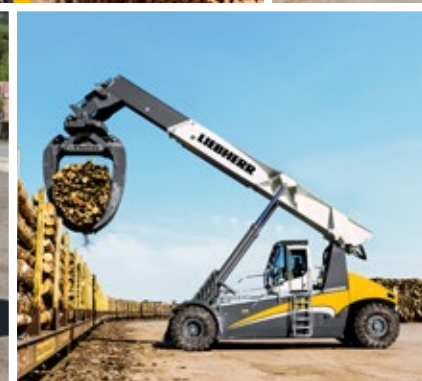


# Liebherr Specialist Machines for Timber Handling



# LIEBHERR

# Liebherr Specialist Machines for Timber Handling





Regardless of whether it is used as a fuel, component or piece of furniture: Timber is a climate-friendly and popular all-rounder. For efficient timber handling Liebherr offers a broad portfolio of powerful and efficient specialized machines, which are ideal for typical operations such as loading and unloading trucks and trailers, sorting logs or transportation. In addition to different machine types and equipment versions, in reality this involves the interaction of powerful engines with an intelligent control system. Whether it is a material handling machine, wheel loader, crawler tractor, telescopic handler or reachstacker: The equipment enables the fast movement and agile manoeuvrability of the machines, as well as the precise and sensitive handling of the raw material, for example during grabbing and sorting. Liebherr manufactures all key components itself – from the diesel engine to the hydraulic system through to the steel structure – thus guaranteeing the long service life of the components and maximum machine availability even in tough operating conditions. Protective measures for the subsoil and the headlights or mudguards made from hot-dip galvanised steel ensure the necessary robustness. Liebherr also focuses on the efficiency of these specialized machines, continuously optimises the interplay of the drive components and in addition to state-of-the-art diesel engines also offers electric material handlers.

## **Material Handling Machines**

### **Electric Material Handling Machines**

### **Wheel Loaders**

### **Crawler Tractors**

### **Telescopic Handlers**

### **Reachstacker**

# Material Handling Machines



### **Performance**

Loading and unloading trucks and trailers, sorting and stacking, as well as holding and transporting all types of timber, are some of the main activities in timber handling companies. Good driving performances, high load capacities, as well as fast working cycles, are required for these tasks. For instance, with the timber machines the optimised drive engine impresses with enhanced driving performance and less consumption. But also equipment such as the enclosed slewing mechanism circuit for the Liebherr machines ensures a high torque for maximum acceleration and quick rotary movements, thus providing the basis for efficient material handling operations. Furthermore, the optimal interplay of hydraulics and electronics allows powerful and fast movements during material handling, as well as sensitive and precise work for sorting timber.

### **Economy**

The new generation of material handling machines are powerful and efficient. Liebherr achieves this difficult balancing act with its own engine technology manufactured in-house and optimised to meet the requirements of controlled hydraulics. Liebherr relies on state-of-the-art engine technology here with intelligent machine controls that optimise the interplay of the drive components in terms of their degree of efficiency. Liebherr-Power Efficiency (LPE) enables machine operation in the area of the lowest specific fuel use. Combined with the innovative Liebherr energy recuperation system, which is a standard feature from machine class LH 40, fuel consumption is reduced to a minimum and, at the same time, material handling is significantly increased thanks to faster and more homogeneous operating cycles—for the lowest consumption and greater efficiency at maximum output.

### **Reliability**

Liebherr material handling machines guarantee the necessary stability and with their robust and durable construction ensure smooth operations right across the timber industry. In order to optimally equip the machines for tough timber handling tasks, Liebherr offers a variety of protective devices, such as protection for the headlights, protection for the travel drive or also protection for the uppercarriage and the counterweight. Long service life along with maximum machine availability are assured thanks to the in-house production of all key components: diesel engine, hydraulic and electronic components, slew ring, swivel drive and steel structure, developed, tested and produced by Liebherr all at the high level of quality one would expect.

### **Comfort**

The newly developed Liebherr cab gives the operator the necessary space and comfort to make the best possible use of his or her machine's capability. Large glass panels, different types of cab elevations and rear and side area monitoring enable optimum viewing of the working area and the area around the machine at all times for the operator. In addition, the Comfort driver's seat, the intuitive touchscreen colour display and central lubrication systems for the machine and its working tool provide the necessary comfort for the operator to allow him to concentrate on what is important – the handling capacity.

