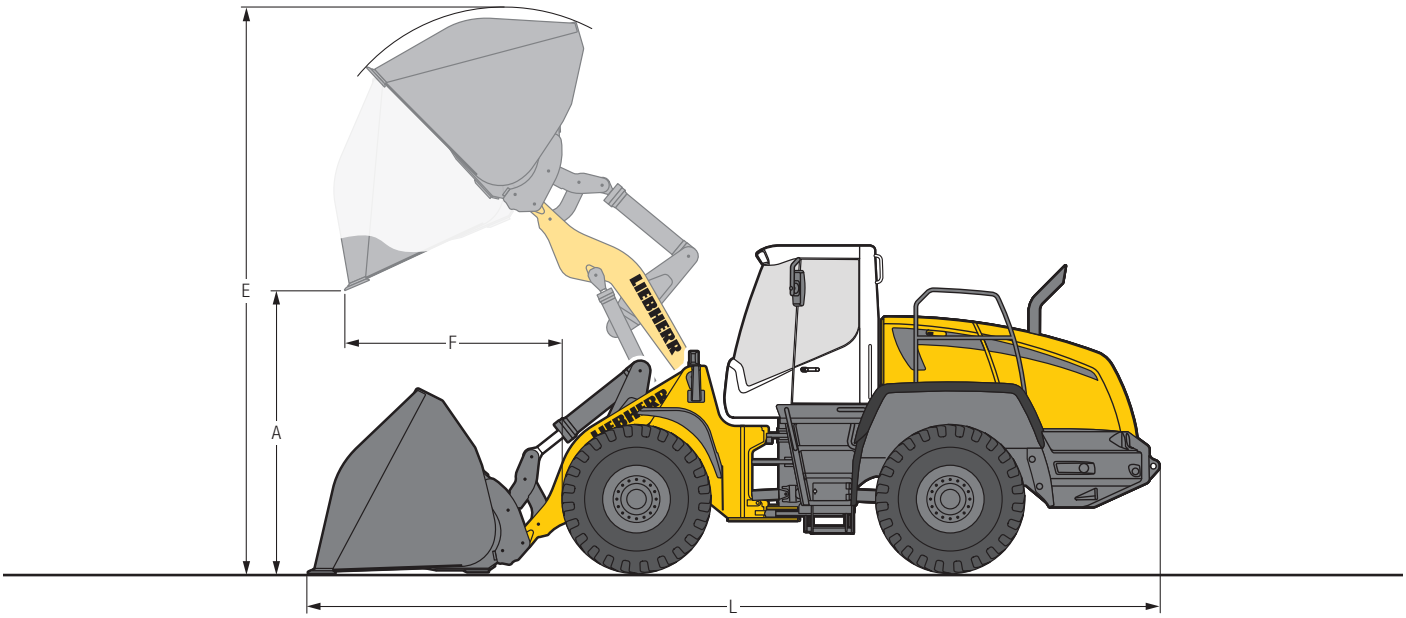
IND-QC = Industrial lift arm with parallel guidance including quick coupler

