
L 580 LogHandler XPower®

Product information

LIEBHERR

Wheel loader



Generation

6

Max. payload

8,800 – 9,000 kg

Engine

Stage V

Stage IV –

only for select markets

Stage IIIA (compliant) –

only for select markets

Take it to the next level



Max. payload

8,850 kg

Wood grab size

3.7 m²

Operating weight

37,500 kg

Engine

253 kW / 344 HP

Performance

- Specially designed lift arms enable high manipulation heights and long reaches for fast and trouble-free loading / unloading of trucks, loading of facilities, as well as log handling and the transportation of high stacks of logs
- Grab that can be rotated 360° and swivelled forwards and backwards, ensuring optimum material handling
- Additional grab variants and sizes ensure a variety of possible applications
- Hydraulic stop damping acts transversely to the travel direction and dampens vibrations, thus ensuring a smooth drive and high machine availability
- Stroke limit damping provides more robustness as well as a lower load on the stroke limits of the working hydraulics
- Reduced machine vibrations allow comfortable and quiet operation

Reliability

- L 580 LogHandler XPower® delivers maximum performance even under the toughest operating conditions in the timber industry thanks to a sophisticated engineering concept
- Equipped with numerous protective devices, the LogHandler proves to be an extremely robust, reliable and powerful machine
- The components inherent in Liebherr-XPower wheel loaders are extremely resistant to wear

Maintainability

- The most important points of daily maintenance can be seen on the touch screen display
- Simple and safe maintenance ensures less downtime, and less costs

Economy

- Liebherr-XPower travel drive accelerates quickly and enables high travel speeds, ensuring faster work cycles
- Excellent fuel economy thanks to the innovative travel drive with Liebherr-Power-Efficiency (LPE)
- LPE optimises the interplay of diesel engine, transmission and working hydraulics for maximum efficiency and performance
- Minimal tyre wear and virtually no brake wear due to the hydraulic-mechanical braking action of the drive
- Automatic positioning of the lift arms by sophisticated electrohydraulics optimises work processes and saves time

Comfort

- Ergonomic cab design and enhanced operating comfort ensures concentrated and less-tiring work – increasing performance and productivity
- Optional joystick steering is integrated into the operator's seat for ergonomic and comfortable operation
- The option for just joystick steering makes it possible to have no steering wheel and steering column, removing the need to reach around the steering to the control unit
- Excellent all-round visibility no matter the position of the lift arms thanks to the special kinematics for timber work, the optimum lighting concept, and the generous cab windows

Focus on performance and power

Lift arms

Everything in view and under control – the lift arms specifically designed for logging operations, provide an optimal view of the loading / unloading area. An additional grab camera provides an ideal view from the top of the log pile. The grab design provides excellent penetrative force to give a faster fill and enabling maximum load. In addition, the extended grab width of 1,100 mm ensures the stable transportation of logs. The hydraulic stop damping of the grab compensates for speed changes and ground unevenness and provides greater operator comfort. A hydraulically adjustable log pusher with additional deflector plates is also available as an option.



Safety and assistance systems

Safe and helpful – a number of assistance systems ensure greater safety and faster work cycles, effectively increasing productivity. Safety at the rear of the wheel loader is increased with rear area monitoring, active personnel detection and an acoustic and visual reversing alarm.



Cab

Comfortable and modern – the soundproofed ROPS/ FOPS cab offers a modern and ergonomic working atmosphere in every respect. The Liebherr control lever is electro-hydraulically pilot-controlled and is conveniently adjustable via the Liebherr display. Optional joystick steering is integrated into the operator's seat for ergonomic and comfortable operation. In addition, the optional exclusive joystick steering offers an operator's cab without a steering wheel and column, providing numerous advantages such as more space in the cab, improved visibility of the operating area and no need to reach around between the steering and control unit.

Travel drive and maintenance

Powerful and efficient – the Liebherr XPower travel drive enables continuous acceleration in all speed ranges, without noticeable gear changes and without losing tractive force. The ride control and working hydraulics stroke limit damping keep vibrations low during work and extends the machine's service life. All maintenance points are safely, easily and quickly accessible. Non-slip treads and sturdy handrails ensure maximum safety.

