

Product Information Wheel Loader

L 580 LogHandler

Xpower[®]

Generation

6

Max. Payload

8,590 – 8,750 kg

Engine

Stage IV/Tier 4f

Stage V/Tier 4f



LIEBHERR



reddot award 2017
winner



L 580 LogHandler XPower®

Max. Payload

8,730 kg

Wood Grab Capacity

3.6 m²

Operating Weight

36,650 kg

Engine Output (ISO 14396)

250 kW/340 HP

Performance

The L 580 LogHandler XPower® has been developed especially for the requirements of the timber industry. The specially designed lift arm allows high manipulation heights and great ranges. Thus logs can be picked up and manipulated even at great height. The wheel loader is particularly suitable for tasks such as loading and unloading lorries, feeding debarking and sorting machines as well as handling, transporting and high stacking logs. Various grapple versions and sizes make the LogHandler particularly versatile and flexible in use. The grapple can be rotated 360° as well as pivoting forwards and backwards. The special hydraulic stop damper acts horizontally to the driving direction. It dampens vibrations and ensures smooth driving and high machine availability. The Smooth Speed Reduction system (SSR-System) developed by Liebherr allows a highly sensitive movement of the load, thus increasing machine stability and productivity. This intelligent control ensures safe operation and offers maximum operator comfort by considerably reducing vibrations in the cab.

Economy

The Liebherr-XPower driveline accelerates quickly, allowing high travel speeds. Time savings can be made on flat terrain, as well as on inclines. At the same time, the innovative driveline with Liebherr-Power-Efficiency (LPE) achieves significant fuel savings. In addition there is minimal tyre wear and hardly any brake wear. At maximum handling capacity and efficiency, this reduces operating costs significantly, further increasing profitability.

Reliability

The L 580 LogHandler XPower® provides maximum performance even under the toughest of operating conditions in the timber industry. Equipped with numerous protective devices, the LogHandler has proven its worth as a robust, reliable and a high-performance machine. At the same time, the components of the Liebherr-XPower wheel loaders are extremely resistant and low-wear. XPower® ensures a long life time of the machine and reliability in use.

Comfort

The modern ergonomic cab design provides the operator with maximum comfort enabling him to concentrate on accurate operation without fatigue, which once again means more efficiency and productivity. The optional joystick steering, integrated into the operator's seat, allows precise and sensitive control of the machine. Particularly in the case of short load cycles in particular, minimising required steering movements makes work more relaxed. In combination with the joystick steering, the operator's cab is also optionally available without steering wheel and column. Eliminating the need for the operator to move their hands between the steering unit and the control unit increases safety and comfort. The electro-hydraulic system allows an automatic positioning of the lift arm. The generous glass surfaces of the cab, the special kinematics for timber handling and the optimal lighting concept provide excellent all-round visibility in all lift arm positions. Moreover, the optional grapple monitoring and the rear area monitoring camera as standard, ensure perfect visibility. Maximum safety for people, the machine and the load is guaranteed, while increasing productivity at the same time.

Maintainability

The most important points for daily maintenance can be seen at a glance in the access area of Liebherr-XPower wheel loaders. Quick and safe checks save time and money.

Wheel Loader L 580 LogHandler XPower®

Overview

Robustness and Quality for a Durable Machine

- Grapple with hydraulic stop damper horizontally to the driving direction
- Hoist cylinder protection
- Lamp carrier in steel design with additional lights and guard (optional)
- Log pusher hydraulically adjusted with additional deflector plates (optional)
- Integral tyre pressure monitoring system (optional)
- Special tyres for timber handling (optional)

Highest Level of Performance

- Robust and visually optimised special kinematic for timber handling allows higher stacking and greater ranges
- Various grapple versions and sizes with modular blade (optional)
- Powerful and efficient Liebherr-XPower driveline

Maximum Operator Comfort for Greater Productivity

- Automatic central lubrication system
- Premiumdisplay (Touchscreen)
- Liebherr control lever, electrohydraulically controlled, adjustable using Liebherr display
- Joystick steering (optional)
- Operator's cab without steering wheel/steering column – Joystick steering only (optional)
- Smooth Speed Reduction system (SSR-System) for lower load on lift arm
- Ride control





