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# L 550 – L 586 XPower®

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## LIEBHERR

Wheel loaders



**Generation**  
6

**Diesel engine**  
Tier 4f

**Tipping load**  
27,560 lb – 47,620 lb

## Performance

More power, greater productivity – increased performance through an innovative travel drive

## Economy

Efficient performance guaranteed – low costs with high handling capacity

## Reliability

A reliable partner – robust and durable machines

## Comfort

Well thought-out design – when technology combines comfort and safety

## Maintainability

Savings in both time and costs – thanks to quick and simple maintenance



### L 550 XPower®

**Tipping load, articulated**  
27,560 lb  
**Bucket capacity**  
4.5 yd<sup>3</sup>  
**Operating weight**  
40,895 lb  
**Engine output**  
163 kW / 219 HP

### L 556 XPower®

**Tipping load, articulated**  
30,315 lb  
**Bucket capacity**  
4.8 yd<sup>3</sup>  
**Operating weight**  
43,210 lb  
**Engine output**  
183 kW / 245 HP



## **L 566 XPower®**

**Tipping load, articulated**  
35,055 lb  
**Bucket capacity**  
5.5 yd<sup>3</sup>  
**Operating weight**  
52,690 lb  
**Engine output**  
203 kW / 272 HP

## **L 580 XPower®**

**Tipping load, articulated**  
42,330 lb  
**Bucket capacity**  
6.8 yd<sup>3</sup>  
**Operating weight**  
60,955 lb  
**Engine output**  
233 kW / 312 HP

## **L 586 XPower®**

**Tipping load, articulated**  
47,620 lb  
**Bucket capacity**  
7.8 yd<sup>3</sup>  
**Operating weight**  
71,870 lb  
**Engine output**  
263 kW / 353 HP

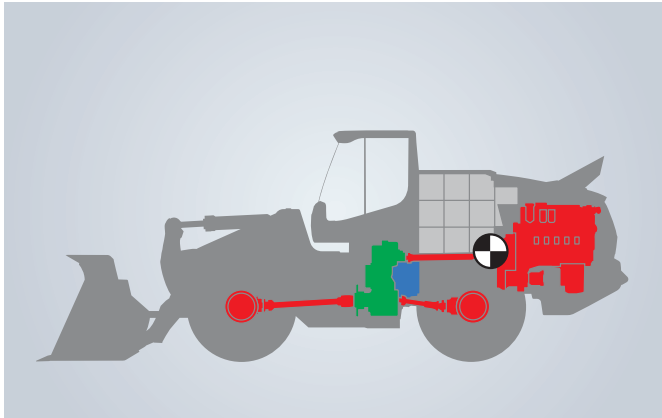
# Performance

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## More power, greater productivity – increased performance through an innovative travel drive

The innovative Liebherr-XPow<sup>er</sup> travel drive combines the best features of two types of drive into a unique machine design. Faster work cycles, high tipping loads, and increased machine availability result in terrific handling capacity.



### Powerful machine design

- The drive components installed in the rear of the wheel loader act as a natural counterweight and are part of the sophisticated ballast design
- Ideal weight distribution results in higher tipping loads and thus greater productivity
- Balanced operating mass increases efficiency and saves fuel
- Strong designs and robust steel parts ensure a reliable and powerful machine



### Maximum performance

- Liebherr-XPow<sup>er</sup> travel drive combines the hydrostatic and mechanical drives
- Interaction of the two drive types is automatically and continuously adapted to the respective application
- XPow<sup>er</sup>® offers the highest efficiency in material pick-up and transport as well as optimum acceleration and maximum performance in all loading cycles



### Lift arm variations, optimized for each use

- Standard Z-bar kinematics provide high torque in the lower lift arm range
- Particularly suitable for conventional wheel loader applications due to quick and easy filling of the bucket
- Industrial lift arms (for L 550 - L 566 / L 580) have parallel movement and offer particularly high torque in the upper lift arm range
- Particularly suitable for industrial use, large working attachments, and heavier loads



### Great versatility for the optimum handling of material

- The diverse range of ex-works working attachments means that the right tool is always available
- The robust bucket design enables the bucket to be filled fast and efficiently
- Excellent bucket penetration force and easy bucket filling result in lower fuel consumption
- Modular bucket design for L 550 and L 556 G6.2 allows individual configuration, suitable for every application

# Economy

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## Efficient performance guaranteed – low costs with high handling capacity

Power, speed, and durability combined with innovative technology result in an optimum machine design that makes a reliable contribution to cost-effective success. The efficient Liebherr-XPower travel drive and the robust components reduce operating costs in a sustainable way.



#### Maximum productivity with minimum fuel consumption

- Liebherr power efficiency (LPE) optimizes the interaction between the diesel engine, transmission, and working hydraulics for maximum efficiency
- Liebherr-XPower travel drive with LPE provides enormous fuel savings
- At the highest efficiency, operating costs are reduced, and profitability is increased



#### Minimum wear due to intelligent machine design

- Virtually no brake wear due to the hydraulic-mechanical braking action
- Continuous tractive force control combined with automatic self-locking differentials prevents wheel spin, thereby increasing productivity and significantly reducing tire wear



#### Efficient management with LiDAT

- Liebherr's own data transmission and positioning system
- Optimal management, monitoring, and control of the entire fleet in terms of machine data acquisition, data analysis, fleet management and service
- Evaluations of machine use and fuel consumption ensure the machines are managed cost-effectively
- Standard availability of LiDAT incl. 1st year of free use



#### Solidlink

- Optional hydraulic quick coupler with integrated automatic hydraulic coupling system
- Hydraulic working tools changed within seconds direct from the operator's cab
- The change is fully automatic, safe, and leak-free
- Time savings thanks to greater convenience lead to increased performance; saving time and money

# Reliability

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## A reliable partner – robust and durable machines

Tried and tested over decades with proven excellence – the specially developed components of Liebherr wheel loaders demonstrate their sophisticated technology and durability. The high level of quality offers maximum reliability and availability even under the toughest operating conditions.





### High performance and long-lasting components

- Decades of experience in the development, design, and production of individual elements is reflected in their robustness and durability
- Components are ideally coordinated for maximum performance
- High Liebherr quality standards ensure reliability even under the toughest operating conditions



### Working without interruption

- Diesel oxidation catalysts (DOC) and diesel particulate filters (DPF) as well as selective catalytic reduction (SCR) are installed for exhaust gas treatment, and lower pollutant emissions
- The diesel particulate filter can be unblocked during operation via active regeneration, thus enabling an uninterrupted work process
- Long intervals between regenerations increase productivity, save fuel, and reduce operating costs



### Reliable Liebherr drive design

- Variable distribution of forces between the hydrostatic and mechanical drives means that there is less stress on each of the drive paths
- Long service life and reliable use of the machine thanks to Liebherr-XPower travel drive



### Optimal cooling capacity

- The radiator is installed behind the operator's cab – the cleanest place on the wheel loader
- Demand-controlled cooling via thermostatic control for reliable operation
- High machine availability due to less radiator contamination
- The optional equipment such as the reversible fan drive, lint filter for the radiator, and the coarse-mesh radiator, additionally protect the cooling system from contamination

# Comfort

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## Well thought-out design – when technology combines comfort and safety

A cab where you can really feel good – the modern cab design is optimally adapted to the day-to-day needs of the operators. The spacious and ergonomically designed operator's cab offers perfect conditions for comfortable and productive work, and can be individually adjusted to the operator.



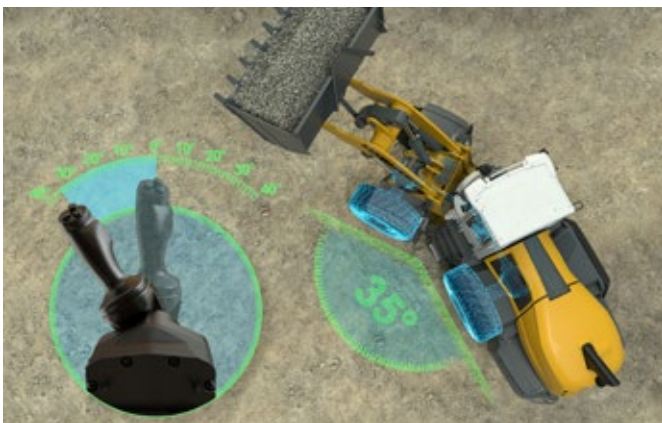
### Modern cab design for greater productivity

- Modern ergonomic cab design enables focused working with less fatigue
- Displays, control elements, and operator's seat are perfectly aligned with one another to form an ergonomic unit
- For the operator, the individual adjustment options on the operator's seat and the steering wheel create a comfortable working atmosphere with plenty of legroom
- Numerous storage compartments provide lots of space in the operator's cab on all sides



### Keep an eye on everything – for hazard-free work

- The large windshield in the operator's cab provides excellent all-round visibility of the working attachment and the operating area
- The engine bonnet was designed with optimized visibility in mind and this, together with the integrated reversing camera, ensure an excellent overview at the rear of the machine for greater safety
- Height-adjustable 9" touch screen display provides all operating-relevant machine data at a glance



### Innovative joystick steering

- Optional joystick steering is integrated into the operator's seat for ergonomic and comfortable operation
- Intuitive operating behavior resembles that of a steering wheel
- The direction of the joystick corresponds to the desired wheel loader articulation angle
- Speed-dependent force feedback ensures precise and safe steering behavior
- "Joystick steering only" allows for an operator's cab without a steering column, thereby eliminating the need to reach between the steering and control units



### Assistance systems – increase safety conveniently

- Active personnel detection monitors the rear area of the wheel loader and warns of hazards with a visual and acoustic signal
- Tire pressure monitoring system transmits tire pressure values directly to the operator's display
- Skyview 360° simplifies monitoring of the entire machine environment on a separate display in the operator's cab
- The weighing device with "Truck Payload Assistant" ensures faster and more accurate loading cycles
- Further assistance systems are available upon customer request

# Maintainability

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## Savings in both time and costs – thanks to quick and simple maintenance

Intelligent installation of components, quick and easy access to the engine compartment, and maximum efficiency down to the smallest detail are crucial for effective maintenance work. All parts to be serviced can be reached safely and quickly. This saves time and money.



#### Safe and well thought-out service access

- Electrically rear-opening engine bonnet provides safe and easy access to the entire engine compartment
- All maintenance work can be conveniently performed from a platform in the engine bonnet
- Improved access to the front windscreen/ cab filter box is provided by the cab access on the right side of the machine



#### Intelligent design means less time spent on maintenance

- Simple and safe maintenance ensures less downtime
- Less contamination of the radiator due to its well-thought-out position directly behind the operator's cab
- The most important fill levels can be seen in the entry area



#### Increased efficiency down to the smallest detail

- Non-slip treads and sturdy handrails ensure maximum safety when cleaning
- Quick and easy maintenance shortens downtime, increases productivity, and saves money



#### Liebherr customer service

- Comprehensive service network provides effective and prompt support
- Fast and reliable service implementation by qualified service specialists

# Focus on innovation and safety

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## Lift arms

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Cleverly designed – one wheel loader, two lift arm variants, and numerous application options – while the standard Z-bar kinematics ensure high torque in the lower lift arms, the industrial kinematics provide optimum, parallel movement, and particularly high torque in the upper lift arms. This means that the XPower® wheel loaders are optimally equipped for any task and can perform the work powerfully and efficiently.

## Drive design

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Powerful performance – the Liebherr-XPower travel drive combines the hydrostatic drive for short loading cycles with the mechanical drive for long distances and inclines. The standard combination of these two drive types offers the highest efficiency in all applications and results in a lower load on the respective drive path.



## Comfort

Intuitive and comfortable – the ergonomically optimized cab design enables comfortable and less tiring work. The large glazed area and the visibility-optimized engine hood design provide an unobstructed view in all directions. The joystick steering allows precise and productive work through intuitive and exact control. The optional “joystick steering only” provides an even better view of the lift arms and the working attachment as well as more space in the operator’s cab.

## Assistance systems

Intelligent helpers – the innovative assistance systems offer comprehensive solutions to optimize safety and comfort, supporting the operator and thus enhancing performance. The simple handling and intuitive operation enable safe, efficient, and thus more economical machine operation.

## Maintenance

Reliable service – the unique installation position of the components results in excellent maintenance accessibility. Supported by the latest technology, you have safe and easy access to the entire engine compartment. Short downtimes and fast maintenance work lead to greater productivity and a higher profitability of the machine.

# Technical data



## Diesel engine

	L 550	L 556
<b>Diesel engine</b>	D934 A7	D944 A7
Design	Water-cooled in-line engine with charge-air cooling	
Cylinder inline	4	
Fuel injection process	Electronic Coft inon Rail high-pressure injection	
Output to	kW / HP	160 / 214
ISO 9249 / ECE-R.24	at RPM	1,800
Rated output to		
ISO 14396 / ECE-R.120	kW / HP	163 / 119
Nominal speed	at RPM	1,800
Max. torque to	lb ft	920
ISO 14396 / ECE-R.120	at RPM	1,100
Displacement	in <sup>3</sup>	428
	liter	7.014
Bore / Stroke	in	4.8" / 5.91"
		5.12" / 5.91"
<b>Tier 4f</b>		
Harmful emissions values	In accordance with EPA 40 CFR part 1039 and CARB 13 CCR section 2423	
Emission control	Liebherr-SCR technology	
<b>Air cleaner system</b>	Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display	
<b>Electrical system</b>		
Operating voltage	V	24
Capacity	Ah	2 x 140
Alternator	V / A	28 / 140
Starter	V / HP	24 / 10.5



## Driveline

<b>Continuous power split XPower® driveline</b>	
Design	Continuous, fully-automatic XPower® driveline. No traction interruptions across the entire speed range. Hydrostatic power split with two axial piston units. Identical driving performance – forwards and in reverse
Filtration	Filter system for driveline, depend on working hydraulics
Control	Driveline is controlled from travel pedal for tractive force and speed setting with integrated inch function. The Liebherr control switch is used to control forward and reverse travel
<b>Travel speed range</b>	0 - 24.9* mph forward and reverse, fully-automatic Speed restriction available upon request. Speeds quoted apply with the standard tires as indicated on loader model.