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

Attachment

Light Material Bucket

L 550 / L 566 / L 580



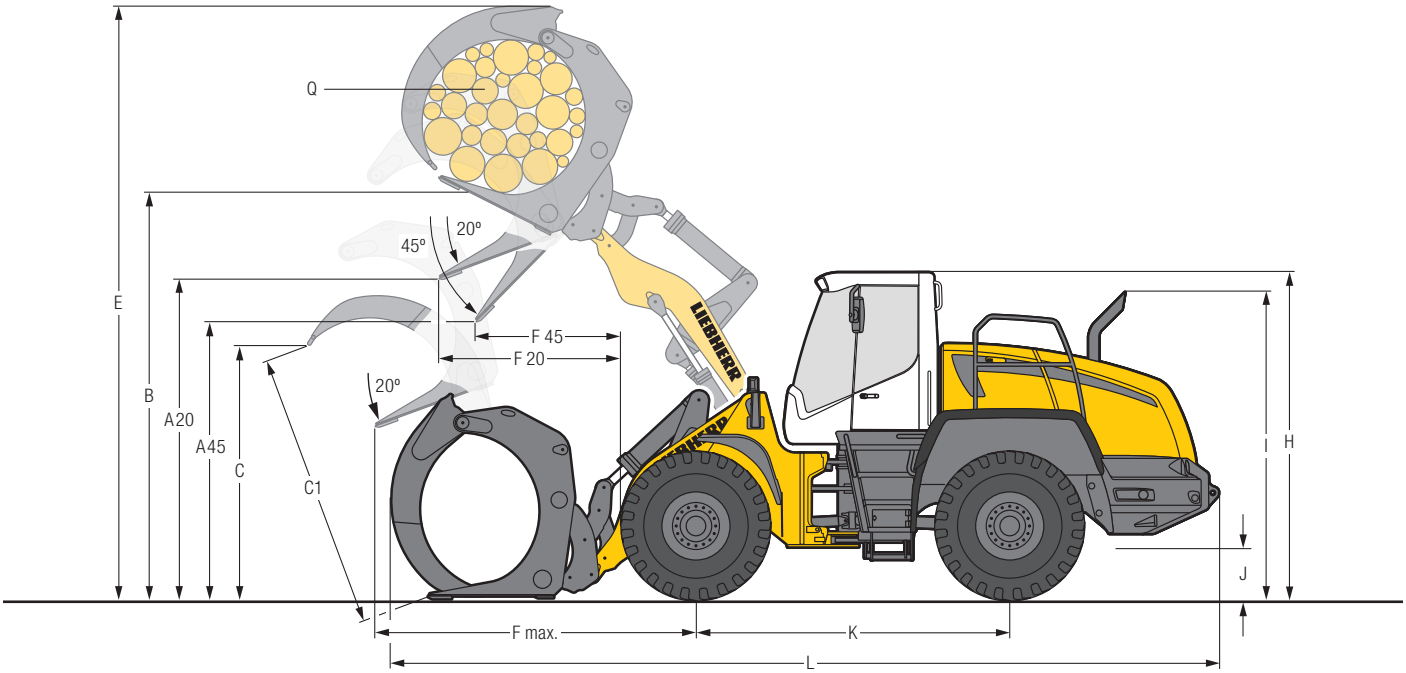
Light Material Bucket			L 550		L 566		L 580	
	Geometry		IND-QC	IND-QC	IND-QC	IND-QC	IND-QC	IND-QC
	Cutting tool		BOCE	BOCE	BOCE	BOCE	BOCE	BOCE
	Bucket capacity	m^3	5.0	9.0	6.5	12.0	7.5	14.0
	Bucket width	mm	2,950	3,400	3,200	3,700	3,400	4,000
A	Dumping height at max. lift height	mm	2,550	2,340	2,885	2,620	2,810	2,480
E	Max. operating height	mm	5,900	6,110	6,470	6,700	6,580	6,800
F	Reach at maximum lift height	mm	1,450	1,705	1,485	1,860	1,550	1,950
L	Overall length	mm	8,600	8,970	9,620	10,100	9,715	10,200
	Tipping load, straight*	kg	11,950	11,450	14,600	13,850	18,700	16,450
	Tipping load, articulated at 40°*	kg	10,300	9,750	12,400	12,100	16,000	14,400
	Operating weight*	kg	18,250	18,950	24,700	25,650	26,400	27,300
	Tyre sizes		23.5R25 L3	23.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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, articulated at 40° according to ISO 14397-1)

IND-QC = Industrial lift arm with parallel guidance including quick coupler
BOCE = Bolt-on cutting edge

