

# Wheel Loaders

# L 550 - L 586

Tipping Load, articulated: 25,680 lb – 45,040 lb



# LIEBHERR

*Courtesy of Machine.Market*



## L 550

Tipping Load, articulated: 25,680 lb  
Bucket Capacity: 4.2 yd<sup>3</sup>  
Operating Weight: 36,430 lb  
Engine Output: 173 HP\*/129 kW

## L 556

Tipping Load, articulated: 28,970 lb  
Bucket Capacity: 4.7 yd<sup>3</sup>  
Operating Weight: 38,070 lb  
Engine Output: 188 HP\*/140 kW

## L 566

Tipping Load, articulated: 34,280 lb  
Bucket Capacity: 5.2 yd<sup>3</sup>  
Operating Weight: 49,600 lb  
Engine Output: 255 HP\*/190 kW

## L 580

Tipping Load, articulated: 39,680 lb  
Bucket Capacity: 6.5 yd<sup>3</sup>  
Operating Weight: 54,190 lb  
Engine Output: 268 HP\*/200 kW

\*according to SAE J1349

## L 586

Tipping Load, articulated: 45,040 lb  
Bucket Capacity: 7.2 yd<sup>3</sup>  
Operating Weight: 69,180 lb  
Engine Output: 335 HP\*/250 kW





## **Economy**

The Liebherr driveline reduces wheel loader fuel consumption by 25 % or more when compared to conventional travel gears!

## **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**

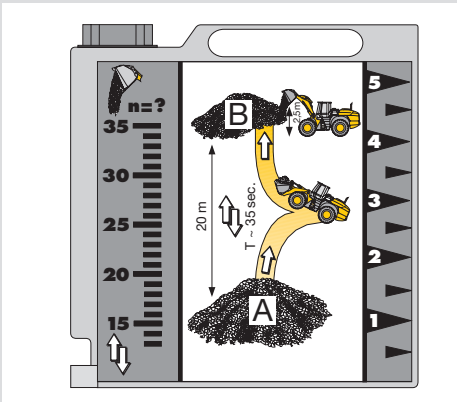
All the materials used in the Liebherr wheel loaders have passed extensive tests to ensure that they meet Liebherr's exacting standards even in the toughest conditions. The advanced concept and proven quality make Liebherr wheel loaders the benchmark for reliability.

## **Comfort**

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







#### Lower fuel consumption

- Up to 25% less fuel consumption when compared to conventional drive machines.
- The Liebherr wheel loaders demonstrate their fuel economy in the Liebherr standard normtest.



# Economy

The Liebherr driveline reduces wheel loader fuel consumption by 25 % or more when compared to conventional drive machines.

## 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.
- Practically no brake wear thanks to the hydraulic braking action of the driveline; this ultimately reduces repair costs.
- Reduced tire wear due to continuous traction control. Depending on the working conditions, there is up to 25 % less wear.

## Active environmental protection

### Economical use of resources

The reduction in fuel lowers emissions, thus actively protecting resources:

0.3 gal of fuel produces up to 7 lb of carbon dioxide (CO<sub>2</sub>). By saving up to 1.3 gal per operating hour, up to 33,069 lb less CO<sub>2</sub> is produced in 1,000 operating hours. Not only are operating costs reduced but the environment also benefits from the drastically reduced emissions.

### Low noise emission

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



### Reduced brake wear

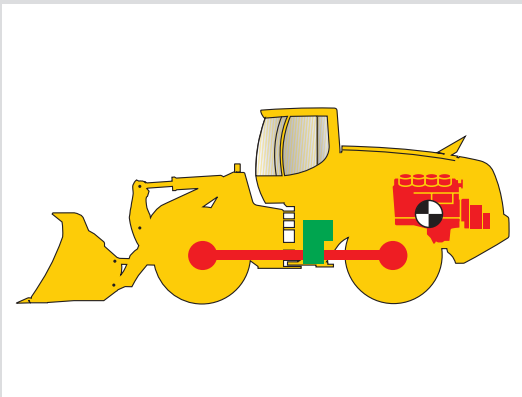
- Even under the toughest working conditions, the Liebherr travel drive always brakes hydraulically. The mechanical service brake only acts as a support and is therefore subject to hardly any wear.



### Reduced tire wear

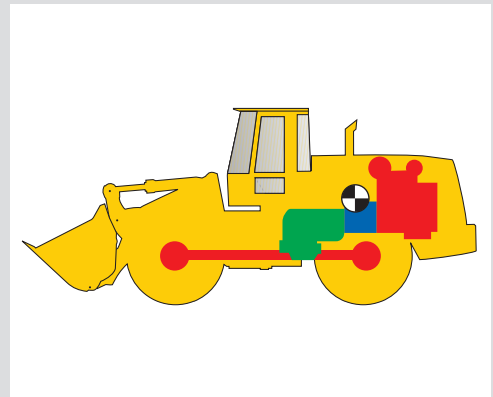
- The tractive force can be adjusted continuously. This stops wheel spins and reduces tire wear by up to 25 %.





#### Liebherr driveline

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







# Performance

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

## Higher performance, lower weight

### Higher productivity

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

## Ultra modern Liebherr driveline

### Innovative technology

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

## Flexibility puts them ahead

### An all-purpose loader

The Industrial lift arm is the ideal tool to complement the available equipment for the large Liebherr wheel loaders. This „torque increase“ is the perfect additional system for your requirements, especially when operating with heavy equipment and loads. Their compact design allows these wheel loaders to maneuver quickly and efficiently – ideal for handling large volume of material.

### Conventional travel gear

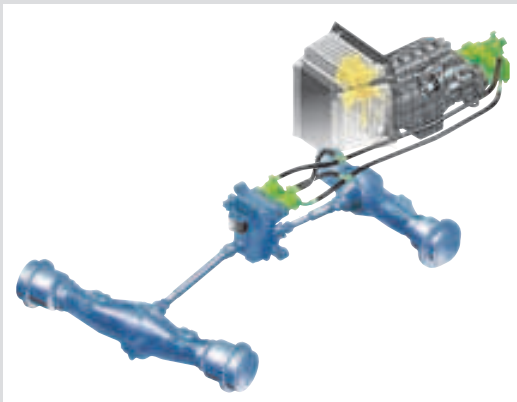
- Longitudinally mounted diesel engine moves the center of gravity further forward.
- Additional counterweight is needed to maintain stability and to increase the tipping load.
- This results in high operating weight and poor visibility.



### An all-purpose loader

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





#### Liebherr driveline

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





# Reliability

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

## Reliable Liebherr driveline

### Fewer components

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

### Everything from a single source

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

### Cooling system

- The cooling system is fitted on the rear section between the diesel engine and the operator's cab. The cooling air is drawn in directly behind the cab and blown out upwards at the rear. The fan speed is varied automatically by heat sensors that determine the amount of cooling needed.
- The reversible fan drive is a standard feature.



### Liebherr's own components

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





#### Liebherr control lever

- The Liebherr control lever is used to manage all travel and working movements of the wheel loader, so that the operator's left hand can always remain on the steering wheel. There is no need to let go of the steering wheel increasing overall safety. The operator controls the following functions with his right hand:

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







# Comfort

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

## First-class cab design

### Comfort cab

The ultra-modern, ergonomically planned cab design allows the operator to achieve better performance and productivity in the greatest possible comfort. The displays, controls and operator's seat are carefully coordinated to form a perfect ergonomic unit.

### Liebherr control lever

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

## Liebherr driveline

### Continuously variable transmission

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

## Service access

### Easy maintenance

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

### Hydrostatic fan drive

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

### Service access

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



### Powerful air-conditioning system

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



# Technical Data

L 550 - L 580



## Engine

	L 550	L 556	L 566	L 580
Liebherr diesel engine	D934S A6	D934S A6	D936L A6	D936L A6
Design	Liebherr diesel engine, water-cooled, exhaust turbo charged with intercooler			
Cylinder inline	4	4	6	6
Combustion process	PLD			
Rated output according to SAE J1349	HP/kW 173/129	188/140	255/190	268/200
at rpm 2,000	2,000	2,000	2,000	2,000
Max. torque	lb ft 611	664	907	974
at rpm 1,500	1,300	1,300	1,300	1,300
Displacement	in <sup>3</sup> 388	428	642	642
Bore/Stroke	in 4.8"/5.35"	4.8"/5.91"	4.8"/5.91"	4.8"/5.91"
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 143	143	170	170
Alternator	V/A 28/80	28/80	28/80	28/80
Starter motor	V/HP 24/9	24/9	24/9	24/9

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



## Travel Drive

Stepless hydrostatic travel drive				
Design	Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit with one axle transfer case. Direction of travel 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 directional forces steplessly at full engine speed. The Liebherr joystick is used to control forward and reverse travel			
Travel speed range	Speed range 1 _____ 0 - 6.2 mph			
	Speed range 2 and A2 _____ 0 - 12.4 mph			
	Speed range A3 _____ 0 - 24.9 mph			
	The quoted speeds apply with the tires that are standard equipment on the loader			



## Axles

Four-wheel drive				
Front axle	Fixed			
Rear axle	Center pivot, with 13° oscillating angle to each side			
Height of obstacles which can be driven over	L 550	L 556	L 566	L 580
	1'8"	1'8"	1'8"	1'8"
	With all four wheels remaining in contact with the ground			
Differentials	Automatic limited-slip differentials			
Reduction gear	Planetary final drive in wheel hubs			
Track width	6'7" with all types of tires (L 550, L 556)			
	7'4" with all types of tires (L 566, L 580)			



