Wheel Loaders

L 550 - L 586

Tipping load, articulated: 11,650 kg – 20,430 kg

LIEBHERR

L 550

Tipping load, articulated:	11,650 kg
Bucket capacity:	3.2 m³
Operating weight:	16,525 kg
Engine output:	129 kW

L 556

Tipping load, articulated:	13,140 kg
Bucket capacity:	3.6 m³
Operating weight:	17,270 kg
Engine output:	140 kW

L 566

Tipping load, articulated:	15,550 kg
Bucket capacity:	4.0 m³
Operating weight:	22,500 kg
Engine output:	190 kW

L 576

Tipping load, articulated:	17,200 kg
Bucket capacity:	4.5 m³
Operating weight:	24,260 kg
Engine output:	200 kW

L 580

Tipping load, articulated:	18,000 kg
Bucket capacity:	5.0 m³
Operating weight:	24,580 kg
Engine output:	200 kW

L 586

Tipping load, articulated:	20,430 kg
Bucket capacity:	5.5 m³
Operating weight:	31,380 kg
Engine output:	250 kW

Economy

Compared to conventional transmission, the Liebherr driveline achieves a reduction in fuel consumption for wheel loaders of 25 % or more! Five litres less fuel per operating hour significantly reduce operating costs and environmental pollution.

Performance

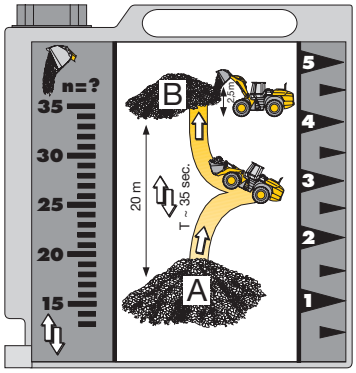
The Liebherr driveline allows the Liebherr diesel engine to be mounted lengthways in the rear, with the output shaft facing backwards. Compared to conventionally driven wheel loaders, the operating weight is much lower, the tipping load is higher, and more material can be moved each operating hour.

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 even in the toughest conditions. The mature concept and proven quality make Liebherr wheel loaders to the benchmark for 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.



Lower fuel consumption

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

Economy

Compared to conventional transmission, the Liebherr driveline achieves a reduction in fuel consumption for wheel loaders of 25 % or more! Five litres less fuel per operating hour significantly reduce 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 need up to 5 litres less fuel per operating hour at the same working conditions.

– More or less no brake wear thanks to the hydraulic braking action of the driveline. This means there is practically no brake wear and consequent repair costs.

– Reduced tyre wear thanks 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 (CO_2). By saving up to 5 litres per operating hour, up to 15,000 kg less CO_2 is produced in 1,000 operating hours – that means lower costs and active environmental protection.

Low noise emission

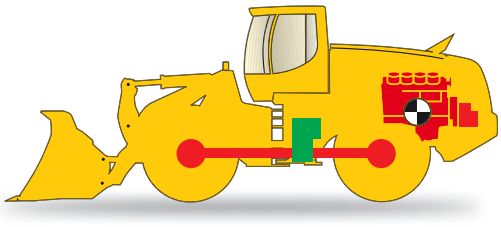
The innovative driveline concept means much lower noise emission – Liebherr wheel loaders are significantly quieter in operation.

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.

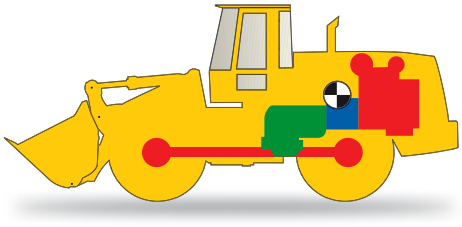
Reduced tyre wear

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



Liebherr driveline

- Optimum weight distribution thanks to lengthways-installed Liebherr diesel engine, output shaft is facing to the rear.
- The variable displacement pumps 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 the Liebherr diesel engine to be 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

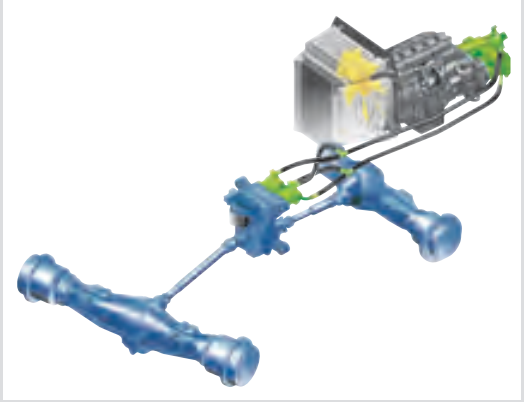
The Industrial lift arm is the ideal tool to complement the available equipment for the large Liebherr wheel loaders. Especially when operating with heavy equipment and loads, this “torque increase” is the perfect additional system for your requirements. Their compact design allows these wheel loaders to maneuver quickly and efficiently – an ideal basis for high handling capacity.

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.

An all-purpose loader

- The choice between Industrial lift arm or Z pattern linkage means that the loader can always be configured for every job application – Industrial lift arm for operations with heavy work arrangements; Z for conventional material handling.



Liebherr driveline

- The Liebherr driveline consists of two hydraulic motors which accelerate the loader continuously from a standstill to maximum speed, either forwards or in reverse but without a reversing gear unit.

Reliability

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

Controlled cooling

The intelligent answer

The cooling fan is not driven directly 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 is increased to maximum value, thus preventing 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 itself. This ensures co-ordinated quality from the manufacturer down to the smallest detail. Liebherr components guarantee maximum performance and reliability.

Cooling system

- The cooling system is fitted on the rear section between the diesel engine and the operator's cab. The cooling air is drawn in directly behind the cab and blown out upwards at the rear. The fan speed is varied automatically by heat sensors that determine the amount of cooling needed.
- A reversible fan drive to expel dust from the radiator can be specified as an optional extra.

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 control lever

- The Liebherr control lever is used to manage all travel and working movements of the wheel loader, so that the operator's left hand can always remain on the steering wheel. There is no need to let go of the steering wheel, and this increases the 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
– 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.

Liebherr control lever

All the 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 transmission

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

Service access

Easy maintenance

Because the Liebherr diesel engine is rotated by 180°, the hydraulic pumps, hydraulic tank, hydraulic tank cut-off valve, air filter and battery main switch can be reached easily and safely from ground level by opening a single engine compartment hood. The engine, pump distributor gear and cooling system are easily accessible by opening the engine cover.

Hydrostatic fan drive

The cooling system is positioned directly behind the cab, which means there is less dirt and therefore less maintenance and cleaning resulting in time and cost savings!

Service access

- The unique position of the Liebherr diesel engine provides perfect accessibility for maintenance. The hydraulic pumps, hydraulic tank, hydraulic tank cut-off valve and battery main switch can be easily and safely accessed from ground level by opening a single engine compartment hood.

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

Technical Data

Engine

	L 550	L 556	L 566	L 576	L 580
Liebherr diesel engine	D934S A6	D934L A6	D936L A6	D936L A6	D936L A6
Design	Liebherr diesel engine, water-cooled, exhaust turbo charged with intercooler				
Cylinder inline	4	4	6	6	6
Combustion process	Unit pump (PLD) microprocessor controlled				
Rated output according to ISO 9249 kW	129	140	190	200	200
at RPM	2,000	2,000	2,000	2,000	2,000
Max. torque Nm	828	900	1,230	1,320	1,320
at RPM	1500	1,300	1,300	1,300	1,300
Displacement litres	6.36	7.01	10.52	10.52	10.52
Bore/Stroke mm	122/136	122/150	122/150	122/150	122/150
Air cleaner	Dry type with main and safety element, pre-cleaner, service indicator on LCD display				
Electrical system					
Operating voltage V	24	24	24	24	24
Capacity Ah	143	143	170	170	170
Alternator V/A	28/80	28/80	28/80	28/80	28/80
Starter motor V/kW	24/6.6	24/6.6	24/6.6	24/6.6	24/6.6

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

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

	L 550	L 556	L 566	L 576	L 580
Front axle	Fixed				
Rear axle	Centre pivot, with 13° oscillating angle to each side				
Height of obstacles which can be driven over mm	500	500	520	520	520
	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 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 positioning

	L 550	L 556	L 566	L 576	L 580
Max. flow l/min.	234	234	290	290	290
Max. pressure bar	290	330	350	350	350

Attachment

Geometry	Powerful Z-pattern 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	3.5 s	3.5 s	3.5 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 site 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, heatable rear window ROPS roll over protection per DIN/ISO 3471/ EN 474-3 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
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