Technical data



Diesel engine

Diesel engine		D936 A7
Design		Water-cooled in-series engine with charge-air cooling
Cylinder inline		6
Fuel injection process		Electronic Common Rail high-pressure injection
Output		
to ISO 9249 / ECE-R.24	kW / HP at RPM	250 / 340 1,800
Rated output		
to ISO 14396 / ECE-R.120	kW / HP at RPM	253 / 344 1,800
Nominal speed		1,800
Max. torque		
to ISO 14396 / ECE-R.120	Nm at RPM	1,969 1,000
Displacement		litres 10.52
Bore / Stroke		mm 122 / 150
Stage IV - available only in select markets		
Harmful emission values		According to regulation ECE-R.96 Power Band Q
Emission control		Liebherr-SCR technology
Stage V		
Harmful emission values		According to regulation (EU) 2016/1628
Emission control		Liebherr-SCR technology and closed diesel particle filter system
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



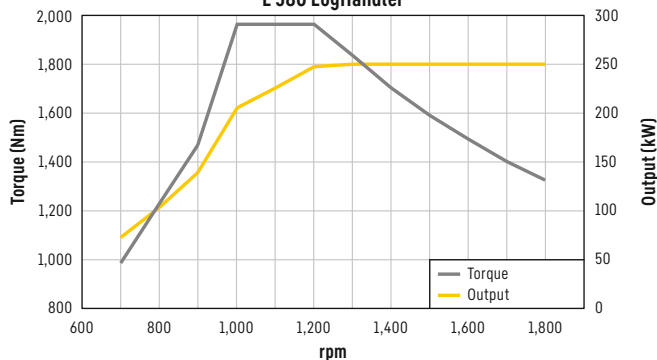
Driveline

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

L 580 LogHandler



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	
Lifting function	Lifting, neutral, lowering Lift arm positions programmable	
Turning function	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	
Vibration emissions		
Vibrations in the hand/arm	m/s ²	≤ 2.5
Vibrations through the whole body	m/s ²	≤ 0.5

Sound level

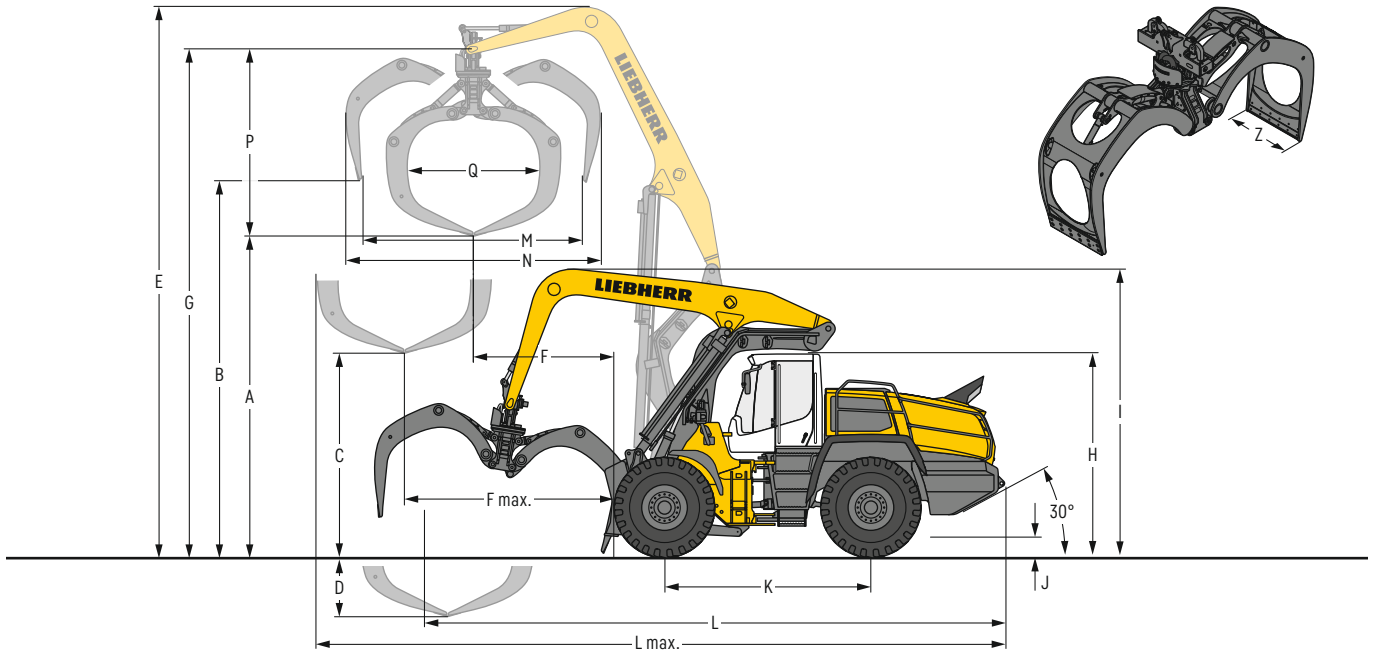
Sound pressure level to ISO 6396		
L _{PA} (inside cab)	dB(A)	68
Sound power level to 2000/14/EC		
L _{WA} (surround noise)	dB(A)	107

