

Large wheel loaders. L 556 - L 580

„2plus2“

„2plus2“

Tipping load, articulated: 13,140 kg – 18,000 kg



LIEBHERR

L 556 „2plus2“

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

L 566 „2plus2“

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

L 576 „2plus2“

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

L 580 „2plus2“

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



Economy

Compared to conventional travel gears, the Liebherr driveline achieves a reduction in fuel consumption for wheel loaders of 25 % or more! 5 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.

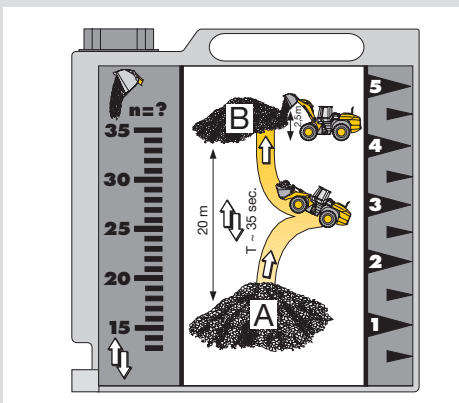
Reliability

All the materials used in these 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 with 2plus2 gearbox 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 travel gears, the Liebherr driveline achieves a reduction in fuel consumption for wheel loaders of 25 % or more! 5 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 (CO₂). By saving of 5 litres per operating hour, up to 15,000 kg less CO₂ is produced in 1,000 operating hours – that means lower costs and active environmental protection.

Low noise emission

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



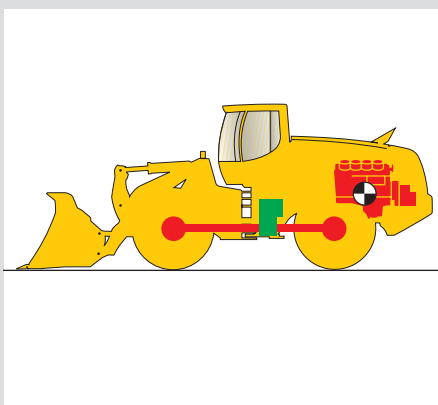
Reduced brake wear

- 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.



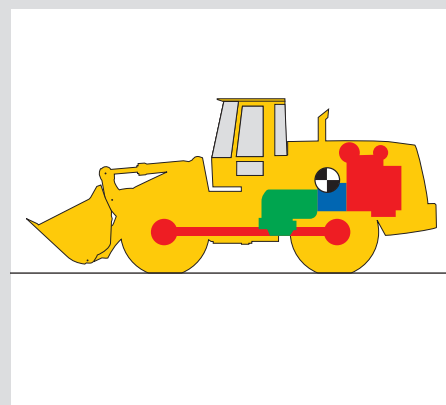
Reduced tyre wear

- 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

The large Liebherr wheel loaders are equipped with the 2plus2 gearbox. Tractive force and speed are automatically adjusted to the requirements without that the driver has to shift. 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 “Holzknecht” 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 manoeuvre quickly and efficiently – an ideal basis for high handling capacity.



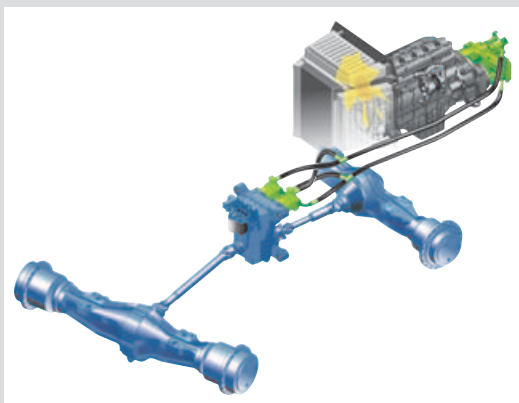
Conventional travel gear

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



An all-purpose loader

- The choice between “Holzknecht” or Z pattern linkage means that the loader can always be configured for every job application – Holzknacht for industrial use; 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 – with a 2plus2 gearbox – but without a reversing gear unit.



Reliability

All the materials used in these 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.

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 minimising the number of parts susceptible to 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 to the 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 driver'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 driver'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 driver 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
- Auxillary 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 with 2plus2 gearbox 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 driver to achieve better performance and productivity in the greatest possible comfort. The displays, controls and driver's seat are carefully co-ordinated 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 with its 2plus2 gearbox 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 accessibly 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 work, time and money saving is the result!



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 driver 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 556 2plus2	L 566 2plus2	L 576 2plus2	L 580 2plus2
Liebherr diesel engine	D934L A6	D936L A6	D936L A6	D936L A6
Design	Liebherr diesel engine, water-cooled, exhaust turbo charged with intercooler			
Cylinder inline	4	6	6	6
Combustion process	PLD			
Rated output according to ISO 9249				
to ISO 9249	kW 140	190	200	200
at RPM 2000	2000	2000	2000	2000
Max. torque				
at RPM 900	Nm 900	1200	1270	1270
at RPM 1300	1500	1500	1500	1500
Displacement	litres 7,01			
Bore/Stroke	mm 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
Capacity	Ah 135	170	170	170
Alternator	V/A 28/80	28/80	28/80	28/80
Starter motor	V/kW 24/5,4	24/6,6	24/6,6	24/6,6



Travel Drive

Stepless hydrostatic travel drive	
Design "2plus2"	Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit with one 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 0–10,0 km/h Speed range 2 and A2 0–20,0 km/h Speed range A3 0–40,0 km/h The quoted speeds apply with the tyres that are standard equipment on the loader



Axles

Four-wheel drive	Fixed
Front axle	Centre pivot, with 13° oscillating angle to each side
Rear axle	
L 556	L 566
2plus2	2plus2
L 576	L 580
2plus2	2plus2
Height of obstacles which can be driven over	mm 500
	520
	520
	520
	520
Differentials	Automatic limited-slip differentials with 45 % locking action in both axles
Reduction gear	Planetary final drive in wheel hubs
Track width	2000 mm with all types of tyres (L 556 2plus2) 2230 mm with all types of tyres (L 566 2plus2, L 576 2plus2, L 580 2plus2)



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 wheel hubs (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. 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 control and pressure cutoff
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	l/min. 234
Max. pressure	bar 330



Attachment

Geometry	Powerful Z-pattern linkage with tilt cylinder and cast steel cross-tube
Bearings	Sealed
Cycle time at nominal load	
Lifting	5,5 s
Dumping	2,3 s
Lowering (empty)	2,7 s



Operator's Cab

Design	On elastic bearing on rear section, soundproof ROPS/FOPS cab. Driver's door with optional sliding window, 180° opening angle, fold-out window on right side, 45° 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 ROPS roll over protection per DIN/ISO 3471/EN 474-3 FOPS falling objects protection per DIN/ISO 3449/EN 474-1
Operator's seat	6 way adjustable seat with seat belt, adjustable for operator's weight
Heating and air conditioning	Driver'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, automatic air conditioning optional