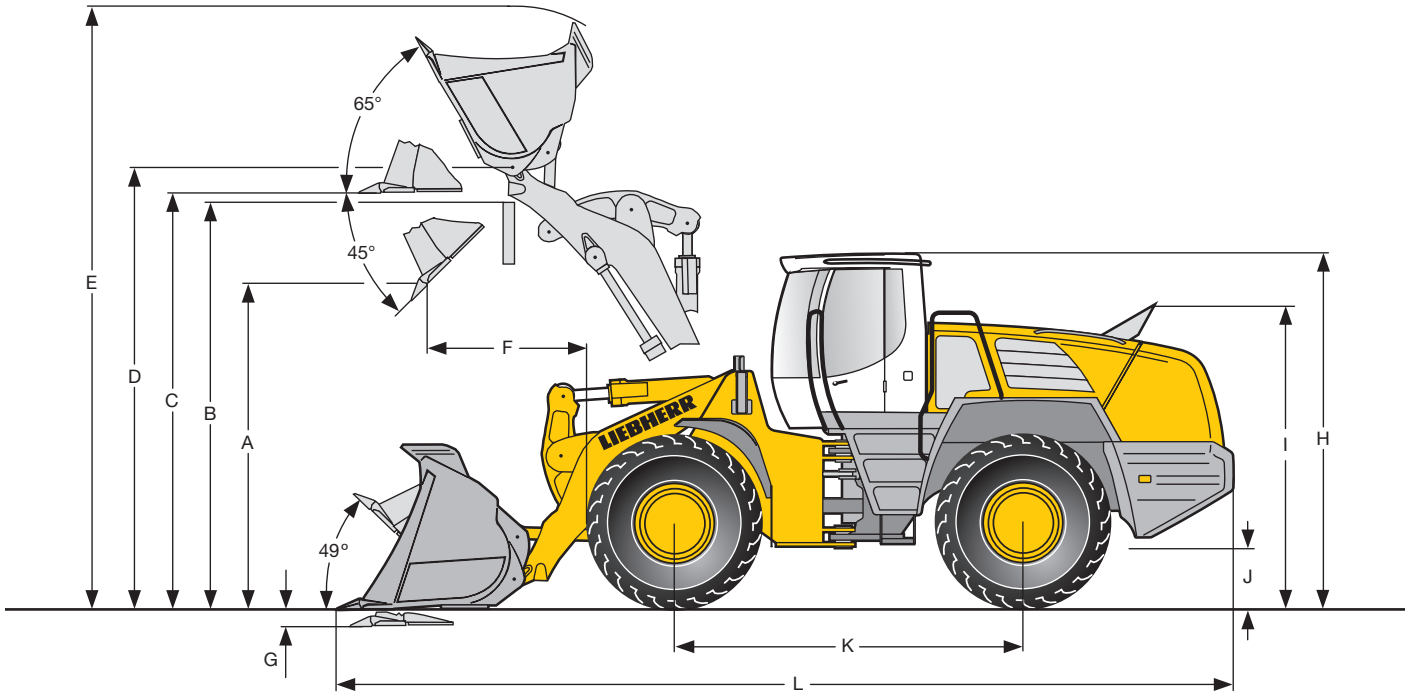
ISO 6396	L 550	L 556	L 566	L 576	L 580
L_{pA} (inside cab)	69 dB(A)	69 dB(A)	69 dB(A)	69 dB(A)	69 dB(A)
2000/14/EC					
L_{WA} (surround noise)	104 dB(A)	104 dB(A)	105 dB(A)	105 dB(A)	105 dB(A)

Capacities

	L 550	L 556	L 566	L 576	L 580
Fuel tank l	255	255	350	350	350
Engine oil (including filter change) l	31	31	43	43	43
Pump distributor gears l	2.5	2.5	2.5	2.5	2.5
Transmission l	11.5	11.5	11.5	11.5	11.5
Coolant l	45	45	52	52	52
Front axle l	30	38	51	51	58
Rear axle l	30	30	51	51	50
Hydraulic tank l	135	135	135	135	135
Hydraulic system, total l	240	240	260	260	260
Air condition system R134a g	780	780	780	780	780

Dimensions

Z-bar linkage



Loading Bucket			L 550		L 556		L 566		L 576		L 580	
	Cutting tools		T	T	T	T	T	T	T	T	T	T
	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	3.8	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
	Specific material weight	t/m^3	1.8	1.6	1.8	1.6	1.8	1.6	1.8	1.6	1.8	1.6
A	Dumping height at max. lift height and 45° discharge	mm	2,882	2,790	2,850	2,760	3,240	3,185	3,187	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	1,232	1,180	1,238	1,233	1,321	1,150	1,220
G	Digging depth	mm	85	85	85	85	100	100	100	100	100	100
H	Height above cab	mm	3,365	3,365	3,365	3,365	3,550	3,550	3,550	3,550	3,550	3,550
I	Height above exhaust	mm	2,985	2,985	2,985	2,985	3,100	3,100	3,100	3,100	3,100	3,100
J	Ground clearance	mm	530	530	530	530	565	565	565	565	565	565
K	Wheelbase	mm	3,280	3,280	3,280	3,280	3,580	3,580	3,580	3,580	3,700	3,700
L	Overall length	mm	8,220	8,240	8,240	8,350	8,912	8,992	8,992	9,112	9,300	9,400
	Turning circle radius over outside bucket edge	mm	6,420	6,440	6,440	6,470	7,096	7,110	7,110	7,145	7,420	7,450
	Breakout force (SAE)	kN	125	118	130	120	200	190	190	175	175	160
	Tipping load, straight*	kg	13,205	13,090	14,890	14,650	17,690	17,010	19,570	19,150	20,390	19,990
	Tipping load, articulated at 37°*	kg	11,865	11,765	13,350	13,135	15,850	15,240	17,530	17,160	18,330	17,970
	Tipping load, articulated at 40°*	kg	11,650	11,550	13,140	12,930	15,550	14,950	17,200	16,840	18,000	17,650
	Operating weight*	kg	16,525	16,590	17,270	17,320	22,500	22,625	24,260	24,360	24,580	24,730
	Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3		26.5R25 L3	

* The figures shown here are valid with tyres above, 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.

** 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 24.

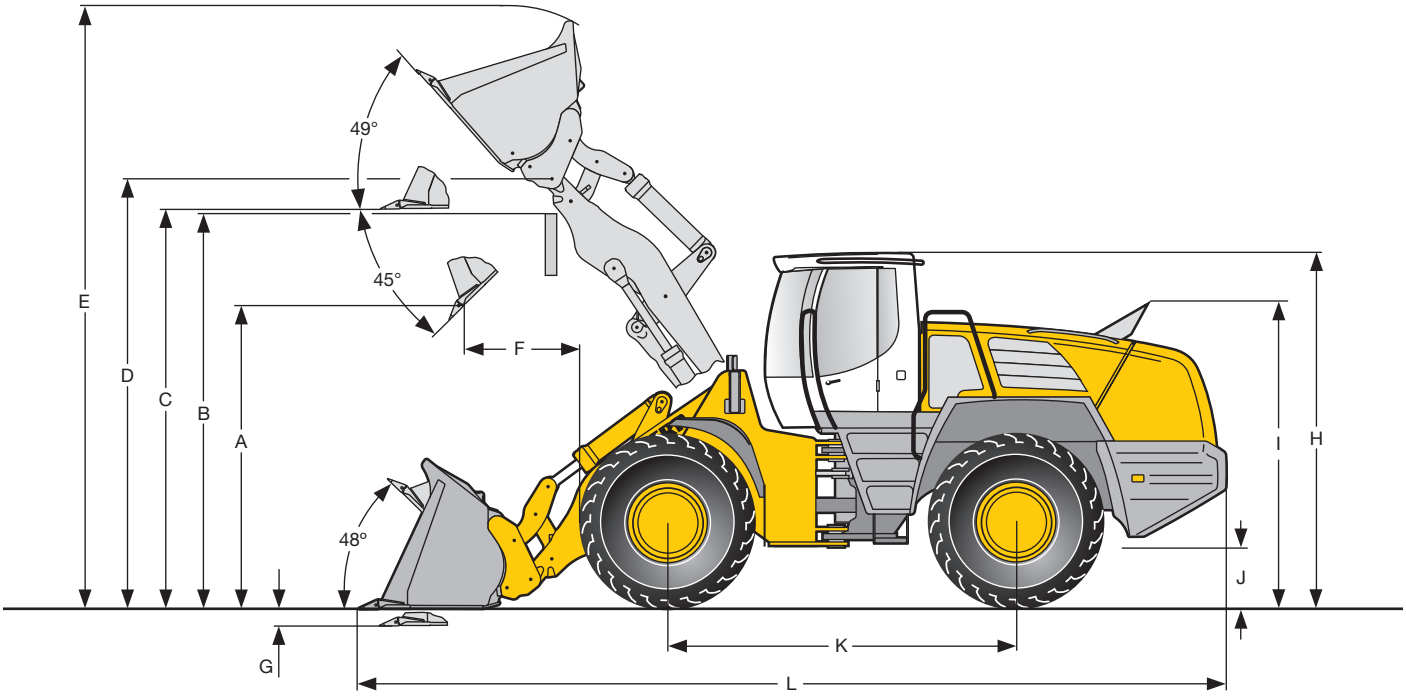
= Excavation bucket with back grading edge

= Rehandling bucket

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

Dimensions

Industrial lift arm



Loading Bucket			L 550	L 556
	Geometry		IND	IND
	Cutting tools		T	T
	Lift arm length	mm	2,600	2,600
	Bucket capacity according to ISO 7546**	m^3	3.0	3.3
	Bucket width	mm	2,700	2,700
	Specific material weight	t/m^3	1.8	1.8
A	Dumping height at max. lift height and 45° discharge	mm	2,882	2,852
B	Dump-over height	mm	3,500	3,500
C	Max. height of bucket bottom	mm	3,795	3,795
D	Max. height of bucket pivot point	mm	4,075	4,075
E	Max. operating height	mm	5,580	5,620
F	Reach at max. lift height and 45° discharge	mm	1,135	1,174
G	Digging depth	mm	80	80
H	Height above cab	mm	3,365	3,365
I	Height above exhaust	mm	2,985	2,985
J	Ground clearance	mm	530	530
K	Wheelbase	mm	3,280	3,280
L	Overall length	mm	8,300	8,355
	Turning circle radius over outside bucket edge	mm	6,470	6,500
	Breakout force (SAE)	kN	125	130
	Tipping load, straight*	kg	12,290	13,660
	Tipping load, articulated at 37° *	kg	11,050	12,265
	Tipping load, articulated at 40°*	kg	10,850	12,050
	Operating weight*	kg	16,940	17,740
	Tyre sizes		23.5R25 L3	23.5R25 L3