### **Maintainability**

The service-based machine design guarantees short servicing times, thus minimising maintenance costs. All the maintenance points are easily accessible due to the large, wide-opening service doors. The enhanced service concept places the maintenance points close to each other and reduces their number to a minimum. This means that service work can be completed even more quickly and efficiently.

# Log Loaders Overview

## Attachment

- High load capacities and long reach thanks to optimised kinematic properties and robust construction for greater handling performance
- Clever routing of hydraulic hoses optimises the oil flow and minimises power losses for maximum energy efficiency
- Pipe fracture safety valves on hoist and stick cylinders and retract stick shut-off for maximum safety during every application
- Tailor-made Liebherr wood grapple for greater handling performance thanks to optimum penetration effect and good clamping properties

## Operator's cab

- Slewing gear brake comfort for faster and safer work
- Less strain on the operator, workers and reduced environmental pollution due to lower noise emissions
- Simple and safe access thanks to new, space-saving access system with integrated steps and 10° inclination
- Proportional control as standard with 4-way minijoystick for greater precision, highprecision control and functions





### **Uppercarriage**

- Greater fuel efficiency thanks to the latest engine technology with intelligent machine control
- Optimal engine output and greater pump flow for fast work cycles, convincing dynamics and maximum handling performance
- Reversible fan and large-meshed cooler as a reliable, sealed unit for high machine availability
- Optimized servicing concept and cleverly designed maintenance access points guarantees minimum machine downtime

### **Undercarriage**

- Optimised hydraulics with closed slewing mechanism circuit for greater fuel efficiency and faster work cycles
- Maximum acceleration and higher drawbar pull thanks to a new travel motor for greater travelling performance
- Mudguards for greater safety thanks to max. splash protection for cab accesses and standing areas
- Four wheel steering as standard for high agility and manoeuvrability combined with very good driving stability and improved directional stability

## Examples of Use and Technical Data



		LH 35 M Timber Litronic		LH 50 M Timber Litronic		LH 60 M Timber Litronic	
Reach	m	10		11		11	
Operating weight*	kg	approx. 29,500 – 31,500		approx. 38,000 – 40,000		approx. 42,500 – 45,500	
Engine output	kW/HP	150/204		170/231		200/272	
Emission stage	Stage	V/Tier 4f	IIIA (compliant)	V/Tier 4f	IIIA (compliant)	V/Tier 4f	IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.00–1.90		1.60–3.20		1.60–3.60	

\* without working tool





# Material Handling Machines Overview

## Attachment

- High load capacities and long reach thanks to optimised kinematic properties and robust construction for greater handling performance
- Energy recovery cylinder filled with nitrogen for maximum efficiency through less fuel consumption at more handling capacity from machine class LH 40
- Pipe fracture safety valves on hoist and stick cylinders and retract stick shut-off for maximum safety during every application
- Quick coupling systems and working tools made by Liebherr for maximum machine capacity utilisation and greater handling performance

## Operator's Cab

- Joystick steering without steering column as standard for convenient operation, greater legroom and clear view of the working area
- Less strain on the operator, workers and reduced environmental pollution due to lower noise emissions
- Optimum visibility due to large glass surfaces and standard rear and side area monitoring with camera
- Proportional control as standard with 4-way minijoystick for greater precision, highprecision control and functions





### **Uppercarriage**

- Greater fuel efficiency thanks to the latest engine technology with intelligent machine control
- Optimal engine output and greater pump flow for fast work cycles, convincing dynamics and maximum handling performance
- Reversible fan and large-meshed cooler as a reliable, sealed unit for high machine availability
- Optimized servicing concept and cleverly designed maintenance access points guarantees minimum machine downtime

### **Undercarriage**

- Optimised hydraulics with closed slewing mechanism circuit for greater fuel efficiency and faster work cycles from machine class LH 30 upwards
- Central lubrication system manual or fully automatic for more productive working time
- Load-holding valves fitted as standard on all support cylinders for maximum stability in every application
- Less downtime thanks to maintenance-free support cylinders

# Technical Data

## LH 26 M Industry Litronic

Reach	m	13			14
Operating weight*	kg	approx. 24,200–24,500			approx. 26,500–29,100
Engine output	kW/HP	115/157			140/190
System performance	kW	-			-
Emission stage	Stage	IV/Tier 4f	IIIA (compliant)		V/Tier 4f IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	0.80–1.30			1.00–1.90