Noise Emission

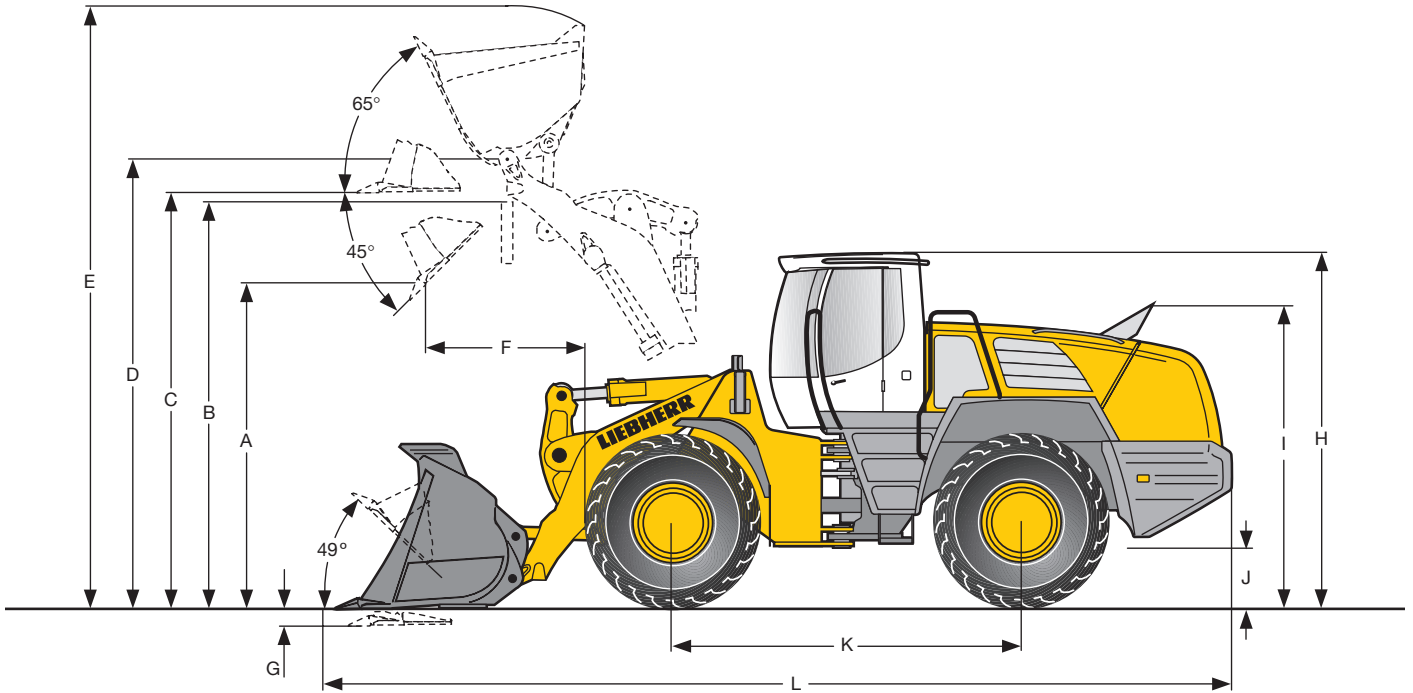
ISO 6396	L 556	L 566	L 576	L 580
L _{DA} (inside cab)	2plus2	2plus2	2plus2	2plus2
L _{WA} (surround noise)	69	69	69	69
2000/14/EG				
L _{WA} (surround noise)	104	105	105	105



Capacities

Fuel tank	L 556	L 566	L 576	L 580
(including filter change)	2plus2	2plus2	2plus2	2plus2
L 300	400	400	400	400
Engine oil				
(including filter change)	l 31	43	43	43
Pump distributor gears	l 2,5	2,5	2,5	2,5
Transmission "2plus2"	l 11,5	11,5	11,5	11,5
Coolant	l 42	52	52	52
Front axle	l 35	51	51	58
Rear axle	l 27,5	51	51	50
Hydraulic tank	l 135	135	135	135
Hydraulic system, total	l 220	260	260	260

Dimensions



Loading Bucket

		L 556 ^{2plus2}		L 566 ^{2plus2}		L 576 ^{2plus2}		L 580 ^{2plus2}	
Cutting tools		T	T	T	T	T	T	T	T
Bucket capacity according to ISO 7546**	m ³	3,6	3,8	4,0	4,5	4,5	5,0	5,0	5,5
Bucket width	mm	2700	2700	3000	3000	3000	3000	3300	3300
Specific material weight	t/m ³	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	2850	2760	3240	3185	3187	3105	3320	3250
B Dump-over height	mm	3500	3500	3900	3900	3900	3900	4100	4100
C Max. height of bucket bottom	mm	3645	3645	4050	4050	4050	4050	4270	4270
D Max. height of bucket pivot point	mm	3915	3915	4360	4360	4360	4360	4580	4580
E Max. operating height	mm	5460	5480	5870	5960	5960	6040	6340	6420
F Reach at max. lift height and 45° discharge	mm	1160	1232	1180	1238	1233	1321	1150	1220
G Digging depth	mm	85	85	100	100	100	100	100	100
H Height above cab	mm	3365	3365	3550	3550	3550	3550	3550	3550
I Height above exhaust	mm	2985	2985	3100	3100	3100	3100	3100	3100
J Ground clearance	mm	530	530	565	565	565	565	565	565
K Wheelbase	mm	3280	3280	3580	3580	3580	3580	3700	3700
L Overall length	mm	8240	8350	8912	8992	8992	9112	9300	9400
Turning circle radius over outside bucket edge	mm	6440	6470	7096	7110	7110	7145	7420	7450
Lifting force (SAE)	kN	185	184	264	264	264	262	250	248
Breakout force (SAE)	kN	130	120	200	190	190	175	175	160
Tipping load, straight*	kg	14890	14650	17690	17010	19570	19150	20390	19990
Tipping load, articulated at 37°*	kg	13350	13135	15850	15240	17530	17160	18330	17970
Tipping load, articulated at 40°*	kg	13140	12930	15550	14950	17200	16840	18000	17650
Operating weight*	kg	17270	17320	22500	22625	24260	24360	24580	24730
Tyre sizes		23.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA	

* 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 21.