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

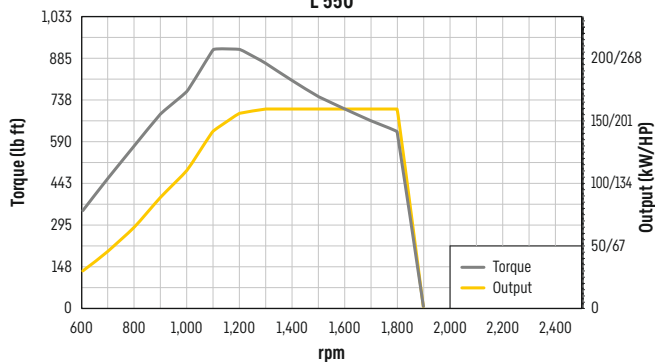


## Brakes

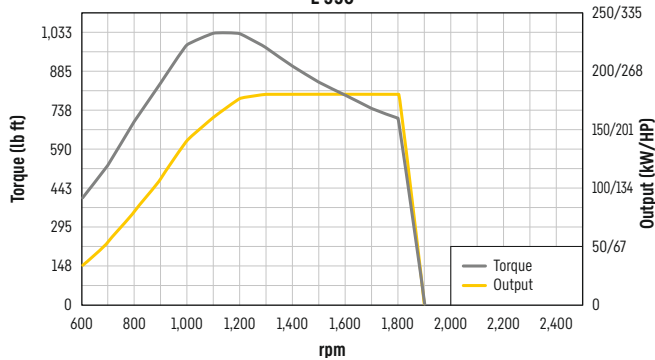
<b>Wear-free service brake</b>	Self-locking of the XPower® driveline (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes (two separate brake circuits)
<b>Parking brake</b>	Electro-hydraulically actuated spring-loaded disc brake system on the transmission

The braking system meets the requirements of the ISO 3450.

L 550



L 556





## Axles

	L 550	L 556
<b>Four-wheel drive</b>		
<b>Front axle</b>	Fixed	
<b>Rear axle</b>	Center pivot, with 13° oscillating angle to each side	
Height of obstacles which can be driven over	ft in 1'6"	1'5"
	with all four wheels remaining in contact with the ground	
<b>Differentials</b>	Automatic limited-slip differentials	
<b>Reduction gear</b>	Planetary final drive in wheel hubs	
<b>Track width</b>	6'7" with all types of tires	

## Steering

<b>Design</b>	"Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders		
<b>Angle of articulation</b>	40° to each side		
<b>Emergency steering</b>	Electro-hydraulic emergency steering system		

## Attachment hydraulics

	L 550	L 556
<b>Design</b>	"Load-sensing" swash plate type variable flow pump with output and flow control, and pressure cut-off in the control block	
<b>Cooling</b>	Hydraulic oil cooling using thermostatically controlled fan and oil cooler	
<b>Filtration</b>	Return line filter in the hydraulic reservoir	
<b>Control</b>	Liebherr control lever, electro-hydraulically operated	
<b>Lifting function</b>	Lifting, neutral, lowering Automatic lift arm position and lowering by Liebherr control lever Float position controlled by Liebherr control lever	
<b>Tilt function</b>	Tilt back, neutral, dump Automatic bucket return for tilting back and dumping controlled by Liebherr control lever	
<b>Max. flow</b>	gpm 62	77
<b>Max. pressure</b>		
Z-bar kinematics	psi 5,076	5,076
Industrial lift arm	psi 5,511	5,511

## Attachment

	L 550		L 556	
<b>Geometry variants</b>				
Optional	Powerful Z-bar kinematics with tilt cylinder and cast steel cross-tube Industrial lift arm with tilt cylinder, hydraulic quick coupler standard			
<b>Bearings</b>	Sealed			
<b>Cycle time at nominal load</b>	ZK	IND	ZK	IND
Lifting	s 5.4	5.4	5.4	5.4
Dumping	s 1.0	2.2	1.0	2.2
Lowering (empty)	s 2.9	2.9	2.9	2.9

## Operator's cab

<b>Design</b>	Hydraulically mounted, noise-proof cab ROPS roll over protection per EN ISO 3471 / EN 474-1 FOPS falling objects protection per EN ISO 3449 / EN 474-1, Cat. II Operator's door with sliding side window, sliding side window on right, front windscreen made of compound safety glass, side panels with single-pane safety glass ESG, heated rear window ESG, all windows are tinted. 3 way continuous adjustable steering column		
<b>Liebherr operator's seat</b>	6 way adjustable, vibration-damped operator's seat "Comfort" with seat, depth and incline adjustment standard (air-cushioned with seat heating adjustable to operator's weight), Liebherr control lever mounted into the operator's seat standard		
<b>Cab heating and ventilation</b>	4-zone air conditioning with improved cooling output standard, electrically heated rear window, all filters are easy to access and replaceable		
<b>Vibration emissions</b>			
Vibrations in the hand/arm	ft/s <sup>2</sup>	≤ 8.2	
Vibrations through the whole body	ft/s <sup>2</sup>	≤ 1.6	

## Sound level

	L 550	L 556
<b>Sound pressure level to ISO 6396</b>		
L <sub>PA</sub> (inside cab)	dB(A) 68	68
<b>Sound power level to 2000/14/EC</b>		
L <sub>WA</sub> (surround noise)	dB(A) 104	104

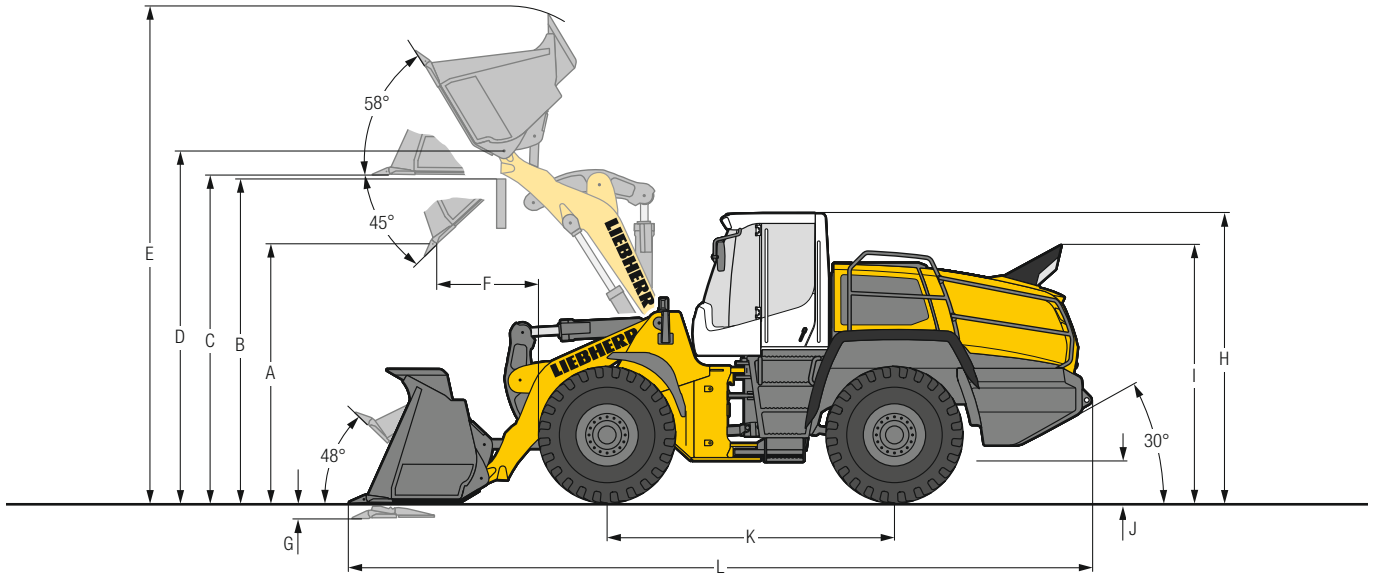
## Capacities

	L 550	L 556
<b>Fuel tank</b>	gal 74	74
<b>DEF tank</b>	gal 17.8	17.8
<b>Engine oil</b>		
(inclusive filter change)	gal 6.9	6.9
<b>Pump distribution gearbox</b>	gal 0.3	0.3
<b>XPower® gearbox</b>	gal 14	14
<b>Coolant</b>	gal 17.7	17.7
<b>Front axle</b>	gal 9.2	11.1
<b>Rear axle</b>	gal 9.2	9.2
<b>Hydraulic tank</b>	gal 27.7	27.7
<b>Hydraulic system, total</b>	gal 46.2	47.6
<b>Air conditioning system R134a</b>	lb 2.8	2.8

# Dimensions

## Z-bar kinematics

L 550 – L 556



### Excavation bucket

	L 550				L 556			
	STD	STD	HL	HL	STD	STD	HL	HL
Geometry	ZK	ZK	ZK	ZK	ZK	ZK	ZK	ZK
Cutting tools	Z	Z	Z	Z	Z	Z	Z	Z
Lift arm length	ft in 8'10"	8'10"	10'2"	10'2"	8'10"	8'10"	10'2"	10'2"
Bucket capacity according to ISO 7546 **	yd <sup>3</sup> 4.5	4.8	3.7	4.1	4.8	5.4	4.1	4.4
Specific material density	lb/yd <sup>3</sup> 3,034	2,697	3,034	2,697	3,034	2,697	3,034	2,697
Bucket width	ft in 9'5"	9'5"	9'5"	9'5"	9'5"	9'5"	9'5"	9'5"
A Dumping height at max. lift height and 45° discharge	ft in 9'11"	9'9"	12'2"	12'	9'9"	9'6"	12'	11'9"
B Dump-over height	ft in 12'2"	12'2"	13'9"	13'9"	12'2"	12'2"	13'9"	13'9"
C Max. height of bucket bottom	ft in 12'9"	12'9"	14'6"	14'6"	12'9"	12'9"	14'6"	14'6"
D Max. height of bucket pivot point	ft in 13'7"	13'7"	15'5"	15'5"	13'7"	13'7"	15'5"	15'5"
E Max. operating height	ft in 19'	19'3"	20'4"	20'6"	19'3"	19'7"	20'6"	20'10"
F Reach at max. lift height and 45° discharge	ft in 3'4"	3'6"	2'9"	2'11"	3'6"	3'9"	2'11"	3'1"
G Digging depth	ft in 3"	3"	4"	4"	3"	3"	4"	4"
H Height above operator's cab	ft in 11'1"	11'1"	11'1"	11'1"	11'1"	11'1"	11'1"	11'1"
I Height above exhaust	ft in 9'11"	9'11"	9'11"	9'11"	9'11"	9'11"	9'11"	9'11"
J Ground clearance	ft in 1'7"	1'7"	1'7"	1'7"	1'7"	1'7"	1'7"	1'7"
K Wheelbase	ft in 11'6"	11'6"	11'6"	11'6"	11'6"	11'6"	11'6"	11'6"
L Overall length	ft in 28'1"	28'4"	29'6"	29'9"	28'4"	28'8"	29'9"	30'
Turning circle radius over tires	ft in 20'2"	20'2"	20'2"	20'2"	20'2"	20'2"	20'2"	20'2"
Turning circle radius over outside bucket edge	ft in 22'5"	22'6"	23'1"	23'1"	22'6"	22'7"	23'1"	23'2"
Breakout force (SAE)	lbf 37,095	34,845	39,340	37,095	39,340	37,095	41,590	39,340
Tipping load, straight *	lb 30,975	30,755	25,795	25,575	34,390	33,950	28,660	28,440
Tipping load, fully articulated *	lb 27,560	27,335	22,595	22,375	30,315	29,870	25,020	24,800
Operating weight *	lb 40,895	41,115	41,335	41,625	43,210	43,430	43,650	43,760
Tire size	23,5R25 L3		23,5R25 L3		23,5R25 L3		23,5R25 L3	

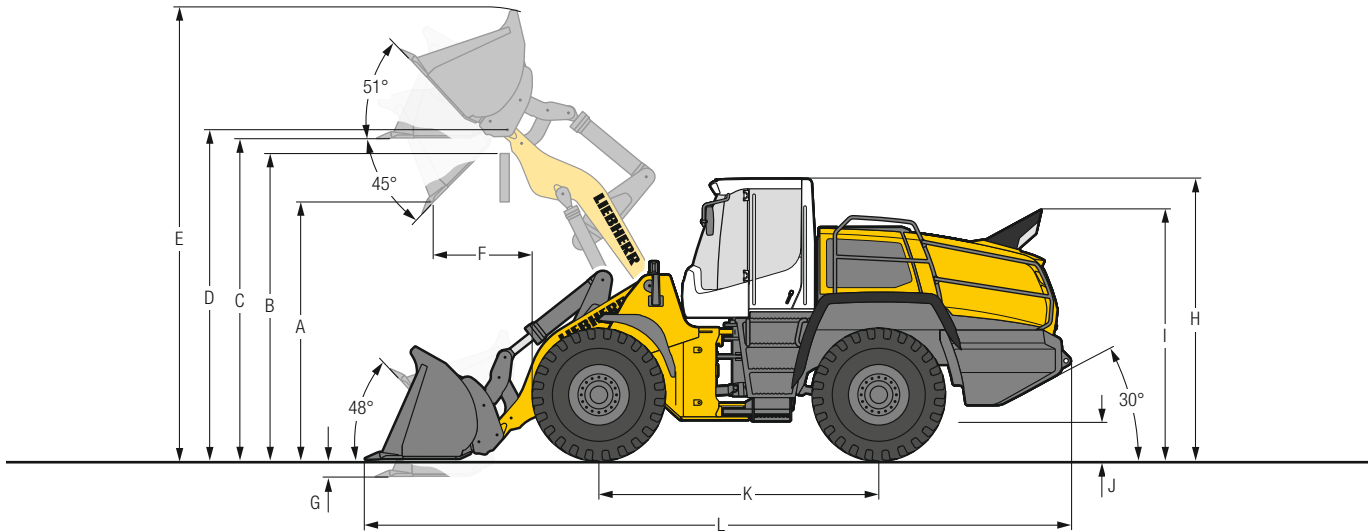
\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS / FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see page 24.

