# **Product Information** Wheel loader for economical log handling

# LIEBHERR

# Liebherr L 580 LogHandler

The Liebherr L 580 wheel loader in LogHandler format has been developed especially for operations in the timber handling sector. The newly designed lifting gear means that the logs can be taken up from above at a great height, which makes the LogHandler particularly well-suited for work such as the loading and unloading of grapple tools are available. The driver's cab has a roof window, fitted as standard with a protective grille, to provide the best possible view upwards, and the protective grille for the front windscreen is integrated directly into the lifting gear. Like all Liebherr wheel loaders, the new LogHandler has a stepless hydrostatic drive system, which achieves impressive fuel savings. Other advantages are the practically wear-free service brake and the extremely low tyre wear.



#### **Economy**

Compared to conventional transmission, the Liebherr driveline achieves a reduction in fuel consumption for wheel loaders of 25 % or more! Five litres less fuel per operating hour significantly reduce operating costs and environmental pollution.

#### **Performance**

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

## Reliability

All the materials used in Liebherr wheel loaders have passed long-term tests to ensure that they match up to Liebherr's exacting standards even in the toughest conditions. The mature concept and proven quality make Liebherr wheel loaders to the benchmark for reliability.

#### **Comfort**

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



# LogHandler design



Special kinematic for timber handling

- Piston rod protection
- Protective grille for Front windscreen mounted on lifting frame
- Five working area lights at front
- Automatic central lubrication system



Cab with roof window including sun blind

- Protective grille for cab roof window
- Washing system for cab roof window



- Protective grille for travel lights
- Lamp carrier in steel format



Liebherr operating lever, with electro-hydraulic pre-control



Optional Stump ram, hydraulically lowered



Goodyear 775/65R29 GP-4D L4

800/65R29 XLD65 L3



de

Michelin

Grab-grapple variants / Areas of application	3,2 m²	3,6 m²	3,2 m <sup>2</sup>	3,2 m <sup>2</sup>	3,6 m²
Grab shape	Round	Round	Heart shape	Heart shape	Heart shape
Chain as trunk holder	•	•		•	•
hydraulic individual stump holder			•		
Jaws engage into one another	•	•			
Height from top to top			•	•	•
Timber handling	•	•	•	•	•
Loading and unloading trucks	•	•	•	•	•
Material take-up at the wall			•	•	•

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# **Technical Data**



Diesel engine Design	_ D936L A6 _ Liebherr diesel engine, water-cooled, e charged with intercooler	exhaust turbo
Cylinder inline	_6	
Combustion process	<ul> <li>Unit pump (PLD) microprocessor contr</li> </ul>	olled
Rated output according		
to ISO 9249	_ 230 kW	at 2,000 RPM
Max. torque	_ 1,320 Nm	at 1,300 RPM
Displacement	_ 10.52 litres	
Bore/Stroke	_ 122/150 mm	
Air cleaner	<ul> <li>Dry type with main and safety element service indicator on LCD display</li> </ul>	, pre-cleaner,
Electrical system	. ,	
Operating voltage	_ 24 V	
Capacity	_ 170 Ah	
Alternator	_ 28 V/80 A	
Starter motor	_ 24 V/6.6 kW	

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 an variable axial piston motors in closed loo one axle transfer case. Direction of trave by changing the flow-direction of the vadisplacement pump	op circuit with el in reversed			
Filtering system Control	Suction return line filter for closed circuit  By travel and inching pedal. The inching pedal m it possible to control the tractive and thrust force steplessly at full engine speed. The Liebherr joys is used to control forward and reverse travel				
Travel speed range	Speed range 1 Speed range 2 and A2 Speed range A3 The quoted speeds apply with the tyres Goodyear GP-4D	0 - 20.0  km/h 0 - 30.0  km/h			



Four-wheel drive	
Front axle	_ Fixed
Rear axle	Centre pivot, with 9° oscillating angle to each side
Height of obstacles which	
can be driven over	_ 520 mm
	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	2,370 mm with all types of tyres



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 (two separate brake circuits)
Parking brake	Electro-hydraulically actuated spring-loaded brake
The braking system meets the rec	system on the transmission quirements of the EC guidelines 71/320.



#### **Steering**

	"Load-sensing" swash plate type variable flow pump with pressure cut-off and flow control. Central pivot with two double-acting, damped steering cylinders
	40° (to each side)
Emergency steering	Electro-hydraulic emergency steering system



Dimensions/weight are calculated for loaders equipped with Goodyear 775/65R29 GP-4D L4 tyres.