## Brakes

Wear-free service brake	Self-locking of the hydrostatic travel drive (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes 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 with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders
Angle of articulation	40° (to each side)
Emergency steering	Electro-hydraulic emergency steering system



## Attachment Hydraulics

Design	"Load-sensing" swash plate type variable flow pump with output and flow control, and pressure cut-off in the control block			
Cooling	Hydraulic oil cooling using thermostatically controlled fan and oil cooler			
Filtering	Return line filter in the hydraulic reservoir			
Control	"Liebherr-Joystick" with hydraulic servo control			
Lift circuit	Lifting, neutral, lowering and float positions controlled by Liebherr joystick with detent			
Tilt circuit	Tilt back, neutral, dump automatic bucket positioning			
	L 550	L 556	L 566	L 580
Max. flow	gpm 62	62	77	77
Max. pressure	psi 4,206	4,786	5,076	5,076



## Attachment

Geometry	Powerful Z-pattern linkage with tilt cylinder and cast steel cross-tube			
Bearings	Sealed			
Cycle time at nominal load	L 550	L 556	L 566	L 580
<b>Z-bar linkage</b>				
Lifting	5.5 s	5.5 s	5.5 s	5.5 s
Dumping	2.3 s	2.3 s	2.0 s	2.0 s
Lowering (empty)	2.7 s	2.7 s	3.5 s	3.5 s
<b>Industrial lift arm</b>				
Lifting	5.5 s	5.5 s	5.5 s	5.5 s
Dumping	3.5 s	3.5 s	3.5 s	3.5 s
Lowering (empty)	2.7 s	2.7 s	3.5 s	3.5 s



## Operator's Cab

Design	On elastic bearing on rear section, soundproof ROPS/FOPS cab. Operator's door with optional sliding window, 180° opening angle, fold-out window on right side with opening angle, front windscreen made of compound safety glass, green tinted as standard, side windows made of single-pane safety glass, grey tinted, continuously adjustable steering column and joystick control as standard, heatable rear window
	ROPS roll over protection per DIN/ISO 3471/EN 474-3
	FOPS falling objects protection per DIN/ISO 3449/EN 474-1
Operator's seat	6 way adjustable seat with lap belt, vibration damping and suspension adjustable for the operator's weight
Cab heating and ventilation	Operator's cab with 4-level air control, cooling water heating, defroster and air conditioning with electronic valve control, as well as electronic fresh/recirculated air control, filter system with pre-filter, fresh air filter and recirculated air filter, easily replaced, air conditioning as standard



## Noise Emission

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



## Capacities

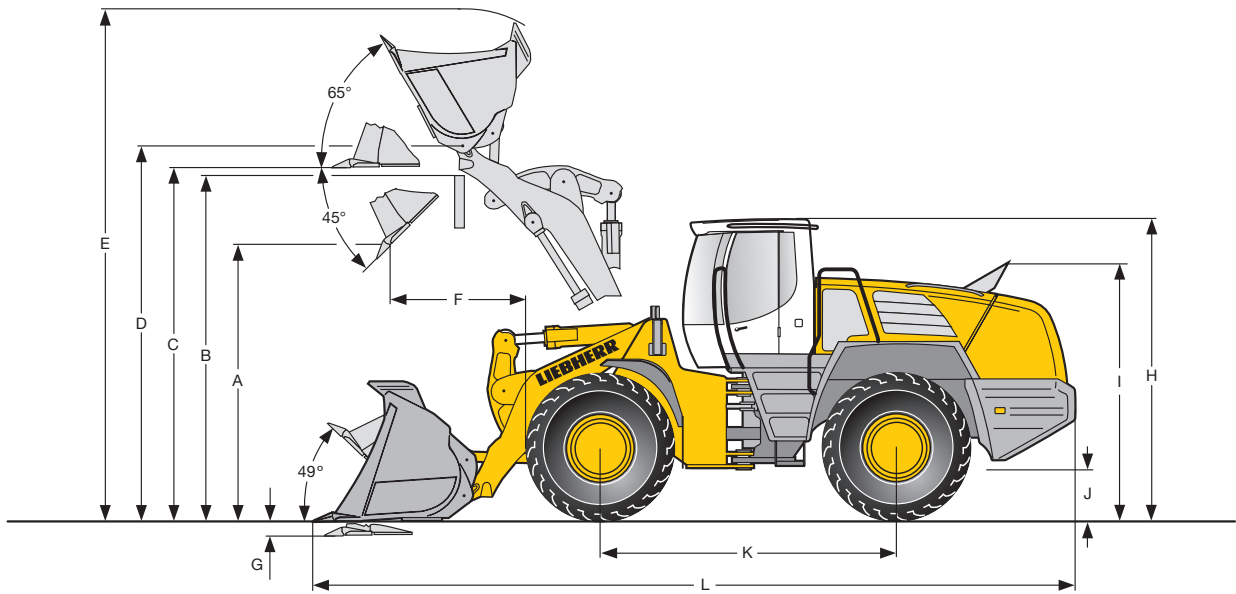
Fuel tank	L 550	L 556	L 566	L 580
	gal 67.3	67.3	92.4	92.4
Engine oil				
(including filter change)	gal 8.2	8.2	11.4	11.4
Pump distributor gears	gal 0.7	0.7	0.7	0.7
Transmission	gal 3.0	3.0	3.0	3.0
Coolant	gal 11.9	11.9	13.7	13.7
Front axle	gal 7.9	10.0	13.5	15.3
Rear axle	gal 7.9	7.9	13.5	13.2
Hydraulic tank	gal 35.7	35.7	35.7	35.7
Hydraulic system, total	gal 63.4	63.4	68.7	68.7
Air-condition system R134a	lb 1.7	1.7	1.7	1.7



# Dimensions

## Z-bar linkage

L 550 - L 580




### Loading Bucket

		L 550		L 556		L 566		L 580	
		T	T	T	T	T	T	T	T
Cutting tools									
Lift arm length	ft in	8'6"	8'6"	8'6"	8'6"	9'7"	9'7"	10'	10'
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	4.2	4.7	4.7	5.0	5.2	5.9	6.5	7.2
Bucket width	ft in	8'10"	8'10"	8'10"	8'10"	9'10"	9'10"	10'10"	10'10"
Specific material weight	lb/yd <sup>3</sup>	3,034	2,697	3,034	2,697	3,034	2,697	3,034	2,697
A Dumping height at max. lift height and 45° discharge	ft in	9'5"	9'2"	9'4"	9'1"	10'8"	10'5"	10'11"	10'8"
B Dump-over height	ft in	11'6"	11'6"	11'6"	11'6"	12'10"	12'10"	13'5"	13'5"
C Max. height of bucket bottom	ft in	12'	12'	12'	12'	13'3"	13'3"	14'	14'
D Max. height of bucket pivot point	ft in	12'10"	12'10"	12'10"	12'10"	14'4"	14'4"	15'	15'
E Max. operating height	ft in	17'8"	17'9"	17'11"	18'	19'3"	19'7"	20'10"	21'1"
F Reach at max. lift height and 45° discharge	ft in	3'7"	4'	3'10"	4'1"	3'10"	4'1"	3'9"	4'
G Digging depth	ft in	3"	3"	3"	3"	4"	4"	4"	4"
H Height above cab	ft in	11'	11'	11'	11'	11'8"	11'8"	11'8"	11'8"
I Height above exhaust	ft in	9'10"	9'10"	9'10"	9'10"	10'2"	10'2"	10'2"	10'2"
J Ground clearance	ft in	1'9"	1'9"	1'9"	1'9"	1'10"	1'10"	1'10"	1'10"
K Wheelbase	ft in	10'9"	10'9"	10'9"	10'9"	11'9"	11'9"	12'2"	12'2"
L Overall length	ft in	27'	27'	27'	27'5"	29'3"	29'6"	30'6"	30'10"
Turning circle radius over outside bucket edge	ft in	21'1"	21'2"	21'2"	21'3"	23'3"	23'4"	24'4"	24'5"
Breakout force (SAE)	lbf	28,101	26,527	29,225	26,977	44,962	42,714	39,342	35,969
Tipping load, straight*	lb	29,112	28,859	32,826	32,297	39,000	37,501	44,952	44,070
Tipping load, articulated at 37°*	lb	26,158	25,937	29,431	28,957	34,943	33,598	40,411	39,617
Tipping load, articulated at 40°*	lb	25,684	25,463	28,968	28,505	34,282	32,959	39,683	38,912
Operating weight*	lb	36,431	36,575	38,073	38,184	49,604	49,880	54,190	54,520
Tire sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3	

\* The figures shown here are valid with tires above and include 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.