Attachment

Log Grapple



L 550 / L 566 / L 580

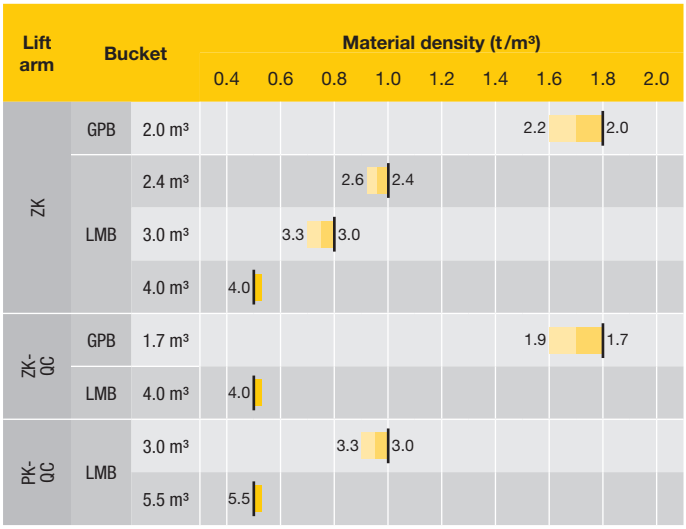
Log Grapple			L 550	L 566	L 580
	Geometry		IND-QC	IND-QC	IND-QC
A20	Discharge height at 20°	mm	3,570	3,570	3,520
A45	Discharge height at 45°	mm	2,950	2,930	2,805
B	Manipulation height	mm	4,530	5,125	5,125
C	Max. grapple opening in loading position	mm	2,740	2,650	2,930
C1	Max. grapple opening	mm	2,990	3,050	3,340
E	Max. height	mm	6,480	7,400	7,500
F20	Reach at max. lifting height at 20° discharge	mm	1,890	2,165	2,215
F45	Reach at max. lifting height at 45° discharge	mm	1,530	1,620	1,625
F max.	Max. reach	mm	2,820	3,110	3,160
H	Height above cab	mm	3,360	3,590	3,590
I	Height above exhaust	mm	3,015	3,000	3,000
J	Ground clearance	mm	490	535	535
K	Wheelbase	mm	3,305	3,780	3,900
L	Overall length	mm	8,700	9,880	10,050
	Width over tyres	mm	2,650	2,970	2,970
Q	Grapple diameter	m²	2.4	3.1	3.5
	Grapple width	mm	1,600	1,800	1,800
	Payload*	kg	6,400	8,200	9,200
	Operating weight*	kg	19,450	25,750	28,000
	Tyre sizes		23.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown here are valid with tyres above (optional tyres will change the vertical dimensions), includes 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.

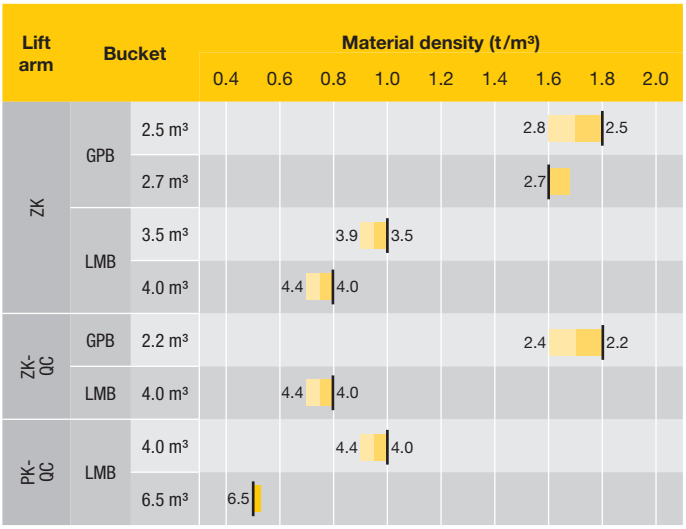
IND-QC = Industrial lift arm with parallel guidance including quick coupler