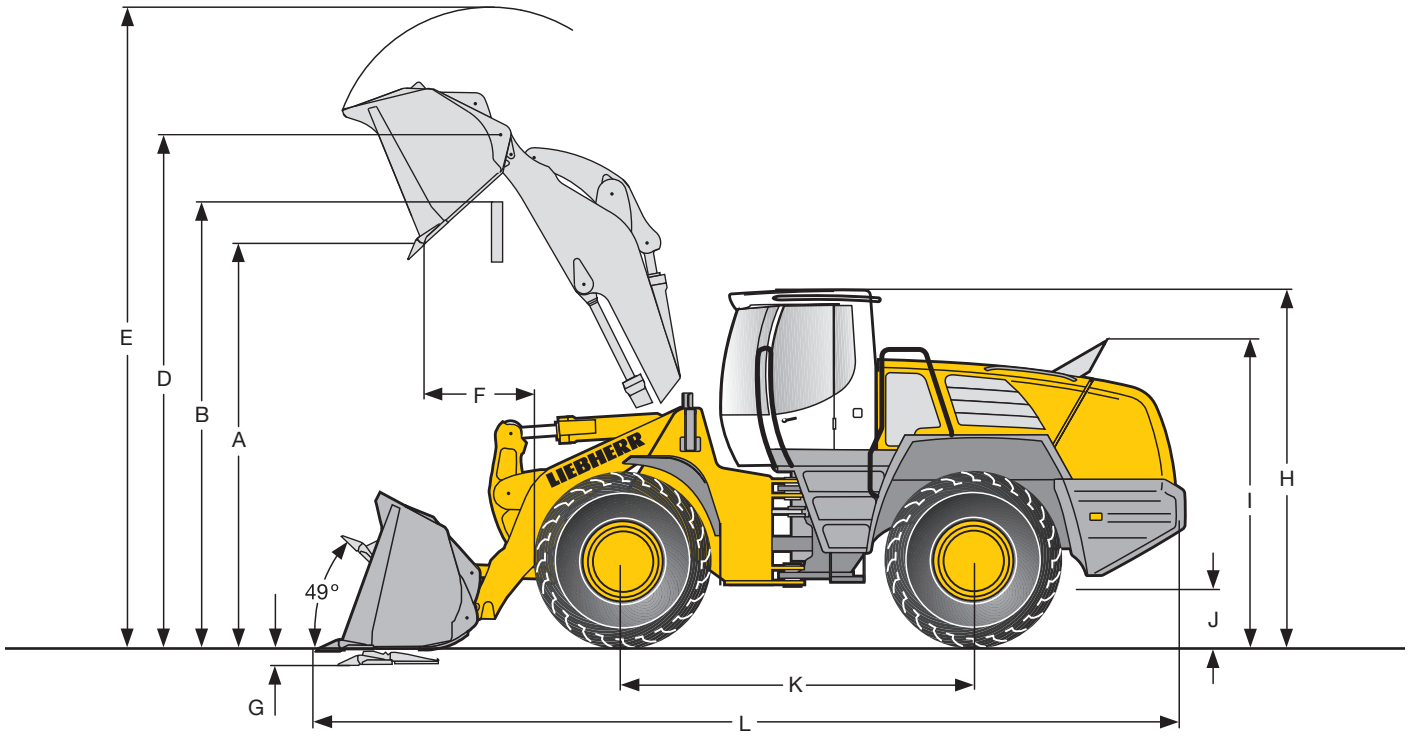
* The figures shown here are valid with tyres above, includes all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load.

= Excavation bucket with back grading edge for hydraulic quick coupler

IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556)
T = Welded-on tooth holder with add-on teeth

Dimensions

High Lift



High Lift			L 550		L 556		L 566		L 576		L 580	
	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	3,250	3,250	3,250	3,250	3,250	3,250
	Bucket capacity according to ISO 7546**	m³	2.6	2.8	2.8	3.0	3.5	4.0	4.0	4.5	4.5	5.0
	Bucket width	mm	2,700	2,700	2,700	2,700	3,000	3,000	3,000	3,000	3,000	3,300
	Specific material weight	t/m³	1.8	1.6	1.8	1.6	1.8	1.6	1.8	1.6	1.8	1.6
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	3,528	3,528
B	Dump-over height	mm	4,100	4,100	4,100	4,100	4,300	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	4,470
D	Max. height of bucket pivot point	mm	4,640	4,640	4,640	4,640	4,778	4,778	4,778	4,778	4,778	4,778
E	Max. operating height	mm	6,090	6,120	6,120	6,160	6,180	6,285	6,285	6,375	6,540	6,540
F	Reach at max. lift height and 45° discharge	mm	940	960	960	1,015	980	1,070	1070	1,127	1,214	1,214
G	Digging depth	mm	80	80	80	80	140	140	140	140	140	140
H	Height above cab	mm	3,365	3,365	3,365	3,365	3,550	3,550	3,550	3,550	3,550	3,550
I	Height above exhaust	mm	2,985	2,985	2,985	2,985	3,100	3,100	3,100	3,100	3,100	3,100
J	Ground clearance	mm	530	530	530	530	565	565	565	565	565	565
K	Wheelbase	mm	3,280	3,280	3,280	3,280	3,580	3,580	3,580	3,580	3,700	3,700
L	Overall length	mm	8,710	8,740	8,740	8,820	9,250	9,370	9,370	9,450	9,570	9,570
	Turning circle radius over outside bucket edge	mm	6,670	6,690	6,690	6,730	7,245	7,280	7,280	7,305	7,410	7,540
	Breakout force (SAE)	kN	115	110	120	115	155	150	155	150	150	150
	Tipping load, straight*	kg	10,310	10,160	11,440	11,260	15,030	14,840	16,540	16,360	18,445	18,450
	Tipping load, articulated at 40°*	kg	9,100	8,970	10,090	9,940	13,200	13,050	14,540	14,380	16,290	16,290
	Operating weight*	kg	17,180	17,210	17,970	18,040	22,750	22,860	24,490	24,610	24,650	24,800
	Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3		26.5R25 L3	

* The figures shown here are valid with tyres above, 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.

** 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 24.

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

= Rehandling bucket

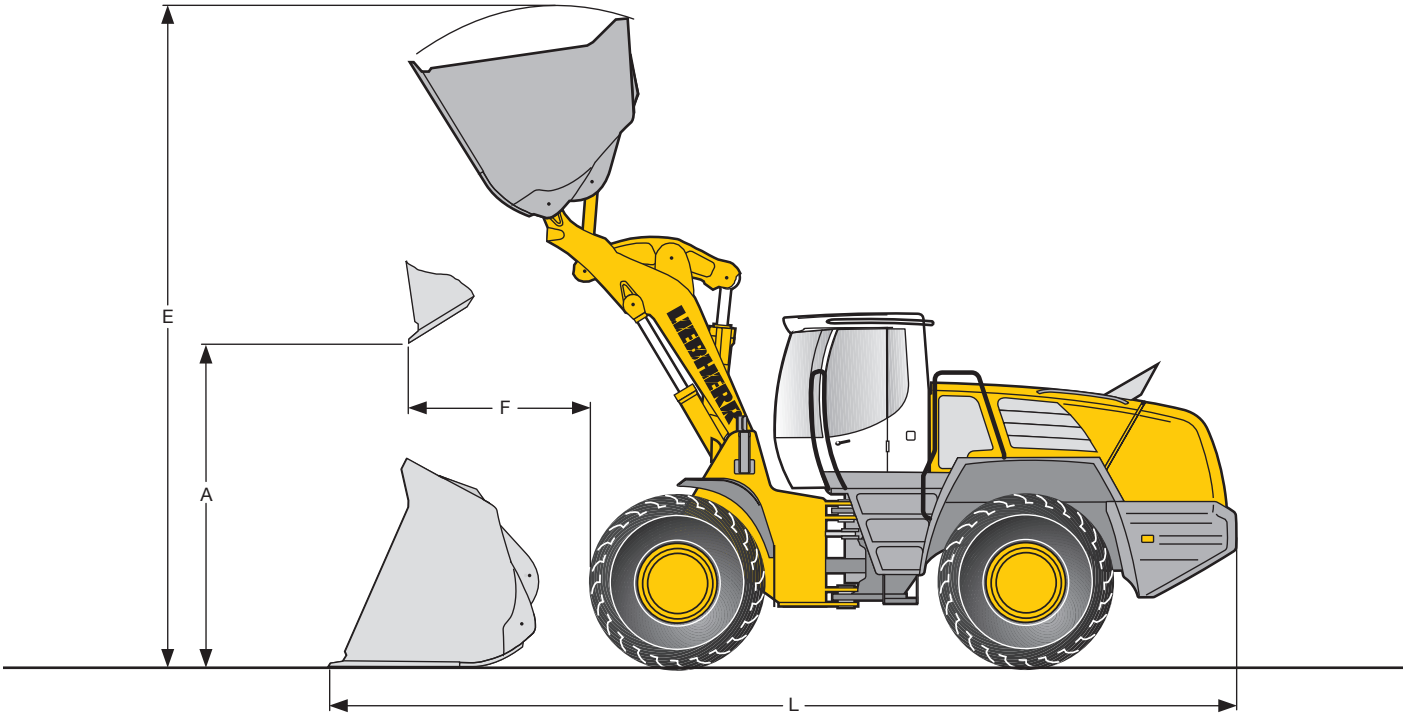
IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14)

ZK = Z-bar linkage

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

Attachment

Light Material Bucket



Light Material Bucket (heavy material density) with Bolt-On Cutting Edge			L 550 STD	L 550 HL	L 556 STD	L 556 HL	L 566 STD	L 566 STD	L 576 STD	L 576 STD	L 580 STD	L 580 STD
	Geometry		IND	IND	IND	IND	ZK	ZK	ZK	ZK	ZK	ZK
	Bucket capacity	m^3	5.0	4.5	6.0	5.0	6.5	8.5	6.5	8.5	6.5	8.5
	Bucket width	mm	2,950	2,950	2,950	2,950	3,200	3,500	3,200	3,500	3,200	3,500
	Specific material weight	t/m^3	0.8	0.8	0.8	0.8	1.0	0.8	1.2	0.9	1.2	1.0
A	Dumping height at max. lift height	mm	2,550	3,220	2,430	3,130	3,015	2,875	3,015	2,875	3,195	3,050
E	Max. operating height	mm	5,900	6,320	6,080	6,480	6,230	6,430	6,230	6,430	6,450	6,650
F	Reach at maximum lift height	mm	1,450	1,250	1,580	1,330	1,415	1,564	1,415	1,564	1,205	1,355
L	Overall length	mm	8,550	8,950	8,730	9,065	9,050	9,255	9,050	9,255	9,170	9,375
	Tipping load, straight*	kg	11,500	9,300	12,070	10,550	16,320	15,760	18,380	17,800	19,640	19,040
	Tipping load, articulated at 40°*	kg	10,140	8,210	10,650	9,300	14,345	13,850	16,150	15,650	17,340	16,815
	Operating weight*	kg	17,400	17,740	18,310	18,500	23,290	23,400	24,700	25,010	24,860	25,170
	Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3		26.5R25 L3	