## LH 30 M Industry Litronic

## LH 35 M Industry Litronic

Reach	m	15			18
Operating weight*	kg	approx. 30,700–31,900			approx. 41,100–45,300
Engine output	kW/HP	140/190			155/211
System performance	kW	-			233
Emission stage	Stage	V/Tier 4f	IIIA (compliant)		V/Tier 4f IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.00–1.90			1.00–1.90

## LH 40 M Port Litronic

## LH 50 M Industry Litronic<sup>1</sup>

Reach	m	18			19
Operating weight*	kg	approx. 40,000–46,900			approx. 44,000–47,200
Engine output	kW/HP	155/211			155/211
System performance	kW	245			233
Emission stage	Stage	V/Tier 4f	IIIA (compliant)		V/Tier 4f IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.00–3.60			1.00–3.60

## LH 50 M Port Litronic<sup>3</sup>

## LH 60 M Industry Litronic<sup>1</sup>

Reach	m	20			25
Operating weight*	kg	approx. 55,000–72,600			approx. 75,700–94,500
Engine output	kW/HP	190/258			230/313
System performance	kW	334			418
Emission stage	Stage	V/Tier 4f	IIIA (compliant)		V/Tier 4f IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.60–3.60			1.40–3.60

## LH 80 M Port Litronic<sup>1</sup>

## LH 110 M Port Litronic<sup>1</sup>

Reach	m	25			30
Operating weight*	kg	approx. 100,000–115,000			approx. 130,000–160,000
Engine output	kW/HP	300/408			400/543
System performance	kW	478			614
Emission stage	Stage	V/Tier 4f	IIIA (compliant)		V/Tier 4f IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.40–3.60			1.40–3.60

## LH 150 M Port Litronic<sup>1</sup>

**LH 30 C Industry Litronic****LH 40 C Port Litronic**

Reach	m	14		18
Operating weight*	kg	approx. 27,100–30,200		approx. 44,900–50,100
Engine output	kW/HP	140/190		155/211
System performance	kW	-		233
Emission stage	Stage	V/Tier 4f	IIIA (compliant)	V/Tier 4f      IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.00–1.90		1.00–1.90

**LH 50 C Port Litronic<sup>3</sup>****LH 60 C Industry Litronic<sup>1</sup>**

Reach	m	19		20
Operating weight*	kg	approx. 51,500–54,700		approx. 52,000–75,800
Engine output	kW/HP	155/211		190/258
System performance	kW	233		334
Emission stage	Stage	V/Tier 4f	IIIA (compliant)	V/Tier 4f      IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.00–3.60		1.60–3.60

**LH 80 C Port Litronic<sup>2</sup>****LH 110 C Port Litronic<sup>1</sup>**

Reach	m	25		25
Operating weight*	kg	approx. 80,000–116,700		approx. 105,000–120,000
Engine output	kW/HP	230/313		300/408
System performance	kW	418		478
Emission stage	Stage	V/Tier 4f	IIIA (compliant)	V/Tier 4f      IIIA (compliant)
Wood grab capacity	m <sup>2</sup>	1.40–3.60		1.40–3.60

**LH 150 C Port Litronic<sup>2</sup>**

Reach	m	30		
Operating weight*	kg	approx. 130,000–175,000		
Engine output	kW/HP	400/543		
System performance	kW	614		
Emission stage	Stage	V/Tier 4f	IIIA (compliant)	
Wood grab capacity	m <sup>2</sup>	1.40–3.60		

\* without working tool

<sup>1</sup> also available as High Rise/<sup>2</sup> also available as High Rise and Gantry/<sup>3</sup> only available as High Rise

## Examples of Use





# Electric Material Handling Machines





### **Performance**

The new electric-powered material handling equipment has been specially developed to deal with the particular requirements of industrial material handling. A large spectrum of equipment and an uppercarriage optimised for long reach work makes it possible to cater for all waste and cargo handling requirements. With all of its major components manufactured in-house and combined with the power of an electric motor, the drive train output maximises the machine's performance in terms of lift capacity, precision and work pace. The scope of this high performing equipment is enhanced considerably thanks to a tracked undercarriage.