Bucket Selection

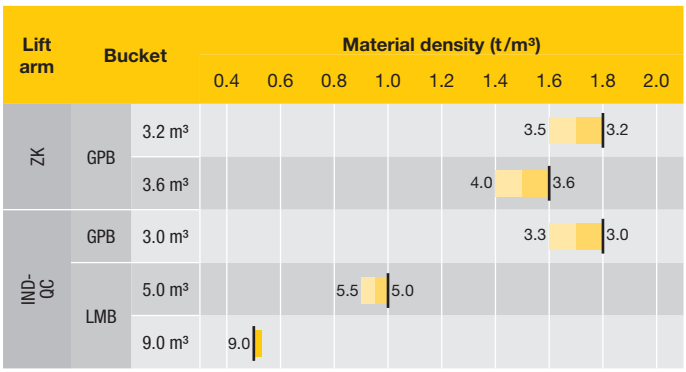
L 524



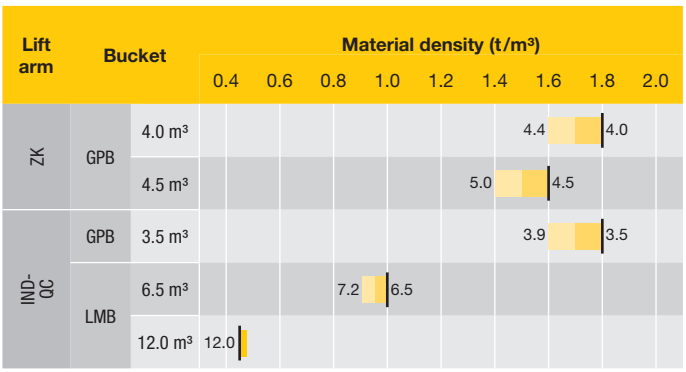
L 538



L 550

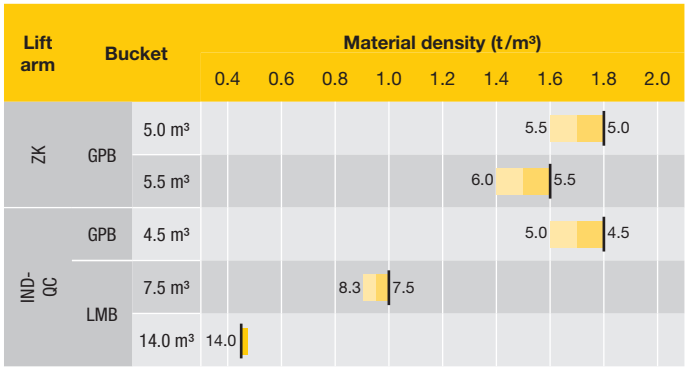


L 566



Bucket Selection

L 580



Bucket Filling Factor

Lift Arm

ZK	Z-bar linkage, standard lift arm length
ZK-HL	Z-bar linkage, High Lift
ZK-QC	Z-bar linkage, including quick coupler, standard lift arm length
PK-QC	Parallel linkage including quick coupler, standard lift arm length
IND-QC	Industrial lift arm including quick coupler, standard lift arm length

Bucket

GPB	General purpose bucket (Excavation bucket)
LMB	Light material bucket

Bulk Materials

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

ISO 14397-1

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 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.

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

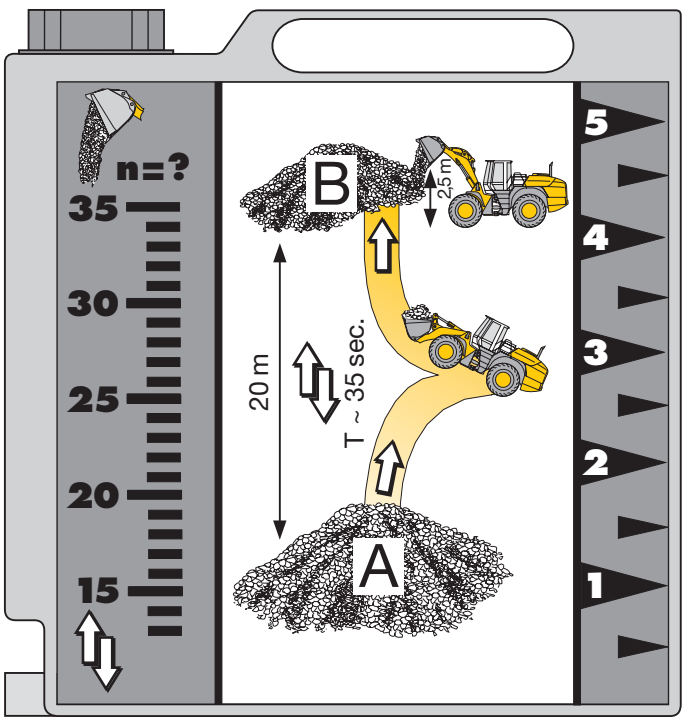
$$\text{Bucket capacity} = \frac{\text{Pay load (t)}}{\text{Specific bulk weight of material (t/m}^3\text{)}}$$