Productive and Safe Working

- Soundproof ROPS/FOPS cab
- Windscreen guard mounted on lift arm
- Grapple monitoring with camera on display (optional)
- Headlights LED inside the arm
- Headlights LED on the arm (double design inside and outside; single design on front carriage) (optional)
- Additional headlights at rear of cabin roof (optional)
- Active personnel detection at the rear (optional)
- Safe, non-slip ladder access to cabin

Short Service Times for Greater Productivity

- Radiator easy to maintain
- Fluff trap for radiator (optional)
- Large-mesh radiator (optional)
- Reversible fan drive (optional)
- Air pre-cleaner (optional)

Productive and Safe Working

- Anti-slip steps and sturdy handrails
- Rear space monitoring camera via Liebherr display
- LogHandler special ballast (no water filling of tyres required)

Robustness and Quality for a Durable Machine

- Crash protection, rear (optional)
- Ramming guard with guard, rear (optional)
- Widening for mudguard (optional)

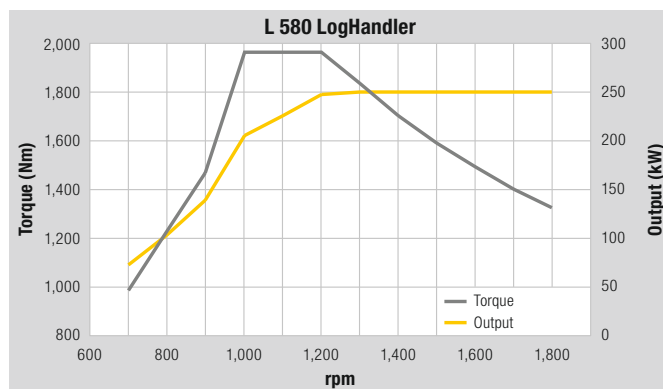
Technical Data



Engine

Diesel engine	D936 A7
Design	Stage V: Water-cooled in-series engine with charge-air cooling, exhaust gas treatment through Liebherr-SCR technology, closed diesel particle filter system as standard Stage IV: Water-cooled in-series engine with charge-air cooling, exhaust after-treatment through Liebherr-SCR technology, closed diesel particle filter system optional
Cylinder inline	6
Fuel injection process	Electronic Common Rail high-pressure injection
Max. gross output to ISO 3046 and SAE J1995	kW/HP 253/344 at RPM 1,250 – 1,800
Max. net output to ISO 9249 and SAE J1349	kW/HP 250/340 at RPM 1,250 – 1,800
Rated output to ISO 14396	kW/HP 250/340 at RPM 1,800
Max. net torque to ISO 9249 and SAE J1349	Nm 1,965 at RPM 1,000
Displacement	litres 10.52
Bore/Stroke	mm 122/150
Air cleaner system	Dry type filter with main and safety element, pre-cleaner, service indicator on the Liebherr display
Electrical system	
Operating voltage	V 24
Battery	Ah 2 x 180
Alternator	V/A 28/180
Starter	V/kW 24/7.8

The availability of models with stage V/Tier 4f or stage IV/Tier 4f emission standards is subject to emission regulations in the respective countries.



Driveline

Continuous power split XPower® driveline	
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 lever is used to control forward and reverse travel
Travel speed range	0 – 40 km/h forward and reverse, fully-automatic Speed restriction available upon request. Speeds quoted apply with the tyres Michelin 800/65R29 XLD65 L3.



Axles

Four-wheel drive	
Front axle	Fixed
Rear axle	Centre pivot, with 10° oscillating angle to each side
Height of obstacles which can be driven over	mm 300 with all four wheels remaining in contact with the ground
Differentials	Automatic limited-slip differentials
Reduction gear	Planetary final drive in wheel hubs
Track width	2,374 mm with all types of tyres



Brakes

Wear-free service brake	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)
Parking brake	Electro-hydraulically actuated spring-loaded disc brake system on the transmission

The braking system meets the requirements of the ISO 3450.



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	38° to each side
Emergency steering	Electro-hydraulic emergency steering system



Tyres

All dimensions and weight data are calculated for loaders equipped with Michelin 800/65R29 XLD65 L3 tyres.