- STD = Standard lift arm length
- HL = High Lift
- ZK = Z-bar kinematics
- Z = Welded-on tooth holder with add-on teeth

# Dimensions

## Industrial lift arm



### Excavation bucket

	L 550			L 556		
	STD IND-QC	HL IND-QC	HL IND-QC	STD IND-QC	HL IND-QC	HL IND-QC
Geometry						
Cutting tools	T	T	T	T	T	T
Lift arm length	ft in 8'10"	ft in 9'10"	ft in 9'10"	ft in 8'10"	ft in 9'10"	ft in 9'10"
Bucket capacity according to ISO 7546**	yd <sup>3</sup> 4.1	yd <sup>3</sup> 3.4	yd <sup>3</sup> 3.7	yd <sup>3</sup> 4.4	yd <sup>3</sup> 3.7	yd <sup>3</sup> 4.1
Specific material density	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 2,697	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 2,697
Bucket width	ft in 9'5"	ft in 9'5"	ft in 9'5"	ft in 9'5"	ft in 9'5"	ft in 9'5"
A Dumping height at max. lift height and 45° discharge	ft in 9'7"	ft in 11'7"	ft in 11'5"	ft in 9'5"	ft in 11'5"	ft in 11'3"
B Dump-over height	ft in 12'2"	ft in 13'5"	ft in 13'5"	ft in 12'2"	ft in 13'5"	ft in 13'5"
C Max. height of bucket bottom	ft in 12'8"	ft in 14'5"	ft in 14'5"	ft in 12'8"	ft in 14'5"	ft in 14'5"
D Max. height of bucket pivot point	ft in 13'7"	ft in 15'4"	ft in 15'4"	ft in 13'7"	ft in 15'4"	ft in 15'4"
E Max. operating height	ft in 19'2"	ft in 20'6"	ft in 20'8"	ft in 19'5"	ft in 20'8"	ft in 20'11"
F Reach at max. lift height and 45° discharge	ft in 3'9"	ft in 2'9"	ft in 2'10"	ft in 4'	ft in 2'10"	ft in 3'
G Digging depth	ft in 4"	ft in 4"	ft in 4"	ft in 4"	ft in 4"	ft in 4"
H Height above operator's cab	ft in 11'1"	ft in 11'1"	ft in 11'1"	ft in 11'1"	ft in 11'1"	ft in 11'1"
I Height above exhaust	ft in 9'11"	ft in 9'11"	ft in 9'11"	ft in 9'11"	ft in 9'11"	ft in 9'11"
J Ground clearance	ft in 1'7"	ft in 1'7"	ft in 1'7"	ft in 1'7"	ft in 1'7"	ft in 1'7"
K Wheelbase	ft in 11'6"	ft in 11'6"	ft in 11'6"	ft in 11'6"	ft in 11'6"	ft in 11'6"
L Overall length	ft in 28'10"	ft in 29'7"	ft in 29'9"	ft in 29'1"	ft in 29'9"	ft in 30'
Turning circle radius over tires	ft in 20'2"	ft in 20'2"	ft in 20'2"	ft in 20'2"	ft in 20'2"	ft in 20'2"
Turning circle radius over outside bucket edge	ft in 22'7"	ft in 22'11"	ft in 23'	ft in 22'7"	ft in 23'	ft in 23'
Breakout force (SAE)	lbf 31,475	lbf 33,720	lbf 32,595	lbf 34,845	lbf 39,340	lbf 37,095
Tipping load, straight*	lb 28,440	lb 24,690	lb 24,470	lb 31,525	lb 27,335	lb 27,115
Tipping load, fully articulated*	lb 25,130	lb 21,650	lb 21,385	lb 27,560	lb 23,810	lb 23,590
Operating weight*	lb 42,330	lb 42,550	lb 42,660	lb 44,535	lb 44,755	lb 44,865
Tire size	23.5R25 L3			23.5R25 L3		

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

\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material - see page 24.

STD = Standard lift arm length

HL = High Lift

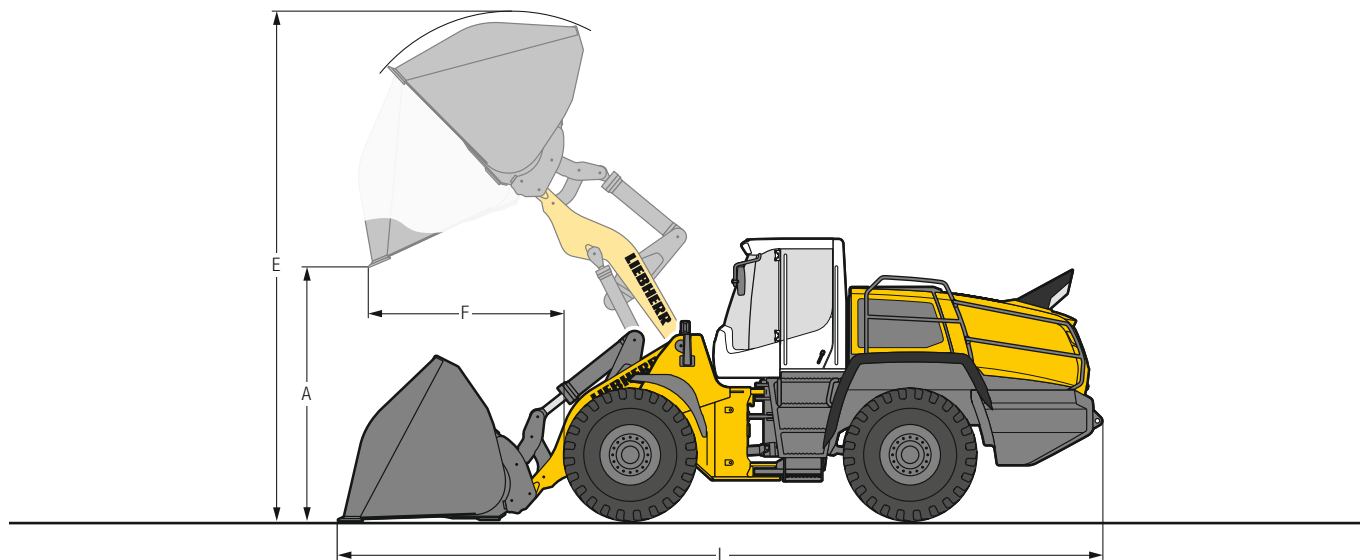
IND-QC = Industrial lift arm with parallel guidance incl. quick coupler

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

# Attachment

## Light material bucket

L 550 – L 556



### Heavy material density

	L 550		L 556	
	STD	HL	STD	HL
Geometry	IND-QC	IND-QC	IND-QC	IND-QC
Cutting tools	BOCE	BOCE	BOCE	BOCE
Bucket capacity	yd <sup>3</sup> 6.5	5.9	7.2	6.5
Specific material density	lb/yd <sup>3</sup> 1,686	1,686	1,686	1,686
Bucket width	ft in 9'8"	9'8"	9'8"	9'8"
A Dumping height at max. lift height	ft in 8'8"	10'6"	8'4"	10'4"
E Max. operating height	ft in 19'7"	21'6"	19'10"	21'4"
F Reach at maximum lift height	ft in 4'8"	3'8"	4'11"	3'11"
L Overall length	ft in 29'5"	30'4"	29'10"	30'7"
Tipping load, straight*	lb 26,895	23,370	29,985	26,015
Tipping load, fully articulated*	lb 23,370	20,280	25,795	22,485
Operating weight*	lb 42,990	43,210	45,195	45,415
Tire size	23.5R25 L3		23.5R25 L3	



### Light material density

	L 550		L 556	
	STD	HL	STD	HL
Geometry	IND-QC	IND-QC	IND-QC	IND-QC
Cutting tools	BOCE	BOCE	BOCE	BOCE
Bucket capacity	yd <sup>3</sup> 12.4	11.1	13.1	11.8
Specific material density	lb/yd <sup>3</sup> 843	843	843	843
Bucket width	ft in 11'2"	11'2"	11'2"	11'2"
A Dumping height at max. lift height	ft in 7'7"	9'7"	7'7"	9'5"
E Max. operating height	ft in 20'6"	22'1"	20'6"	22'2"
F Reach at maximum lift height	ft in 5'9"	4'8"	5'9"	4'10"
L Overall length	ft in 30'11"	31'9"	30'11"	31'11"
Tipping load, straight*	lb 26,235	22,485	29,320	24,910
Tipping load, fully articulated*	lb 22,485	19,400	25,355	21,385
Operating weight*	lb 44,310	44,535	46,515	46,730
Tire size	23.5R25 L3		23.5R25 L3	

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

STD = Standard lift arm length

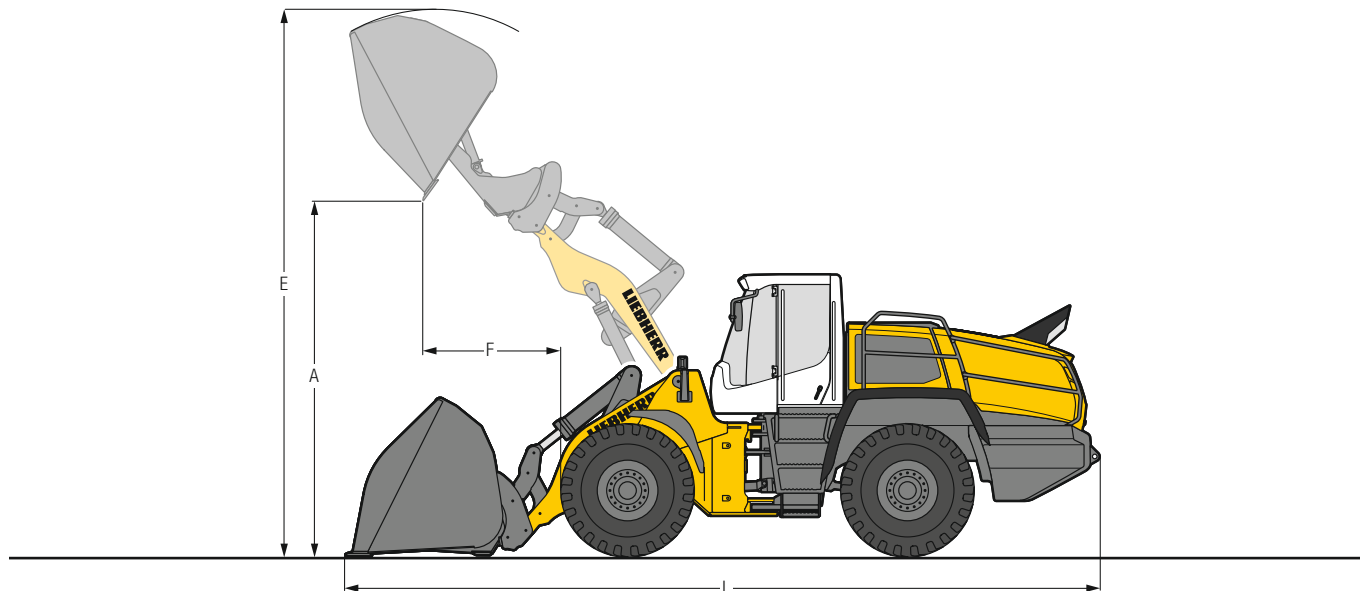
HL = High Lift

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

BOCE = Bolt-on cutting edge

# Attachment

## High-Dump bucket



### Heavy material density

	L 550		L 556	
	STD	HL	STD	HL
Geometry	IND-QC	IND-QC	IND-QC	IND-QC
Cutting tools	BOCE	BOCE	BOCE	BOCE
Bucket capacity	yd <sup>3</sup> 5.9	5.2	6.5	5.9
Specific material density	lb/yd <sup>3</sup> 1,686	1,686	1,686	1,686
Bucket width	ft in 8'10"	8'10"	8'10"	8'10"
A Dumping height at max. lift height	ft in 15'3"	17'2"	15'	17'
E Max. operating height	ft in 22'6"	24'2"	22'8"	24'3"
F Reach at maximum lift height	ft in 5'6"	4'7"	5'9"	4'9"
L Overall length	ft in 30'4"	31'4"	30'8"	31'6"
Tipping load, straight*	lb 26,235	22,265	29,985	24,910
Tipping load, fully articulated*	lb 22,705	19,180	26,015	21,165
Operating weight*	lb 43,870	44,090	44,975	46,295
Tire size	23.5R25 L3		23.5R25 L3	



### Light material density

	L 550		L 556	
	STD	HL	STD	HL
Geometry	IND-QC	IND-QC	IND-QC	IND-QC
Cutting tools	BOCE	BOCE	BOCE	BOCE
Bucket capacity	yd <sup>3</sup> 11.8	10.5	12.4	11.1
Specific material density	lb/yd <sup>3</sup> 843	843	843	843
Bucket width	ft in 11'2"	11'2"	11'2"	11'2"
A Dumping height at max. lift height	ft in 14'3"	16'3"	14'1"	16'1"
E Max. operating height	ft in 23'3"	24'7"	23'5"	24'10"
F Reach at maximum lift height	ft in 5'8"	4'8"	5'9"	4'10"
L Overall length	ft in 30'10"	31'9"	31'1"	32'
Tipping load, straight*	lb 25,130	21,385	28,220	24,030
Tipping load, fully articulated*	lb 21,605	18,300	24,250	20,505
Operating weight*	lb 45,195	45,415	47,400	47,620
Tire size	23.5R25 L3		23.5R25 L3	

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

STD = Standard lift arm length

HL = High Lift

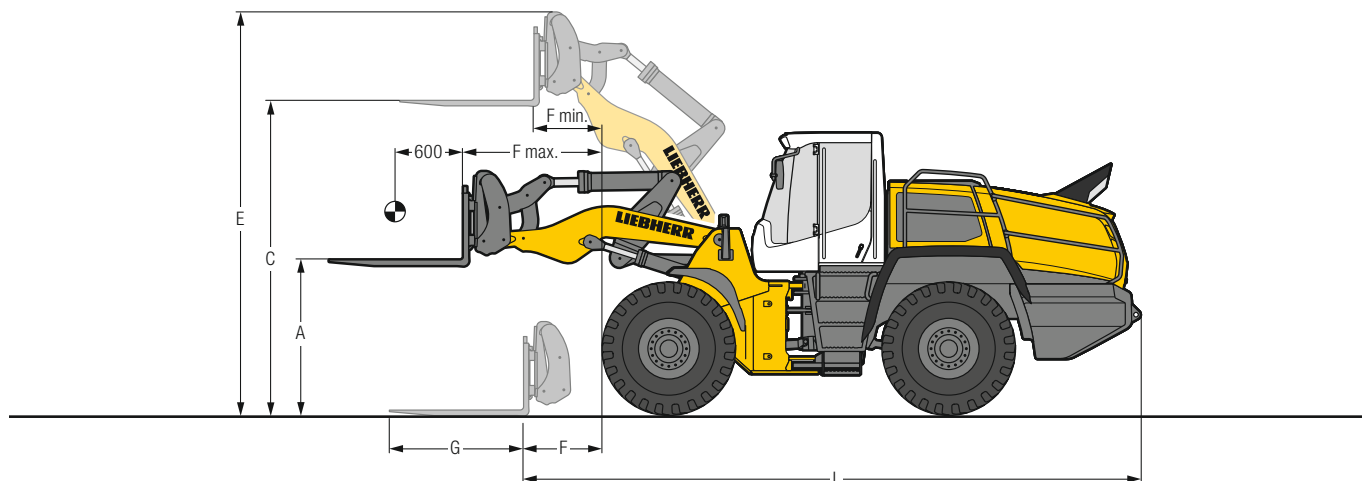
IND-QC = Industrial lift arm with parallel guidance incl. quick coupler

BOCE = Bolt-on cutting edge

# Attachment

## Fork carrier and fork

L 550 - L 556



### FEM IV fork carrier and fork

		L 550	L 556
Geometry		IND-QC	IND-QC
A	Lifting height at max. reach	ft in	5'11"
C	Max. lifting height	ft in	12'10"
E	Max. operating height	ft in	16'1"
F	Reach at loading position	ft in	3'7"
F max.	Max. reach	ft in	5'7"
F min.	Reach at max. lifting height	ft in	2'4"
G	Fork length	ft in	4'11"
L	Length - basic machine	ft in	24'10"
	Tipping load, straight*	lb	24,120
	Tipping load, fully articulated*	lb	21,230
	Recraft intended payload for uneven ground = 60% of tipping load, articulated <sup>1)</sup>	lb	12,745
	Recraft intended payload for smooth surfaces = 80% of tipping load, articulated <sup>1)</sup>	lb	16,995
	Operating weight*	lb	40,785
	Tire size	23.5R25 L3	23.5R25 L3