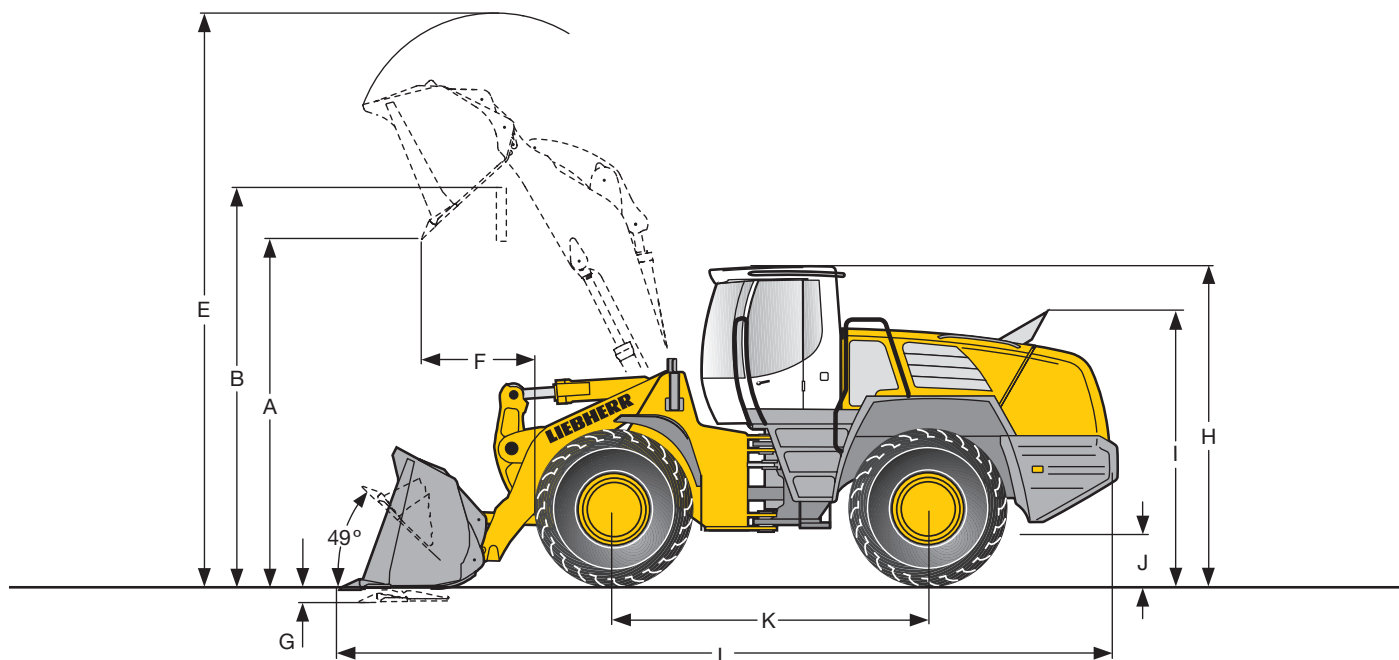
= Loading bucket with back grading edge



= Welded-on tooth holder with add-on teeth

Attachment

High Lift



High Lift

		L 556 ^{2plus2}		L 566 ^{2plus2}		L 576 ^{2plus2}		L 580 ^{2plus2}	
Cutting tools		T	T	T	T	T	T	T	T
Bucket capacity according to ISO 7546**	m ³	3,0	3,3	3,5	4,0	4,0	4,5	4,5	5,0
Bucket width	mm	2700	2700	3000	3000	3000	3000	3000	3300
Specific material weight	t/m ³	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	3630	3590	3745	3665	3665	3610	3528	3528
B Dump-over height	mm	4100	4100	4300	4300	4300	4300	4300	4300
C Max. height of bucket bottom	mm	4330	4330	4470	4470	4470	4470	4470	4470
D Max. height of bucket pivot point	mm	4600	4600	4778	4778	4778	4778	4778	4778
E Max. operating height	mm	6050	6100	6180	6285	6285	6375	6540	6540
F Reach at max. lift height and 45° discharge	mm	915	960	980	1070	1070	1127	1214	1214
G Digging depth	mm	130	130	140	140	140	140	140	140
H Height above cab	mm	3365	3365	3550	3550	3550	3550	3550	3550
I Height above exhaust	mm	2985	2985	3100	3100	3100	3100	3100	3100
J Ground clearance	mm	530	530	565	565	565	565	565	565
K Wheelbase	mm	3280	3280	3580	3580	3580	3580	3700	3700
L Overall length	mm	8650	8720	9250	9370	9370	9450	9570	9570
Turning circle radius over outside bucket edge	mm	6670	6700	7245	7280	7280	7305	7410	7540
Lifting force (SAE)	kN	130	130	230	230	230	230	230	230
Breakout force (SAE)	kN	125	120	155	150	155	150	150	150
Tipping load, straight*	kg	12280	12240	15030	14840	16540	16360	18445	18450
Tipping load, articulated at 40°*	kg	10835	10800	13200	13050	14540	14380	16290	16290
Operating weight*	kg	17400	17440	22750	22860	24490	24610	24650	24800
Tyre sizes		23.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA	

* 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 21.