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

 = Excavation bucket with back grading edge

 = Rehandling bucket

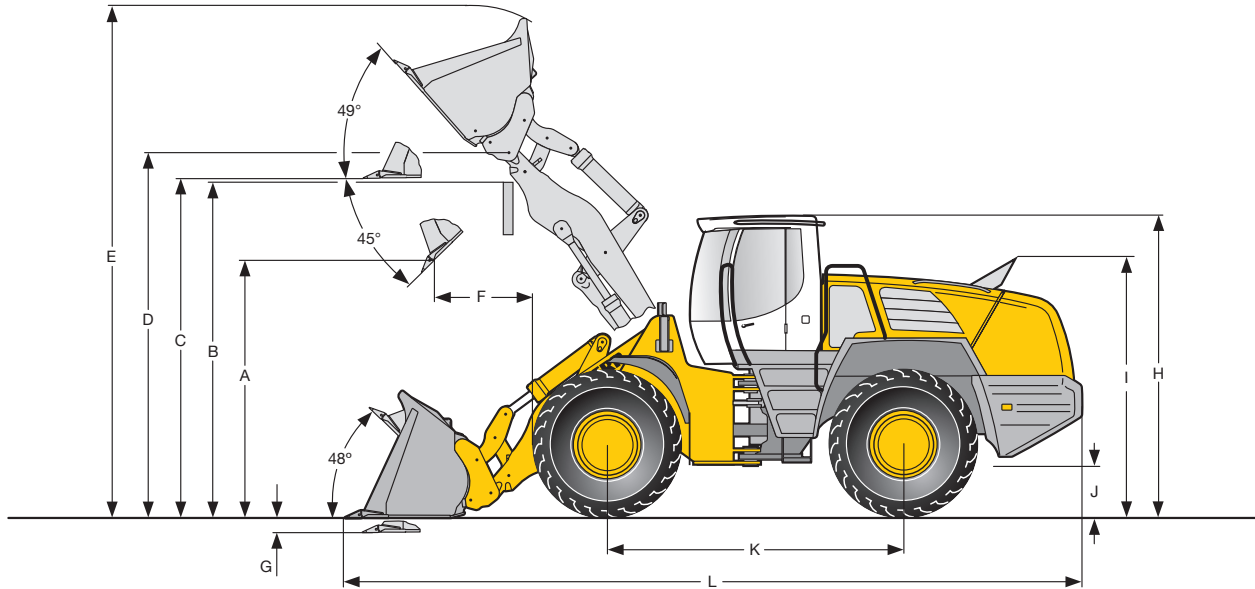
T = Welded-on tooth holder with add-on teeth



# Dimensions

## Industrial lift arm

L 550 - L 580



### Loading Bucket

L 550

L 556

		L 550	L 556
Geometry		IND	IND
Cutting tools		T	T
Lift arm length	ft in	8'6"	8'6"
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	3.9	4.3
Bucket width	ft in	8'10"	8'10"
Specific material weight	lb/yd <sup>3</sup>	3,034	3,034
A Dumping height at max. lift height and 45° discharge	ft in	9'6"	9'4"
B Dump-over height	ft in	11'6"	11'6"
C Max. height of bucket bottom	ft in	12'5"	12'5"
D Max. height of bucket pivot point	ft in	13'4"	13'4"
E Max. operating height	ft in	18'4"	18'5"
F Reach at max. lift height and 45° discharge	ft in	3'9"	3'10"
G Digging depth	ft in	3"	3"
H Height above cab	ft in	11'	11'
I Height above exhaust	ft in	9'10"	9'10"
J Ground clearance	ft in	1'9"	1'9"
K Wheelbase	ft in	10'9"	10'9"
L Overall length	ft in	27'3"	27'5"
Turning circle radius over outside bucket edge	ft in	21'3"	21'4"
Breakout force (SAE)	lbf	28,101	29,225
Tipping load, straight*	lb	27,095	30,115
Tipping load, articulated at 37°*	lb	24,361	27,039
Tipping load, articulated at 40°*	lb	23,920	26,565
Operating weight*	lb	37,346	39,110
Tire sizes		23.5R25 L3	23.5R25 L3

\* The figures shown here are valid with tires above and include 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.



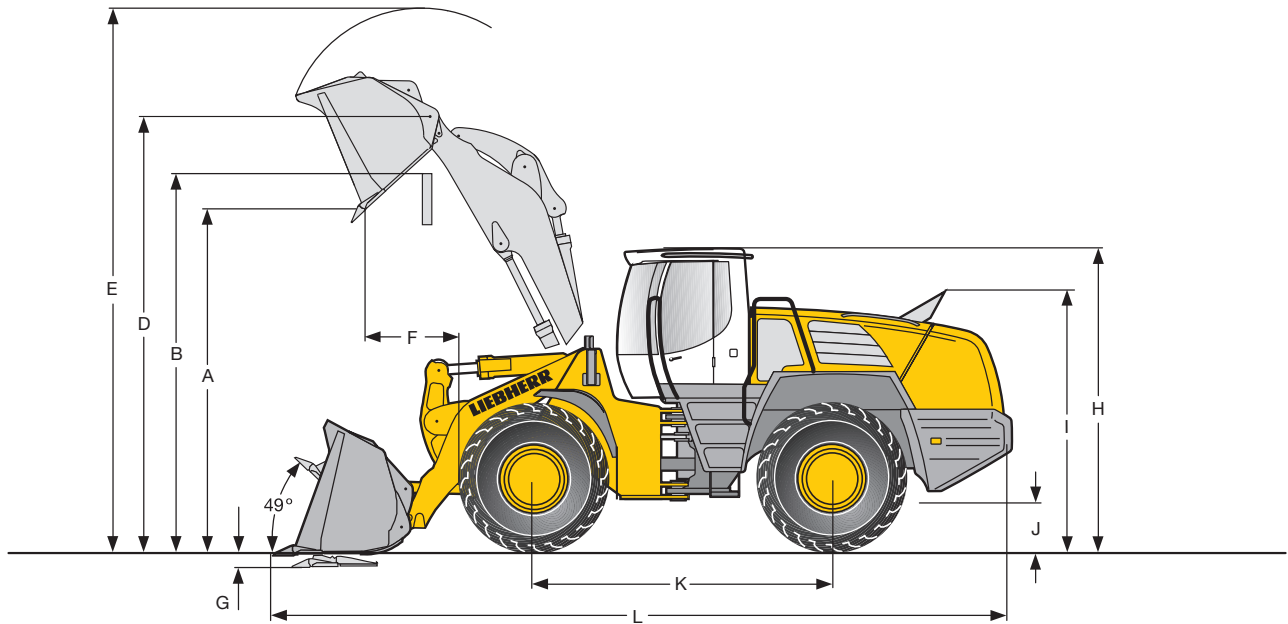
= Excavation bucket with back grading edge for hydraulic quick coupler

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

# Dimensions

## High Lift

L 550 - L 580





### High Lift

		L 550		L 556		L 566		L 580	
		IND	IND	IND	IND	ZK	ZK	ZK	ZK
Geometry		T	T	T	T	T	T	T	T
Cutting tools		T	T	T	T	T	T	T	T
Lift arm length	ft in	9'10"	9'10"	9'10"	9'10"	10'8"	10'8"	10'8"	10'8"
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	3.4	3.7	3.7	3.9	4.6	5.2	5.9	6.5
Bucket width	ft in	8'10"	8'10"	8'10"	8'10"	9'10"	9'10"	9'10"	10'10"
Specific material weight	lb/yd <sup>3</sup>	3,034	2,697	3,034	2,697	3,034	2,697	3,034	2,697
A Dumping height at max. lift height and 45° discharge	ft in	11'8"	11'7"	11'7"	11'4"	12'3"	12'	11'7"	11'7"
B Dump-over height	ft in	13'5"	13'5"	13'5"	13'5"	14'10"	14'10"	14'10"	14'10"
C Max. height of bucket bottom	ft in	14'4"	14'4"	14'4"	14'4"	14'8"	14'8"	14'8"	14'8"
D Max. height of bucket pivot point	ft in	15'3"	15'3"	15'3"	15'3"	15'8"	15'8"	15'8"	15'8"
E Max. operating height	ft in	20'	20'1"	20'1"	20'3"	20'3"	20'7"	21'5"	21'5"
F Reach at max. lift height and 45° discharge	ft in	3'1"	3'2"	3'2"	3'4"	3'3"	3'6"	4'	4'
G Digging depth	ft in	3"	3"	3"	3"	6"	6"	6"	6"
H Height above cab	ft in	11'	11'	11'	11'	11'8"	11'8"	11'8"	11'8"
I Height above exhaust	ft in	9'10"	9'10"	9'10"	9'10"	10'2"	10'2"	10'2"	10'2"
J Ground clearance	ft in	1'9"	1'9"	1'9"	1'9"	1'10"	1'10"	1'10"	1'10"
K Wheelbase	ft in	10'9"	10'9"	10'9"	10'9"	11'9"	11'9"	12'2"	12'2"
L Overall length	ft in	28'7"	28'8"	28'8"	28'11"	30'4"	30'9"	31'5"	31'5"
Turning circle radius over outside bucket edge	ft in	21'11"	21'11"	21'11"	22'1"	23'9"	23'11"	24'4"	24'9"
Breakout force (SAE)	lbf	25,853	24,729	26,977	25,853	34,845	33,721	33,721	33,721
Tipping load, straight*	lb	22,729	22,399	25,221	24,824	33,135	32,717	40,664	40,675
Tipping load, articulated at 40°*	lb	20,062	19,775	22,244	21,914	29,101	28,770	35,913	35,913
Operating weight*	lb	37,875	37,941	39,617	39,771	50,155	50,398	54,344	54,675
Tire sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3	

\* The figures shown here are valid with tires above and include 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.