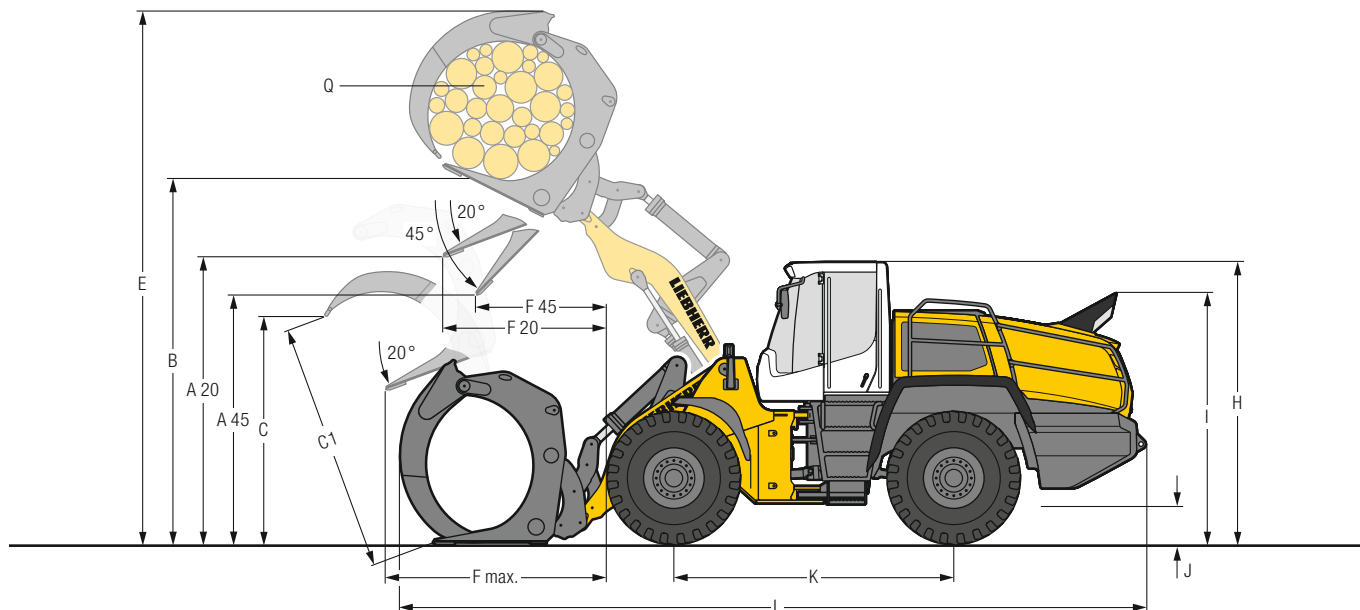
\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load. (Tipping load, fully articulated according to ISO 14397-1)

<sup>1)</sup> According to EN 474-3

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

# Attachment

## Log grapple



### Log grapple

Geometry	L 550		L 556
	IND-QC	IND-QC	IND-QC
A20 Discharge height at 20°	ft in 11'3"	11'	11'
A45 Discharge height at 45°	ft in 9'8"	9'1"	9'1"
B Manipulation height	ft in 14'11"	14'11"	15'3"
C Max. grapple opening in loading position	ft in 7'10"	9'	9'
C1 Max. grapple opening	ft in 8'6"	9'10"	9'10"
E Max. height	ft in 20'10"	21'10"	21'10"
F20 Reach at max. lifting height at 20° discharge	ft in 5'3"	5'11"	5'11"
F45 Reach at max. lifting height at 45° discharge	ft in 3'10"	4'4"	4'4"
F max. Max. reach	ft in 8'6"	9'3"	9'3"
H Height above operator's cab	ft in 11'2"	11'2"	11'2"
I Height above exhaust	ft in 10'	10'	10'
J Ground clearance	ft in 1'7"	1'7"	1'7"
K Wheelbase	ft in 11'6"	11'6"	11'6"
L Overall length	ft in 28'10"	29'9"	29'9"
Width over tires	ft in 8'8"	8'8"	8'8"
Q Grapple diameter	m <sup>2</sup> 2.15	2.85	2.85
Grapple width	ft in 5'3"	5'3"	5'3"
Payload*	lb 13,890	13,230	14,110
Operating weight*	lb 44,090	44,425	46,295
Tire size	23.5R25 L4		23.5R25 L4

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and payload.

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

# Bucket selection

L 550 – L 556

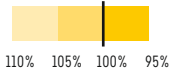
## L 550

Lift arm	Bucket	Material density (lb/yd³)									
		674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371	
ZK	GPB <sub>1</sub>	4.5 yd³						4.8			4.5
		4.8 yd³					5.4				4.8
ZK-HL	GPB <sub>1</sub>	3.7 yd³						4.1			3.7
		4.1 yd³					4.5				4.1
IND-QC	GPB <sub>1</sub>	4.1 yd³						4.5			4.1
		6.5 yd³			7.2						6.5
	LMB	12.4 yd³	12.4								
		5.9 yd³				6.5					5.9
HDB	11.8 yd³	11.8									
	10.5 yd³										
IND-QC-HL	GPB <sub>1</sub>	3.4 yd³						3.8			3.4
		3.7 yd³						4.1			3.7
	LMB	5.9 yd³				6.5					5.9
		11.1 yd³	11.1								
	HDB	5.2 yd³				5.8					5.2
		10.5 yd³	10.5								

## L 556

Lift arm	Bucket	Material density (lb/yd³)										
		674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371		
ZK	GPB <sub>1</sub>	4.8 yd³								5.4		4.8
		5.4 yd³						5.9				5.4
ZK-HL	GPB <sub>1</sub>	4.1 yd³								4.5		4.1
		4.5 yd³						4.8				4.5
IND-QC	GPB <sub>1</sub>	4.5 yd³								4.8		4.5
		7.2 yd³						8.0				7.2
	LMB	13.1 yd³	13.1									
		6.5 yd³				7.2						6.5
HDB	12.4 yd³	12.4										
	10.5 yd³											
IND-QC-HL	GPB <sub>1</sub>	3.7 yd³								4.1		3.7
		4.1 yd³								4.5		4.1
	LMB	6.5 yd³				7.2						6.5
		11.8 yd³	11.8									
	HDB	5.9 yd³				6.5						5.9
		11.1 yd³	11.1									

### Bucket filling factor



### Lift arm

ZK	Z-bar kinematics, standard lift arm length
ZK-HL	Z-bar kinematics, High Lift
IND-QC	Industrial lift arm with quick coupler, standard lift arm length
IND-QC-HL	Industrial lift arm with quick coupler, High Lift

### Bucket

GPB <sub>1</sub>	General purpose bucket (Excavation bucket)
LMB	Light material bucket
HDB	High-dump bucket

### Bulk material densities and bucket filling factors

		lb/yd³	%			lb/yd³	%			lb/yd³	%
Gravel	moist	3,203	105	Earth	dry	2,191	115	Glass waste	broken	2,360	100
	dry	2,697	105		dry excavated	2,697	110		solid	1,686	100
	crushed stone	2,528	100		Topsoil	1,854	110		Compost	dry	1,348
Sand	dry	2,528	105	Basalt	3,287	100		wet	1,686	110	
	wet	3,203	110	Granite	3,034	95	Wood chips / Saw dust		843	110	
Gravel and Sand	dry	2,865	105	Sandstone	2,697	100	Paper	shredded / loose	1,011	110	
	wet	3,371	100	Slate	2,950	100			recovered paper / cardboard	1,686	110
Sand / Clay		2,697	110	Bauxite	2,360	100	Coal	heavy material density	2,023	110	
Clay	natural	2,697	110	Limestone	2,697	100			light material density	1,517	110
	dry	2,360	110	Gypsum	3,034	100	Waste	domestic waste	843	100	
Clay / Gravel	dry	2,360	110	Coke	843	110			bulky waste	1,686	100
	wet	2,697	100	Slag	3,034	100					



# Tires



## Tire types

	Size and tread code	Change of operating weight lb	Width over tires ft in	Change in vertical dimensions* ft in	Use
<b>L 550 XPower® / L 556 XPower®</b>					
Bridgestone	23.5R25 VJT L3	304	8'9"	0.24"	Bulk material (firm ground conditions)
Bridgestone	23.5R25 VLTS L4	794	8'9"	1.54"	Gravel, Industry (firm ground conditions)
Bridgestone	23.5R25 VSDL L5	1,980	8'9"	2.56"	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	23.5R25 VSDT L5	1,876	8'9"	2.17"	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	750/65R25 VTS L3	1,605	9'5"	0.43"	Gravel, Industry, Wood (all ground conditions)
Continental	23.5R25 EM-Master L3	467	8'9"	1.14"	Bulk material (firm ground conditions)
Continental	23.5R25 EM-Master L4	732	8'9"	0.79"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	23.5R25 TL-3A+ L3	626	8'9"	1.42"	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	23.5R25 GP-4D L4	723	8'10"	0.98"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	23.5R25 RL-4K L4	1,102	8'10"	1.54"	Gravel, Industry, Stone (firm ground conditions)
Goodyear	23.5R25 RL-5K L5	2,064	8'10"	2.24"	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	23.5R25 RL-5S L5	2,134	8'10"	2.24"	Scrap, Recycling, Slag (firm ground conditions)
Goodyear	23.5R25 RT-5D L5	1,808	8'9"	2.17"	Stone, Mining spoil (firm ground conditions)
Goodyear	750/65R25 TL-3A+ L3	1,499	9'7"	0.94"	Sand, Gravel, Industry, Wood (all ground conditions)
Michelin	23.5R25 XHA2 L3	0	8'8"	0"	Sand, Gravel (all ground conditions)
Michelin	23.5R25 XTLA L2	- 26	8'8"	- 0.16"	Gravel, Earthworks, Clay (all ground conditions)
Michelin	23.5R25 X MINE PRO L5	1,825	8'10"	2.20"	Stone, Scrap, Recycling (firm ground conditions)
Michelin	23.5R25 XLD D2A L5	1,349	8'9"	1.02"	Stone, Mining spoil (firm ground conditions)
Michelin	650/65R25 XLD65 L3T	- 247	8'10"	- 2.09"	Gravel, Industry, Wood (all ground conditions)
Michelin	750/65R25 XLD65 L3T	1,155	9'5"	- 0.28"	Gravel, Industry, Wood (all ground conditions)

\* The stated values are theoretical and may deviate in practice.

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

# Technical data

L 566 - L 586



## Diesel engine

	L 566	L 580	L 586
<b>Diesel engine</b>	D936 A7	D936 A7	D936 A7
<b>Design</b>	Water-cooled in-line engine with charge-air cooling		
Cylinder inline	6	6	6
<b>Fuel injection process</b>	Electronic Common Rail high-pressure injection		
<b>Output to</b>	200 / 268	230 / 308	260 / 349
ISO 9249 / ECE-R.24	at RPM	1,800	1,800
<b>Rated output to</b>	203 / 272	233 / 312	263 / 353
ISO 14396 / ECE-R.120	at RPM	1,800	1,800
Nominal speed	at RPM	1,800	1,800
Max. torque to ISO	lb ft	1,412	1,452
14396 / ECE-R.120	at RPM	1,000	1,000
Displacement	in <sup>3</sup>	642	642
	liter	10.52	10.52
Bore / Stroke	ft in	4.8" / 5.91"	4.8" / 5.91"
<b>Tier 4f</b>			
<b>Harmful emissions values</b>	In accordance with EPA 40 CFR part 1039 and CARB 13 CCR section 2423		
<b>Emission control</b>	Liebherr-SCR technology		
<b>Air cleaner system</b>	Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display		
<b>Electrical system</b>			
Operating voltage	V	24	24
Capacity	Ah	2 x 180	2 x 180
Alternator	V/A	28 / 180	28 / 180
Starter	V/HP	24 / 10.5	24 / 10.5



## Driveline

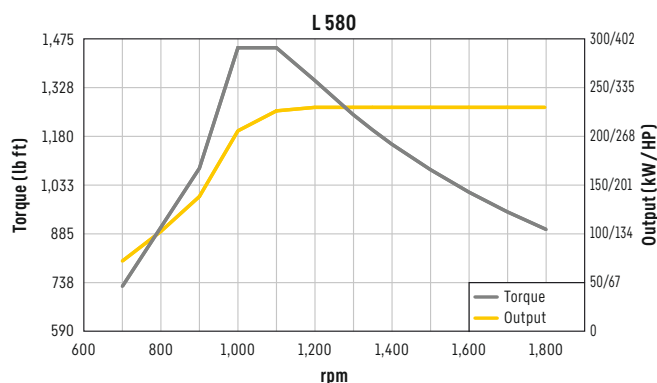
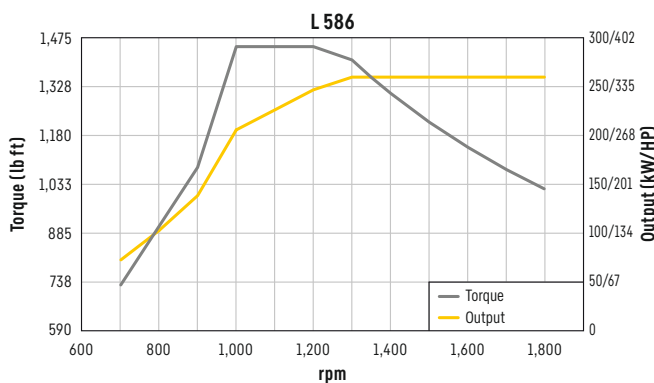
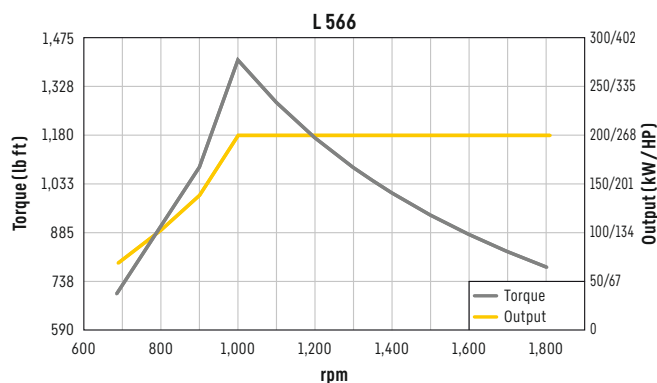
<b>Continuous power split XPower® driveline</b>	
<b>Design</b>	Continuous, fully-automatic XPower® driveline. No traction interruptions across the entire speed range. Hydrostatic power split with two axial piston units. Identical driving performance – forwards and in reverse
<b>Filtration</b>	Filter system for driveline, depend on working hydraulics
<b>Control</b>	Driveline is controlled from travel pedal for tractive force and speed setting with integrated inch function. The Liebherr control switch is used to control forward and reverse travel
<b>Travel speed range</b>	L 566 - L 580: 0 - 24.9 mph forward and reverse, fully-automatic L 586: 0 - 20.5 mph forward and reverse, fully-automatic Speed restriction available upon request. Speeds quoted apply with the standard tires as indicated on loader model.