Operating weight when fitted with Michelin 800/65R29 XLD65 L3 tyres are amended to:

Operating weight \_\_\_\_\_\_\_ + 440 kg

Vertical dimensions \_\_\_\_\_\_ + 20 mm



## **Attachment Hydraulics**

Design	"Load-sensing" swash plate type variable flow pump with output and flow control, and pressure cut-off in
Cooling	the control block  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
Turning circle	Forwards, neutral, backwards
•	Automatic transport configuration
Grapple swing	Forwards and backwards
Grapple rotation	360°
Max. flow	400 l/min.
Max. pressure	320 bar



Geometry	Powerful and stable "LogHandler" lifting equipment
-	for optimum lifting heights. 360° rotating grapple tool
Bearings	Sealed



## **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 site 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**

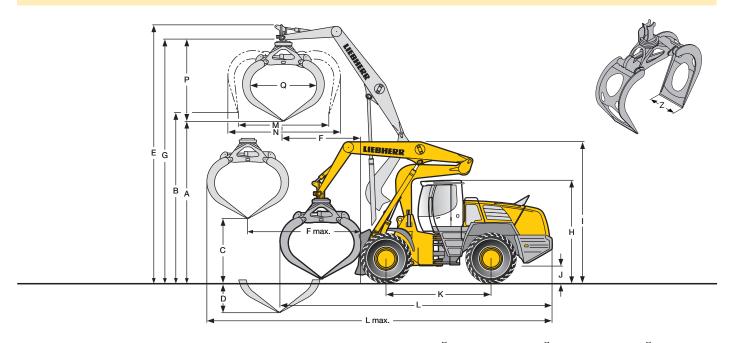
ISO 6396	L <sub>DA</sub>	(inside cab)	=	69 d	B(A)
2000/14/EC	Lw	(surround noise)	1 =	105 d	B(A)



## **Capacities**

Fuel tank	350	1
Engine oil (including filter change)	_ 43	1
Pump distributor gears	_ 2.5	1
Transmission	11.5	1
Coolant	_ 52	1
Front axle	_ 58	1
Rear axle	_ 50	1
Hydraulic tank	135	ı
Hydraulic system, total	300	ı
Air condition system R134a	780	g

# **Dimensions**



Rote	ating Grapple, 360°		3.2 m <sup>2</sup>	3.6 m <sup>2</sup>	3.2 m <sup>2</sup>	3.2 m <sup>2</sup>	3.6 m <sup>2</sup>
Α	Max. manipulation height with grapple closed	mm	5,834	5,670	5,600	5,670	5,565
В	Max. manipulation height with grapple open	mm	6,300	6,190	6,250	6,250	6,185
С	Manipulation height at max. outreach	mm	2,334	2,170	2,100	2,170	2,065
D	Lower manipulation area	mm	899	1,063	1,133	1,063	1,168
E	Max. height	mm	9,120	9,120	9,120	9,120	9,120
F	Outreach at max. lift height	mm	2,675	2,675	2,675	2,675	2,675
F max.	Max. outreach	mm	3,970	3,970	3,970	3,970	3,970
G	Height of grapple link	mm	8,650	8,650	8,650	8,650	8,650
Н	Height above cab	mm	3,590	3,590	3,590	3,590	3,590
I	Height with grapple positioned longitudinally	mm	5,050	5,050	5,050	5,050	5,050
	Height when max. outreach is attained	mm	6,730	6,730	6,730	6,730	6,730
J	Ground clearance	mm	580	580	580	580	580
K	Wheelbase	mm	3,700	3,700	3,700	3,700	3,700
L	Overall length	mm	10,168	10,243	10,073	10,073	10,203
L max.	Max. Total length at max. outreach	mm	12,520	12,595	12,425	12,425	12,555
	Width over tyres	mm	3,220	3,220	3,220	3,220	3,220
М	Grapple opening	mm	3,800	3,990	4,415	4,335	4,415
N	Max. span with grapple open	mm	4,300	4,530	4,495	4,415	4,495
Р	Height from top to top	mm	2,816	2,980	3,050	2,980	3,085
Q	Grapple cross-section	mm	2,530	2,660	2,310	2,335	2,515
	Grapple weight	kg	2,600	2,700	2,960	2,550	2,750
Z	Jaw width	mm	1,000	1,000	1,000	1,000	1,000
	Turning circle over lifting equipment with						
	grapple positioned longitudinally	mm	6,885	6,930	6,835	6,830	6,900
	Turning circle over external edge of tyres	mm	6,725	6,725	6,725	6,725	6,725
	Turning circle over inner edge of tyres	mm	3,500	3,500	3,500	3,500	3,500
	Max. payload with 40° angle of articulation *	kg	8,590**	8,510**	8,310**	8,630**	8,470**
	Max. payload with 37° angle of articulation *	kg	8,750**	8,670**	8,470**	8,790**	8,630**
	Operating weight *	kg	33,500**	33,600**	33,860**	33,450**	33,650**
	Tyre sizes		775/65R29	775/65R29	775/65R29	775/65R29	775/65R29
			Goodyear	Goodyear	Goodyear	Goodyear	Goodyear
			GP-4D	GP-4D	GP-4D	GP-4D	GP-4D