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

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

 = Rehandling bucket

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

ZK = Z-bar linkage

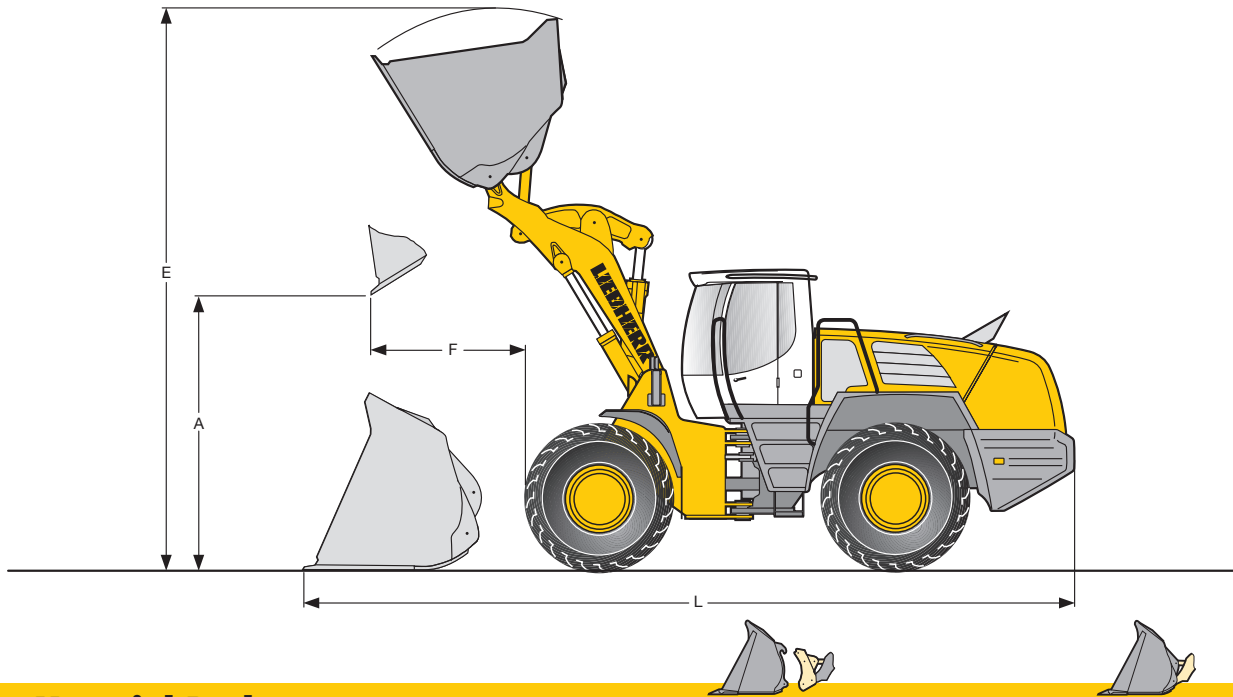
T = Welded-on tooth holder with add-on teeth



# Attachment

## Light Material Bucket

L 550 - L 580



Light Material Bucket (heavy material density) with Bolt-On Cutting Edge		L 550		L 556		L 566		L 580	
		STD	HL	STD	HL	STD	STD	STD	STD
Geometry		IND	IND	IND	IND	ZK	ZK	ZK	ZK
Bucket capacity	yd <sup>3</sup>	6.5	5.9	7.8	6.5	8.5	11.1	8.5	11.1
Bucket width	ft in	9'8"	9'8"	9'8"	9'8"	10'6"	11'6"	10'6"	11'6"
Specific material weight	lb/yd <sup>3</sup>	1,348	1,348	1,348	1,348	1,686	1,348	2,023	1,686
A Dumping height at max. lift height	ft in	8'4"	10'7"	8'	10'3"	9'11"	9'5"	10'6"	10'
E Max. operating height	ft in	19'4"	20'9"	19'11"	21'3"	20'5"	21'1"	21'2"	21'10"
F Reach at maximum lift height	ft in	4'9"	4'1"	5'2"	4'4"	4'8"	5'2"	3'11"	4'5"
L Overall length	ft in	28'1"	29'4"	28'8"	29'9"	29'8"	30'4"	30'1"	30'9"
Tipping load, straight*	lb	25,353	20,503	26,610	23,259	35,979	34,745	43,299	41,976
Tipping load, articulated at 40°*	lb	22,355	18,100	23,479	20,503	31,625	30,534	38,228	37,071
Operating weight*	lb	38,360	39,110	40,366	40,785	51,346	51,588	54,807	55,490
Tire sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3		26.5R25 L3	

Light Material Bucket (light material density) with Bolt-On Cutting Edge		L 550		L 556		L 566	L 580
		STD	HL	STD	HL	STD	STD
Geometry		IND	IND	IND	IND	ZKK	ZKK
Bucket capacity	yd <sup>3</sup>	11.8	10.5	13.1	11.8	14.4	18.3
Bucket width	ft in	11'2"	11'2"	11'2"	11'2"	12'2"	13'1"
Specific material weight	lb/yd <sup>3</sup>	843	843	843	843	674	674
A Dumping height at max. lift height	ft in	7'8"	9'7"	7'5"	9'4"	9'3"	9'1"
E Max. operating height	ft in	20'1"	21'3"	20'6"	21'8"	22'5"	23'6"
F Reach at maximum lift height	ft in	5'7"	5'	5'10"	5'3"	7'3"	7'5"
L Overall length	ft in	29'3"	30'8"	29'8"	31'1"	31'10"	32'11"
Tipping load, straight*	lb	23,942	19,874	26,169	22,277	27,988	30,247
Tipping load, articulated at 40°*	lb	21,120	17,527	23,093	19,665	24,604	26,698
Operating weight*	lb	40,322	40,631	42,240	42,648	55,733	60,098
Tire sizes		23.5R25 L4		23.5R25 L4		26.5R25 L4	26.5R25 L4

\* The figures shown here are valid with tires above and include 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.

STD = Standard lift arm length

HL = High Lift

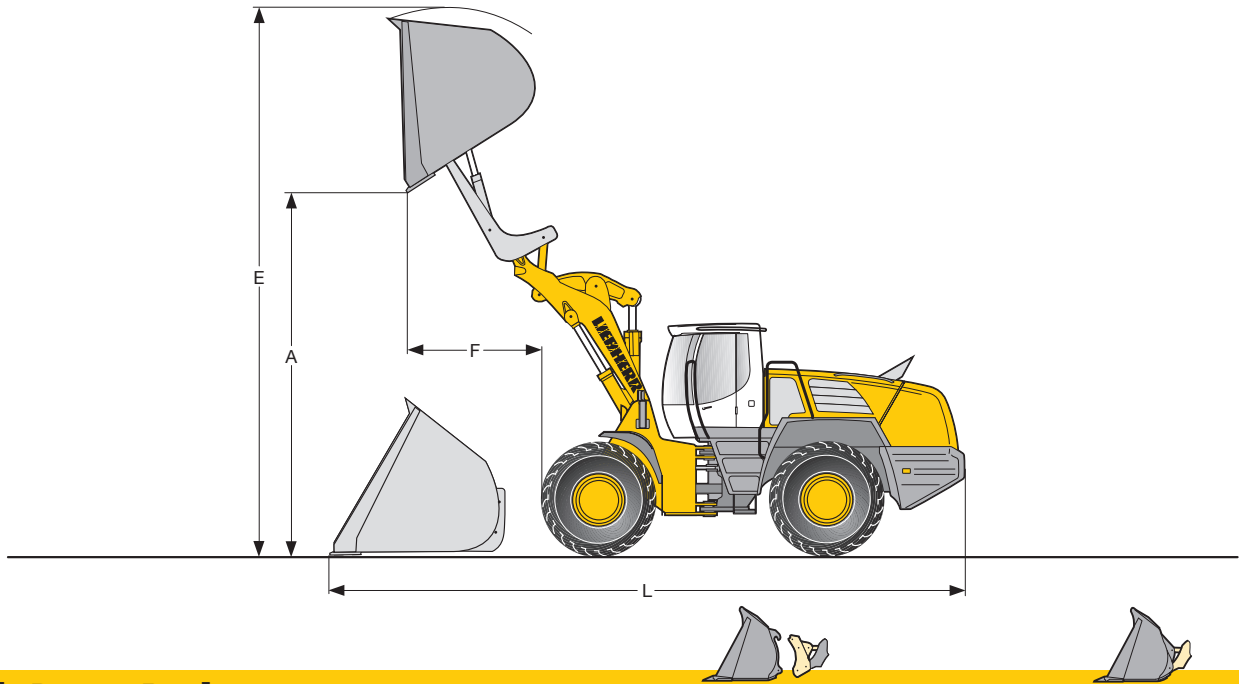
IND = Industrial lift arm with parallel guidance including hydraulic quick coupler (only available for L 550 and L 556; illustration see page 14).