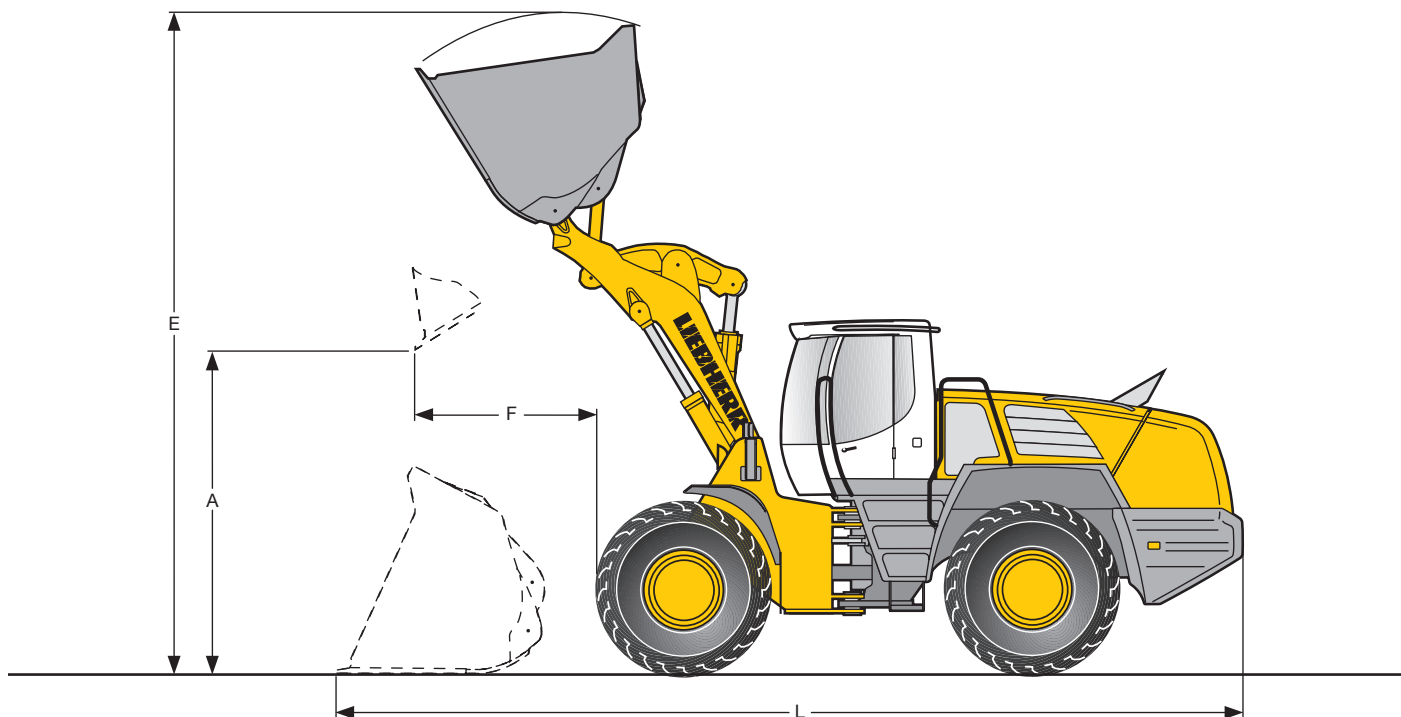


= Loading bucket with back grading edge

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

Attachment

Light Material Bucket



Light Material Bucket with Bolt-On Cutting Edge

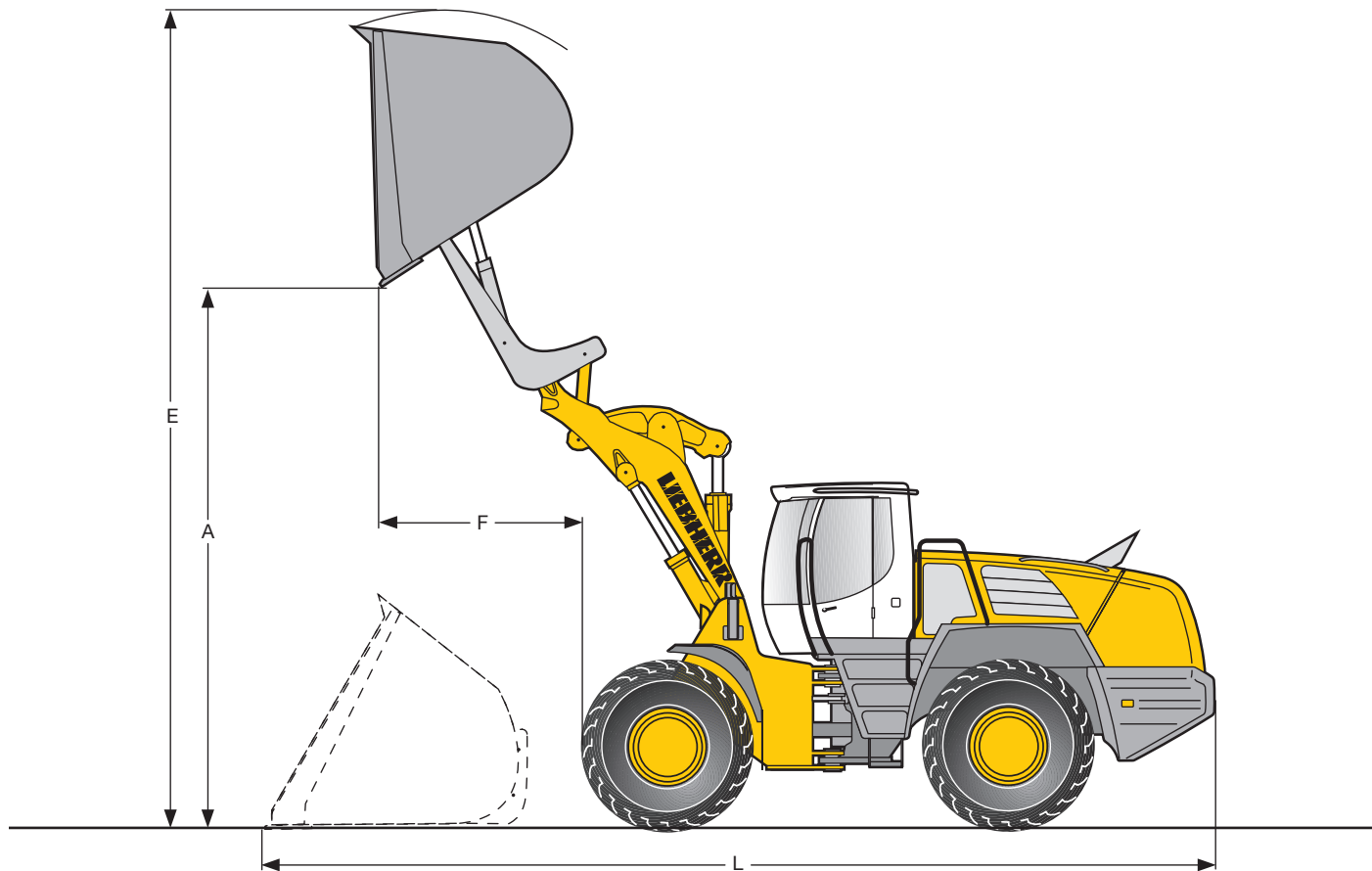


		L 556 ^{2plus2}		L 566 ^{2plus2}		L 576 ^{2plus2}		L 580 ^{2plus2}	
Bucket capacity	m ³	5,0	6,0	6,5	8,5	6,5	8,5	6,5	8,5
Bucket width	mm	2950	2950	3200	3500	3200	3500	3200	3500
Specific material weight	t/m ³	1,1	0,8	1,0	0,8	1,2	0,9	1,2	1,0
A Dumping height at max. lift height	mm	2592	2454	3015	2875	3015	2875	3195	3050
E Max. operating height	mm	5575	5775	6230	6430	6230	6430	6450	6650
F Reach at maximum lift height	mm	1358	1502	1415	1564	1415	1564	1205	1355
L Overall length	mm	8400	8600	9050	9255	9050	9255	9170	9375
Tipping load, straight*	kg	13840	13580	16320	15760	18380	17800	19640	19040
Tipping load, articulated*	kg	12210	11990	14345	13850	16150	15650	17340	16815
Operating weight*	kg	17690	17830	23290	23400	24700	25010	24860	25170
Tyre sizes		23.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA		26.5R25 Michelin XHA	