### **Reliability**

Investing in an electric material handling concept pays in the long term. Continually rising costs from conventional energies are a burden on operating costs and considerably reduce profit margins. Environmental factors and CO<sub>2</sub> emissions, in particular, are growing in importance with the choice of engines/motors and working methods. With the electric drive system, Liebherr offers an economically interesting alternative to conventional machines and, moreover, an eco-friendly solution. Furthermore, the material handling machine is always available because refuelling is unnecessary as are particulate filters and AdBlue.

### **Economy**

With more than 30 years of experience in designing electric material handling equipment, Liebherr developed the existing models EP 934 C, EP 944 C and EP 954 C to comply with every demand from the market. The layout of the machines was completely revised due to the components of the electric drive system, which means the unit is more than just a conversion of a conventional vehicle with diesel drive system. All of the important components of the electric drive system have been integrated in the existing exterior dimensions of the uppercarriage. Liebherr electric material handling machines offer a high level of reliability so that they can consistently fulfil their key functions when deployed in industrial areas. The already long service life of the hydraulic components is further enhanced by the low noise electric drive system. The drive concept, with just one electric motor, ensures that the high voltage is limited to the range of the switch cabinet and drive system and the low voltage functions are capable of being comprised in one terminal box.

### **Comfort**

To allow the operator to concentrate optimally on his/her work and utilise the machine's maximum performance, all electric material handling machines feature an ergonomically designed driver's cab with a high level of comfort and good all-round vision. Thanks to low noise generation and the elimination of vibrations, the electric drive system provides greater comfort. For Liebherr, comfort also means easily accessible service and check points for all daily maintenance tasks on the machine in order to keep downtimes as minimal as possible.

### **Maintainability**

The large, wide-open service door provides an optimal service access. All the daily maintenance points can be accessed conveniently and safely. Short service times for greater productivity.

# Electric Material Handling Machine Overview

## Large range of equipment

- Range of equipment which covers all requirements in timber handling
- Special design upon consultation (Live-heel)

## Cab with panoramic view

- Benefit of unique space with optimal view of working zone
- Rear and side access
- Can accommodate client supervision system

## Large range of tools, including

- Wood grapple
- Quick coupler systems

## Cab elevation

- Large range of fixed and hydraulically adjustable height adjustment devices
- Perfect view of the working area and surrounding area of machine





#### **Access**

- In series production, safety and comfort for accessing the workstation
- Secured anti-slip ladders

#### **Electric motor**

- Harsh environment conditions
- Constant speed whatever the load rating
- Integrated sensors for maximum availability

#### **Integrated switchgear cabinet**

- Designed to withstand even extreme environmental conditions
- Overpressure system to prevent ingress of dust
- Fastenings with standard padlocks
- Robust and durable

#### **Spring base**

- Absorption of dynamic loads in order to be able to operate the machine safely on one pillar over the long term
- Number of platforms based on size of machine
- Assembly kit for customer (for concrete, steel)

# Technical Data

## EP 934 C Umschlag

Reach	m	13–20	15–22
Operating weight	kg	39,100	51,900
Engine output	kW / HP	160 / 218	200 / 272
Wood grab capacity	m <sup>2</sup>	0.80–1.70	1.30–2.50

## EP 944 C Umschlag

Reach	m	13–20	15–22
Operating weight	kg	39,100	51,900
Engine output	kW / HP	160 / 218	200 / 272
Wood grab capacity	m <sup>2</sup>	0.80–1.70	1.30–2.50

## EP 954 C Umschlag

Reach	m	16–24	12–16
Operating weight	kg	64,500	38,050
Engine output	kW / HP	250 / 340	160 / 218
Wood grab capacity	m <sup>2</sup>	1.70–4.00	0.80–1.30

## ER 934 C Umschlag

Reach	m	16–24	12–16
Operating weight	kg	64,500	38,050
Engine output	kW / HP	250 / 340	160 / 218
Wood grab capacity	m <sup>2</sup>	1.70–4.00	0.80–1.30

## ER 944 C Umschlag

Reach	m	15–18	15–20
Operating weight	kg	52,050	75,400
Engine output	kW / HP	200 / 272	250 / 340
Wood grab capacity	m <sup>2</sup>	1.10–2.10	1.30–2.30