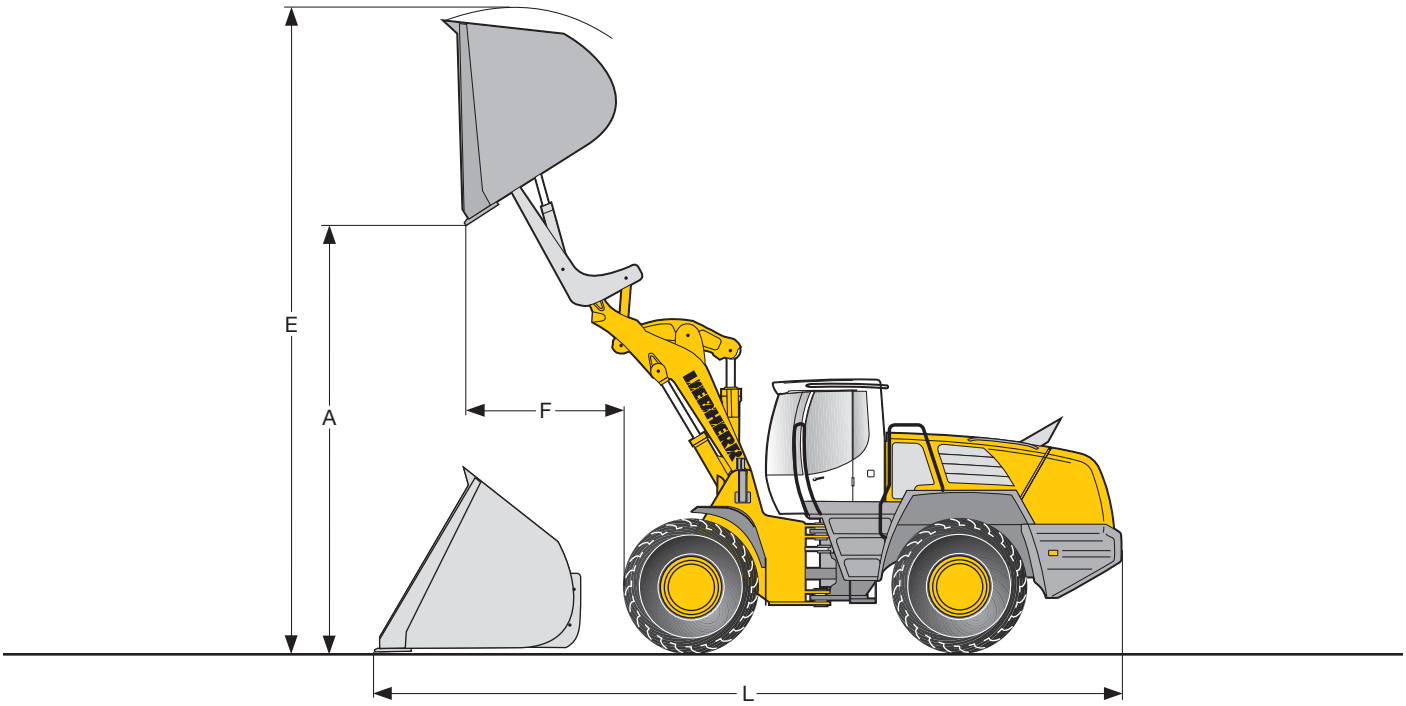
Light Material Bucket (light material density) with Bolt-On Cutting Edge			L 550 STD	L 550 HL	L 556 STD	L 556 HL	L 566 STD	L 576 STD	L 580 STD
	Geometry		IND	IND	IND	IND	ZKK	ZKK	ZKK
	Bucket capacity	m^3	9.0	8.0	10.0	9.0	11.0	11.0	14.0
	Bucket width	mm	3,400	3,400	3,400	3,400	3,700	3,700	4,000
	Specific material weight	t/m^3	0.5	0.5	0.5	0.5	0.4	0.5	0.4
A	Dumping height at max. lift height	mm	2,340	2,920	2,265	2,840	2,810	2,810	2,760
E	Max. operating height	mm	6,110	6,470	6,250	6,600	6,820	6,820	7,170
F	Reach at maximum lift height	mm	1,705	1,520	1,780	1,600	2,200	2,200	2,260
L	Overall length	mm	8,925	9,350	9,035	9,475	9,700	9,700	10,030
	Tipping load, straight*	kg	10,860	9,015	11,870	10,105	12,695	13,410	13,720
	Tipping load, articulated at 40°*	kg	9,580	7,950	10,475	8,920	11,160	11,790	12,110
	Operating weight*	kg	18,290	18,430	19,160	19,345	25,280	26,120	27,260
	Tyre sizes		23.5R25 L4		23.5R25 L4		26.5R25 L4	26.5R25 L4	26.5R25 L4

* The figures shown here are valid with tyres above, 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.

STD = Standard lift arm length
HL = High Lift
IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14).
ZK = Z-bar linkage
ZKK = Z-bar linkage with tilt ram support and hydraulic quick coupler (“Holzknecht”)

Attachment

High-Dump Bucket




High-Dump Bucket (heavy material density) with Bolt-On Cutting Edge			L 550 STD	L 550 HL	L 556 STD	L 556 HL	L 566 STD	L 576 STD	L 580 STD
	Geometry		IND	IND	IND	IND	ZK	ZK	ZK
	Bucket capacity	m³	4.5	4.0	5.0	4.5	6.5	6.5	6.5
	Bucket width	mm	2,700	2,700	2,700	2,700	3,200	3,200	3,200
	Specific material weight	t/m³	0.8	0.8	0.8	0.8	0.8	1.0	1.0
A	Dumping height at max. lift height	mm	4,550	5,040	4,590	5,160	5,320	5,320	5,540
E	Max. operating height	mm	6,680	7,120	6,850	7,300	7,600	7,600	7,820
F	Reach at maximum lift height	mm	1,790	1,560	1,820	1,650	1,830	1,830	1,655
L	Overall length	mm	8,830	9,240	8,950	9,350	9,660	9,660	9,780
	Tipping load, straight*	kg	10,260	8,750	11,020	9,460	13,650	15,580	16,790
	Tipping load, articulated at 40°*	kg	9,050	7,720	9,720	8,340	12,000	13,270	14,820
	Operating weight*	kg	17,860	18,090	19,020	18,960	24,810	25,920	26,380
	Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3	26.5R25 L3

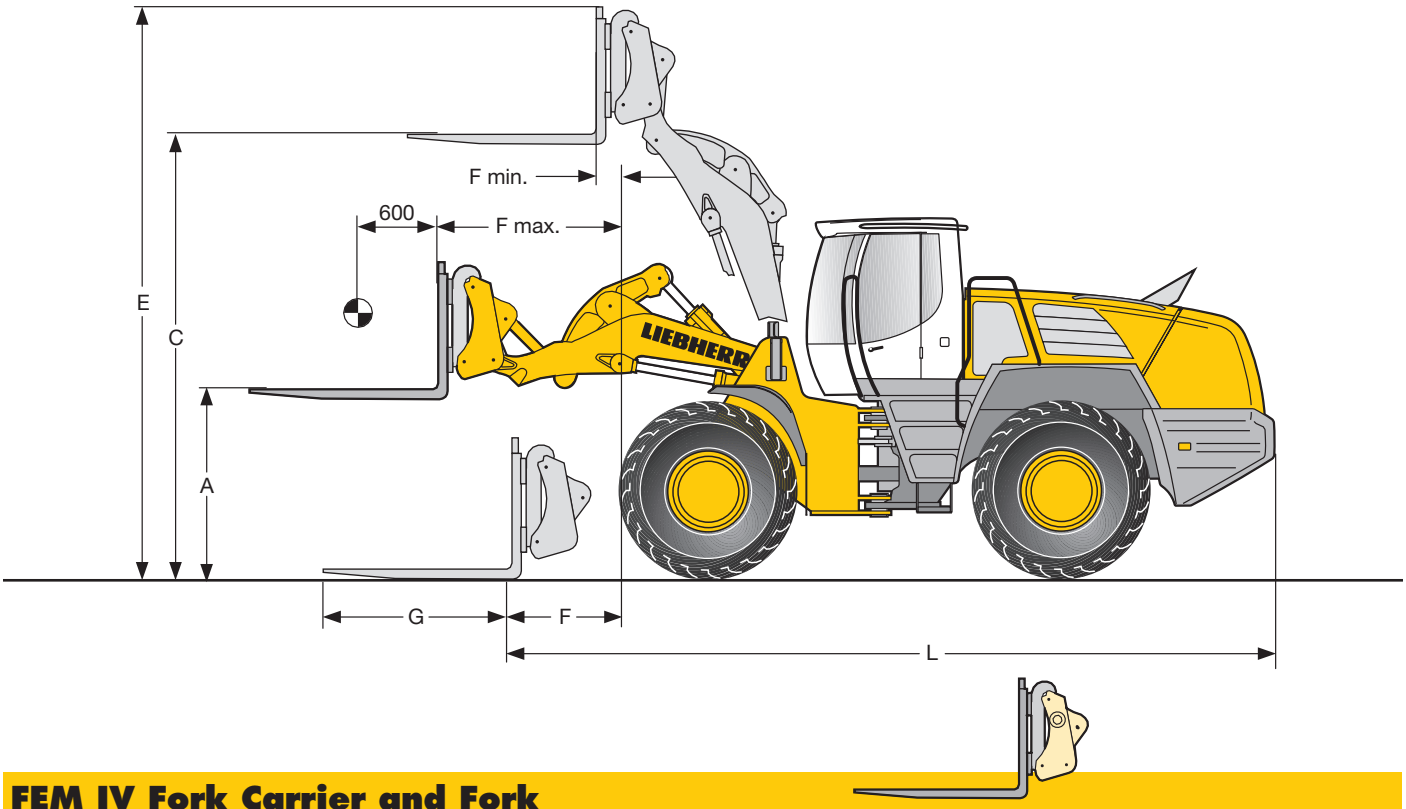
High-Dump Bucket (light material density) with Bolt-On Cutting Edge			L 550 STD	L 550 HL	L 556 STD	L 556 HL	L 566 STD	L 576 STD	L 580 STD
	Geometry		IND	IND	IND	IND	ZKK	ZKK	ZKK
	Bucket capacity	m³	8.0	7.0	9.5	8.0	11.0	11.0	13.0
	Bucket width	mm	3,400	3,400	3,400	3,400	3,700	3,700	4,000
	Specific material weight	t/m³	0.5	0.5	0.5	0.5	0.4	0.5	0.4
A	Dumping height at max. lift height	mm	4,500	4,850	4,610	5,000	4,550	4,550	4,780
E	Max. operating height	mm	6,860	7,160	7,150	7,450	8,280	8,280	8,590
F	Reach at maximum lift height	mm	1,780	1,550	1,860	1,620	2,060	2,060	2,080
L	Overall length	mm	8,900	9,300	9,050	9,450	9,630	9,630	9,960
	Tipping load, straight*	kg	9,910	8,370	10,960	9,320	11,540	12,340	12,830
	Tipping load, articulated at 40°*	kg	8,740	7,350	9,670	8,225	10,140	10,850	11,330
	Operating weight*	kg	18,390	18,780	19,260	19,695	25,580	26,520	27,780
	Tyre sizes		23.5R25 L4		23.5R25 L4		26.5R25 L4	26.5R25 L4	26.5R25 L4

* The figures shown here are valid with tyres above, 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.