* 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

High-Dump Bucket



High-Dump Bucket with Bolt-On Cutting Edge

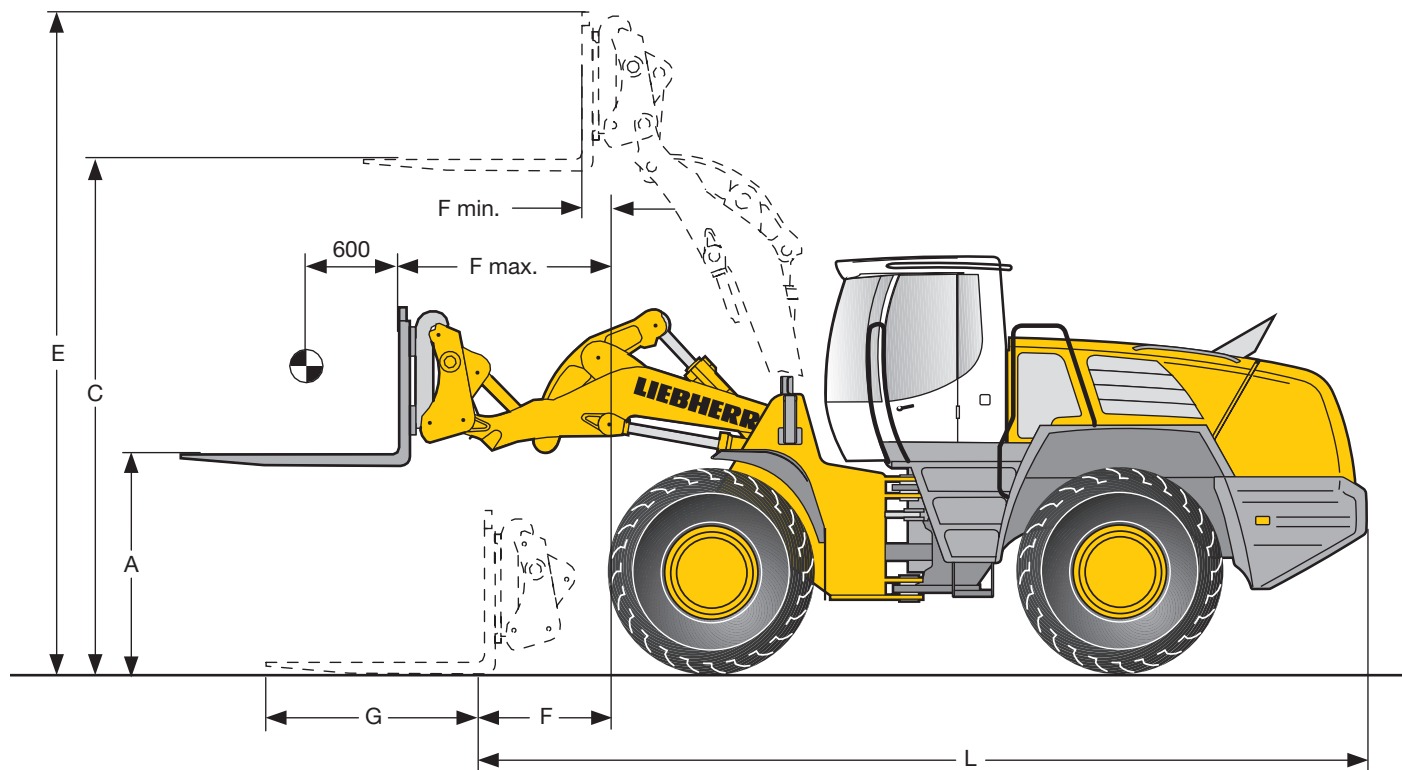


		L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}	
Bucket capacity	m ³	4,5	5,0	6,5	6,5	
Bucket width	mm	2700	2700	3200	3200	
Specific material weight	t/m ³	1,1	0,9	0,8	1,0	
A Dumping height at max. lift height	mm	4560	4730	5320	5320	5540
E Max. operating height	mm	6600	6800	7600	7600	7820
F Reach at maximum lift height	mm	1660	1620	1830	1830	1655
L Overall length	mm	8920	9050	9660	9660	9780
Tipping load, straight*	kg	13115	11945	13650	15580	16790
Tipping load, articulated*	kg	11570	10540	12000	13270	14820
Operating weight*	kg	18010	18490	24810	25920	26380
Tyre sizes		23.5R25 Michelin XHA	26.5R25 Michelin XHA	26.5R25 Michelin XHA	26.5R25 Michelin XHA	

* 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

			L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}
A	Lifting height at max. reach	mm	1780	1780	1985	1985
C	Max. lifting height	mm	3680	3680	4130	4350
E	Max. operating height	mm	4680	4680	5300	5540
F	Reach at loading position	mm	1020	1020	1250	1300
F max.	Max. reach	mm	1655	1655	1960	1970
F min.	Reach at max. lifting height	mm	835	835	1020	840
G	Fork length	mm	1200	1500	1800	1800
L	Length – basic machine	mm	7160	7160	7920	8100
	Tipping load, straight*	kg	10400	10370	11600	14140
	Tipping load, articulated*	kg	9180	9150	10200	12280
	Recommended payload for uneven ground = 60 % of tipping load, articulated***	kg	5490	5490	5885	7500
	Recommended payload for smooth surfaces = 80 % of tipping load, articulated***	kg	6500**	6500**	7845	8840**
	Operating weight*	kg	17040	17080	22715	24285
	Tyre sizes		23.5R25 Michelin XHA	26.5R25 Michelin XHA	26.5R25 Michelin XHA	26.5R25 Michelin XHA

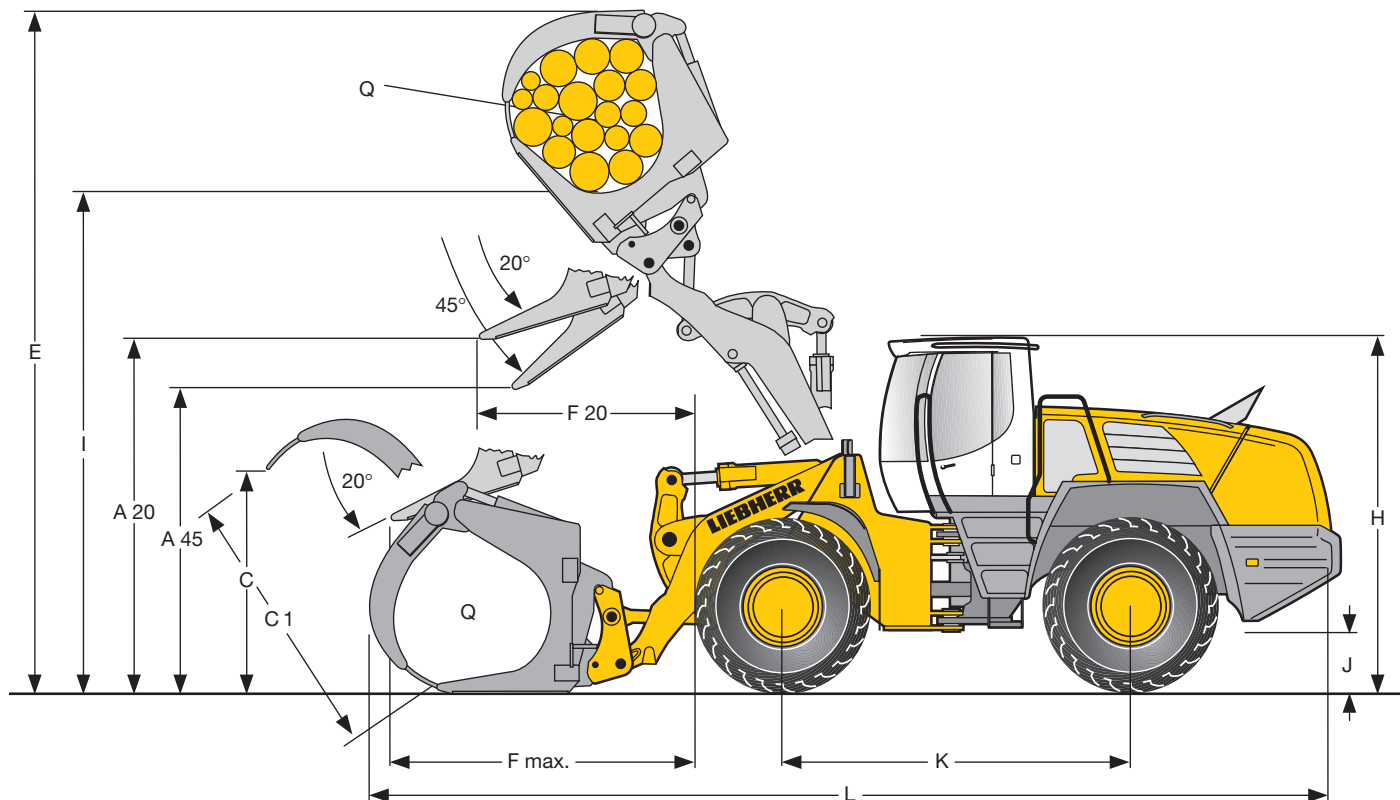
* The figures shown here are valid with tyres above, includes all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load.

** Payload on forks is limited by tilt cylinder

*** According to EN 473-3 and ISO 8313

Attachment

Log Grapple (Holzknecht)



Log Grapple



L 556 ^{2plus2}

L 566 ^{2plus2}

L 576 ^{2plus2}

L 580 ^{2plus2}

			L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}
	Geometry		ZKK	ZKK	ZKK	ZKK
A20	Discharge height at 20°	mm	3150	3400	3400	3630
A45	Discharge height at 45°	mm	2590	2700	2700	2880
C	Max. grapple opening in loading position	mm	2035	3000	3000	3370
C1	Max. grapple opening	mm	2500	3300	3300	3650
E	Max height	mm	6300	7500	7500	7800
F20	Reach at max. lifting height at 20° discharge	mm	1875	2340	2340	2230
F45	Reach at max. lifting height at 45° discharge	mm	1400	1770	1770	1660
F max.	Max. outreach	mm	2700	3260	3260	3340
H	Height above cab	mm	3365	3580	3580	3580
I	Manipulation height	mm	4450	5200	5200	5400
J	Ground clearance	mm	530	565	565	565
K	Wheelbase	mm	3280	3580	3580	3700
L	Overall length	mm	8300	9600	9600	9980
	Width over tyres	mm	2700	2930	2930	2930
Q	Grapple diameter	m ²	2,4	3,1	3,1	3,5
	Grapple width	mm	1780	1850	1850	1850
	Payload*	kg	6400**	8200**	8650**	9200**
	Operating weight*	kg	19740**	25980**	26790**	27850**
	Tyre sizes		23.5R25 Good Year GP-4B	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D