## ER 954 C Umschlag

Reach	m	15–18	15–20
Operating weight	kg	52,050	75,400
Engine output	kW / HP	200 / 272	250 / 340
Wood grab capacity	m <sup>2</sup>	1.10–2.10	1.30–2.30

## ER 934 C High Rise

Reach	m	13–20	15–22
Operating weight	kg	56,200	73,400
Engine output	kW / HP	160 / 218	200 / 272
Wood grab capacity	m <sup>2</sup>	0.80–1.70	1.30–2.50

## ER 944 C High Rise

Reach	m	13–20	15–22
Operating weight	kg	56,200	73,400
Engine output	kW / HP	160 / 218	200 / 272
Wood grab capacity	m <sup>2</sup>	0.80–1.70	1.30–2.50

## ER 954 C High Rise

Reach	m	16–24	
Operating weight	kg	95,800	
Engine output	kW / HP	250 / 340	
Wood grab capacity	m <sup>2</sup>	1.70–3.60	

## LH 26 M Industry Litronic

Reach	m	13	12
Operating weight*	kg	approx. 26,200–26,500	approx. 26,700–27,900
Engine output	kW	90	90
System performance	kW	105	105
Wood grab capacity	m <sup>2</sup>	0.80–1.30	0.80–1.30

## LH 26 C Industry Litronic

Reach	m	13	12
Operating weight*	kg	approx. 26,200–26,500	approx. 26,700–27,900
Engine output	kW	90	90
System performance	kW	105	105
Wood grab capacity	m <sup>2</sup>	0.80–1.30	0.80–1.30

## LH 110 C Port Litronic<sup>1</sup>

Reach	m	25	30
Operating weight*	kg	approx. 110,000–130,000	approx. 135,000–185,000
Engine output	kW	300	400
System performance	kW	478	614
Wood grab capacity	m <sup>2</sup>	1.40–3.60	1.40–3.60

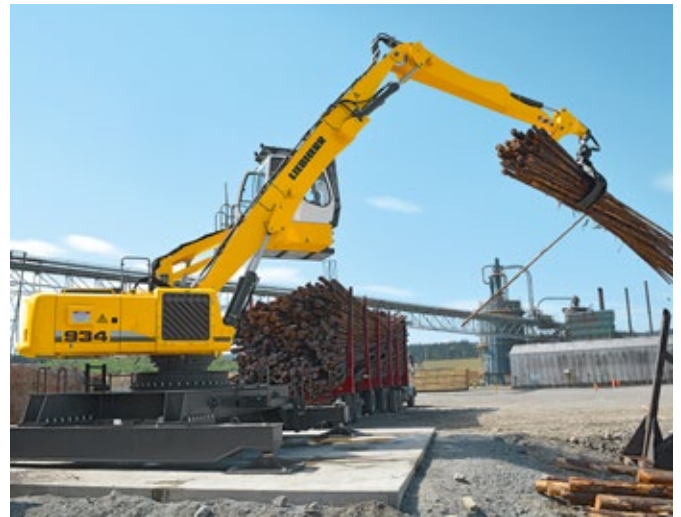
## LH 150 C Port Litronic<sup>1</sup>

Reach	m	25	30
Operating weight*	kg	approx. 110,000–130,000	approx. 135,000–185,000
Engine output	kW	300	400
System performance	kW	478	614
Wood grab capacity	m <sup>2</sup>	1.40–3.60	1.40–3.60

\* without working tool

<sup>1</sup> also available as High Rise and Gantry

# Examples of Use



## Wheel Loaders



**Performance**

With the Liebherr wheel loaders L 526–L 566 XPower® and L 580 XPower®, a choice can be made between industrial lift arm/parallel linkage and Z-bar linkage: as well as special solutions such as the LogHandler XPower®. The ideal machine is available for specific tasks such as transporting and loading logs, chippings and small sticks of wood or feeding debarking and sorting machines. Such machine versatility ensures maximum efficiency and productivity.

**Economy**

The innovative drive concepts of the Liebherr wheel loaders make a fuel reduction possible of up to 30%. In addition there is minimal tyre wear and hardly any brake wear, at maximum handling capacity and efficiency, thus reducing operating costs and also protecting the environment.