STD = Standard lift arm length
HL = High Lift
IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14).
ZK = Z-bar linkage
ZKK = Z-bar linkage with tilt ram support and hydraulic quick coupler (“Holzknecht”)

Attachment

Fork Carrier and Fork



FEM IV Fork Carrier and Fork with Quick Change Device

			L 550		L 556		L 566	L 576	L 580
	Geometry		ZK	IND	ZK	IND	ZK	ZK	ZK
A	Lifting height at max. reach	mm	1,780	1,840	1,780	1,840	1,985	1,985	1,985
C	Max. lifting height	mm	3,680	3,835	3,680	3,835	4,130	4,130	4,350
E	Max. operating height	mm	4,680	4,825	4,680	4,825	5,300	5,300	5,540
F	Reach at loading position	mm	1,020	985	1,020	985	1,250	1,250	1,300
F max.	Max. reach	mm	1,655	1,680	1,655	1,680	1,960	1,960	1,970
F min.	Reach at max. lifting height	mm	835	750	835	750	1,020	1,020	840
G	Fork length	mm	1,500	1,500	1,500	1,500	1,800	1,800	1,800
L	Length – basic machine	mm	7,160	7,160	7,160	7,160	7,920	7,920	8,100
	Tipping load, straight *	kg	9,140	9,190	10,370	10,260	11,600	12,650	14,140
	Tipping load, articulated at 40° *	kg	8,065	8,100	9,150	9,050	10,200	11,050	12,280
	Recommended payload for uneven ground = 60 % of tipping load, articulated [1]	kg	4,550	4,860	5,490	5,430	5,885	6,630	7,500
	Recommended payload for smooth surfaces = 80 % of tipping load, articulated [1]	kg	5,800 [2]	6,480	6,500 [2]	7,240	7,845	8,840	8,840 [2]
	Operating weight *	kg	16,395	16,500	17,080	17,265	22,715	23,530	24,285
	Tyre sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3	26.5R25 L3

* The figures shown here are valid with tyres above, 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.

[1] According to EN 474-3 and ISO 14397

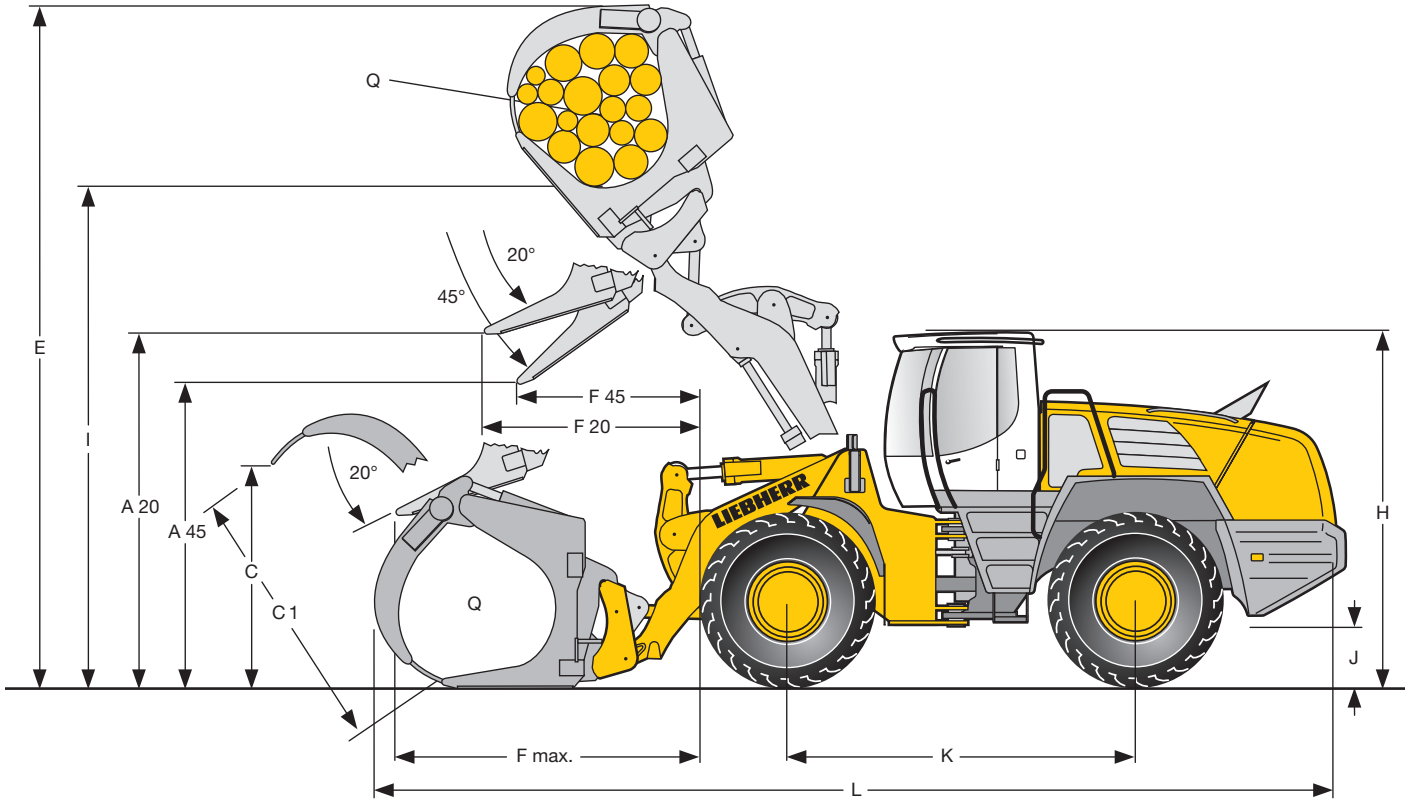
[2] Payload on forks is limited by tilt cylinder

ZK = Z-bar linkage

IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14).

Attachment

Log Grapple (Industrial lift arm)



Log Grapple			L 550	L 556	L 566	L 576	L 580
	Geometry		IND	IND	ZKK	ZKK	ZKK
A20	Discharge height at 20°	mm	3,590	3,570	3,400	3,400	3,630
A45	Discharge height at 45°	mm	3,020	2,950	2,700	2,700	2,880
C	Max. grapple opening in loading position	mm	2,350	2,690	3,000	3,000	3,370
C1	Max. grapple opening	mm	2,465	2,960	3,300	3,300	3,650
E	Max height	mm	6,320	6,480	7,500	7,500	7,800
F20	Reach at max. lifting height at 20° discharge	mm	1,740	1,890	2,340	2,340	2,230
F45	Reach at max. lifting height at 45° discharge	mm	1,410	1,530	1,770	1,770	1,660
F max.	Max. outreach	mm	2,670	2,820	3,260	3,260	3,340
H	Height above cab	mm	3,365	3,365	3,580	3,580	3,580
I	Manipulation height	mm	4,530	4,530	5,200	5,200	5,400
J	Ground clearance	mm	530	530	565	565	565
K	Wheelbase	mm	3,280	3,280	3,580	3,580	3,700
L	Overall length	mm	8,500	8,650	9,600	9,600	9,980
	Width over tyres	mm	2,660	2,660	2,930	2,930	2,930
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	18,890**	19,550**	25,980**	26,790**	27,850**
	Tyre sizes		23.5R25 L4	23.5R25 L4	26.5R25 L4	26.5R25 L4	26.5R25 L4

* The figures shown here are valid with tyres above, 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.

** Data with rear tyres filled with water

ZKK = Z-bar linkage with tilt ram support and hydraulic quick coupler (“Holzknecht”)

IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14).