ZK = Z-bar linkage                      ZKK = Z-bar linkage with tilt cylinder support and hydraulic quick coupler ("Lumberjack")

# Attachment

## High-Dump Bucket

L 550 - L 580



High-Dump Bucket (heavy material density) with Bolt-On Cutting Edge		L 550		L 556		L 566	L 580
		STD	HL	STD	HL	STD	STD
Geometry		IND	IND	IND	IND	ZK	ZK
Bucket capacity	yd <sup>3</sup>	5.9	5.2	6.5	5.9	8.5	8.5
Bucket width	ft in	8'10"	8'10"	8'10"	8'10"	10'6"	10'6"
Specific material weight	lb/yd <sup>3</sup>	1,348	1,348	1,348	1,348	1,348	1,686
A Dumping height at max. lift height	ft in	14'11"	16'6"	15'1"	16'11"	17'5"	18'2"
E Max. operating height	ft in	21'11"	23'4"	22'6"	23'11"	24'11"	25'8"
F Reach at maximum lift height	ft in	5'10"	5'1"	6'	5'5"	6'	5'5"
L Overall length	ft in	29'	30'4"	29'4"	30'8"	31'8"	32'10"
Tipping load, straight*	lb	22,619	19,290	24,295	20,856	30,093	37,016
Tipping load, articulated at 40°*	lb	19,952	17,020	21,429	18,386	26,455	32,673
Operating weight*	lb	39,374	39,881	41,931	41,799	54,697	58,158
Tire sizes		23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3

High-Dump Bucket (light material density) with Bolt-On Cutting Edge		L 550		L 556		L 566	L 580
		STD	HL	STD	HL	STD	STD
Geometry		IND	IND	IND	IND	ZKK	ZKK
Bucket capacity	yd <sup>3</sup>	10.5	9.2	12.4	10.5	14.4	17.0
Bucket width	ft in	11'2"	11'2"	11'2"	11'2"	12'2"	13'1"
Specific material weight	lb/yd <sup>3</sup>	843	843	843	843	674	674
A Dumping height at max. lift height	ft in	14'9"	15'11"	15'1"	16'5"	14'11"	15'8"
E Max. operating height	ft in	22'6"	23'6"	23'5"	24'5"	27'2"	28'2"
F Reach at maximum lift height	ft in	5'10"	5'1"	6'1"	5'4"	6'9"	6'10"
L Overall length	ft in	29'2"	30'6"	29'8"	31'	31'7"	32'8"
Tipping load, straight*	lb	21,848	18,453	24,162	20,547	25,441	28,285
Tipping load, articulated at 40°*	lb	19,268	16,204	21,318	18,133	22,355	24,978
Operating weight*	lb	40,542	41,402	42,461	43,420	56,394	61,244
Tire sizes		23.5R25 L4		23.5R25 L4		26.5R25 L4	26.5R25 L4

\* The figures shown here are valid with tires above and include 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.

STD = Standard lift arm length

HL = High Lift

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

ZK = Z-bar linkage

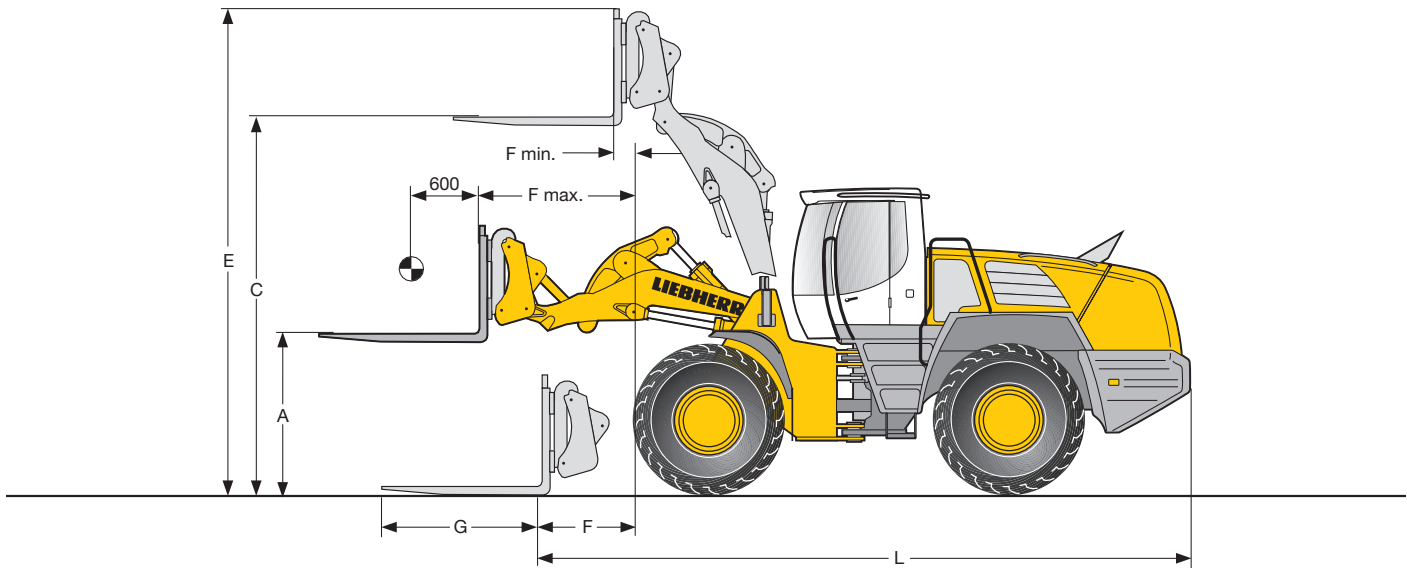
ZKK = Z-bar linkage with tilt cylinder support and hydraulic quick coupler ("Lumberjack")



# Attachment

## Fork Carrier and Fork

L 550 - L 580



### FEM IV Fork Carrier and Fork with Quick Change Device

		L 550		L 556		L 566	L 580
Geometry		ZK	IND	ZK	IND	ZK	ZK
A	Lifting height at max. reach	ft in 5'10"	6'	5'10"	6'	6'6"	6'6"
C	Max. lifting height	ft in 12'1"	12'7"	12'1"	12'7"	13'7"	14'3"
E	Max. operating height	ft in 15'4"	15'10"	15'4"	15'10"	17'5"	18'2"
F	Reach at loading position	ft in 3'4"	3'3"	3'4"	3'3"	4'1"	4'3"
F max.	Max. reach	ft in 5'5"	5'6"	5'5"	5'6"	6'5"	6'6"
F min.	Reach at max. lifting height	ft in 2'9"	2'6"	2'9"	2'6"	3'4"	2'9"
G	Fork length	ft in 4'11"	4'11"	4'11"	4'11"	5'11"	5'11"
L	Length - basic machine	ft in 23'6"	23'6"	23'6"	23'6"	26'	26'7"
	Tipping load, straight*	lb 20,150	20,260	22,862	22,619	25,574	31,173
	Tipping load, articulated at 40°*	lb 17,780	17,857	20,172	19,952	22,487	27,073
	Recommended payload for uneven ground = 60% of tipping load, articulated <sup>1)</sup>	lb 10,031	10,714	12,103	11,971	12,974	16,535
	Recommended payload for smooth surfaces = 80% of tipping load, articulated <sup>1)</sup>	lb 12,787 <sup>2)</sup>	14,285	14,330 <sup>2)</sup>	15,961	17,295	19,489 <sup>2)</sup>
	Operating weight*	lb 36,145	36,376	37,655	38,062	50,078	53,539
	Tire sizes	23.5R25 L3		23.5R25 L3		26.5R25 L3	26.5R25 L3

\* The figures shown here are valid with tires above and include 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.