**Reliability**

Liebherr wheel loaders satisfy Liebherr's exacting standards in even the toughest conditions. They feature many components which are produced in-house and are therefore perfectly tailored to work in synergy. This ensures machine reliability and availability.

**Comfort**

The modern, ergonomic cabin design provides the operator with maximum comfort enabling him to concentrate on his work without fatigue, which once again means more safety and productivity. The Liebherr control lever allows precise and sensitive control of the machine. This ensures accurate and safe handling. The generous glass surfaces of the cab offer excellent all-round visibility thus ensuring maximum safety for people, the machine and the load.

**Maintainability**

The Liebherr wheel loaders offer excellent service accessibility. All points for daily maintenance can be reached safely and conveniently. A clear benefit which saves time and money!

# Wheel Loaders L 526–L 580 XPower® Overview

## Maximum Operator Comfort for Greater Productivity

- Automatic central lubrication system (optional)
- Premiumdisplay (Touchscreen)
- Liebherr control lever with mini joystick (optional)
- Joystick steering or 2-in-1 steering (optional)
- Ride control (L 526–L 546 optional / L 550–L 580 as standard)
- Preparation for protective ventilation and dust filtering device (optional)

## Highest Level of Performance

- Industrial lift arm/parallel linkage or Z-bar linkage (L 526–L 566 and L 580 optional)
- LIKUFIX quick hitch (L 526 – L 546 optional)
- Comprehensive range of special equipment for timber handling (optional)

## Robustness and Quality for Durable Machines

- Tilt cylinder protection (optional)
- Lamp carrier in steel design (L 526–L 546 as standard / L 550–L 580 optional)
- Guard for headlights (optional)
- Integral tyre pressure monitoring system (L 550 – L 580 optional)
- Special tyres for timber handling (optional)







#### **Productive and Safe Working**

- Soundproof ROPS/FOPS cab
- Windscreen guard (optional)
- Additional working lights, front/rear (optional)
- Adaptive working lighting (optional)
- Roof camera for front area monitoring (with Liebherr camera via Liebherr display) (optional)
- Skyview 360° (optional)
- Active personnel detection at the rear (L 550 – L 580 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
- Reversing obstruction detector with smart alarm (optional)

#### **Robustness and Quality for Durable Machines**

- Crash protection, rear (optional)
- Chassis protection (optional)
- Widening for mudguard (optional)

# 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)
- 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

## L 507 Stereo

Tipping load	kg	3,490–3,750	L 509 Stereo	4,200–4,430
Bucket capacity	m <sup>3</sup>	0.9–1.6		1.2–2.0
Operating weight	kg	5,550–5,730		6,390–6,465
Engine output (ISO 14396)	kW/HP	50/68		54/73
Emission stage	Stage	V/Tier 4f		V/Tier 4f

## L 514 Stereo

Tipping load	kg	4,075–5,750	L 518 Stereo	5,025–6,550
Bucket capacity	m <sup>3</sup>	1.4–3.5		1.5–4.0
Operating weight	kg	8,860–9,985		9,190–10,445
Engine output (ISO 14396)	kW/HP	76/103		76/103
Emission stage	Stage	IV/Tier 4f		IV/Tier 4f

## L 526

Tipping load	kg	6,510–7,750	L 538	7,720–9,100
Bucket capacity	m <sup>3</sup>	2.1–5.5		2.3–6.5
Operating weight	kg	12,620–13,690		13,900–15,000
Engine output (ISO 14396)	kW/HP	100/136		111/151
Emission stage	Stage	IV/Tier 4f		IV/Tier 4f

## L 546

Tipping load	kg	8,200–9,750	L 550 XPower®	9,300–11,100
Bucket capacity	m <sup>3</sup>	2.5–7.5		3.0–9.0
Operating weight	kg	14,300–15,800		18,700–20,300
Engine output (ISO 14396)	kW/HP	120/163		140/190
Emission stage	Stage	IV/Tier 4f		IV & V/Tier 4f

## L 556 XPower®

Tipping load	kg	10,500–12,400	L 566 XPower®	12,100–15,000
Bucket capacity	m <sup>3</sup>	3.3–10.0		3.5–12.0
Operating weight	kg	19,500–21,200		24,800–26,900
Engine output (ISO 14396)	kW/HP	165/224		200/272
Emission stage	Stage	IV & V/Tier 4f		IV & V/Tier 4f