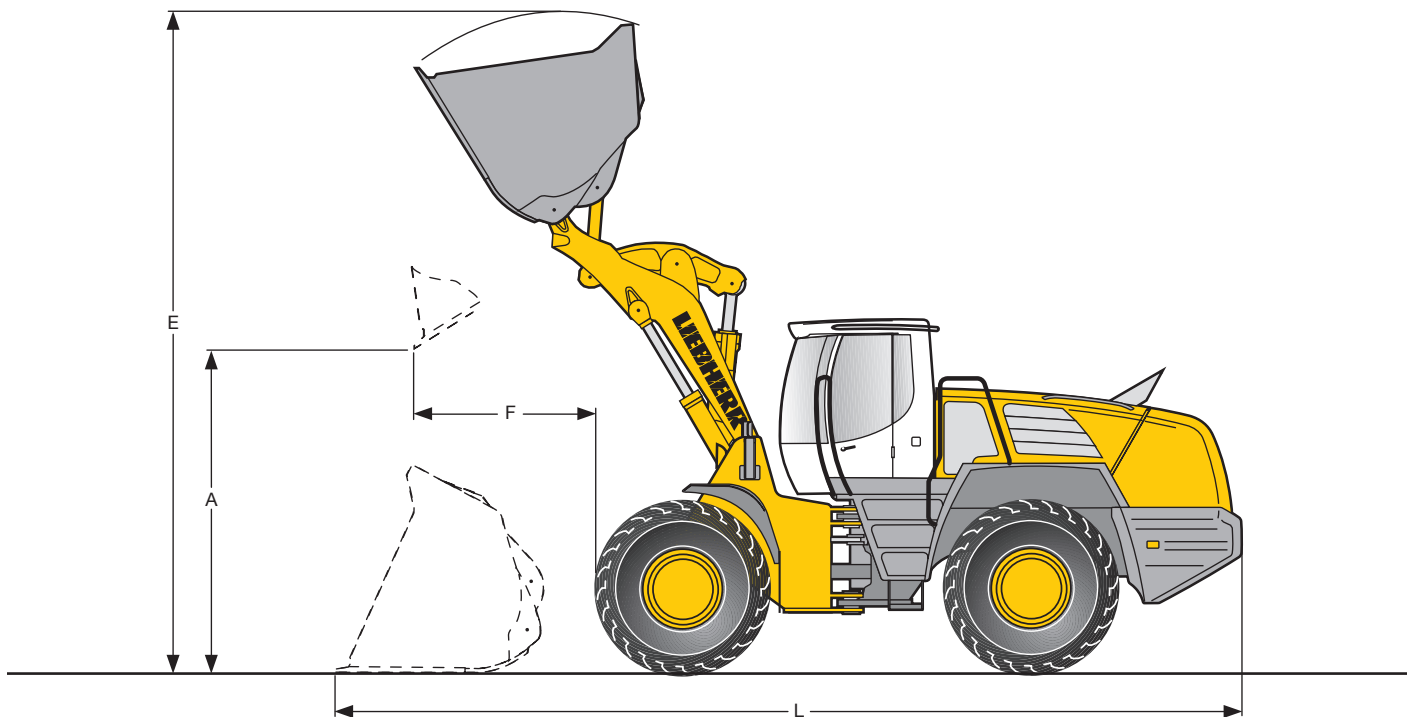
* The figures shown here are valid with tyres above, includes all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and tipping load.

** Data with rear tyres filled with water

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

Attachment

Light Material Bucket (Holzknecht)



Light Material Bucket with Bolt-On Cutting Edge



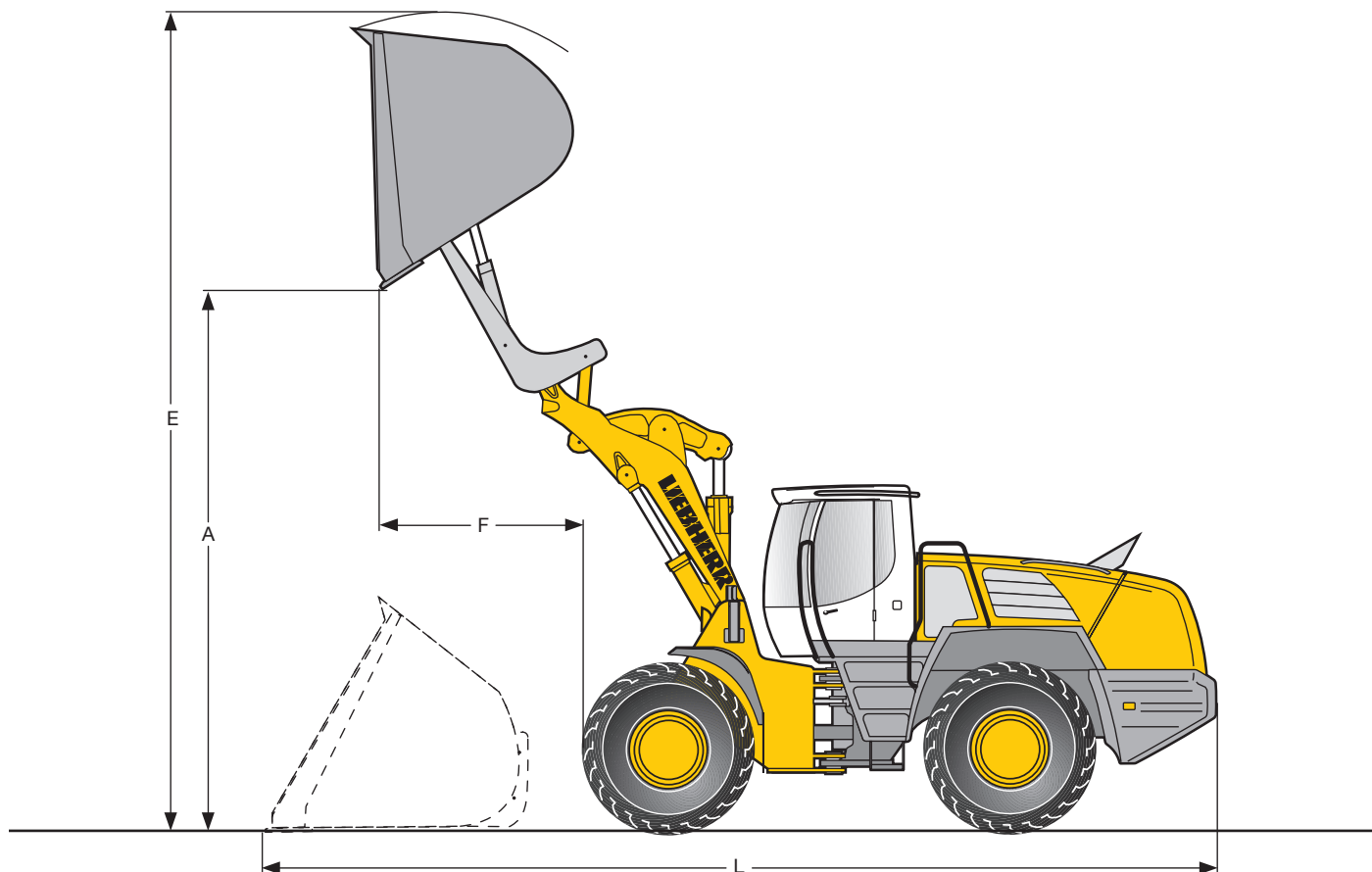
		L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}
Geometry		ZKK	ZKK	ZKK	ZKK
Bucket capacity	m ³	8,5	11,0	11,0	14,0
Bucket width	mm	3200	3700	3700	4000
Specific material weight	t/m ³	0,4	0,4	0,5	0,4
A Dumping height at max. lift height	mm	2370	2810	2810	2760
E Max. operating height	mm	6100	6820	6820	7170
F Reach at maximum lift height	mm	1625	2200	2200	2260
L Overall length	mm	8620	9700	9700	10030
Tipping load, straight*	kg	10905	12695	13410	13720
Tipping load, articulated*	kg	9620	11160	11790	12110
Operating weight*	kg	19120	25280	26120	27260
Tyre sizes		23.5R25 Good Year GP-4B	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D

* 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.