<sup>\*</sup> The figures shown here are valid with tyres above, includes all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator. Different tyres and optional equipment will change the operating weight and payload. The stump pusher encreases the operating weight at 860 kg.

<sup>\*\*</sup> Data with rear tyres filled with water



round grab with chain as stump holder; jaws engage into one another

heart-shaped grab with hydraulic individual stump holder; closes tip on tip

heart-shaped grab with chain as stump holder; closes tip on tip

# **Equipment**



## **Basic Machine**

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	•
Fluff trap 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 bio degredable hydraulic oil	+
Air cleaner system with pre-filter	•
Reversible fan drive	+
Emergency steering system	•
Back-up alarm	+
Lockable doors, service flap and engine hood	•
Toolbox with toolkit	•
Weighing device (integrated)	+
Towing hitch	•
Two working area lights at rear	•
Two tail lights	•
20 km/h speed limiting	+



operator 5 das	
Storage box	•
Lockable storage compartment	•
Ashtray	•
Roof window with protective grille and washing system	•
Operator's package	•
Operator's seat – adjustable in 6 ways	•
Operator's seat with active suspension, with seat climate	١.
control and seat heating	+
Operator's seat – air sprung with seat heating	+
Fire extinguisher 2 kg	+
Cup holder	•
Five working area lights at front	•
Height-adjustable steering column	+
Horn	•
Joystick steering	+
Floor mat	•
Clothes hook	•
Air conditioning system	•
Storage box with cooling function	+
LED operating spotlight, front/rear	+
Liebherr joystick control – adjustable	•
Radio set	+
Provision for radio including loudspeaker	+
Rear view monitoring with camera	+
Interior rear-view mirror	•
Amber beacon	+
Soundproof ROPS/FOPS cab with tinted safety glass front windscreen, heatable rear window	•
Wash/wipe system for windscreen and rear window	•
Sliding window	+
Protective ventilation system	+
Sun visor	•
Dust filter system	+
Plug 12 V	•
First aid kit	+
Adjustable steering column	•
Hot water heater with defroster and recirculated-air system	•
Wide angle mirror	+
Xenon working lights front	+
Two or four working area lights rear	+



Timer for hours of operation	•
Flashing turn indicators	•
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:**

Battery charge	•
Flow through emergency steering system	•
Parking brake	•
Hydraulic oil temperature	•
Air cleaner blockage	•
Engine oil pressure	•
Engine overheat	•



Acaibic irainings ioit	
Overheat of hydraulic fluid	•
Engine oil pressure	•
Engine overheat	•
Emergency steering system	•



Working lights rear	•
Working lights front	•
Electronic tractive force adaptation	•
Speed range selection	•
Headlights	•
Ride control	•
Parking brake	•
Blower	•
Heater	•
Air conditioning	•
Creep speed	•
Steering column switch for direction of travel	•
Mode switch	•
Amber beacon	•
Wash/wipe system for rear window	•
Road travel	•
Transport position (at operating lever)	•
Hazard warning flashers	•
Additional hydraulics	•



Rotating Grapple, 360°	•
Hydraulic servo control of working hydraulics	•
LogHandler lifting gear with protective grille for front windscreen	•
Stump ram	+

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

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

# The Liebherr Group of Companies

## **Wide Product Range**

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

#### **Exceptional Customer Benefit**

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

## State-of-the-art Technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

### Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of 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.

















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