The Liebherr Wheel Loaders

Wheel Loader		 L 524	 L 538	 L 550	 L 566	 L 580
Tipping load	kg	7,500	9,500	12,350	15,550	18,000
Bucket capacity	m³	2.0	2.5	3.2	4.0	5.0
Operating weight	kg	10,400	12,800	17,350	23,100	24,720
Engine output	kW/HP	86/117	104/141	147/200	209/284	209/284

10.14

Environmental Protection Can Help You Earn Money!



The Liebherr Standard Consumption Test – easy to reproduce and practical.
The Liebherr Standard Consumption Test determines 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
L 524: 2.0 m³	n = 47	2.8	8.5
L 538: 2.5 m³	n = 39	2.7	10.3
L 550: 3.2 m³	n = 30	2.9	13.5
L 566: 4.0 m³	n = 23	3.2	17.3
L 580: 5.0 m³	n = 21	2.9	19.1

Equipment

Basic Wheel Loader

	524	538	550	566	580
Crash protection, rear	+	+	+	+	+
Automatic central lubrication system	+	+	+	+	+
Battery master switch	•	•	•	•	•
Automatic travel mode	•	•	•	•	•
Speed range selection	•	•	•	•	•
Ride control	+	+	+	+	+
Parking brake	•	•	•	•	•
Fluff trap for radiator	+	+	+	+	+
Speed limitation Vmax	•	•	•	•	•
Large-mesh radiator	+	+	+	+	+
Pre-heat system for cold starting	•	•	•	•	•
Combined inching-braking system	•	•	•	•	•
Fuel tank steel version	•	•	•	•	•
Multi-disc limited slip differentials in both axles	•	•	•	•	•
LiDAT Standard (Liebherr Data Transfer System) – one year free of charge	+	+	+	+	+
Reversible fan drive	+	+	+	+	+
Air cleaner system with pre-filter	•	•	•	•	•
Emergency steering system	+	+	+	+	+
Acoustic back-up alarm	•	•	•	•	•
Tail lights, single version	-	-	•	•	•
Headlights rear, single version (on tail flap) – halogen	•	•	•	•	•
Headlights and license plate illumination rear, single version (on tail flap) – halogen	+	+	+	+	+
Headlights front, single version (on front-chassis) – halogen	•	•	•	•	•
Transport lashing lugs	•	•	•	•	•
Lockable doors, service flap and engine hood	•	•	•	•	•
Chock	+	+	+	+	+
Air pre-cleaner Top-Spin	+	+	+	+	+
Fuel pre-heating system	+	+	+	+	+
Hazard warning lights	•	•	•	•	•
Toolbox with toolkit	•	•	•	•	•
Central lubrication lines for lift arm	•	•	•	•	•
Towing hitch	•	•	•	•	•