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

Attachment

High-Dump Bucket (Holzknecht)



High-Dump Bucket with Bolt-On Cutting Edge

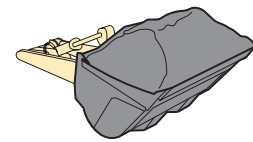
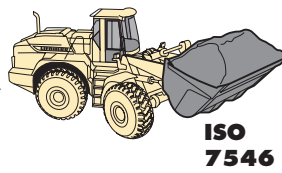
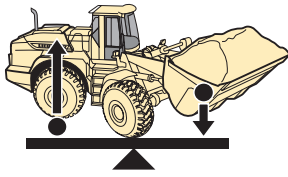


		L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}
Geometry		ZKK	ZKK	ZKK	ZKK
Bucket capacity	m ³	8,0	11,0	11,0	13,0
Bucket width	mm	3500	3700	3700	4000
Specific material weight	t/m ³	0,4	0,4	0,5	0,4
A Dumping height at max. lift height	mm	4980	4550	4550	4780
E Max. operating height	mm	7350	8280	8280	8590
F Reach at maximum lift height	mm	1960	2060	2060	2080
L Overall length	mm	8750	9630	9630	9960
Tipping load, straight*	kg	10290	11540	12340	12830
Tipping load, articulated*	kg	9080	10140	10850	11330
Operating weight*	kg	19615	25580	26520	27780
Tyre sizes		23.5R25 Good Year GP-4B	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D	26.5R25 Good Year GP-4D

* 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.

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

Tipping Load



What is tipping load?

Load at centre of gravity of working equipment, so that the wheel loader just begins to tip over the front axle.

This the most unfavourable static-load position for the wheel loader.

Liftings 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.

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

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

Bulk Material Densities and Bucket Filling Factors

	t/m ³	%		t/m ³	%		t/m ³	%
Gravel, moist	1,9	105	Clay, natural	1,6	110	Granite	1,8	95
dry	1,6	105	dry	1,4	110	Limestone,		
wet, 6–50 mm	2,0	105	wet	1,65	105	hard	1,65	95
dry, 6–50 mm	1,7	105	Clay and gravel,			soft	1,55	100
crushed stone	1,5	100	dry	1,4	110	Sandstone	1,6	100
Sand, dry	1,5	110	wet	1,6	100	Slate	1,75	100
moist	1,8	115	Earth, dry	1,3	115	Bauxite	1,4	100
wet	1,9	110	wet excavated	1,6	110	Gypsum, broken	1,8	100
Gravel and sand,			Topsoil	1,1	110	Coke	0,5	110
dry	1,7	105	Weathered rock			Slag, broken	1,8	100
wet	2,0	100	50 % rock, 50 % earth	1,7	100	Coal	1,1	110
Sand and clay	1,6	110	Basalt	1,95	100			

Tyres



	Size and tread code		Change of operating weight kg	Width over tyres mm	Change in vertical dimensions mm	use
L 556 2plus2						
Bridgestone	23.5R25 VMT	L3	+ 156	2650	+ 30	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 912	2660	+ 70	Stone, Recycling
Good Year	23.5R25 GP-2B	L2	- 44	2660	+ 30	Sand
Good Year	23.5R25 RL-5K	L5	+ 760	2670	+ 60	Stone, Recycling
Good Year	23.5R25 RT-3B	L3	+ 122	2660	+ 25	Gravel
Michelin	23.5R25 XHA	L3	0	2650	0	Gravel
Michelin	23.5R25 XLD D2	L5	+ 580	2660	+ 35	Stone, Mining spoil
Michelin	23.5R25 X-MINE D2	L5	+ 728	2670	+ 60	Stone, Recycling
L 566 2plus2						
Bridgestone	23.5R25 VMT	L3	- 392	2970	- 20	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 364	2970	+ 15	Stone, Recycling
Good Year	23.5R25 GP-2B	L2	- 592	2970	- 10	Sand, Gravel
Good Year	23.5R25 RL-5K	L5	+ 212	2980	+ 10	Stone, Recycling
Michelin	23.5R25 X-MINE D2	L5	+ 180	2990	+ 10	Stone, Recycling
Michelin	23.5R25 XLD D2	L5	+ 32	2970	- 15	Stone, Mining spoil
L 566 2plus2/L 576 2plus2/L 580 2plus2						
Bridgestone	26.5R25 VMT	L3	+ 168	2970	+ 45	Gravel
Bridgestone	26.5R25 VSDL	L5	+ 1168	2970	+ 70	Stone, Recycling
Good Year	26.5R25 GP-2B	L2	- 12	2970	+ 25	Sand, Gravel
Good Year	26.5R25 RL-5K	L5	+ 1020	2980	+ 60	Stone, Recycling
Good Year	26.5R25 RT-3B	L3	+ 380	2960	+ 25	Gravel
Michelin	26.5R25 XHA	L3	0	2950	0	Gravel
Michelin	26.5R25 XLD D2	L5	+ 660	2970	+ 40	Stone, Mining spoil
Michelin	26.5R25 X-MINE D2	L5	+ 1056	2990	+ 60	Stone, Recycling

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	3231	3501	3824	4225	4581	5680
Bucket capacity	m ³	0,8	0,9	1,0	1,1	1,2	1,5
Operating weight	kg	5120	5240	5480	6080	6250	8350
Engine output	kW/HP	42/58	46/63	46/63	54/74	58/79	72/98

Wheel Loader



		L 524	L 534	L 538	L 544 ^{2plus2}
Tipping load	kg	7005	8625	9000	10600
Bucket capacity	m ³	2,0	2,4	2,5	3,0
Operating weight	kg	10100	12100	12380	15300
Engine output	kW/HP	81/110	100/136	100/136	121/165