<sup>1)</sup> According to EN 473-3 and ISO 14397

<sup>2)</sup> Payload on forks is limited by tilt cylinder

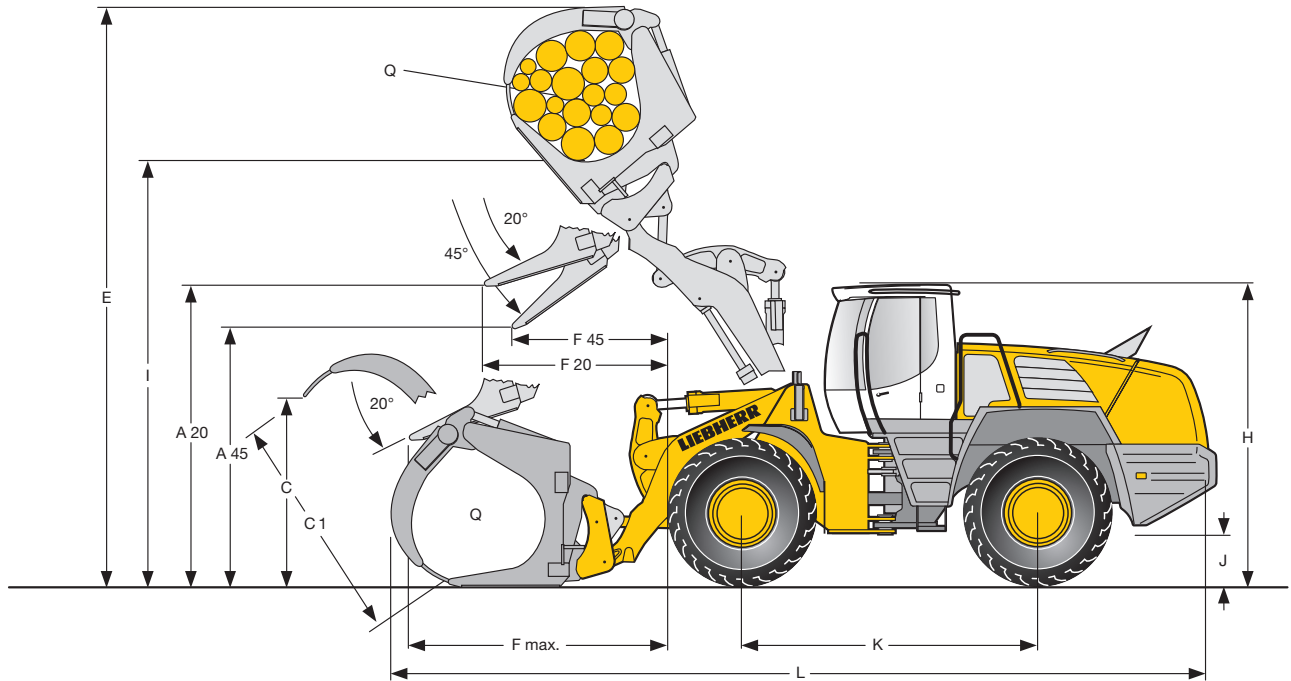
ZK = Z-bar linkage

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

# Attachment

## Log Grapple (Industrial lift arm)

L 550 - L 580



Log Grapple			L 550	L 556	L 566	L 580
	Geometry		IND	IND	ZKK	ZKK
A20	Discharge height at 20°	ft in	11'9"	11'9"	11'2"	11'11"
A45	Discharge height at 45°	ft in	9'11"	9'8"	8'10"	9'5"
C	Max. grapple opening in loading position	ft in	7'9"	8'10"	9'10"	11'1"
C1	Max. grapple opening	ft in	8'1"	9'9"	10'10"	12'
E	Max height	ft in	20'9"	21'3"	24'7"	25'7"
F20	Reach at max. lifting height at 20° discharge	ft in	5'9"	6'2"	7'8"	7'4"
F45	Reach at max. lifting height at 45° discharge	ft in	4'8"	5'	5'1"	5'5"
F max.	Max. outreach	ft in	8'9"	9'3"	10'8"	10'11"
H	Height above cab	ft in	11'	11'	11'9"	11'9"
I	Manipulation height	ft in	14'10"	14'10"	17'1"	17'9"
J	Ground clearance	ft in	1'9"	1'9"	1'10"	1'10"
K	Wheelbase	ft in	10'9"	10'9"	11'9"	12'2"
L	Overall length	ft in	27'11"	28'5"	31'6"	32'9"
	Width over tires	ft in	8'9"	8'9"	9'7"	9'7"
Q	Grapple diameter	in <sup>2</sup>	2,790	3,720	4,805	5,425
	Grapple width	ft in	5'3"	5'3"	5'11"	5'11"
	Payload*	lb	13,889**	14,109**	18,078**	20,283**
	Operating weight*	lb	41,645**	43,100**	57,276**	61,399**
	Tire sizes		23.5R25 L4	23.5R25 L4	26.5R25 L4	26.5R25 L4

\* The figures shown here are valid with tires above and include 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.

\*\* Data with rear tyres filled with water

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

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



# Technical Data

L 586



## Engine

Liebherr diesel engine	D936L A6	
Design	Liebherr diesel engine, water-cooled, exhaust turbo charged with intercooler	
Cylinder inline	6	
Combustion process	PLD	
Rated output according to SAE J1349	335 HP (250 kW)	at 2,000 rpm
Max. torque	1,172 lb ft	at 1,500 rpm
Displacement	642 in <sup>3</sup>	
Bore/Stroke	4.8"/5.91"	
Air cleaner	Dry type with main and safety element, pre-cleaner, service indicator on LCD display	
Electrical system		
Operating voltage	24 V	
Capacity	170 Ah	
Alternator	28 V/80 A	
Starter motor	24 V/9 HP	

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



## Travel Drive

Stepless hydrostatic travel drive	
Design	Swash plate type variable flow pump and two variable axial piston motors in closed loop circuit with one axle transfer case. Direction of travel 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 directional forces steplessly at full engine speed. The Liebherr joystick is used to control forward and reverse travel
Travel speed range	Speed range 1 _____ 0 – 5.0 mph Speed range 2 and A2 _____ 0 – 9.9 mph Speed range A3 _____ 0 – 21.7 mph The quoted speeds apply with the tires that are standard equipment on the loader



## Axles

Four-wheel drive	
Front axle	Fixed
Rear axle	Center pivot, with 13° oscillating angle to each side
Height of obstacles which can be driven over	1'9" With all four wheels remaining in contact with the ground
Differentials	Automatic limited-slip differentials
Reduction gear	Planetary final drive in wheel hubs
Track width	7'10" with all types of tires



## 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 with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders
Angle of articulation	37° (to each side)
Emergency steering	Electro-hydraulic emergency steering system



## Attachment Hydraulics

Design	"Load-sensing" swash plate type variable flow pump with output and flow control, and pressure cut-off in the control block
Cooling	Hydraulic oil cooling using thermostatically controlled fan and oil cooler
Filtering	Return line filter in the hydraulic reservoir
Control	"Liebherr-Joystick" with hydraulic servo control
Lift circuit	Lifting, neutral, lowering and float positions controlled by Liebherr joystick with detent
Tilt circuit	Tilt back, neutral, dump automatic bucket positioning
Max. flow	108 gpm
Max. pressure	4,786 psi



## Attachment

Geometry	Powerful Z-pattern linkage with tilt cylinder and cast steel cross-tube
Bearings	Sealed
Cycle time at nominal load	Lifting _____ 6.5 s Dumping _____ 3.0 s Lowering (empty) _____ 4.0 s



## Operator's Cab

Design	On elastic bearing on rear section, soundproof ROPS/FOPS cab. Operator's door with optional sliding window, 180° opening angle, fold-out window on right side with opening angle, front windscreen made of compound safety glass, green tinted as standard, side windows made of single-pane safety glass, grey tinted, continuously adjustable steering column and joystick control as standard, heatable rear window ROPS roll over protection per DIN/ISO 3471/EN 474-3 FOPS falling objects protection per DIN/ISO 3449/EN 474-1
Liebherr Operator's seat	6 way adjustable seat with lap belt, vibration damping and suspension adjustable for the operator's weight
Cab heating and ventilation	Operator's cab with 4-level air control, cooling water heating, defroster and air conditioning with electronic valve control, as well as electronic fresh/recirculated air control, filter system with pre-filter, fresh air filter and recirculated air filter, easily replaced, air conditioning as standard



## Noise Emission

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

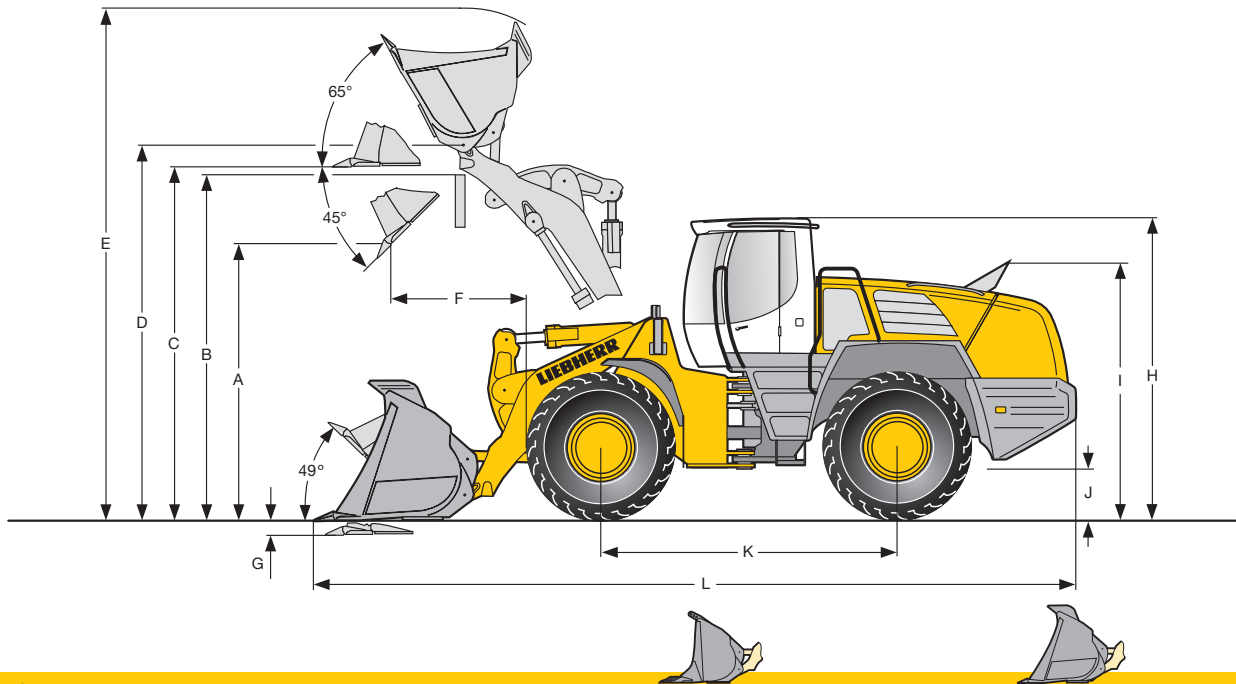


## Capacities

Fuel tank	114.8 gal
Engine oil (including filter change)	11.4 gal
Pump distributor gears	2.0 gal
Transmission	3.0 gal
Coolant	15.6 gal
Front axle	23.8 gal
Rear axle	14.8 gal
Hydraulic tank	47.6 gal
Hydraulic system, total	92.5 gal
Air-condition system R134a	3.0 lb