Change of dimensions and weight when fitted with Goodyear 775/65R29 GP-4D L4 tyres are:

Operating weight	kg – 220
Vertical dimensions	mm – 18



Attachment Hydraulics

Design	“Load-sensing” swash plate type variable flow pump with output and flow control, and pressure cut-off in the control block
Cooling	Hydraulic oil cooling using thermostatically controlled fan and oil cooler
Filtration	Return line filter in the hydraulic reservoir
Control	Liebherr control lever, electro-hydraulically operated
Lift circuit	Lifting, neutral, lowering Lift arm positions programmable
Turning circle	Forwards, neutral, reverse Lift arm positions programmable
Grapple swing	Forwards, lock, loose, reverse
Grapple rotation	360°
Grapple opening/closing	
Max. flow	l/min. 420
Max. pressure	bar 350



Attachment

Geometry	Powerful and sturdy LogHandler lift arm for optimal lifting heights. 360° rotating grapple equipment
Bearings	Sealed



Operator's Cab

Design	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 laminated safety glass, side panels with single-pane safety glass ESG, heated rear window ESG, all windows are tinted. 3 way continuous adjustable steering column
Liebherr operator's seat	6 way adjustable, vibration-damped operator's seat “Comfort” with seat, depth and incline adjustment as standard (air-cushioned with seat heating adjustable to operator's weight), Liebherr control lever mounted into the operator's seat as standard
Cab heating and ventilation	4-zone air conditioning with new improved cooling output as standard, electrically heated rear window, all filters are easy to access and replaceable



Sound Level

Sound pressure level to ISO 6396	
L_{pA} (inside cab)	dB(A) 68
Sound power level to 2000/14/EC	
L_{WA} (surround noise)	dB(A) 107