Technical Data

L 586

Engine

Liebherr diesel engine	D936L A6	
Design	Liebherr diesel engine, water-cooled, exhaust turbo charged with intercooler	
Cylinder inline	6	
Combustion process	Unit pump (PLD) microprocessor controlled	
Rated output according to ISO 9249	250 kW	at 2,000 RPM
Max. torque	1,590 Nm	at 1,500 RPM
Displacement	10.52 litres	
Bore/Stroke	122/150 mm	
Air cleaner	Dry type with main and safety element, pre-cleaner, service indicator on LCD display	
Electrical system		
Operating voltage	24 V	
Capacity	170 Ah	
Alternator	28 V/80 A	
Starter motor	24 V/6.6 kW	

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

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 – 8.0 km/h
Speed range 2 and A2	0 – 16.0 km/h
Speed range A3	0 – 35.0 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	530 mm 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	2,400 mm with all types of tyres

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 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	37° (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 positioning
Max. flow	410 l/min.
Max. pressure	330 bar

Attachment

Geometry	Powerful Z-pattern linkage with tilt cylinder and cast steel cross-tube	
Bearings	Sealed	
Cycle time at nominal load	Lifting	6.5 s
	Dumping	3.0 s
	Lowering (empty)	4.0 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 site 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, heatable rear window ROPS roll over protection per DIN/ISO 3471/ EN 474-3 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
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

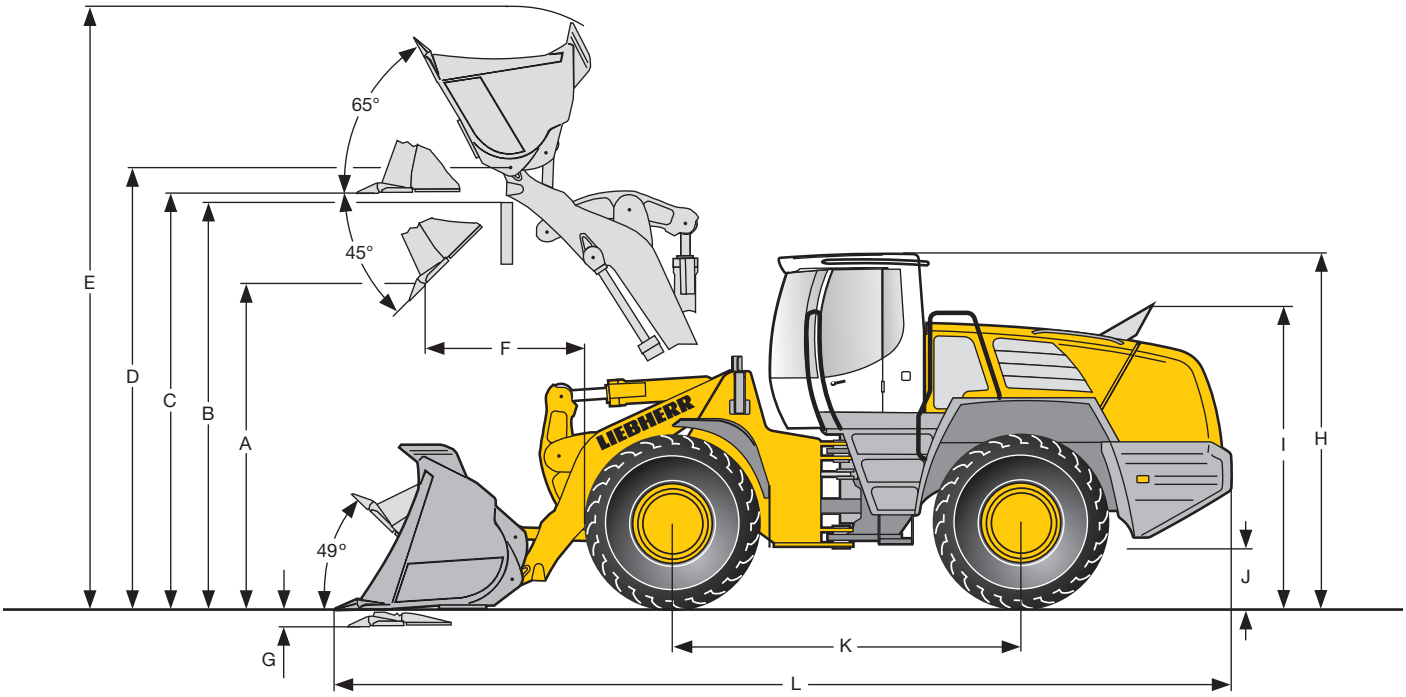
ISO 6396	L_{pA} (inside cab)	= 69 dB(A)
2000/14/EC	L_{WA} (surround noise)	= 107 dB(A)

Capacities

Fuel tank	435 l
Engine oil (including filter change)	43 l
Pump distributor gears	7.7 l
Transmission	11.5 l
Coolant	59 l
Front axle	90 l
Rear axle	56 l
Hydraulic tank	180 l
Hydraulic system, total	350 l
Air condition system R134a	1,250 g

Dimensions

Z-bar linkage



L 586

	Loading Bucket		STD	HL	STD	HL	STD	HL
	Cutting tool		ROB	ROB	T	T	T	T
	Lift arm length	mm	3,150	3,450	3,150	3,450	3,150	3,450
	Bucket capacity according to ISO 7546 **	m^3	5.0	5.0	5.5	5.5	6.0	6.0
	Bucket width	mm	3,400	3,400	3,400	3,400	3,400	3,400
	Specific material weight	t/m^3	2.0	1.8	1.8	1.6	1.6	1.4
A	Dumping height at max. lift height and 45° discharge	mm	3,330	3,745	3,310	3,725	3,260	3,670
B	Dump-over height	mm	4,150	4,500	4,150	4,500	4,150	4,500
C	Max. height of bucket bottom	mm	4,300	4,770	4,330	4,750	4,330	4,750
D	Max. height of bucket pivot point	mm	4,660	5,080	4,640	5,060	4,640	5,060
E	Max. operating height	mm	6,400	6,800	6,500	6,950	6,530	6,980
F	Reach at max. lift height and 45° discharge	mm	1,370	1,370	1,385	1,370	1,430	1,410
G	Digging depth	mm	140	140	100	100	100	100
H	Height above cab	mm	3,760	3,760	3,740	3,740	3,740	3,740
I	Height above exhaust	mm	3,330	3,330	3,310	3,310	3,310	3,310
J	Ground clearance	mm	595	595	575	575	575	575
K	Wheelbase	mm	3,900	3,900	3,900	3,900	3,900	3,900
L	Overall length	mm	9,950	10,300	9,930	10,250	9,960	10,280
	Turning circle radius over outside bucket edge	mm	8,250	8,450	8,250	8,450	8,300	8,500
	Breakout force (SAE)	kN	235	230	235	230	225	220
	Tipping load, straight *	kg	22,690	19,905	22,780	20,010	22,060	19,350
	Tipping load, articulated at 37° *	kg	20,345	17,850	20,430	17,940	19,780	17,340
	Operating weight *	kg	32,585	32,910	31,380	31,700	31,750	32,100
	Tyre sizes		29.5R25 L5			29.5R25 L3		

* The figures shown here are valid with tyres above, 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.

** 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 24.

= Rock bucket with oblique base for quarrying applications

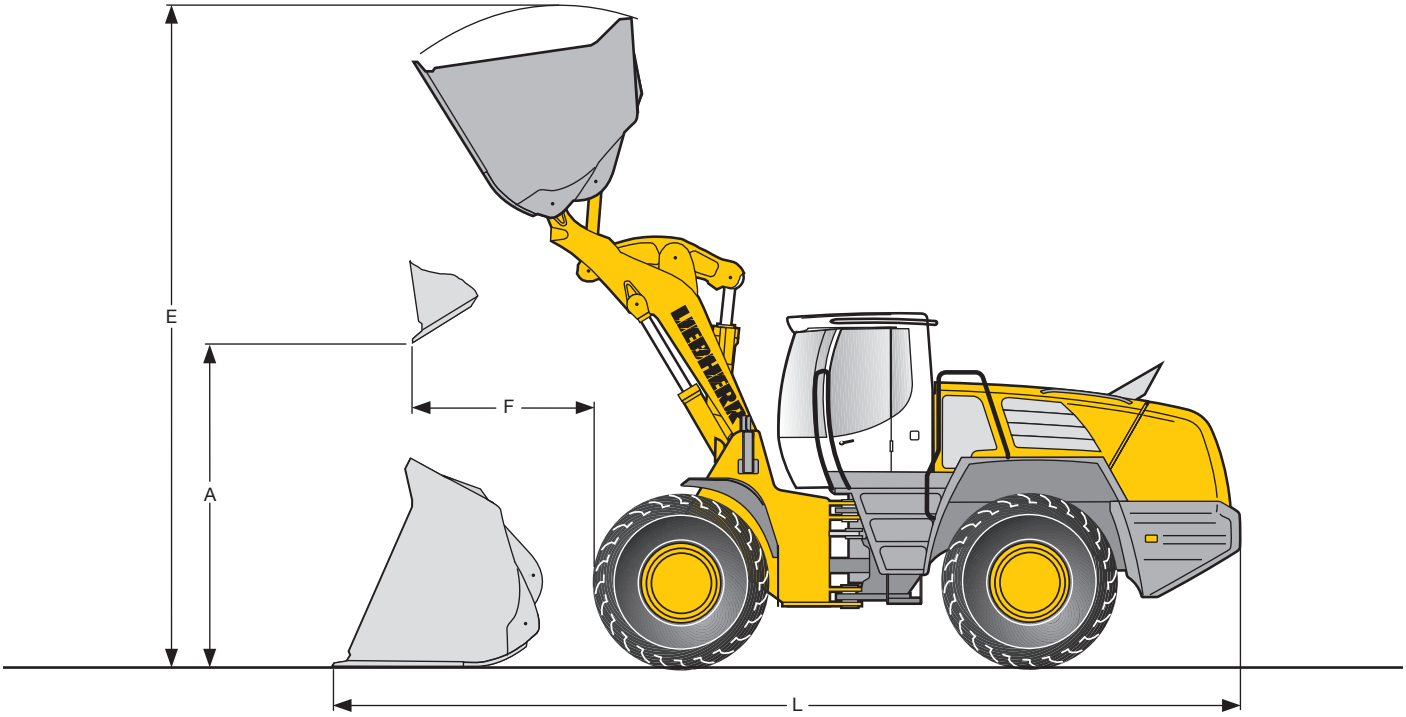
= Rehandling bucket

STD = Standard lift arm length
HL = High Lift
ROB = Rock bucket with delta cutting edge, welded-on tooth holder with add-on teeth and bolted intermediate sections
T = Welded-on tooth holder with add-on teeth