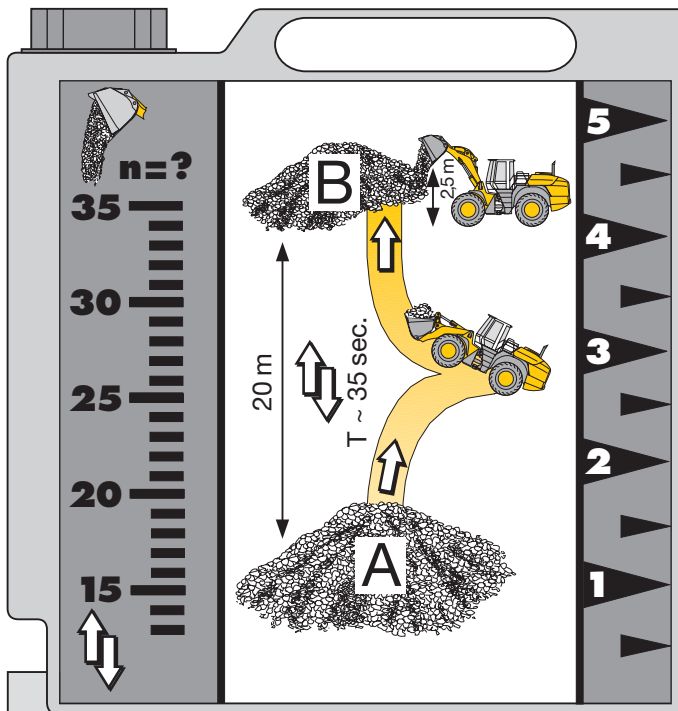
Wheel Loader



		L 556 ^{2plus2}	L 566 ^{2plus2}	L 576 ^{2plus2}	L 580 ^{2plus2}
Tipping load	kg	13140	15550	17200	18000
Bucket capacity	m ³	3,6	4,0	4,5	5,0
Operating weight	kg	17270	22500	24260	24580
Engine output	kW/HP	140/191	190/259	200/272	200/272

09.05

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 m ³	n = 48	2,9	8,3
L 534: 2,4 m ³	n = 40	2,8	10,0
L 538: 2,5 m ³	n = 40	2,8	10,0
L 544 2plus2: 3,0 m ³	n = 35	2,6	11,4
L 544 2plus2: 3,5 m ³	n = 33	2,4	12,1
L 566 2plus2: 4,0 m ³	n = 22	3,2	18,2
L 576 2plus2: 4,5 m ³	n = 21	2,9	19,1
L 580 2plus2: 5,0 m ³	n = 20	2,8	20,0

Equipment



Basic Machine

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Liebherr-2plus2-travelgear	•	•	•	•
Ride control	•	•	•	•
Liebherr shock absorbing element	-	-	-	-
Automatic travel mode	•	•	•	•
20 km/h speed limiting	+	+	+	+
Electronical theft protection	+	+	+	+
Creep speed/Cruise control	•	•	•	•
Electronic crowding force control	•	•	•	•
Combined inching-braking system	•	•	•	•
Multi-disc limited slip differentials in both axles	•	•	•	•
Air cleaner system with pre-filter	•	•	•	•
Particle protection for radiator	+	+	+	+
Reversible fan drive	+	+	+	+
Emergency steering system	•	•	•	•
Bio degradable hydraulic oil	+	+	+	+
Headlights	•	•	•	•
Tail lights	•	•	•	•
Working area lights at front	•	•	•	•
Working area lights at rear	•	•	•	•
Battery master switch	•	•	•	•
Pre-heat system for cold starting	•	•	•	•
Towing hitch	•	•	•	•
Lockable doors, service flap an engine hood	•	•	•	•
Toolbox with toolkit	•	•	•	•
Dust filter system	+	+	+	+
Protective ventilation system	+	+	+	+
Amber beacon	+	+	+	+
Acoustical warning device for travel in reverse	+	+	+	+
Exhaust pipe – special steel	•	•	•	•
Noise suppression package "101"	+	+	+	+
Automatic central lubrication system	+	+	+	+
Road ballast	-	-	+	-



Operator's Cab

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Driver's cab with reduced overall height – 90 mm	-	-	-	-
Soundproof ROPS/FOPS cab with tinted safety glass front windscreen, heatable rear window	•	•	•	•
Joystick steering	+	+	+	+
2in1 steering system – changeable	+	+	+	+
Hot-water heater with defroster and recirculated-air system	•	•	•	•
Adjustable steering column	•	•	•	•
Liebherr joystick control – adjustable	•	•	•	•
Air conditioning system	•	•	•	•
Automatic air conditioning	+	+	+	+
Liebherr operator's seat – adjustable in 6 ways	•	•	•	•
Air sprung operator's seat with seat belt	+	+	+	+
Sliding window	+	+	+	+
Emergency exit	•	•	•	•
Wash/wipe system for windscreen and rear window	•	•	•	•
Interior rear-view mirror	•	•	•	•
Sun visor	•	•	•	•
Bottle holder	•	•	•	•
Clothes hook	•	•	•	•
Cool box	+	+	+	+
Storage compartment	•	•	•	•
Plug	•	•	•	•
Ashtray	•	•	•	•
Horn	•	•	•	•
Provision for radio including loudspeaker	+	+	+	+
Radio set	+	+	+	+
Tool kit	•	•	•	•
Operator's package	•	•	•	•



Instruments for:

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Diesel engine pre-heat	•	•	•	•
Engine oil temperature	•	•	•	•
Fuel reserve	•	•	•	•
Timer for hours of operation	•	•	•	•
Speedometer	•	•	•	•
Travel speed ranges and gear selected	•	•	•	•

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Forward – reverse travel	•	•	•	•
Forward travel	•	•	•	•
Reverse travel	•	•	•	•
Speedometer	•	•	•	•
Rev. counter	•	•	•	•
Clock	•	•	•	•
Flashing turn indicators	•	•	•	•
High-beam headlights	•	•	•	•
Diagnosis system	•	•	•	•



Warning Lights for:

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Engine oil pressure	•	•	•	•
Engine overheat	•	•	•	•
Parking brake	•	•	•	•
Hydraulic oil temperature	•	•	•	•
Air cleaner blockage	•	•	•	•
Battery charge	•	•	•	•
Flow through emergency steering system	•	•	•	•



Audible Warnings for:

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Engine oil pressure	•	•	•	•
Engine overheat	•	•	•	•
Overheat of hydraulic fluid	•	•	•	•



Function Keys for:

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Speed range selection	•	•	•	•
Air conditioning	•	•	•	•
Hazard warning flashers	•	•	•	•
Parking brake	•	•	•	•
Electronic tractive force adaptation	•	•	•	•
Creep speed	•	•	•	•
Ride control	•	•	•	•
Automatic bucket positioner	•	•	•	•
Hoist kick-out	+	+	+	+
Additional hydraulics	•	•	•	•
Float position	•	•	•	•
Headlights	•	•	•	•
Working lights front	•	•	•	•
Working lights rear	•	•	•	•
Road travel	•	•	•	•
Wash/wipe system for rear window	•	•	•	•
Amber beacon	•	•	•	•
Mode switch	•	•	•	•
Blower	•	•	•	•
Heater	•	•	•	•
Adjusting the crowding force counter	•	•	•	•



Equipment

	556 2plus2	566 2plus2	576 2plus2	580 2plus2
Z-bar linkage	•	•	•	•
Z-bar linkage "High Lift"	+	+	+	+
Industrial Z-bar linkage	+	+	+	+
Hydraulic servo control of working hydraulics	•	•	•	•
Automatic bucket positioner – adjustable	•	•	•	•
Automatic hoist kick out – adjustable	+	+	+	+
Float position	•	•	•	•
Loading buckets with and without teeth, or bolt-on cutting edge	+	+	+	+
High-dump bucket	+	+	+	+
Light material bucket	+	+	+	+
Fork carrier and lift forks	+	+	+	+
Hydraulic quick-change device	+	+	+	+
3rd hydraulic control circuit	+	+	+	+
3rd and 4th hydraulic control circuits	+	+	+	+
Comfort control	+	+	+	+
Country-specific versions	+	+	+	+

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

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

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, too. 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 its 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 100 companies with over 23,000 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



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