# Dimensions

## Z-bar linkage



L 586

### Loading Bucket

		STD	HL	STD	HL	STD	HL
Cutting tool		ROB	ROB	T	T	T	T
Lift arm length	ft in	10'4"	11'4"	10'4"	11'4"	10'4"	11'4"
Bucket capacity according to ISO 7546**	yd <sup>3</sup>	6.5	6.5	7.2	7.2	7.9	7.9
Bucket width	ft in	11'2"	11'2"	11'2"	11'2"	11'2"	11'2"
Specific material weight	lb/yc <sup>3</sup>	3,371	3,034	3,034	2,697	2,697	2,360
A Dumping height at max. lift height and 45° discharge	ft in	10'11"	12'3"	10'10"	12'3"	10'8"	12'
B Dump-over height	ft in	13'7"	14'9"	13'7"	14'9"	13'7"	14'9"
C Max. height of bucket bottom	ft in	14'1"	15'8"	14'2"	15'7"	14'2"	15'7"
D Max. height of bucket pivot point	ft in	15'3"	16'8"	15'3"	16'7"	15'3"	16'7"
E Max. operating height	ft in	21'	22'4"	21'4"	22'10"	21'5"	22'11"
F Reach at max. lift height and 45° discharge	ft in	4'6"	4'6"	4'7"	4'6"	4'8"	4'7"
G Digging depth	ft in	6"	6"	4"	4"	4"	4"
H Height above cab	ft in	12'4"	12'4"	12'3"	12'3"	12'3"	12'3"
I Height above exhaust	ft in	10'11"	10'11"	10'10"	10'10"	10'10"	10'10"
J Ground clearance	ft in	1'11"	1'11"	1'11"	1'11"	1'11"	1'11"
K Wheelbase	ft in	12'10"	12'10"	12'10"	12'10"	12'10"	12'10"
L Overall length	ft in	32'8"	33'10"	32'7"	33'8"	32'8"	33'9"
Turning circle radius over outside bucket edge	ft in	27'1"	27'9"	27'1"	27'9"	27'3"	27'11"
Breakout force (SAE)	lbf	52,830	51,706	52,830	51,706	50,582	49,458
Tipping load, straight*	lb	50,023	43,883	50,221	44,114	48,633	42,659
Tipping load, articulated at 37°*	lb	44,853	39,353	45,040	39,551	43,607	38,228
Operating weight*	lb	71,838	72,554	69,181	69,887	69,996	70,768
Tire sizes		29.5R25 L5		29.5R25 L3			

\* The figures shown here are valid with tires above and include 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.

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



= Rock bucket with oblique base for quarrying applications



= Rehandling bucket

STD = Standard lift arm length

HL = High Lift

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

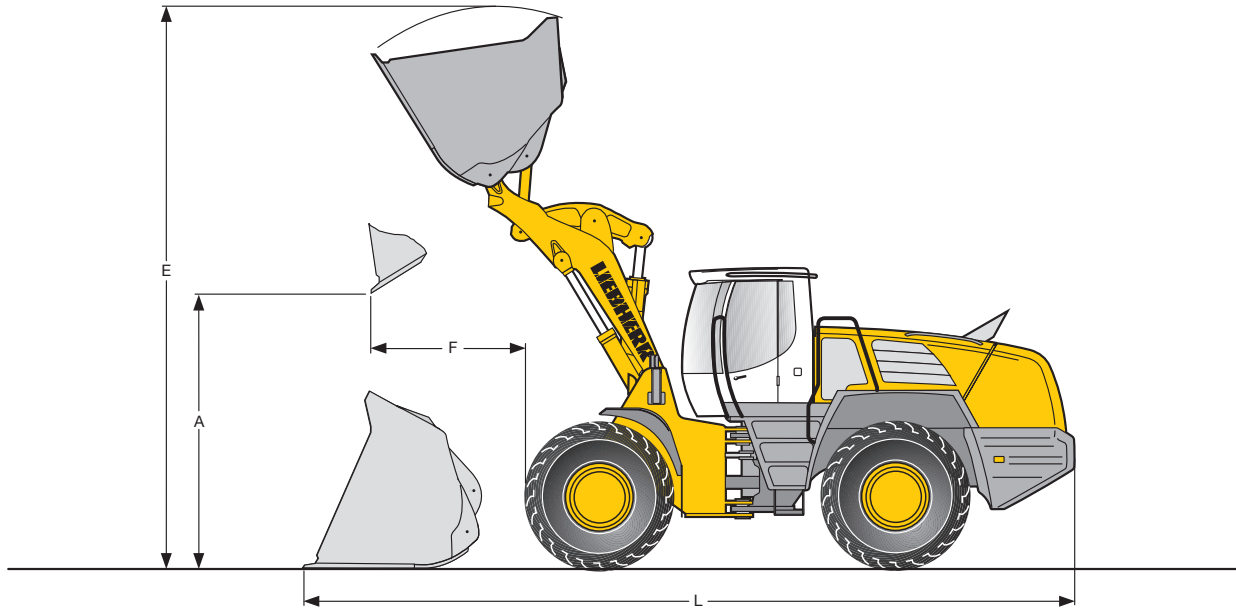
T = Welded-on tooth holder with add-on teeth



# Attachment

## Light Material Bucket

L 586



### Light Material Bucket with Bolt-On Cutting Edge

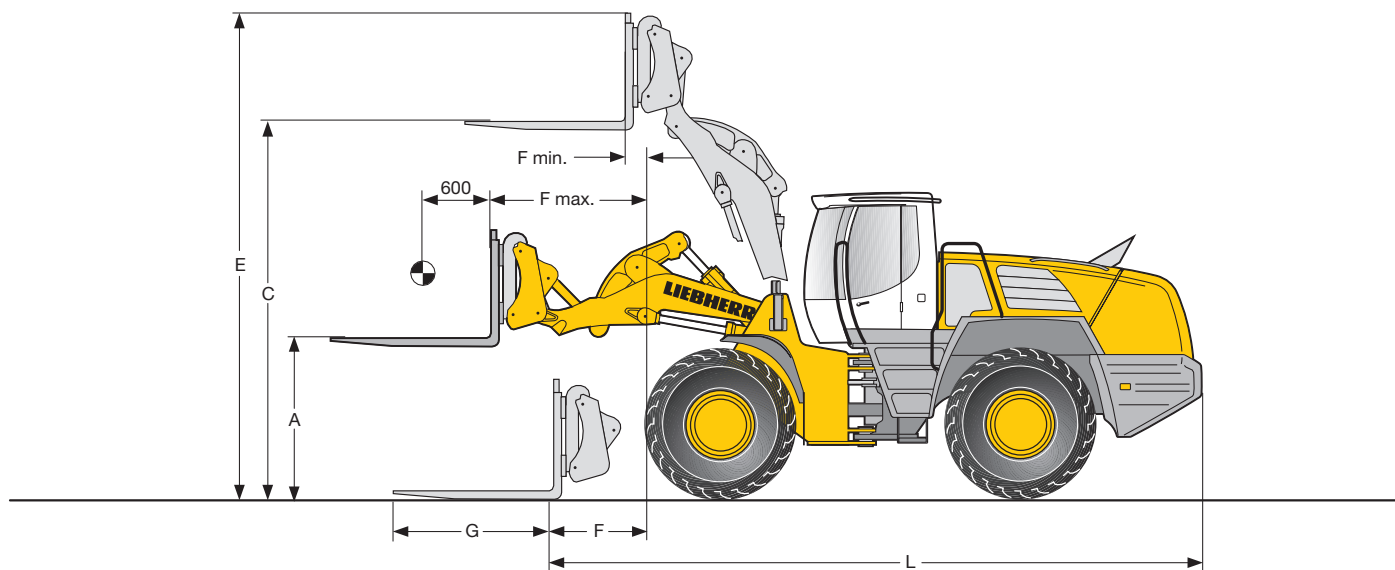


	Bucket capacity	yd <sup>3</sup>	11.1	14.4
	Bucket width	ft in	11'6"	12'2"
	Specific material weight	lb/yd <sup>3</sup>	1,854	1,348
A	Dumping height at max. lift height	ft in	10'3"	9'8"
E	Max. operating height	ft in	22'	22'5"
F	Reach at maximum lift height	ft in	5'	5'10"
L	Overall length	ft in	32'8"	33'8"
	Tipping load, straight*	lb	47,796	46,120
	Tipping load, articulated at 37°*	lb	42,868	41,204
	Operating weight*	lb	69,401	70,702
	Tire sizes		29.5R25 L3	29.5R25 L3

\* The figures shown here are valid with tires above and include 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.