Attachment

Light Material Bucket

L 586



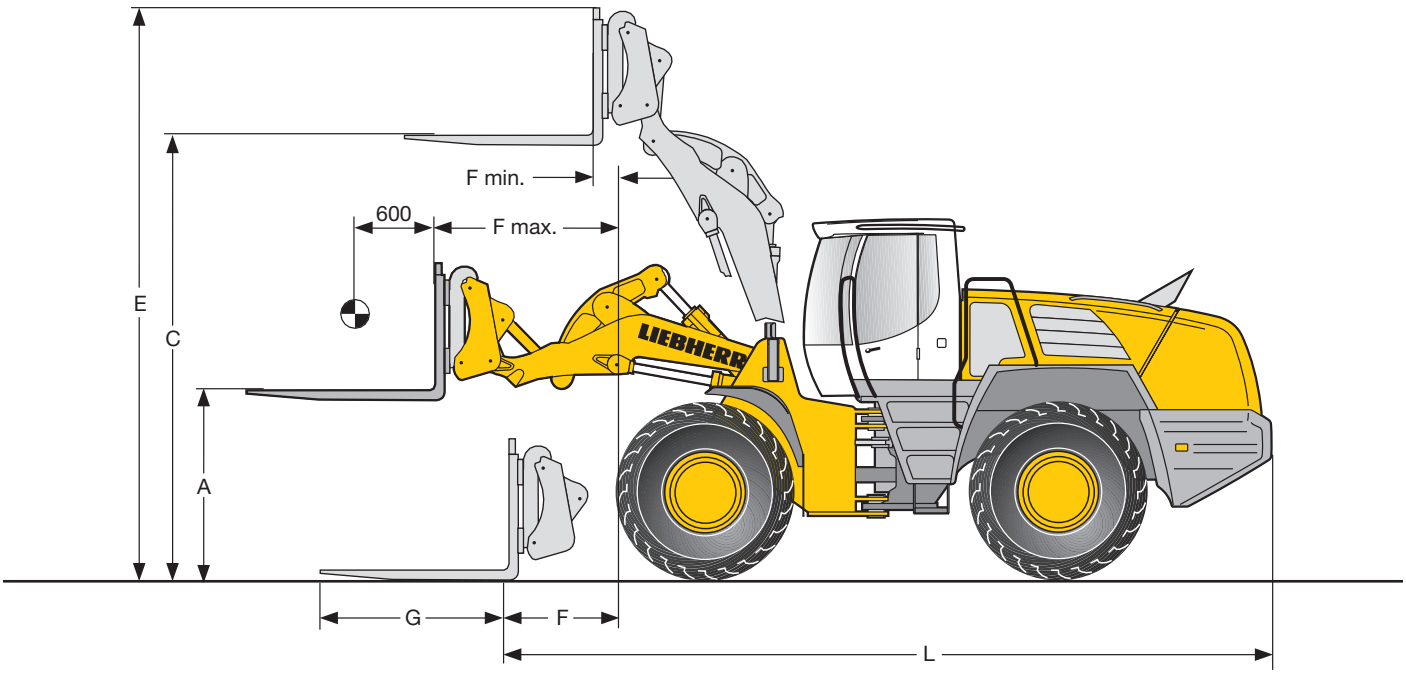
Light Material Bucket
with Bolt-On Cutting Edge

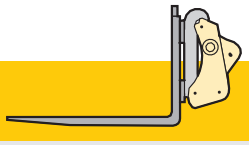
	Bucket capacity	m^3	8.5	11.0
	Bucket width	mm	3,500	3,700
	Specific material weight	t/m^3	1.1	0.8
A	Dumping height at max. lift height	mm	3,115	2,940
E	Max. operating height	mm	6,700	6,835
F	Reach at maximum lift height	mm	1,525	1,770
L	Overall length	mm	9,950	10,250
	Tipping load, straight*	kg	21,680	20,920
	Tipping load, articulated at 37° *	kg	19,445	18,690
	Operating weight*	kg	31,480	32,070
	Tyre sizes		29.5R25 L3	29.5R25 L3

* The figures shown here are valid with tyres above, 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.

Attachment

Fork Carrier and Fork





FEM IV Fork Carrier and Fork
with Quick Change Device

A	Lifting height at max. reach	mm	2,110
C	Max. lifting height	mm	4,420
E	Max. operating height	mm	5,620
F	Reach at loading position	mm	1,300
F max.	Max. reach	mm	2,020
F min.	Reach at max. lifting height	mm	1,010
G	Fork length	mm	1,800
L	Length – basic machine	mm	8,450
	Tipping load, straight *	kg	16,440
	Tipping load, articulated at 37° *	kg	14,740
	Recommended payload for uneven ground = 60 % of tipping load, articulated [1]	kg	8,840
	Recommended payload for smooth surfaces = 80 % of tipping load, articulated [1]	kg	10,000 [2]
	Operating weight *	kg	30,380
	Tyre sizes		29.5R25 L3

* The figures shown here are valid with tyres above, 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.

[1] According to EN 474-3 and ISO 14397

[2] Useful load limited due to FEM IV fork carrier and forks

Tipping Load

ISO 7546

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.

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

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

Bulk Material Densities and Bucket Filling Factors

		t/m³	%
Gravel,	moist	1.9	105
	dry	1.6	105
	wet, 6 – 50 mm	2.0	105
	dry, 6 – 50 mm	1.7	105
	crushed stone	1.5	100
Sand,	dry	1.5	110
	moist	1.8	115
	wet	1.9	110
Gravel and sand,	dry	1.7	105
	wet	2.0	100
Sand and clay		1.6	110

		t/m³	%
Clay,	natural	1.6	110
	dry	1.4	110
	wet	1.65	105
Clay and gravel,	dry	1.4	110
	wet	1.6	100
Earth,	dry	1.3	115
	wet excavated	1.6	110
Topsoil		1.1	110
Weathered rock			
50 % rock, 50 % earth		1.7	100
Basalt		1.95	100

		t/m³	%
Granite		1.8	95
Limestone,	hard	1.65	95
	soft	1.55	100
Sandstone		1.6	100
Slate		1.75	100
Bauxite		1.4	100
Gypsum, broken		1.8	100
Coke		0.5	110
Slag, broken		1.8	100
Coal		1.1	110

Tyres

	Size and tread code		Change of operating weight kg	Width over tyres mm	Change in vertical dimensions mm	Use
L 550						
Goodyear	20.5R25 RT-3B	L3	– 560	2,660	– 40	Gravel
Goodyear	20.5R25 RL-5K	L5	+ 48	2,660	+ 3	Stone, Recycling
Michelin	20.5R25 XHA2	L3	– 580	2,650	– 40	Gravel
Michelin	20.5R25 XLD D2A	L5	– 148	2,650	– 14	Stone, Mining spoil
Michelin	20.5R25 X-MINE D2	L5	+ 120	2,660	0	Stone, Recycling
L 550/L 556						
Bridgestone	23.5R25 VJT	L3	+ 140	2,650	+ 6	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 944	2,660	+ 70	Stone, Recycling
Goodyear	23.5R25 RL-5K	L5	+ 792	2,670	+ 60	Stone, Recycling
Goodyear	23.5R25 RT-3B	L3	+ 154	2,660	+ 25	Gravel
Goodyear	23.5R25 GP-4D	L4	+ 328	2,650	+ 20	Sand, Gravel, Industry
Goodyear	23.5R25 TL-3A+	L3	+ 284	2,650	+ 36	Gravel, Earthworks
Michelin	23.5R25 XHA2	L3	0	2,650	0	Gravel
Michelin	23.5R25 XLD D2A	L5	+ 612	2,660	+ 35	Stone, Mining spoil
Michelin	23.5R25 X-MINE D2	L5	+ 760	2,670	+ 60	Stone, Recycling
L 566						
Bridgestone	23.5R25 VJT	L3	– 406	2,970	– 43	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 400	2,970	+ 15	Stone, Recycling
Goodyear	23.5R25 RL-5K	L5	+ 248	2,980	+ 10	Stone, Recycling
Michelin	23.5R25 X-MINE D2	L5	+ 216	2,990	+ 10	Stone, Recycling
Michelin	23.5R25 XLD D2A	L5	+ 68	2,970	– 15	Stone, Mining spoil
Michelin	23.5R25 XHA2	L3	– 544	2,970	– 49	Gravel
L 566/L 576/L 580						
Bridgestone	26.5R25 VJT	L3	+ 160	2,970	+ 15	Gravel
Bridgestone	26.5R25 VSDL	L5	+ 1,204	2,970	+ 60	Stone, Recycling
Goodyear	26.5R25 RL-5K	L5	+ 1,056	2,980	+ 60	Stone, Recycling
Goodyear	26.5R25 RT-3B	L3	+ 416	2,960	+ 25	Gravel
Goodyear	26.5R25 GP-4D	L4	+ 436	2,970	+ 27	Sand, Gravel, Industry
Goodyear	26.5R25 TL-3A+	L3	+ 348	2,970	+ 31	Gravel, Earthworks
Michelin	26.5R25 XHA2	L3	0	2,970	0	Gravel
Michelin	26.5R25 XLD D2A	L5	+ 696	2,970	+ 40	Stone, Mining spoil
Michelin	26.5R25 X-MINE D2	L5	+ 1,092	2,990	+ 60	Stone, Recycling
L 586						
Bridgestone	29.5R25 VJT	L3	+ 82	3,250	+ 45	Gravel
Bridgestone	29.5R25 VSDL	L5	+ 1,408	3,260	+ 65	Stone, Scrap
Goodyear	29.5R25 RL5K	L5	+ 1,664	3,290	+ 60	Industry, Stone
Michelin	29.5R25 XHA2	L3	0	3,250	0	Gravel
Michelin	29.5R25 XLD D2A	L5	+ 896	3,260	+ 20	Stone, Mining spoil, Recycling
Michelin	29.5R25 X-Mine D2	L5	+ 1,220	3,280	+ 40	Stone, Scrap

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

The Liebherr Wheel Loaders

Stereoloader

		L 506 Stereo	L 507 Stereo	L 508 Stereo	L 509 Stereo	L 510 Stereo	L 514 Stereo
Tipping load	kg	3,231	3,501	3,824	4,225	4,581	5,680
Bucket capacity	m³	0.8	0.9	1.0	1.1	1.2	1.5
Operating weight	kg	5,120	5,240	5,480	6,080	6,250	8,350
Engine output	kW/HP	46/63	48/65	48/65	60/82	60/82	72/98