## Brakes

<b>Wear-free service brake</b>	Self-locking of the XPower® driveline (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes (two separate brake circuits)
<b>Parking brake</b>	Electro-hydraulically actuated spring-loaded disc brake system on the transmission

The braking system meets the requirements of the ISO 3450.



## Axles

	L 566	L 580	L 586
<b>Four-wheel drive</b>			
<b>Front axle</b>	Fixed		
<b>Rear axle</b>	Center pivot, with 13° oscillating angle to each side		
Height of obstacles which can be driven over	ft in		
	1'7.4"	1'6.6"	1'8.6"
	with all four wheels remaining in contact with the ground		
<b>Differentials</b>	Automatic limited-slip differentials		
<b>Reduction gear</b>	Planetary final drive in wheel hubs		
<b>Track width</b>	7'4" with all types of tires (L 566, L 580) 8' with all types of tires (L 586)		

## Steering

<b>Design</b>	"Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders		
<b>Angle of articulation</b>	38° to each side (L 566, L 580) 37° to each side (L 586)		
<b>Emergency steering</b>	Electro-hydraulic emergency steering system		

## Attachment hydraulics

	L 566	L 580	L 586
<b>Design</b>	"Load-sensing" swash plate type variable flow pump with output and flow control, and pressure cut-off in the control block		
<b>Cooling</b>	Hydraulic oil cooling using thermostatically controlled fan and oil cooler		
<b>Filtration</b>	Return line filter in the hydraulic reservoir		
<b>Control</b>	Liebherr control lever, electro-hydraulically operated		
<b>Lifting function</b>	Lifting, neutral, lowering Automatic lift arm position and lowering by Liebherr control lever		
<b>Tilt function</b>	Float position controlled by Liebherr control lever Tilt back, neutral, dump Automatic bucket return for tilting back and dumping controlled by Liebherr control lever		
<b>Max. flow</b>	gpm	77	84
<b>Max. pressure</b>			
Z-bar kinematics	psi	5,076	5,511
Industrial lift arm	psi	5,511	5,511

## Attachment

	L 566	L 580	L 586
<b>Geometry variants</b>			
Optional	Powerful Z-bar kinematics with tilt cylinder and cast steel cross-tube Industrial lift arm with tilt cylinder, hydraulic quick coupler standard (L 566, L 580)		
<b>Bearings</b>	Sealed		
<b>Cycle time at nominal load</b>	ZK	IND	ZK
	IND	ZK	IND
Lifting	s	6.1	6.1
Dumping	s	1.2	2.0
Lowering (empty)	s	3.2	3.2
		3.4	3.4
		3.4	3.6

## Operator's cab

<b>Design</b>	Hydraulically mounted, noise-proof cab ROPS roll over protection per EN ISO 3471/EN 474-1 FOPS falling objects protection per EN ISO 3449 / EN 474-1, Cat. II Operator's door with sliding side window, sliding side window on right, front windscreen made of compound safety glass, side panels with single-pane safety glass ESG, heated rear window ESG, all windows are tinted. 3 way continuous adjustable steering column		
<b>Liebherr operator's seat</b>	6 way adjustable, vibration-damped operator's seat "Comfort" with seat, depth and incline adjustment standard (air-cushioned with seat heating adjustable to operator's weight), Liebherr control lever mounted into the operator's seat standard		
<b>Cab heating and ventilation</b>	4-zone air conditioning with new improved cooling output standard, electrically heated rear window, all filters are easy to access and replaceable		
<b>Vibration emissions</b>			
Vibrations in the hand/arm	ft/s <sup>2</sup>	≤ 8.2	
Vibrations through the whole body	ft/s <sup>2</sup>	≤ 1.6	

## Sound level

	L 566	L 580	L 586
<b>Sound pressure level to ISO 6396</b>			
L <sub>PA</sub> (inside cab)	dB(A)	68	68
<b>Sound power level to 2000/14/EC</b>			
L <sub>WA</sub> (surround noise)	dB(A)	105	105
		105	107

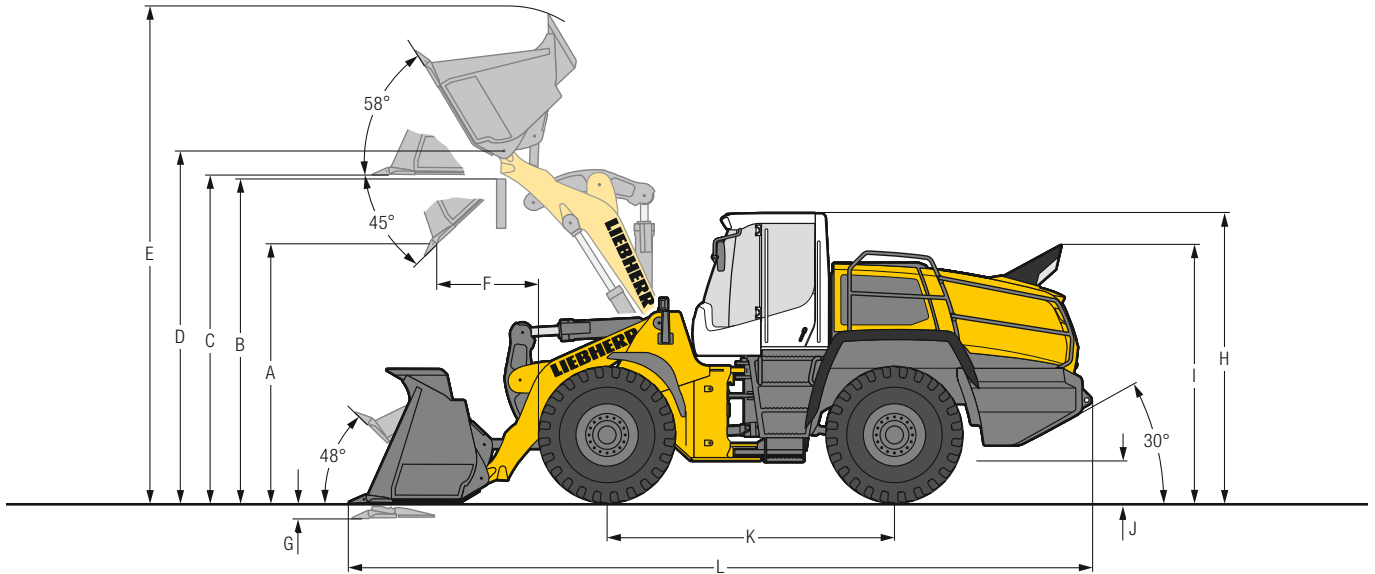
## Füllmengen

	L 566	L 580	L 586
<b>Fuel tank</b>	gal	96	96
<b>DEF tank</b>	gal	17.8	17.8
<b>Engine oil (inclusive filter change)</b>	gal	11.1	11.1
<b>Pump distribution gearbox</b>	gal	0.3	0.3
<b>XPower® gearbox</b>	gal	14.5	14.5
<b>Coolant</b>	gal	19.3	19.3
<b>Front axle</b>	gal	11.1	15.3
<b>Rear axle</b>	gal	11.1	15.3
<b>Hydraulic tank</b>	gal	27.7	27.7
<b>Hydraulic system, total</b>	gal	50.2	50.2
<b>Air conditioning system R134a</b>	lb	2.8	2.8
		2.8	2.8

# Dimensions

## Z-bar kinematics

L 566 – L 586



### Loading bucket

	L 566		L 580			L 586			
	ZK	ZK	ZK	ZK	ZK	ZK	ZK	ZK	
Geometry									
Cutting tools	T	T	T	T	BOCE	T	T	ROB	
Lift arm length	ft in	9'7"	9'7"	10'	10'	10'	10'4"	10'4"	10'4"
Bucket		GPB <sub>1</sub>	GPB <sub>1</sub>	GPB <sub>1</sub>	GPB <sub>2</sub>	GPB <sub>2</sub>	GPB <sub>2</sub>	GPB <sub>2</sub>	RB
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	5.5	6.1	6.8	7.5	7.51	7.8	8.5	7.2
Specific material density	lb/yd <sup>3</sup>	3,034	2,697	3,034	2,697	2,865	3,034	2,697	3,034
Bucket width	ft in	9'10"	9'10"	9'10"	10'10"	10'10"	11'3"	12'	11'2"
A Dumping height at max. lift height and 45° discharge	ft in	10'6"	10'3"	10'9"	10'7"	10'7"	10'8"	10'8"	10'10"
B Dump-over height	ft in	12'10"	12'10"	13'5"	13'5"	13'5"	13'7"	13'7"	13'7"
C Max. height of bucket bottom	ft in	13'3"	13'3"	14'	14'	14'	14'2"	14'2"	14'1"
D Max. height of bucket pivot point	ft in	14'4"	14'4"	15'	15'	15'	15'3"	15'3"	15'3"
E Max. operating height	ft in	20'1"	20'5"	21'5"	21'4"	21'4"	21'5"	21'5"	21'2"
F Reach at max. lift height and 45° discharge	ft in	3'11"	4'2"	3'11"	4'3"	4'3"	4'8"	4'8"	4'7"
G Digging depth	ft in	4"	4"	4"	4"	4"	4"	4"	6"
H Height above operator's cab	ft in	11'9"	11'9"	11'9"	11'9"	11'9"	12'3"	12'3"	12'4"
I Height above exhaust	ft in	10'6"	10'6"	10'6"	10'6"	10'6"	10'10"	10'10"	10'11"
J Ground clearance	ft in	1'9"	1'9"	1'6"	1'6"	1'6"	1'11"	1'11"	1'11"
K Wheelbase	ft in	11'8"	11'8"	12'2"	12'2"	12'2"	12'10"	12'10"	12'10"
L Overall length	ft in	30'1"	30'5"	31'7"	31'11"	31'11"	32'9"	32'9"	32'9"
Turning circle radius over tires	ft in	21'11"	21'11"	22'7"	22'7"	22'7"	24'7"	24'7"	24'9"
Turning circle radius over outside bucket edge	ft in	24'1"	24'2"	25'	25'6"	25'6"	27'5"	27'7"	27'3"
Breakout force (SAE)	lbf	44,960	42,715	50,580	46,085	44,960	53,955	53,955	55,080
Tipping load, straight*	lb	40,015	39,460	47,950	46,850	48,940	54,015	52,690	56,440
Tipping load, fully articulated*	lb	35,055	34,500	42,330	41,225	42,990	47,620	46,295	49,605
Operating weight*	lb	52,690	52,910	60,955	61,290	63,490	71,870	72,860	74,295
Tire size		26.5R25 L3		26.5R25 L3			29.5R25 L3		29.5R25 L5

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

\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see pages 34 / 35.

1) Toothed buckets, hydraulic quick coupler and additional hydraulic circuits are not approved for rehandling application.

GPB<sub>1</sub> = Excavation bucket with back grading edge for direct mounting

GPB<sub>2</sub> = Rehandling bucket for direct mounting

RB = Rock bucket with oblique base for quarrying applications for direct mounting

ZK = Z-bar kinematics

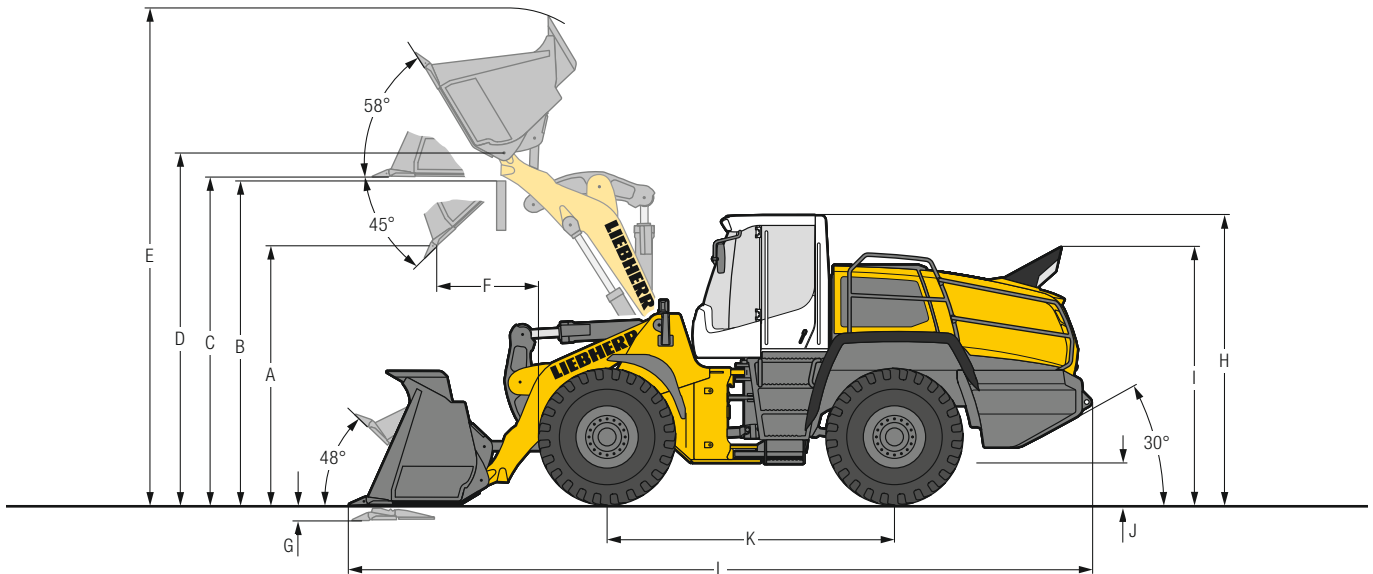
T = Welded-on tooth holder with add-on teeth

BOCE = Bolt-on cutting edge

ROB = Rock bucket with delta cutting edge, welded-on tooth holder with add-on teeth and bolted intermediate sections

# Dimensions

## Z-bar kinematics high lift



L 566 - L 586

### Loading bucket

	L 566		L 580			L 586			
	ZK	ZK	ZK	ZK	ZK	ZK	ZK	ZK	
Geometry	T	T	T	T	BOCE	T	T	ROB	
Cutting tools									
Lift arm length	ft in	10'8"	10'8"	10'8"	10'8"	11'4"	11'4"	11'4"	
Bucket		GPB <sub>1</sub>	GPB <sub>1</sub>	GPB <sub>1</sub>	GPB <sub>2</sub>	GPB <sub>2</sub>	GPB <sub>2</sub>	RB	
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	4.8	5.5	6.1	6.8	6.81	7.2	7.8	6.5
Specific material density	lb/yd <sup>3</sup>	3,034	2,697	3,034	2,697	2,865	3,034	2,697	3,034
Bucket width	ft in	9'10"	9'10"	9'10"	9'10"	9'10"	11'2"	11'2"	11'2"
A Dumping height at max. lift height and 45° discharge	ft in	12'2"	12'	11'8"	11'5"	11'3"	12'3"	12'	12'3"
B Dump-over height	ft in	14'1"	14'1"	14'1"	14'1"	14'1"	14'9"	14'9"	14'9"
C Max. height of bucket bottom	ft in	14'8"	14'8"	14'8"	14'8"	14'8"	15'7"	15'7"	15'8"
D Max. height of bucket pivot point	ft in	15'8"	15'8"	15'8"	15'8"	15'8"	16'7"	16'7"	16'8"
E Max. operating height	ft in	21'2"	21'6"	21'10"	22'1"	22'	22'10"	22'11"	22'4"
F Reach at max. lift height and 45° discharge	ft in	3'8"	3'11"	3'11"	4'2"	4'5"	4'6"	4'8"	4'6"
G Digging depth	ft in	6"	6"	6"	6"	6"	4"	4"	6"
H Height above operator's cab	ft in	11'9"	11'9"	11'9"	11'9"	11'9"	12'3"	12'3"	12'4"
I Height above exhaust	ft in	10'6"	10'6"	10'6"	10'6"	10'6"	10'10"	10'10"	10'11"
J Ground clearance	ft in	1'9"	1'9"	1'6"	1'6"	1'6"	1'11"	1'11"	1'11"
K Wheelbase	ft in	11'8"	11'8"	12'2"	12'2"	12'2"	12'10"	12'10"	12'10"
L Overall length	ft in	31'2"	31'6"	32'1"	32'5"	32'9"	33'8"	33'9"	33'10"
Turning circle radius over tires	ft in	21'11"	21'11"	22'7"	22'7"	22'7"	24'7"	24'7"	24'9"
Turning circle radius over outside bucket edge	ft in	24'6"	24'8"	25'2"	25'4"	25'5"	27'11"	28'1"	27'9"
Breakout force (SAE)	lbf	47,210	44,960	53,955	50,580	50,580	56,200	53,955	58,450
Tipping load, straight*	lb	34,945	34,500	44,535	44,090	45,415	49,385	47,840	50,045
Tipping load, fully articulated*	lb	30,535	30,095	39,240	38,800	40,125	43,430	41,885	44,090
Operating weight*	lb	52,910	53,130	60,955	61,180	63,050	71,870	72,750	74,735
Tire size		26.5R25 L3		26.5R25 L3			29.5R25 L3		29.5R25 L5

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

\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material - see pages 34 / 35.