Operator's Cab

	524	538	550	566	580
Storage box	•	•	•	•	•
Armrest, adjustable	•	•	•	•	•
Exterior mirror, tiltable	•	•	•	•	•
Operator's seat – air sprung	+	+	+	+	+
Operator's seat – air sprung with seat heating	+	+	+	+	+
Operator's seat – mechanically sprung	•	•	•	•	•
Cup holder	•	•	•	•	•
Rear window heater	•	•	•	•	•
Heater	+	+	+	+	+
Horn	•	•	•	•	•
Floor mat	•	•	•	•	•
Clothes hook	•	•	•	•	•
Air conditioning system (manual)	•	•	•	•	•
Steering column, adjustable	•	•	•	•	•
Liebherr joystick control – adjustable	•	•	•	•	•
Radio set	•	•	•	•	•
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 – halogen	+	+	+	-	-
Headlights rear, double version – LED	–	–	–	+	+
Headlights rear, single version – halogen	•	•	•	•	•
Headlights front, double version – halogen	•	•	•	•	•
Windscreen guard	+	+	+	+	+
Sun visor	•	•	•	•	•
Sunblind front/rear	+	+	+	+	+
Plug 12 V	•	•	•	•	•

Display Unit

	524	538	550	566	580
Working hydraulics lockout	•	•	•	•	•
Automatic central lubrication system	+	+	+	+	+
Battery charge	•	•	•	•	•
Timer for hours of operation	•	•	•	•	•
Indicator light / Hazard warning lights	•	•	•	•	•
Brake accumulator pressure	•	•	•	•	•
Rev. Counter	•	•	•	•	•
Speed range indicator	•	•	•	•	•
Travel speed	•	•	•	•	•
Travel direction	•	•	•	•	•
Parking brake	•	•	•	•	•
Gear level	•	•	•	•	•
Heater / Air conditioning	•	•	•	•	•
Hydraulic oil temperature (overheating)	•	•	•	•	•
Fuel level	•	•	•	•	•
Coolant temperature	•	•	•	•	•
Reversible fan drive	+	+	+	+	+
Engine oil pressure	•	•	•	•	•
Emergency steering system	+	+	+	+	+
Service codes	•	•	•	•	•
System and function settings	•	•	•	•	•
Time	•	•	•	•	•
Tractive force regulation	–	–	–	•	•

Warning Symbols for

	524	538	550	566	580
Battery charge	•	•	•	•	•
Brake accumulator pressure	•	•	•	•	•
Air cleaner blockage	•	•	•	•	•
Engine oil pressure	•	•	•	•	•
Emergency steering system	+	+	+	+	+
Engine overspeed	•	•	•	•	•
Engine overheat	•	•	•	•	•

Audible Warnings for

	524	538	550	566	580
Quick coupler, opened	•	•	•	•	•
Coolant level	•	•	•	•	•
Charge air / Fuel temperature too high	•	•	•	•	•
Steering system / Braking system	•	•	•	•	•
Engine oil pressure	•	•	•	•	•
Acoustic back-up alarm	•	•	•	•	•
Service codes	•	•	•	•	•
Overheating of coolant, fuel, hydraulic oil or gearbox oil	•	•	•	•	•

Equipment

	524	538	550	566	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	+	+	+	+	+
Hydraulic servo control of working hydraulics	•	•	•	•	•
Hydraulic quick coupler	+	+	+	+	+
Industrial lift arm including quick coupler	–	–	+	+	+
Tilt cylinder protection	+	+	+	+	+
Loading buckets with and without teeth, or bolt-on cutting edge	+	+	+	+	+
Country-specific versions	+	+	+	+	+
Light material bucket	+	+	+	+	+
Parallel linkage including quick coupler	+	+	–	–	–
Load holding valves	+	+	+	+	+
Float position	•	•	•	•	•
Z-bar linkage	•	•	•	•	•
3rd hydraulic control circuit	+	+	+	+	+

• = 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 41,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.com

Printed in China RG-BK LBH/PM 11695416-3-02.16_enGB

Liebherr-Werk Bischofshofen GmbH
Postfach 49, A-5500 Bischofshofen
☎ +43 50809 1-0, Fax +43 50809 11385
www.liebherr.com, E-Mail: info.lbh@liebherr.com
www.facebook.com/LiebherrConstruction

Liebherr Machinery (Dalian) Co., Ltd.
No. 30, Wanli Street, Dalian Dev. Zone, Dalian 116600
☎ +86 411 8733 5999, Fax +86 411 8733 5881
www.liebherr.com, E-Mail: lmd@liebherr.com
www.facebook.com/LiebherrConstruction