Wheel Loader

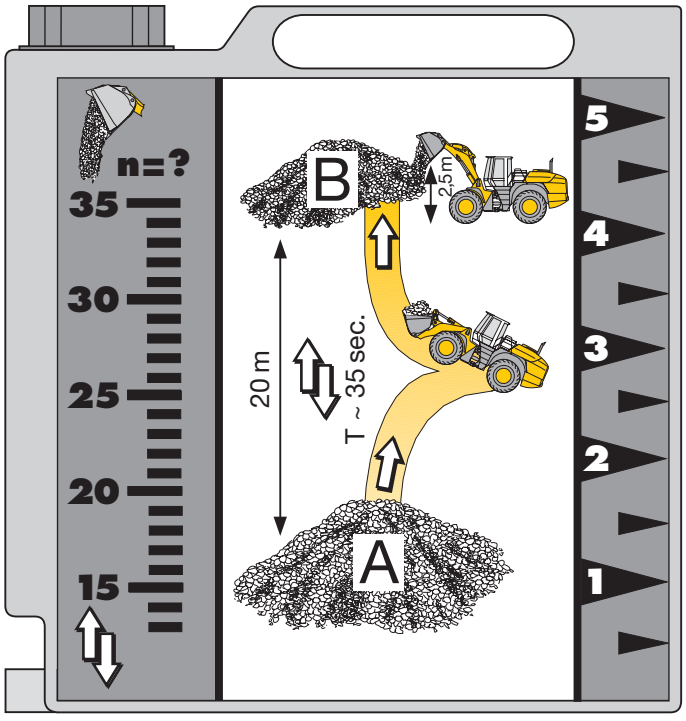
		L 524	L 528	L 538	L 542	L 550
Tipping load	kg	7,300	8,100	9,020	9,760	11,650
Bucket capacity	m³	2.0	2.2	2.5	2.7	3.2
Operating weight	kg	10,600	11,100	12,755	13,320	16,525
Engine output	kW/HP	86/117	86/117	105/143	105/143	129/175

Wheel Loader

		L 556	L 566	L 576	L 580	L 586
Tipping load	kg	13,140	15,550	17,200	18,000	20,430
Bucket capacity	m³	3.6	4.0	4.5	5.0	5.5
Operating weight	kg	17,270	22,500	24,260	24,580	31,380
Engine output	kW/HP	140/191	190/259	200/272	200/272	250/340

07.10

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
L 524: 2.0 m³	n = 44	3.2	9.1
L 528: 2.2 m³	n = 43	2.9	9.3
L 538: 2.5 m³	n = 36	2.9	11.1
L 542: 2.7 m³	n = 35	2.7	11.4
L 550: 3.2 m³	n = 31	2.6	12.9
L 556: 3.6 m³	n = 27	2.9	14.5
L 566: 4.0 m³	n = 22	2.9	18.2
L 576: 4.5 m³	n = 21	2.9	19.1
L 580: 5.0 m³	n = 20	2.8	20.0
L 586: 5.5 m³	n = 14	3.2	28.5*

* Equipped with L5 tires and 5.5 m³ HD bucket

Equipment

Basic Machine

	550	556	566	576	580	586
Exhaust pipe – stainless steel	+	+	+	+	+	+
Automatic central lubrication system	+	+	+	+	+	•
Battery master switch	•	•	•	•	•	•
Fuel particle filter	+	+	+	+	+	+
Electronic crowding force control	•	•	•	•	•	•
Electronical theft protection with/without driver identification	+	+	+	+	+	+
Automatic travel mode	•	•	•	•	•	•
Headlights	•	•	•	•	•	•
Ride control	•	•	•	•	•	•
Fluff trap for radiator	+	+	+	+	+	+
Large-mesh radiator	+	+	+	+	+	–
Pre-heat system for cold starting	•	•	•	•	•	•
Creep speed/Cruise control	•	•	•	•	•	•
Combined inching-braking system	•	•	•	•	•	•
Multi-disc limited slip differentials in both axles	•	•	•	•	•	•
Noise suppression package	+	+	+	+	+	–
LiDAT Standard (Liebherr Data Transfer System)	+	+	+	+	+	+
LiDAT Plus (extended Liebherr Data Transfer System)	+	+	+	+	+	+
Liebherr travel gear	•	•	•	•	•	•
Liebherr bio degredable hydraulic oil	+	+	+	+	+	+
Air cleaner system with pre-filter	•	•	•	•	•	•
Reversible fan drive	+	+	+	+	+	+
Emergency steering system	•	•	•	•	•	•
Back-up alarm	+	+	+	+	+	+
Road ballast	–	–	–	+	–	–
Lockable doors, service flap and engine hood	•	•	•	•	•	•
Rubber widening for rear (in steel) and front mudguards	–	–	–	–	–	+
Toolbox with toolkit	•	•	•	•	•	•
Weighing device (integrated)	+	+	+	+	+	+
Towing hitch	•	•	•	•	•	•
Two working area lights at rear	•	•	•	•	•	•
Two tail lights	•	•	•	•	•	•
20 km/h speed limiting	+	+	+	+	+	+

Operator's Cab

	550	556	566	576	580	586
Storage box	•	•	•	•	•	•
Lockable storage compartment	•	•	•	•	•	•
Ashtray	•	•	•	•	•	•
Operator's package	•	•	•	•	•	•
Operator's seat – adjustable in 6 ways	•	•	•	•	•	•
Operator's seat with active suspension, with seat climate control and seat heating	–	–	+	+	+	+
Operator's seat – air sprung with seat heating	+	+	+	+	+	+
Fire extinguisher 2 kg	+	+	+	+	+	+
Cup holder	•	•	•	•	•	•
Height-adjustable steering column	+	+	+	+	+	+
Horn	•	•	•	•	•	•
Joystick steering	+	+	+	+	+	+
Floor mat	•	•	•	•	•	•
Clothes hook	•	•	•	•	•	•
Air conditioning system	•	•	•	•	•	•
Storage box with cooling function	+	+	+	+	+	+
LED operating spotlight, front/rear	+	+	+	+	+	+
Liebherr joystick control – adjustable	•	•	•	•	•	•
Radio set	+	+	+	+	+	+
Provision for radio including loudspeaker	+	+	+	+	+	+
Rear view monitoring with camera	+	+	+	+	+	+
Interior rear-view mirror	•	•	•	•	•	•
Amber beacon	+	+	+	+	+	+
Soundproof ROPS/FOPS cab with tinted safety glass front windscreen, heatable rear window	•	•	•	•	•	•
Wash/wipe system for windscreen and rear window	•	•	•	•	•	•
Sliding window	+	+	+	+	+	+
Protective ventilation system	+	+	+	+	+	+
Windscreen guard	+	+	+	+	+	+
Sun visor	•	•	•	•	•	•
Dust filter system	+	+	+	+	+	+
Plug 12 V	•	•	•	•	•	•
First aid kit	+	+	+	+	+	+
Adjustable steering column	•	•	•	•	•	•
Four working area lights at front	•	•	•	•	•	•
Hot water heater with defroster and recirculated-air system	•	•	•	•	•	•
Wide angle mirror	+	+	+	+	+	+
Xenon working lights front	+	+	+	+	+	+
Two or four working area lights rear	+	+	+	+	+	+
2in1 steering system – changeable	+	+	+	+	+	–

Instruments for:

	550	556	566	576	580	586
Timer for hours of operation	•	•	•	•	•	•
Flashing turn indicators	•	•	•	•	•	•
Diagnosis system	•	•	•	•	•	•
Rev. counter	•	•	•	•	•	•
Forward – reverse travel	•	•	•	•	•	•
Travel speed ranges and gear selected	•	•	•	•	•	•
High-beam headlights	•	•	•	•	•	•
Fuel reserve	•	•	•	•	•	•
Engine oil temperature	•	•	•	•	•	•
Reverse travel	•	•	•	•	•	•
Speedometer	•	•	•	•	•	•
Clock	•	•	•	•	•	•
Diesel engine pre-heat	•	•	•	•	•	•
Forward travel	•	•	•	•	•	•

Warning Lights for:

	550	556	566	576	580	586
Battery charge	•	•	•	•	•	•
Flow through emergency steering system	•	•	•	•	•	•
Parking brake	•	•	•	•	•	•
Hydraulic oil temperature	•	•	•	•	•	•
Air cleaner blockage	•	•	•	•	•	•
Engine oil pressure	•	•	•	•	•	•
Engine overheat	•	•	•	•	•	•

Audible Warnings for:

	550	556	566	576	580	586
Overheat of hydraulic fluid	•	•	•	•	•	•
Engine oil pressure	•	•	•	•	•	•
Engine overheat	•	•	•	•	•	•
Emergency steering system	•	•	•	•	•	•

Function Keys for:

	550	556	566	576	580	586
Working lights rear	•	•	•	•	•	•
Working lights front	•	•	•	•	•	•
Electronic tractive force adaptation	•	•	•	•	•	•
Speed range selection	•	•	•	•	•	•
Headlights	•	•	•	•	•	•
Ride control	•	•	•	•	•	•
Parking brake	•	•	•	•	•	•
Blower	•	•	•	•	•	•
Heater	•	•	•	•	•	•
Hoist kick-out	+	+	+	+	+	+
Air conditioning	•	•	•	•	•	•
Creep speed	•	•	•	•	•	•
Mode switch	•	•	•	•	•	•
Amber beacon	•	•	•	•	•	•
Automatic bucket positioner	•	•	•	•	•	•
Wash/wipe system for rear window	•	•	•	•	•	•
Float position	•	•	•	•	•	•
Road travel	•	•	•	•	•	•
Hazard warning flashers	•	•	•	•	•	•
Additional hydraulics	•	•	•	•	•	•

Equipment

	550	556	566	576	580	586
Automatic hoist kick out – adjustable	+	+	+	+	+	+
Automatic bucket positioner – adjustable	•	•	•	•	•	•
Fork carrier and lift forks	+	+	+	+	+	+
High Lift arms	+	+	+	+	+	+
High-dump bucket	+	+	+	+	+	+
Log Grapple	+	+	+	+	+	+
Hydraulic quick-change device	+	+	+	+	+	+
Hydraulic servo control of working hydraulics	•	•	•	•	•	•
Industrial lift arm	+	+	+	+	+	–
Comfort control	+	+	+	+	+	+
Loading buckets with and without teeth, or bolt-on cutting edge	+	+	+	+	+	+
Country-specific versions	+	+	+	+	+	+
Light material bucket	+	+	+	+	+	+
Float position	•	•	•	•	•	•
Z-bar linkage	•	•	•	•	•	•
3rd hydraulic control circuit	+	+	+	+	+	+
3rd and 4th hydraulic control circuits	+	+	+	+	+	+

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

All illustrations and data may differ from standard equipment. Subject to change without notice.

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