Capacities

Fuel tank	l	365
DEF tank	l	67.5
Engine oil (inclusive filter change)	l	42
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°

		3.4 m ²	3.7 m ²	4.0 m ²	
A	Max. manipulation height with grapple closed ¹⁾	mm	5,925	5,773	5,691
B	Max. manipulation height with grapple open	mm	7,025	6,955	6,895
C	Manipulation height at max. reach	mm	3,940	3,810	3,680
D	Lower manipulation area	mm	975	1,105	1,235
E	Max. height	mm	9,950	9,950	9,950
F	Reach at max. lifting height	mm	2,720	2,720	2,720
F max.	Max. reach	mm	3,960	3,960	3,960
G	Height of grapple link	mm	9,165	9,165	9,165
H	Height above operator's cab	mm	3,590	3,590	3,590
I	Height with grapple positioned longitudinally	mm	5,250	5,250	5,250
	Height when max. reach is attained	mm	6,950	6,950	6,950
J	Ground clearance incl. log pusher	mm	300	300	300
K	Wheelbase	mm	3,710	3,710	3,710
L	Overall length	mm	10,385	10,435	10,435
L max.	Max. total length at max. reach	mm	12,597	12,647	12,647
	Width over tyres ²⁾	mm	3,220	3,220	3,220
M	Grapple opening	mm	3,580	3,800	4,030
N	Max. span with grapple open	mm	4,300	4,430	4,640
P	Height from tip-to-tip	mm	3,010	3,140	3,270
Q	Grapple diameter	mm	2,400	2,400	2,400
	Grapple weight (incl. chains) ³⁾	kg	2,850	2,950	3,000
Z	Jaw width	mm	1,100	1,100	1,100
	Turning circle radius over lift arm with grapple positioned longitudinally	mm	7,250	7,290	7,290
	Turning circle radius over external edge of tyres	mm	7,030	7,030	7,030
	Turning circle radius over inner edge of tyres	mm	3,800	3,800	3,800
	Max. payload at fully articulated angle of articulation*	kg	9,000	8,850	8,800
	Max. payload with reduced reach (750 mm swung back) and max. articulation angle*	kg	11,100	10,950	10,900
	Operating weight*	kg	37,400	37,500	37,550
	Tyre size		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.

²⁾ The provided values include the tire bulge associated with a fully-loaded machine.

³⁾ Data applies to grapple with chain and bottom screw blade; with hydraulic hold-down device the weight of the grapple increases by 120 kg.



= Combination grapple; closes tip-to-tip

Equipment

Grapple versions / areas of application



		Combination grapple
Hold-down device		Chain / Hydraulic hold-down device
Grapple sizes	m ²	3.4 / 3.7 / 4.0
Grapple closes tip-to-tip		•
Vertical parting		-
Mass handling		+++
Sorting		+++
Unloading trucks		+++
Box emptying		+

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



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 V _{max} , adjustable key on the control unit	•
Transmission mode in neutral position – self-locking or free rolling (can be selected via the display)	+
DEF tank	•
Turbocharger insulation	+
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)	+
Dust protection for alternator	+
Lockable doors and engine hood	•
Air pre-cleaner TOP AIR	+
Toolbox with toolkit	•
Liebherr weighing system with stability indicator	+
Towing hitch	•
Additional handrails left	•
Additional handrails right	+

• = Standard
+ = Option
- = not available



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 on the arm (double design inside and outside; single design on front carriage)	+
Headlights LED inside the arm	•
Smooth Speed Reduction system (SSR-System)	•
Log pusher hydraulically adjusted with automatic lifting in reverse travel	+

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 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" – 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" (USB/AUX/BLUETOOTH/handsfree set)	+
Radio Liebherr "Standard" (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	•
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 12V	•
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 incl. brake assistant	+
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:



Here you can download our wheel loader brochures:



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