1) Toothed buckets, hydraulic quick coupler and additional hydraulic circuits are not approved for rehandling application.

GPB<sub>1</sub> = Excavation bucket with back grading edge for direct mounting

GPB<sub>2</sub> = Rehandling bucket for direct mounting

RB = Rock bucket with oblique base for quarrying applications for direct mounting

ZK = Z-bar kinematics

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

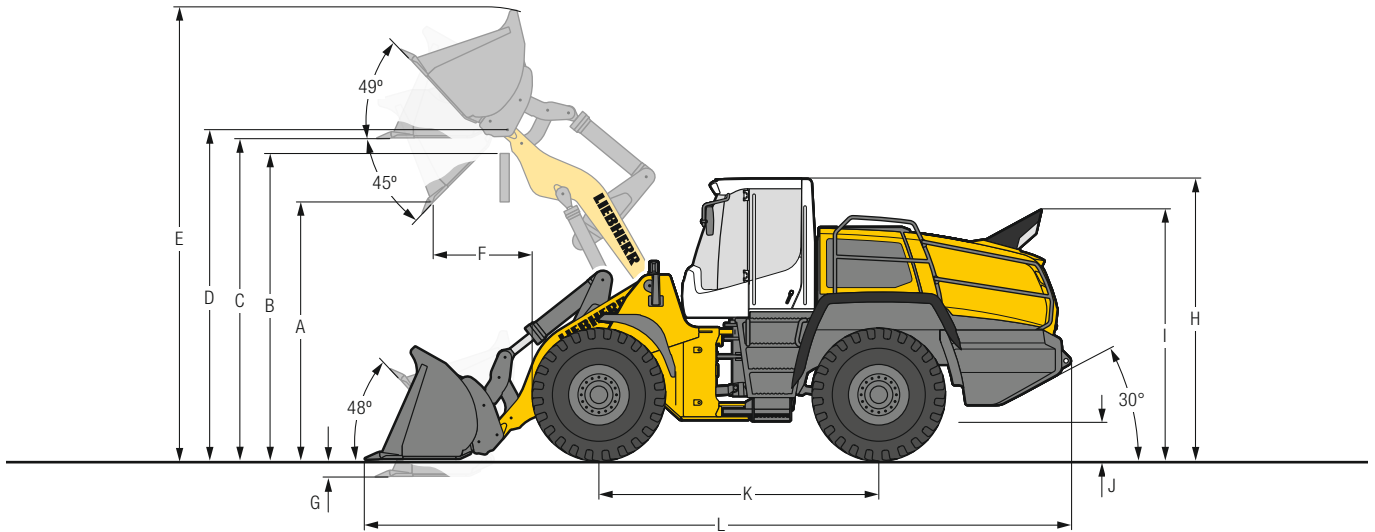
BOCE = Bolt-on cutting edge

ROB = Rock bucket with delta cutting edge, welded-on tooth holder with add-on teeth and bolted intermediate sections

# Dimensions

## Industrial lift arm

L 566 – L 586



### Excavation bucket

	L 566		L 580	
	IND-QC	IND-QC	IND-QC	IND-QC
Geometry				
Cutting tools	T	T	T	T
Lift arm length	ft in 9'6"	ft in 9'6"	ft in 9'6"	ft in 9'6"
Bucket capacity according to ISO 7546 **	yd <sup>3</sup> 4.6	yd <sup>3</sup> 5.2	yd <sup>3</sup> 5.9	yd <sup>3</sup> 6.5
Specific material density	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 2,697	lb/yd <sup>3</sup> 3,034	lb/yd <sup>3</sup> 2,697
Bucket width	ft in 9'10"	ft in 9'10"	ft in 9'10"	ft in 9'10"
A Dumping height at max. lift height and 45° discharge	ft in 10'6"	ft in 10'4"	ft in 10'1"	ft in 9'10"
B Dump-over height	ft in 12'10"	ft in 12'10"	ft in 12'10"	ft in 12'10"
C Max. height of bucket bottom	ft in 13'7"	ft in 13'7"	ft in 13'7"	ft in 13'7"
D Max. height of bucket pivot point	ft in 14'9"	ft in 14'9"	ft in 14'9"	ft in 14'9"
E Max. operating height	ft in 19'10"	ft in 20'3"	ft in 20'7"	ft in 20'9"
F Reach at max. lift height and 45° discharge	ft in 4'2"	ft in 4'5"	ft in 4'3"	ft in 4'
G Digging depth	ft in 4"	ft in 4"	ft in 4"	ft in 4"
H Height above operator's cab	ft in 11'9"	ft in 11'9"	ft in 11'9"	ft in 11'9"
I Height above exhaust	ft in 10'6"	ft in 10'6"	ft in 10'6"	ft in 10'6"
J Ground clearance	ft in 1'9"	ft in 1'9"	ft in 1'6"	ft in 1'6"
K Wheelbase	ft in 11'11"	ft in 11'11"	ft in 12'2"	ft in 12'2"
L Overall length	ft in 30'5"	ft in 30'9"	ft in 31'4"	ft in 31'8"
Turning circle radius over tires	ft in 22'3"	ft in 22'3"	ft in 22'7"	ft in 22'7"
Turning circle radius over outside bucket edge	ft in 24'4"	ft in 24'5"	ft in 24'10"	ft in 24'11"
Breakout force (SAE)	lbf 44,960	lbf 41,590	lbf 44,960	lbf 41,590
Tipping load, straight*	lb 37,700	lb 36,705	lb 44,425	lb 43,430
Tipping load, fully articulated*	lb 33,070	lb 32,075	lb 39,130	lb 38,140
Operating weight*	lb 54,675	lb 55,005	lb 61,840	lb 62,170
Tire size	26.5R25 L3		26.5R25 L3	

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

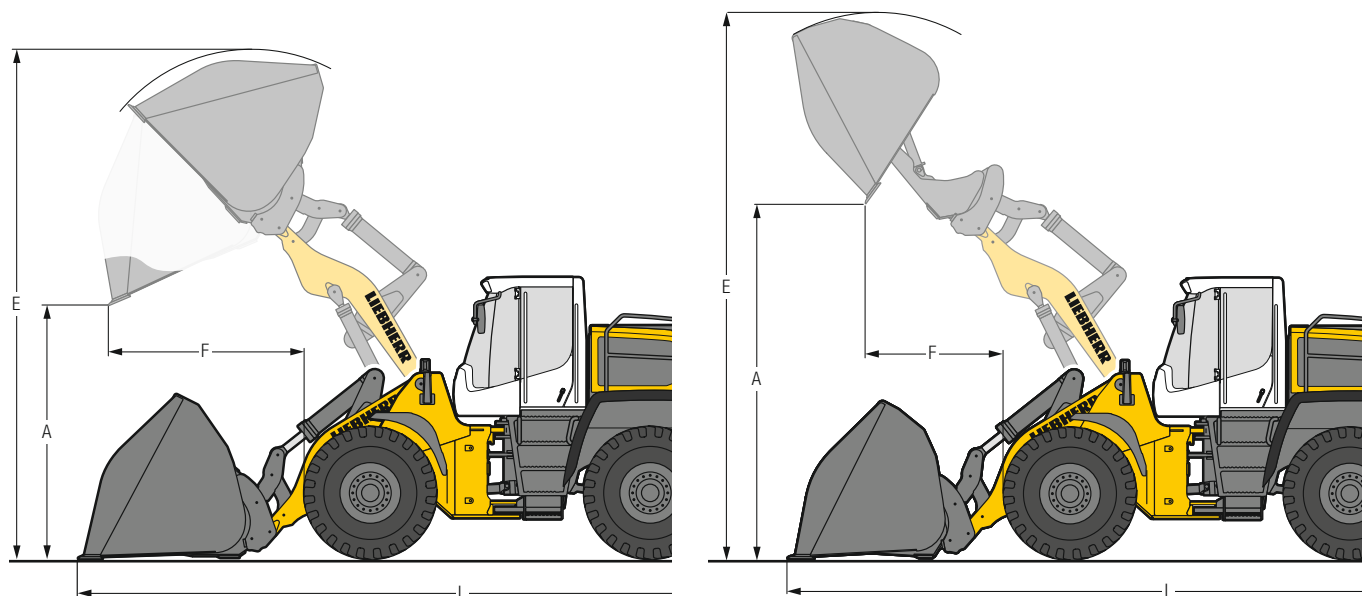
\*\* Actual bucket capacity may be approx. 10% larger than the calculation according to ISO 7546 standard. The degree to which the bucket can be filled depends on the material – see pages 34 / 35.

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

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

# Attachment

## Light material bucket and High-Dump bucket



L 566 - L 586



### Light material bucket

	L 566		L 580		L 586
	IND-QC	IND-QC	IND-QC	IND-QC	ZK
Geometry	IND-QC	IND-QC	IND-QC	IND-QC	ZK
Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	8.5 yd <sup>3</sup>	15.7	9.8	18.3	11.1
Specific material density	1,686 lb/yd <sup>3</sup>	758	1,686	758	1,854
Bucket width	10'6" ft in	12'2"	11'2"	13'1"	11'6"
A Dumping height at max. lift height	9'6" ft in	8'7"	9'3"	8'2"	9'8"
E Max. operating height	21'3" ft in	22'	21'7"	22'4"	22'5"
F Reach at maximum lift height	4'10" ft in	6'1"	5'1"	6'5"	5'10"
L Overall length	31'4" ft in	32'11"	31'10"	33'6"	33'6"
Tipping load, straight*	34,610 lb	32,185	30,645	39,460	52,910
Tipping load, fully articulated*	30,205 lb	27,780	37,260	34,170	46,295
Operating weight*	55,885 lb	57,980	63,160	65,255	72,310
Tire size	26.5R25 L3		26.5R25 L3		29.5R25 L3



### High-Dump bucket

	L 566		L 580		L 586
	IND-QC	IND-QC	IND-QC	IND-QC	ZK
Geometry	IND-QC	IND-QC	IND-QC	IND-QC	ZK
Cutting tools	BOCE	BOCE	BOCE	BOCE	BOCE
Bucket capacity	7.8 yd <sup>3</sup>	14.4	9.2	17.0	11.1
Specific material density	1,686 lb/yd <sup>3</sup>	758	1,686	758	1,686
Bucket width	10'6" ft in	12'2"	10'6"	13'1"	11'6"
A Dumping height at max. lift height	16'10" ft in	15'11"	16'4"	15'8"	16'9"
E Max. operating height	23'8" ft in	24'7"	24'4"	25'1"	25'3"
F Reach at maximum lift height	5'10" ft in	7'	6'8"	6'9"	6'7"
L Overall length	32'2" ft in	33'3"	33'	33'10"	34'5"
Tipping load, straight*	32,410 lb	31,085	39,240	37,700	51,145
Tipping load, fully articulated*	28,000 lb	26,675	34,170	32,630	44,755
Operating weight*	57,320 lb	59,305	64,155	66,360	73,855
Tire size	26.5R25 L3		26.5R25 L3		29.5R25 L3

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

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

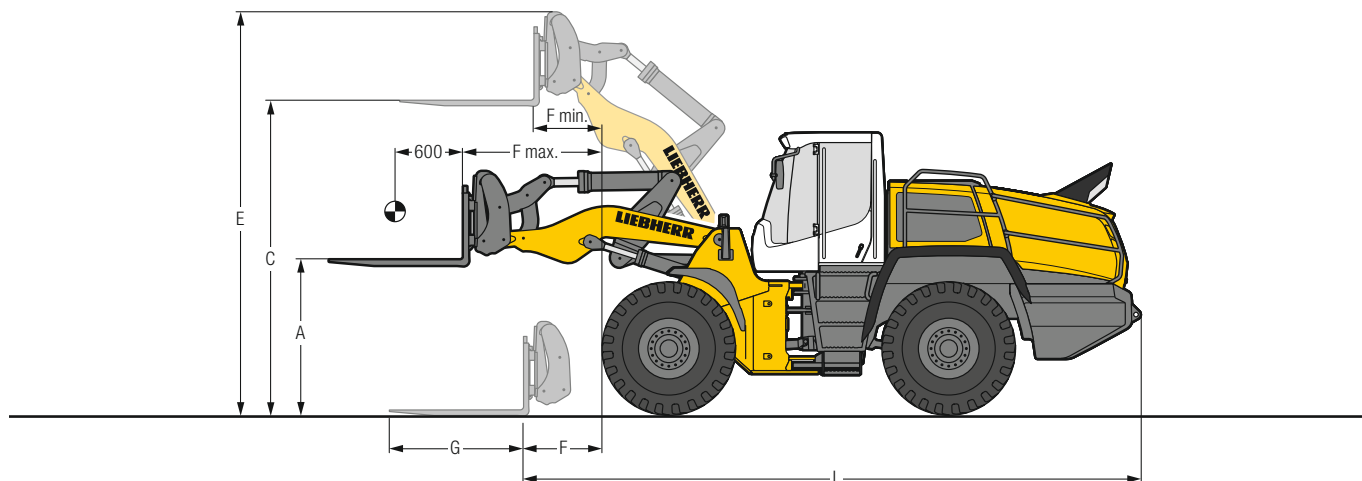
ZK = Z-bar kinematics

BOCE = Bolt-on cutting edge

# Attachment

## Fork carrier and fork

L 566 – L 586



### FEM IV fork carrier and fork

		L 566	L 580
Geometry		IND-QC	IND-QC
A	Lifting height at max. reach	ft in	6'10"
C	Max. lifting height	ft in	13'9"
E	Max. operating height	ft in	17'1"
F	Reach at loading position	ft in	3'9"
F max.	Max. reach	ft in	5'11"
F min.	Reach at max. lifting height	ft in	2'10"
G	Fork length	ft in	5'11"
L	Length – basic machine	ft in	26'7"
	Tipping load, straight*	lb	29,760
	Tipping load, fully articulated*	lb	26,235
	Recoft intended payload for uneven ground = 60% of tipping load, articulated <sup>1)</sup>	lb	15,740
	Recoft intended payload for smooth surfaces = 80% of tipping load, articulated <sup>1)</sup>	lb	22,045 <sup>2)</sup>
	Operating weight*	lb	52,800
	Tire size	26.5R25 L3	26.5R25 L3