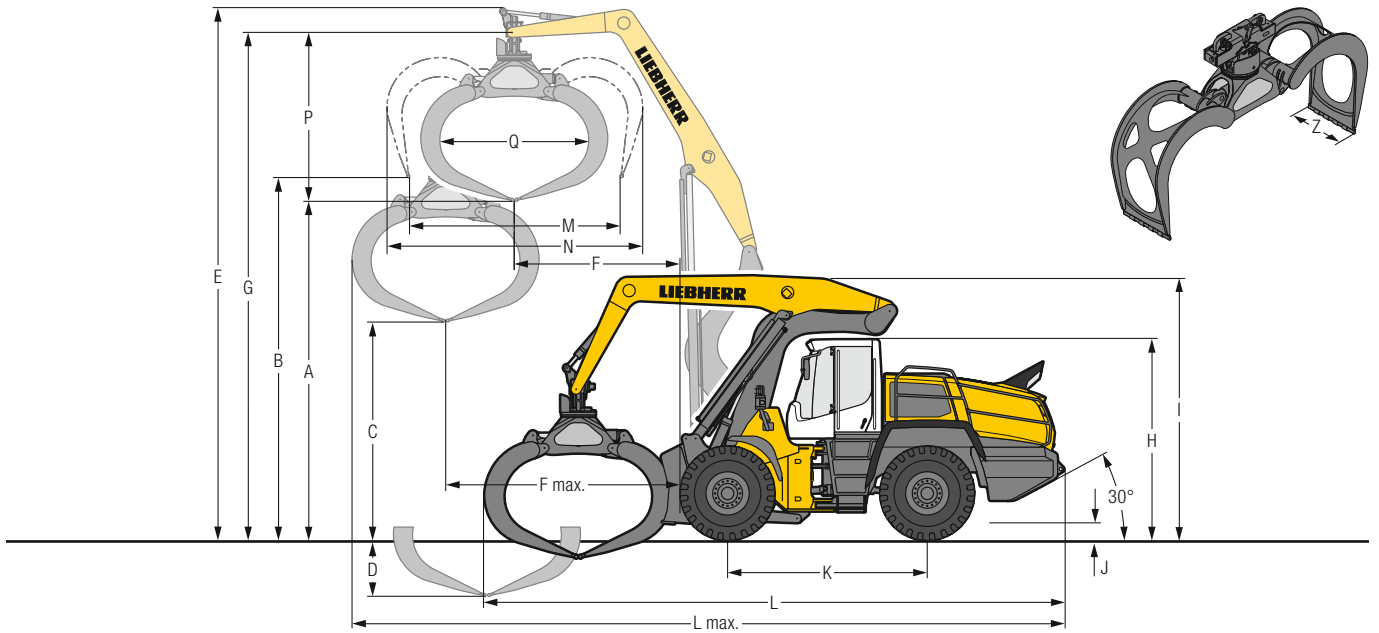


Capacities



Fuel tank	l 365
Engine oil (inclusive filter change)	l 40
DEF tank	l 67.5
Pump distribution gearbox	l 1.2
XPower® gearbox	l 55
Coolant	l 73
Front axle	l 58
Rear axle	l 58
Hydraulic tank	l 95
Hydraulic system, total	l 230
Air conditioning system R134a	g 1,250

Dimensions

LogHandler XPower®




Rotating Grapple, 360°

							
			3.2 m ²	3.6 m ²	3.8 m ²	3.2 m ²	3.6 m ²
A	Max. manipulation height with grapple closed ¹⁾	mm	5,881	5,773	5,691	5,660	5,550
B	Max. manipulation height with grapple open	mm	6,556	6,506	6,468	6,446	6,402
C	Manipulation height at max. reach	mm	4,160	4,052	3,970	3,939	3,829
D	Lower manipulation area	mm	949	1,057	1,139	1,170	1,280
E	Max. height	mm	9,550	9,550	9,550	9,550	9,550
F	Reach at max. lifting height	mm	2,750	2,750	2,750	2,750	2,750
F max.	Max. reach	mm	3,990	3,990	3,990	3,990	3,990
G	Height of grapple link	mm	9,015	9,015	9,015	9,015	9,015
H	Height above operator's cab	mm	3,590	3,590	3,590	3,590	3,590
I	Height with grapple positioned longitudinally	mm	5,250	5,250	5,250	5,250	5,250
	Height when max. reach is attained	mm	6,870	6,870	6,870	6,870	6,870
J	Ground clearance incl. log pusher	mm	300	300	300	300	300
K	Wheelbase	mm	3,710	3,710	3,710	3,710	3,710
L	Overall length	mm	10,440	10,523	10,537	10,358	10,430
L max.	Max. total length at max. reach	mm	12,655	12,738	12,752	12,573	12,645
	Width over tyres	mm	3,220	3,220	3,220	3,220	3,220
M	Grapple opening	mm	3,791	3,983	4,128	4,182	4,408
N	Max. span with grapple open	mm	4,403	4,622	4,771	4,300	4,517
P	Height from tip-to-tip	mm	2,904	3,012	3,094	3,125	3,235
Q	Grapple diameter	mm	2,465	2,647	2,679	2,377	2,522
	Grapple weight (incl. chains)	kg	2,580	2,600	2,590	2,630	2,690
Z	Jaw width	mm	1,000	1,000	870	1,000	870
	Turning circle radius over lift arm with grapple positioned longitudinally	mm	7,270	7,320	7,270	7,220	7,210
	Turning circle radius over external edge of tyres	mm	7,030	7,030	7,030	7,030	7,030
	Turning circle radius over inner edge of tyres	mm	3,800	3,800	3,800	3,800	3,800
	Max. payload at fully articulated angle of articulation*	kg	8,750	8,730	8,740	8,700	8,590
	Operating weight*	kg	36,630	36,650	36,640	36,680	36,750
	Tyre size		800/65R29 Michelin XLD65	800/65R29 Michelin XLD65	800/65R29 Michelin XLD65	800/65R29 Michelin XLD65	800/65R29 Michelin XLD65

* The figures shown include the above tyres, all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment like hold-down devices will change the operating weight and payload. The log pusher increases the operating weight as 1,100 kg.

¹⁾ Takes tyre deflection into account at maximum payload.