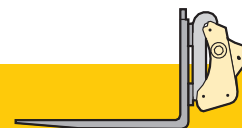
# Attachment

## Fork Carrier and Fork



L 586

### FEM IV Fork Carrier and Fork with Quick Change Device



A	Lifting height at max. reach	ft in	6'11"
C	Max. lifting height	ft in	14'6"
E	Max. operating height	ft in	18'5"
F	Reach at loading position	ft in	4'3"
F max.	Max. reach	ft in	6'8"
F min.	Reach at max. lifting height	ft in	3'4"
G	Fork length	ft in	5'11"
L	Length - basic machine	ft in	27'9"
	Tipping load, straight*	lb	36,243
	Tipping load, articulated at 37°*	lb	32,496
	Recommended payload for uneven ground = 60 % of tipping load, articulated <sup>1)</sup>	lb	19,488
	Recommended payload for smooth surfaces = 80 % of tipping load, articulated <sup>1)</sup>	lb	22,046 <sup>2)</sup>
	Operating weight*	lb	66,976
	Tire sizes		29.5R25 L3

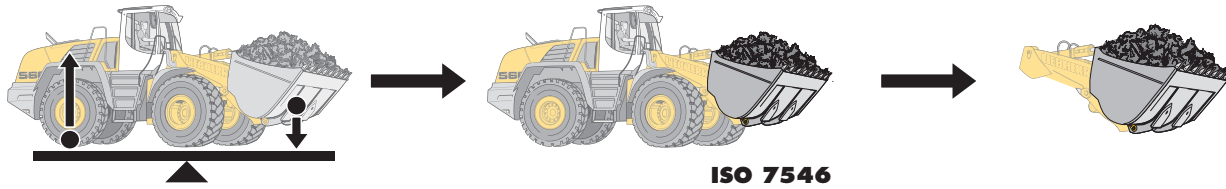
\* The figures shown here are valid with tires above and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tires and optional equipment will change the operating weight and tipping load.

<sup>1)</sup> According to EN 473-3 and ISO 14397

<sup>2)</sup> Useful load limited due to FEM IV fork carrier and forks



# Tipping Load



## What is tipping load?

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

This is the most unfavorable static-load position for the wheel loader.

Lifting arms horizontal, wheel loader fully articulated at center 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.

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

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

## 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	Clay,	natural	2,697	110	Granite		3,034	95
	dry	2,697	105		dry	2,360	110		Limestone,	hard	2,781
	wet, 24" – 1'97"	3,371	105	wet	2,781	105	soft		2,613	100	
	dry, 24" – 1'97"	2,865	105	Clay and gravel,	dry	2,360	110	Sandstone		2,697	100
	crushed stone	2,528	100		wet	2,697	100	Slate		2,950	100
Sand,	dry	2,528	110	Earth,	dry	2,191	115	Bauxite		2,360	100
	moist	3,034	115		wet excavated	2,697	110	Gypsum, broken		3,034	100
	wet	3,203	110	Topsoil		1,854	110	Coke		843	110
Gravel and sand, dry	dry	2,865	105	Weathered rock				Slag, broken		3,034	100
	wet	3,371	100	50 % rock, 50 % earth		2,865	100	Coal		1,854	110
Sand and clay		2,697	110	Basalt		3,287	100				

# Tires



	Size and tread code		Change of operating weight lb	Width over tires ft in	Change in vertical dimensions in	Use
<b>L 550</b>						
Goodyear	20.5R25 RT-3B	L3	- 1,235	8'9"	- 1.57	Gravel
Goodyear	20.5R25 RL-5K	L5	+ 106	8'9"	+ 0.12	Stone, Recycling
Michelin	20.5R25 XHA2	L3	- 1,279	8'8"	- 1.57	Gravel
Michelin	20.5R25 XLD D2A	L5	- 326	8'8"	- 0.55	Stone, Mining spoil
Michelin	20.5R25 XMINE D2	L5	+ 265	8'9"	0	Stone, Recycling
<b>L 550/L 556</b>						
Bridgestone	23.5R25 VJT	L3	+ 309	8'8"	+ 0.24	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 2,081	8'9"	+ 2.76	Stone, Recycling
Goodyear	23.5R25 RL-5K	L5	+ 1,746	8'9"	+ 2.36	Stone, Recycling
Goodyear	23.5R25 RT-3B	L3	+ 340	8'9"	+ 0.98	Gravel
Goodyear	23.5R25 GP-4D	L4	+ 723	8'8"	+ 0.79	Sand, Gravel, Industry
Goodyear	23.5R25 TL-3A+	L3	+ 626	8'8"	+ 1.42	Gravel, Earthworks
Michelin	23.5R25 XHA2	L3	0	8'8"	0	Gravel
Michelin	23.5R25 XLD D2A	L5	+ 1,349	8'9"	+ 1.38	Stone, Mining spoil
Michelin	23.5R25 XMINE D2	L5	+ 1,675	8'9"	+ 2.36	Stone, Recycling
<b>L 566</b>						
Bridgestone	23.5R25 VJT	L3	- 895	9'9"	- 1.69	Gravel
Bridgestone	23.5R25 VSDL	L5	+ 882	9'9"	+ 0.59	Stone, Recycling
Goodyear	23.5R25 RL-5K	L5	+ 547	9'9"	+ 0.39	Stone, Recycling
Michelin	23.5R25 XMINE D2	L5	+ 476	9'10"	+ 0.39	Stone, Recycling
Michelin	23.5R25 XLD D2A	L5	+ 150	9'9"	- 0.59	Stone, Mining spoil
Michelin	23.5R25 XHA2	L3	- 1,199	9'9"	- 1.93	Gravel
<b>L 566/L 580</b>						
Bridgestone	26.5R25 VJT	L3	+ 353	9'9"	+ 0.59	Gravel
Bridgestone	26.5R25 VSDL	L5	+ 2,654	9'9"	+ 2.36	Stone, Recycling
Goodyear	26.5R25 RL-5K	L5	+ 2,328	9'9"	+ 2.36	Stone, Recycling
Goodyear	26.5R25 RT-3B	L3	+ 917	9'9"	+ 0.98	Gravel
Goodyear	26.5R25 GP-4D	L4	+ 961	9'9"	+ 1.06	Sand, Gravel, Industry
Goodyear	26.5R25 TL-3A+	L3	+ 767	9'9"	+ 1.22	Gravel, Earthworks
Michelin	26.5R25 XHA2	L3	0	9'9"	0	Gravel
Michelin	26.5R25 XLD D2A	L5	+ 1,534	9'9"	+ 1.57	Stone, Mining spoil
Michelin	26.5R25 XMINE D2	L5	+ 2,407	9'10"	+ 2.36	Stone, Recycling
<b>L 586</b>						
Bridgestone	29.5R25 VJT	L3	+ 181	10'8"	+ 1.77	Gravel
Bridgestone	29.5R25 VSDL	L5	+ 3,104	10'8"	+ 2.56	Stone, Scrap
Goodyear	29.5R25 RL-5K	L5	+ 3,668	10'10"	+ 2.36	Industry, Stone
Michelin	29.5R25 XHA2	L3	0	10'8"	0	Gravel
Michelin	29.5R25 XLD D2A	L5	+ 1,975	10'8"	+ 0.79	Stone, Mining spoil, Recycling
Michelin	29.5R25 XMINE D2	L5	+ 2,690	10'9"	+ 1.57	Stone, Scrap

Before operating the vehicle with tire foam filling or tire protection chains, please discuss this with the factory.

# Equipment



## Basic Machine

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



## Operator's Cab

	550	556	566	580	586
Storage box	•	•	•	•	•
Lockable storage compartment	•	•	•	•	•
Ashtray	•	•	•	•	•
Operator's package	•	•	•	•	•
Operator's seat – 6 way adjustable	•	•	•	•	•
Operator's seat with active suspension, with seat climate control and seat heating	-	-	+	+	+
Operator's seat – heated and air suspended	+	+	+	+	+
Fire extinguisher 4 lb	+	+	+	+	+
Cup holder	•	•	•	•	•
Height-adjustable steering column	+	+	+	+	+
Horn	•	•	•	•	•
Joystick steering	+	+	+	+	+
Floor mat	•	•	•	•	•
Coat hook	•	•	•	•	•
Air conditioning system	•	•	•	•	•
Storage box with cooling function	+	+	+	+	+
LED operating spotlight, front/rear	+	+	+	+	+
Liebherr joystick control – adjustable	•	•	•	•	•
Radio set	+	+	+	+	+
Provision for radio including speakers	+	+	+	+	+
Rear view monitoring with camera	+	+	+	+	+
Interior rear-view mirror	•	•	•	•	•
Amber beacon	+	+	+	+	+
Soundproof ROPS/FOPS cab with tinted safety glass front windshield, heated rear window	•	•	•	•	•
Wash/wipe system for windscreen and rear window	•	•	•	•	•
Sliding window	+	+	+	+	+
Protective ventilation system	+	+	+	+	+
Windshield guard	+	+	+	+	+
Sun visor	•	•	•	•	•
Dust filter system	+	+	+	+	+
12 V Outlet	•	•	•	•	•
First aid kit	+	+	+	+	+
Adjustable steering column	•	•	•	•	•
Four working area lights at front	•	•	•	•	•
Hot water heater with defroster and recycled-air system	•	•	•	•	•
Wide angle mirror	+	+	+	+	+
Xenon working lights front	+	+	+	+	+
Two or four working area lights rear	+	+	+	+	+
2in1 steering system – changeable	+	+	+	+	-

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

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



## Instruments for:

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



## Warning Lights for:

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



## Audible Warnings for:

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



## Function Keys for:

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



## Equipment

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

550-586 07.11



# The Liebherr Group of Companies

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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.

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

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Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 120 companies with nearly 33,000 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.us](http://www.liebherr.us)



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