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

<sup>1)</sup> According to EN 474-3

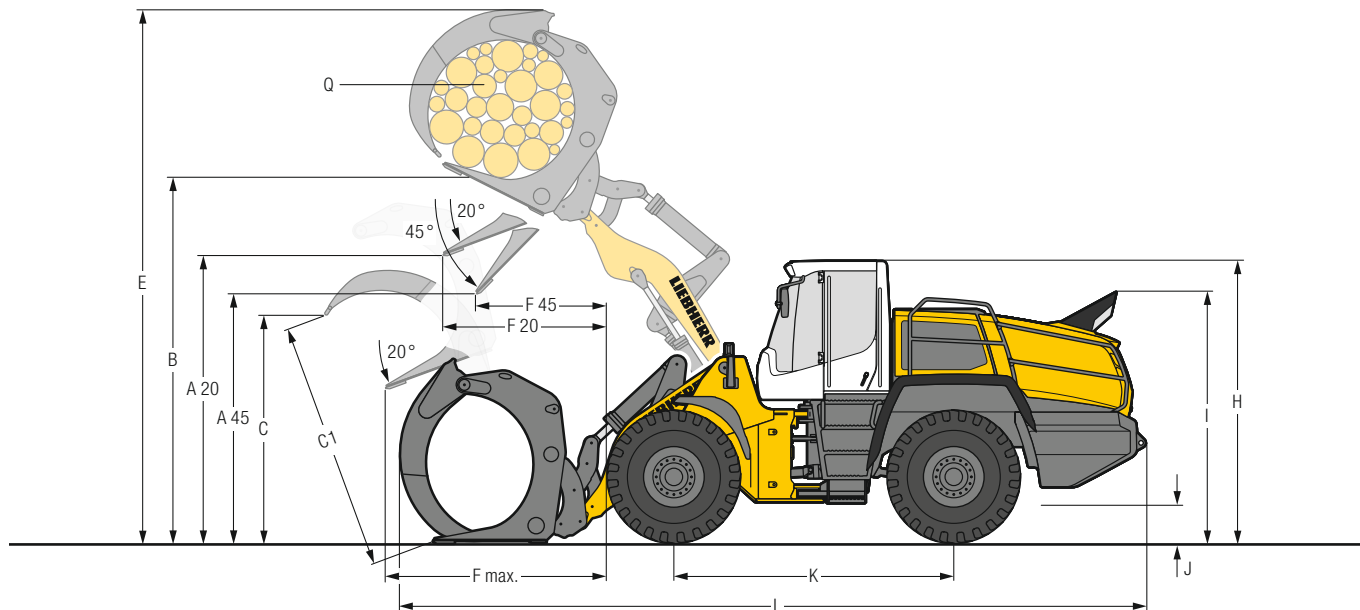
<sup>2)</sup> Payload is limited by FEM IV fork carrier and forks

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



# Attachment

## Log grapple



L 566 - L 586

### Log grapple

		L 566	L 580
Geometry		IND-QC	IND-QC
A20	Discharge height at 20°	ft in 11'9"	11'7"
A45	Discharge height at 45°	ft in 9'7"	9'2"
B	Manipulation height	ft in 16'10"	16'10"
C	Max. grapple opening in loading position	ft in 8'8"	9'7"
C1	Max. grapple opening	ft in 10'	10'11"
E	Max. height	ft in 24'3"	24'7"
F20	Reach at max. lifting height at 20° discharge	ft in 7'1"	7'3"
F45	Reach at max. lifting height at 45° discharge	ft in 5'4"	5'4"
F max.	Max. reach	ft in 10'2"	10'4"
H	Height above operator's cab	ft in 11'10"	11'10"
I	Height above exhaust	ft in 10'7"	10'7"
J	Ground clearance	ft in 1'10"	1'7"
K	Wheelbase	ft in 11'11"	12'2"
L	Overall length	ft in 32'2"	33'
Width over tires		ft in 9'9"	9'9"
Q	Grapple diameter	m <sup>2</sup> 3.70	4.20
Grapple width		ft in 5'11"	5'11"
Payload*		lb 18,080	20,280
Operating weight*		lb 59,415	65,805
Tire size		26.5R25 L4	26.5R25 L4

\* The figures shown include the above tires, all lubricants, a full fuel tank, the ROPS /FOPS cab and the operator. Different tires and optional equipment will change the operating weight and payload.

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

# Bucket selection

L 566 – L 586

L 566		Bucket	Material density (lb/yd <sup>3</sup> )									
Lift arm			674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371	
ZK	GPB <sub>1</sub>	5.5 yd <sup>3</sup>							6.0	5.5		
		6.1 yd <sup>3</sup>						6.8	6.1			
ZK-HL	GPB <sub>1</sub>	4.8 yd <sup>3</sup>							5.4	4.8		
		5.5 yd <sup>3</sup>						6.0	5.5			
IND-QH	GPB <sub>1</sub>	4.6 yd <sup>3</sup>							5.1	4.6		
		5.2 yd <sup>3</sup>						5.8	5.2			
	LMB	8.5 yd <sup>3</sup>			9.4	8.5						
		15.7 yd <sup>3</sup>	15.7									
	HDB	7.8 yd <sup>3</sup>			8.6	7.8						
		14.4 yd <sup>3</sup>	14.4									

L 580		Bucket	Material density (lb/yd <sup>3</sup> )									
Lift arm			674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371	
ZK	GPB <sub>1</sub>	6.8 yd <sup>3</sup>								7.5	6.8	
		7.5 yd <sup>3</sup>							8.2	7.5		
ZK-HL	GPB <sub>1</sub>	7.5 yd <sup>3*</sup>								8.2	7.5	
		6.1 yd <sup>3</sup>								6.8	6.1	
IND-QC	GPB <sub>1</sub>	6.8 yd <sup>3</sup>								7.5	6.8	
		6.8 yd <sup>3*</sup>								7.5	6.8	
	GPB <sub>1</sub>	5.9 yd <sup>3</sup>									6.5	5.9
		6.5 yd <sup>3</sup>								7.2	6.5	
	LMB	9.8 yd <sup>3</sup>			10.9	9.8						
		18.3 yd <sup>3</sup>	18.3									
HDB	9.2 yd <sup>3</sup>			10.1	9.2							
	17.0 yd <sup>3</sup>	17.0										

\* Toothed buckets, hydraulic quick coupler and additional hydraulic circuits are not approved for rehandling application.

L 586		Bucket	Material density (lb/yd <sup>3</sup> )									
Lift arm			674	1,011	1,348	1,686	2,023	2,360	2,697	3,034	3,371	
ZK	GPB <sub>2</sub>	7.8 yd <sup>3</sup>								8.6	7.8	
		8.5 yd <sup>3</sup>							9.4	8.5		
	RB	7.2 yd <sup>3</sup>								7.2	6.8	
	LMB	11.1 yd <sup>3</sup>			12.3	11.1						
HDB		11.1 yd <sup>3</sup>			12.3	11.1						
ZK-HL	GPB <sub>2</sub>	7.2 yd <sup>3</sup>								8.0	7.2	
		7.8 yd <sup>3</sup>								8.6	7.8	
	RB	6.5 yd <sup>3</sup>								6.5	6.2	

### Bucket filling factor



110% 105% 100% 95%

### Lift arm

ZK	Z-bar kinematics, standard lift arm length
ZK-HL	Z-bar kinematics, High Lift
IND-QC	Industrial lift arm with quick coupler, standard lift arm length

### Bucket

GPB <sub>1</sub>	General purpose bucket (Excavation bucket)
GPB <sub>2</sub>	General purpose bucket (Rehandling bucket)
RB	Rock bucket
LMB	Light material bucket
HDB	High-dump bucket

### Bulk material densities and bucket filling factors

		lb/yd <sup>3</sup>	%			lb/yd <sup>3</sup>	%			lb/yd <sup>3</sup>	%
Gravel	moist	3,203	105	Earth	dry	2,191	115	Glass waste	broken	2,360	100
	dry	2,697	105		wet excavated	2,697	110		solid	1,686	100
	crushed stone	2,528	100	Topsoil		1,854	110	Compost	dry	1,348	105
Sand	dry	2,528	105	Basalt		3,287	100		wet	1,686	110
	wet	3,203	110	Granite		3,034	95	Wood chips / Saw dust		843	110
Gravel and Sand	dry	2,865	105	Sandstone		2,697	100	Paper	shredded / loose	1,011	110
	wet	3,371	100	Slate		2,950	100		recovered paper / cardboard	1,686	110
Sand / Clay		2,697	110	Bauxite		2,360	100	Coal	heavy material density	2,023	110
Clay	natural	2,697	110	Limestone		2,697	100		light material density	1,517	110
	dry	2,360	110	Gypsum	broken	3,034	100	Waste	domestic waste	843	100
Clay / Gravel	dry	2,360	110	Coke		843	110		bulky waste	1,686	100
	wet	2,697	100	Slag	broken	3,034	100				

## Tipping load



#### What is tipping load?

Load at centre of gravity of working equipment, so that the wheel loader just begins to tip over the front axle. This is the most unfavourable static-load position for the wheel loader. Lifting arms horizontal, wheel loader fully articulated at centre pivot.

#### Pay load.

The pay load must not exceed 50% of the tipping load when articulated. This is equivalent to a static stability-margin factor of 2.0.

#### Bucket capacity.

The bucket volume is determined from the pay load.

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

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

# Tires

## Tire types

	Size and tread code		Change of operating weight lb	Width over tires ft in	Change in vertical dimensions* ft in	Use
<b>L 566 XPower®</b>						
Bridgestone	26.5R25 VJT	L3	353	9'9"	0.55"	Bulk material (firm ground conditions)
Bridgestone	26.5R25 VSDT	L5	2,288	9'9"	1.97"	Stone, Mining spoil (firm ground conditions)
Bridgestone	26.5R25 VSDL	L5	2,844	9'9"	2.24"	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	26.5R25 VSMS	L5	3,525	9'9"	2.76"	Scrap, Recycling, Slag (firm ground conditions)
Bridgestone	26.5R25 VSNT	L4	1,270	9'9"	1.85"	Gravel, Industry, Wood (firm ground conditions)
Bridgestone	750/65R25 VTS	L3	434	10'1"	- 1.54"	Gravel, Industry, Wood (all ground conditions)
Continental	26.5R25 EM-Master	L3	220	9'9"	1.61"	Bulk material (firm ground conditions)
Continental	26.5R25 EM-Master	L4	1,164	9'7"	1.89"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	26.5R25 TL-3A+	L3	767	9'9"	1.18"	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	26.5R25 GP-4D	L4	961	9'9"	1.02"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	26.5R25 RL-4K	L4	1,711	9'10"	2.48"	Gravel, Industry, Stone (firm ground conditions)
Goodyear	26.5R25 RL-5K	L5	2,743	9'10"	2.48"	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	26.5R25 RL-5S	L5	3,774	9'10"	2.48"	Scrap, Recycling, Slag (firm ground conditions)
Goodyear	26.5R25 RT-5D	L5	2,222	9'10"	2.48"	Stone, Mining spoil (firm ground conditions)
Goodyear	750/65R25 TL-3A+	L3	335	10'2"	- 1.02"	Sand, Gravel, Industry, Wood (all ground conditions)
Michelin	26.5R25 XHA2	L3	0	9'9"	0"	Sand, Gravel (all ground conditions)
Michelin	26.5R25 X MINE PRO	L5	2,619	9'11"	2.28"	Stone, Scrap, Recycling (firm ground conditions)
Michelin	26.5R25 XLD D2A	L5	1,534	9'9"	1.50"	Stone, Mining spoil (firm ground conditions)
Michelin	26.5R25 TXXL	L4	1,076	9'9"	0.91"	Gravel, Industry, Wood (firm ground conditions)
Michelin	750/65R25 XLD 65	L3T	- 9	10'	- 2.24"	Gravel, Industry, Wood (all ground conditions)
<b>L 580 XPower®</b>						
Bridgestone	26.5R25 VJT	L3	353	9'9"	0.55"	Bulk material (firm ground conditions)
Bridgestone	26.5R25 VSDT	L5	2,288	9'9"	1.97"	Stone, Mining spoil (firm ground conditions)
Bridgestone	26.5R25 VSDL	L5	2,844	9'9"	2.24"	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	26.5R25 VSMS	L5	3,525	9'9"	2.76"	Scrap, Recycling, Slag (firm ground conditions)
Bridgestone	26.5R25 VSNT	L4	1,270	9'9"	1.85"	Gravel, Industry, Wood (firm ground conditions)
Bridgestone	750/65R25 VTS	L3	392	10'1"	- 1.54"	Gravel, Industry, Wood (all ground conditions)
Continental	26.5R25 EM-Master	L3	220	9'9"	1.61"	Bulk material (firm ground conditions)
Continental	26.5R25 EM-Master	L4	1,164	9'9"	1.89"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	26.5R25 TL-3A+	L3	767	9'9"	1.18"	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	26.5R25 GP-4D	L4	961	9'9"	1.02"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	26.5R25 RL-4K	L4	1,711	9'10"	2.48"	Gravel, Industry, Stone (firm ground conditions)
Goodyear	26.5R25 RL-5K	L5	2,743	9'10"	2.48"	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	26.5R25 RL-5S	L5	3,774	9'10"	2.48"	Scrap, Recycling, Slag (firm ground conditions)
Goodyear	26.5R25 RT-5D	L5	2,222	9'10"	2.48"	Stone, Mining spoil (firm ground conditions)
Goodyear	750/65R25 TL-3A+	L3	291	10'2"	- 1.02"	Sand, Gravel, Industry, Wood (all ground conditions)
Michelin	26.5R25 XHA2	L3	0	9'9"	0"	Sand, Gravel (all ground conditions)
Michelin	26.5R25 X MINE PRO	L5	2,619	9'11"	2.28"	Stone, Scrap, Recycling (firm ground conditions)
Michelin	26.5R25 XLD D2A	L5	1,534	9'9"	1.50"	Stone, Mining spoil (firm ground conditions)
Michelin	26.5R25 TXXL	L4	1,076	9'9"	0.91"	Gravel, Industry, Wood (firm ground conditions)
Michelin	750/65R25 XLD 65	L3T	- 53	10'	- 2.24"	Gravel, Industry, Wood (all ground conditions)
<b>L 586 XPower®</b>						
Bridgestone	29.5R25 VJT	L3	322	10'8"	0.59"	Bulk material (firm ground conditions)
Bridgestone	29.5R25 VSDT	L5	3,020	10'9"	1.97"	Stone, Mining spoil (firm ground conditions)
Bridgestone	29.5R25 VSDL	L5	3,814	10'9"	2.36"	Stone, Scrap, Recycling (firm ground conditions)
Bridgestone	29.5R25 VSNT	L4	1,570	10'9"	1.97"	Gravel, Industry, Wood (firm ground conditions)
Continental	29.5R25 EM-Master	L3	317	10'8"	0.79"	Bulk material (firm ground conditions)
Continental	29.5R25 EM-Master	L4	1,111	10'9"	1.57"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	29.5R25 TL-3A+	L3	1,173	10'10"	1.42"	Sand, Gravel, Earthworks, Clay (all ground conditions)
Goodyear	29.5R25 GP-4D	L4	1,111	10'8"	0.94"	Gravel, Industry, Wood (firm ground conditions)
Goodyear	29.5R25 RL-4K	L4	2,478	10'9"	1.73"	Gravel, Industry, Stone (firm ground conditions)
Goodyear	29.5R25 RL-5K	L5	3,527	10'10"	2.60"	Stone, Scrap, Recycling (firm ground conditions)
Goodyear	29.5R25 RT-5D	L5	3,325	10'10"	2.20"	Stone, Mining spoil (firm ground conditions)
Goodyear	29.5R25 RL-5S	L5	4,630	10'9"	2.60"	Scrap, Recycling, Slag (firm ground conditions)
Michelin	29.5R25 XHA2	L3	0	10'8"	0"	Sand, Gravel (all ground conditions)
Michelin	29.5R25 XLD D2A	L5	2,064	10'8"	1.02"	Stone, Mining spoil (firm ground conditions)
Michelin	29.5R25 TXXL	L4	1,336	10'9"	1.02"	Gravel, Industry, Wood (firm ground conditions)
Michelin	29.5R25 X MINE PRO	L5	3,113	10'10"	1.65"	Stone, Scrap, Recycling (firm ground conditions)