 = Combination grapple; closes tip-to-tip

 = Heart-shaped grapple with chain as log holder; closes tip-to-tip

Equipment



Basic Wheel Loader

Crash protection, rear	+
Automatic central lubrication system	•
Battery main switch (lockable)	•
Refuelling pump with automatic shut-down system	+
Electronic tractive force regulation for difficult ground conditions	•
Travel light LED	•
Travel light with additional headlights LED	+
Ride control	•
Parking brake	•
Fire extinguisher 6 kg	•
Fluff trap for radiator	+
Speed limiter 20 km/h as a factory preset	+
Speed limiter Vmax adjustable key on the control unit	•
DEF tank	•
Pre-heat system for cold starting	•
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	•
Lamp carrier in steel design with guard	•
Lamp carrier in steel design with additional lights and guard	+
Reversible fan drive	+
Automatic delayed engine stop	+
Widening for mudguard	+
Ramming guard with guard	+
Headlights LED (double design on engine hood)	•
LogHandler special ballast (no water filling of tyres required)	•
Auxiliary heater (Additional heating with engine preheating)	+
Lockable doors and engine hood	•
Air pre-cleaner TOP AIR	+
Toolbox with toolkit	•
Towing hitch	•
Additional handrails left	•
Additional handrails right	+



Equipment

Deflector for log pusher	+
Working hydraulics lockout	•
Grapple with hydraulic stop damper	•
Grapple monitoring (with camera on display)	+
Log grapple Liebherr, 360° rotating	+
Log grapple versions incl. modular blade	+
LogHandler lift arm with windscreen guard	•
Lift arm positions programmable	•
Hoist cylinder protection	•
Headlights LED inside the arm	•
Smooth Speed Reduction system (SSR-System)	•
Log pusher hydraulically adjusted with automatic lifting in reverse travel	+
Headlights LED on the arm (double design inside and outside; single design on front carriage)	+

Equipment



Operator's Cab

Adapter plate for additional fastening on the multi-function rail	+
Access assistance to facilitate cleaning windscreen	•
Exterior mirror, manual adjustable	•
Operating hour meter (integrated in display unit)	•
Operating hour meter (mechanic)	+
Electronical theft protection with code	+
Electronical theft protection 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" – air sprung with seat heating	•
Operator seat "Premium" – active air-suspension with seat air-condition, seat heating and headrest	+
Particle filter F7	•
Fire extinguisher in cab 2 kg	+
Preparation for radio unit installation	+
Rear window heated electrically	•
Integral 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)	•
LiDAT total use 1 year (for free)	•
Liebherr control lever for LogHandler moving with operator's seat	•
Liebherr key with remote control incl. Coming Home / Leaving Home function	+
Multi-functional rail left	+
Premiumdisplay (Touchscreen), with height adjustment and tilting function	•
Preparation for radio installation	+
Radio Liebherr "Comfort" (SD/USB/AUX/BLUETOOTH/handsfree set)	+
Radio Liebherr "Standard" (SD/USB/AUX)	+

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



Operator's Cab

Interior rear-view mirror	•
Amber beacon (left and right) LED	+
Soundproof ROPS/FOPS cab	•
Wipe and wash system	•
Windscreen wiper single-sweep function with button integrated into the Liebherr control lever	•
Headlights rear, single design, LED	+
Headlights rear, double design, LED	+
Sliding window left/ right	•
Slipcover for operator seat	+
Windscreen guard mounted on lift arm	•
Sunblind rear	+
Sunblind front	•
Power socket 12 V	•
Power socket USB	•
First aid kit	+
Preparation for protective ventilation and dust filtering device	+
Wide angle mirror	+
Cigarette lighter	•



Safety

Active personnel detection at the rear	+
Country-specific versions	+
Emergency steering system	•
Reversing obstruction detector	+
Back-up alarm acoustic/visual	+
Rear space monitoring with camera (with Liebherr camera via Liebherr display)	•

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



Grapple Versions / Areas of Application



	Combination grapple	Heart-shaped grapple
Hold-down device	Chain/Hydraulic hold-down device	Chain
Grapple sizes	3.2/3.6/3.8	2.8*/3.2/3.6
Grapple closes tip-to-tip	•	•
Vertical parting	-	•
Mass handling	+++	+ ¹⁾
Sorting	+++	+++
Unloading trucks	+++	+++
Box emptying	+	+++

¹⁾ Depending on job

* Grapple also available with hydraulic hold-down device.

• = Standard, +++ = excellent, + = satisfactory, - = not available

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