\* The stated values are theoretical and may deviate in practice.

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

# The Liebherr wheel loaders

## Wheel loader



		L 526	L 538	L 546	L 550 XPower®
Tipping load	lb	19,245	21,275	24,275	27,560
Bucket capacity	yd <sup>3</sup>	2.9	3.4	3.9	4.5
Operating weight	lb	29,035	32,010	33,975	40,895
Engine output	kW / HP	116 / 156	129 / 173	138 / 185	163 / 219

## Wheel loader



		L 556 XPower®	L 566 XPower®	L 580 XPower®	L 586 XPower®
Tipping load	lb	30,315	35,055	42,330	47,620
Bucket capacity	yd <sup>3</sup>	4.8	5.5	6.8	7.8
Operating weight	lb	43,210	52,690	60,955	71,870
Engine output	kW / HP	183 / 245	203 / 272	233 / 312	263 / 353

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## Environmental Protection Can Help You Earn Money!



### Always in fuel saving mode with the Liebherr fuel-saving calculator

100% power output with up to 30 % less fuel consumption – the Liebherr fuel saving calculator shows how much fuel can be saved compared to similar machines. The online application is available free of charge and provides a quick and simple overview of fuel savings per year in dollars. The calculation is based on average fuel consumption, operating hours per year and the current fuel price. The potential savings when operating a Liebherr wheel loader are impressive – see for yourself!

	Ø Gallons / hour *
L 526: 2.7 yd <sup>3</sup>	1.64
L 538: 3.4 yd <sup>3</sup>	1.83
L 546: 3.7 yd <sup>3</sup>	1.88
L 550: 4.5 yd <sup>3</sup>	2.35
L 556: 4.8 yd <sup>3</sup>	2.61
L 566: 5.5 yd <sup>3</sup>	3.25
L 580: 6.8 yd <sup>3</sup>	3.69
L 586: 7.8 yd <sup>3</sup>	4.42

\* Wheel loader in practical customer applications with individual machine configurations. Average data from LIDAT from 1/8/2024.



Experience just how much fuel you can save!  
[www.encyplus.liebherr.com](http://www.encyplus.liebherr.com)

# Equipment



## Basic wheel loader

	L 550	L 556	L 566	L 580	L 586
Crash protection, rear	+	+	+	+	+
Automatic central lubrication system	+	+	+	+	•
Battery main switch (lockable)	•	•	•	•	•
Electronic tractive force regulation for difficult ground conditions	•	•	•	•	•
Travel light (with additional headlights) on front section halogen	+	+	+	+	+
Travel light (with additional headlights) on front section LED	+	+	+	+	+
Ride control	•	•	•	•	•
Parking brake	•	•	•	•	•
Fire extinguisher 13 lb	+	+	+	+	+
Particle protection for radiator	+	+	+	+	+
Speed limiter 12.4 mph as a factory preset	+	+	+	+	+
Speed limiter VMAX adjustable key on the control unit	•	•	•	•	•
DEF tank	•	•	•	•	•
Turbocharger insulation	+	+	+	+	+
Pre-heat system for cold starting	•	•	•	•	•
Rear license panel light	+	+	+	+	+
Combined inching-braking system	•	•	•	•	•
Fuel pre-filter	•	•	•	•	•
Fuel pre-filter with pre-heating	+	+	+	+	+
Large-mesh radiator	+	+	+	+	-
Cooling water pre-heating 230 V	+	+	+	+	+
Multi-disc limited slip differentials in both axles	•	•	•	•	•
Liebherr biodegradable hydraulic oil	+	+	+	+	+
Liebherr SCR technology incl. diesel particle filter	•	•	•	•	•
Reversible fan drive	•	•	•	•	•
Automatic delayed engine stop	+	+	+	+	+
Widening for mudguard	+	+	+	+	+
Ramming guard with guard	+	+	+	+	-
Headlights halogen (double design on engine hood)	•	•	•	•	•
Headlights LED (double design on engine hood)	+	+	+	+	+
Guard for headlights	+	+	+	+	+
Auxiliary heater (Additional heating with engine preheating)	+	+	+	+	+
Dust protection for alternator	+	+	+	+	+
Road travel counterweight	•	•	+	-	-
Lockable doors and engine hood	•	•	•	•	•
Tunnel package	+	+	+	-	-
Chassis protection rear	+	+	+	+	+
Chassis protection front	+	+	+	+	+
Air pre-cleaner TOP AIR	+	+	+	+	+
Toolbox with toolkit	•	•	•	•	•
Liebherr weighing system with "Truck Payload Assist"	+	+	+	+	+
Towing hitch	•	•	•	•	•
Additional handrails left	•	•	•	•	•
Additional handrails right	•	•	•	•	•



## Equipment

	L 550	L 556	L 566	L 580	L 586
Working hydraulics lockout	•	•	•	•	•
Automatic bucket return programmable	•	•	•	•	•
Pressure relief for hydraulic additional function	+	+	+	+	+
Stroke limit damping	+	+	+	+	+
Fork carrier and pallet forks	+	+	+	+	+
High-dump bucket	+	+	+	+	+
Log grapple	+	+	+	+	-
Automatic lift arm position and lowering programmable	•	•	•	•	•
High Lift arms	+	+	+	+	+
Industrial lift arm	+	+	+	+	-
Lift arm Z-bar kinematics	•	•	•	•	•
Hydraulic quick coupler	+	+	+	+	+
Hydraulic quick coupler Solidlink	+	+	+	+	-
Adjustable tipping speed	•	•	•	•	•
Tilt cylinder protection	+	+	+	+	+
Loading buckets incl. a range of cutting tools	+	+	+	+	+
Light material bucket	+	+	+	+	+
Load holding valves	+	+	+	+	+
Bucket tilt assistant	+	+	+	+	+
Float position	•	•	•	•	•
Visualization of the equipment position	•	•	•	•	•
1st electro-hydraulic, proportional additional function, adjustable delivery flow	+	+	+	+	+
1st additional electro-hydraulic function for continuous sweeper and snow blower operation	+	+	+	+	+
2nd electro-hydraulic, proportional additional function, adjustable delivery flow	+	+	+	+	-
2nd additional electro-hydraulic function for continuous sweeper and snow blower operation	+	+	+	+	-

- = Standard
- + = Option
- = not available

# Equipment



## Operator's cab

	L 550	L 556	L 566	L 580	L 586
Adapter plate for additional fastening on the multi-function rail	+	+	+	+	+
Adaptive working lighting	+	+	+	+	+
Access assistance to facilitate cleaning windscreen	●	●	●	●	●
Exterior mirror, electrical adjustable, with heating	+	+	+	+	+
Exterior mirror, tiltable and adjustable	●	●	●	●	●
Operating hour meter (integrated in display unit)	●	●	●	●	●
Operating hour meter (mechanic)	+	+	+	+	+
Electronical theft protection with code	+	+	+	+	+
Electronical theft protection with key with/without driver identification	+	+	+	+	+
Storage box left	●	●	●	●	●
Operator's cab without steering wheel/ steering column (not available as street legal) – joystick steering only	+	+	+	+	+
Operator seat "Comfort" – with longitudinal absorption and seat heating	●	●	●	●	●
Operator seat "Premium" – with longitudinal and transverse absorption, seat climate control	+	+	+	+	+
Particle filter F7	●	●	●	●	●
Fire extinguisher in cab 4 lb	●	●	●	●	●
Rear window heated electrically	●	●	●	●	●
Audible horn control integrated into Liebherr control lever	+	+	+	+	+
Interior mirror right	●	●	●	●	●
Interior mirror left and right	+	+	+	+	+
Integrated tyre pressure monitoring system	+	+	+	+	+
Joystick steering	+	+	+	+	+
Floor mat	●	●	●	●	●
Clothes hooks (2 pieces)	●	●	●	●	●
Air conditioning system	●	●	●	●	●
Automatic air conditioning system	+	+	+	+	+
Cool box	+	+	+	+	+
3 way continuously adjustable steering column (height-adjustable, tilting, folding)	●	●	●	●	●
Steering stabilisation	●	●	●	●	●
LiDAT total use 1 year (for free)	●	●	●	●	●
iebherr control lever with mini-joystick for 1st and 2nd electro-hydraulic, proportional additional function moving with operator's seat	+	+	+	+	+
Liebherr control lever moving with operator's seat (incl. kick down, travel direction)	●	●	●	●	●
Liebherr multi-lever control system moving with operator's seat (incl. kick down, travel direction)	+	+	+	+	+
Liebherr key with remote control incl. Coming Home / Leaving Home function	+	+	+	+	+
Premiumdisplay (Touchscreen), with height adjustment and tilting function	●	●	●	●	●
Preparation for radio installation	●	●	●	●	●
Radio Liebherr "Comfort" (DAB+ / USB / AUX / BLUETOOTH / handsfree set)	+	+	+	+	+
Radio Liebherr "Standard" (USB / AUX)	+	+	+	+	+



## Operator's cab

	L 550	L 556	L 566	L 580	L 586
Amber beacon swiveling / fixed	+	+	+	+	+
Soundproof ROPS / FOPS cab	●	●	●	●	●
Bucket return with button integrated into Liebherr control lever	+	+	+	+	+
Wipe and wash system	●	●	●	●	●
Windscreen wiper single-sweep function with button	+	+	+	+	+
Headlights rear, single design, halogen / LED	+	+	+	+	+
Headlights rear, double design, LED	+	+	+	+	+
Headlights rear, triple design, LED	+	+	+	+	+
Headlights front, double design, halogen	●	●	●	●	●
Headlights front, double design, LED	+	+	+	+	+
Sliding window left/right	●	●	●	●	●
Slipcover for operator seat	+	+	+	+	+
Windscreen guard	+	+	+	+	+
Sunblind rear	+	+	+	+	+
Sunblind front	●	●	●	●	●
Power socket 12 V	●	●	●	●	●
Power socket USB	●	●	●	●	●
First aid kit	+	+	+	+	+
Preparation for protective ventilation and dust filtrating device	+	+	+	+	+
Wide angle mirror	+	+	+	+	+
Cigarette lighter	●	●	●	●	●



## Safety

	L 550	L 556	L 566	L 580	L 586
Active personnel detection at the rear	+	+	+	+	+
Roof camera for front area monitoring (with Liebherr camera via Liebherr display)	+	+	+	+	+
Country-specific versions	+	+	+	+	+
Emergency steering system	●	●	●	●	●
Reversing obstruction detector	+	+	+	+	+
Back-up alarm audible	●	●	●	●	●
Back-up alarm visual	+	+	+	+	+
Rear space monitoring with camera (with Liebherr camera via Liebherr display)	●	●	●	●	●
Skyview 360°	+	+	+	+	+

- = Standard
- + = Option
- = not available

Further information can be found in the brochure "Assistance systems for wheel loaders" or you can find here:



Here you can download our wheel loader brochures:



# The Liebherr Group



## Global and independent: more than 70 years of success

Liebherr was founded in 1949. With the development of the world's first mobile tower crane, Hans Liebherr laid the foundations of a successful family business which today comprises more than 140 companies on all continent and employs nearly 51,000 people. The parent company of the Group is Liebherr-International AG in Bulle (Switzerland), whose associates are exclusively members of the Liebherr family.

## Technology leadership and pioneering spirit

Liebherr regards itself as a pioneer. This spirit has enabled the company to make a decisive contribution to the technological history of many industries. Today, employees around the world still share the courage of the company founder to take new paths. They are all united by a passion for technology and fascinating products and the determination to perform outstanding work for their customers.

## Widely diversified product portfolio

Not only is Liebherr one of the biggest construction equipment manufacturers in the world, it also provides high-quality, user-oriented products and services in a wide range of other areas. The product portfolio includes the segments earthmoving, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigeration and freezing, components and hotels.

## Customized solutions and maximum customer benefit

Liebherr solutions are characterized by maximum precision, outstanding implementation and exceptional longevity. Its mastery of key technologies enables the company to offer its customers customized solutions. For Liebherr, customer focus does not end with the product; it also encompasses a wide range of services that make a real difference.

[www.liebherr.us](http://www.liebherr.us)

### **WARNING**

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to [www.P65warnings.ca.gov/diesel](http://www.P65warnings.ca.gov/diesel).

### **WARNING**

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov).

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