## L 580 XPower®

Tipping load	kg	14,800–17,750		
Bucket capacity	m <sup>3</sup>	4.5–14.0		
Operating weight	kg	28,050–30,100		
Engine output (ISO 14396)	kW/HP	230/313		
Emission stage	Stage	IV & V/Tier 4f		

## L 580 LogHandler XPower®

Max. payload	kg	8,590–8,750		
Wood grab capacity	m <sup>3</sup>	3.2–3.8		
Operating weight	kg	36,630–36,750		
Engine output (ISO 14396)	kW/HP	250/340		
Emission stage	Stage	IV & V/Tier 4f		

L 526–L 546 correspond to the data in parallel linkage incl. quick hitch and L 550 XPower®–L 580 XPower® correspond to the data in industrial lift arm incl. quick hitch.

## Examples of Use



## Crawler Tractors



**Performance**

The trademarks of the Liebherr crawler tractors are power and innovative technology. The successful balance of operating weight and engine output ensures the maximum level of machine productivity. In various applications, such as; paper mills or power plants, the Liebherr crawler tractor exceeds the industry expectations with its superior performance for customers.

**Economy**

Exceptional dozing power with low fuel consumption are guaranteed by the powerful Liebherr designed diesel engine integrated with the hydrostatic travel drive concept. The crawler tractor is highly cost efficient, since it has the easily accessible service points and an ordering system for spare parts, when needed. These features promote the cost efficiency benefit for customers, while increasing their job productivity.

**Reliability**

Liebherr crawler tractors are designed to have an extensive service life. A varied ranged of application specific attachments serve to protect the machine and operator. These components assist in lowering the customer's maintenance time and costs, and to extend the life of the machine.

**Comfort**

The crawler tractor also allows the operator to have space and comfort during operations. The cab also provides the operator with a comprehensive view of the work area and equipment to ensure safety. The lever system grants the operator full and precise control of the machine. This concept of comfort provides customers the guarantee of productive work operations.

**Maintainability**

Liebherr crawler tractors have minimal maintenance needs, but integrate easily accessible service areas when needed. The service concept lowers the customer's maintenance time and cost.

# Crawler Tractors Overview

## Contamination Protection

- Dust filter system supplies the cab with fresh air, filtered multiple times
- Pre-cleaning of engine intake air by an additional separator
- Sealings around engine compartment prevent the contamination of debris into the base machine
- Sealings between base machine and cab prevent dirt from accumulating in cavities and niches and also from entering the cab
- Automatically reversible fan for automatic blowing out of the radiator / engine compartment
- External air flow to alternator ensures that cooling air is always filtered
- Belly pans with openings make it easier for wood shavings that enter the base machine to fall out
- Radiator guard with fine-mesh grille prevents the ingress of wood chips in the radiator compartment

## Application Attachments

- High-capacity wood chip blade with openings for enhanced visibility







### **Safety**

- Catwalk for comfortable access to diesel filler neck, compartments and oil cooler
- Protective covers on engine hood, cab roof and oil cooler provide protection against falling objects
- Hydraulic oil thermometer to monitor the oil temperature and to warn against the risk of overheating
- Fire extinguisher in the cab (optional installation of an automatic fire-fighting system)
- Fire protection on turbocharger prevents the combustion of wood chips in the engine compartment

### **Durably Designed Equipment**

- Track shoes with trapezoidal holes reduce material build-up between bushings and sprocket
- Sprocket segments with recesses also help to remove accumulating material

# Technical Data

		<b>PR 726 Litronic</b>	<b>PR 736 Litronic</b>
Operating weight	kg	16,791	23,955
Blade capacity (wood chip blade)	m <sup>3</sup>	14.1	17.6
Counterweight	kg	1,560	1,990
Engine output	kW/HP	120/163	150/204
Emission stage	Stage	IV/Tier 4f	IV/Tier 4f

		<b>PR 744 Litronic</b>	<b>PR 746 Litronic</b>
Operating weight	kg	29,041	30,452
Blade capacity (wood chip blade)	m <sup>3</sup>	20.6	20.6
Counterweight	kg	3,175	3,175
Engine output	kW/HP	185/252	185/252
Emission stage	Stage	IIIA (compliant)/Tier 3	IV/Tier 4f

		<b>PR 754 Litronic</b>	<b>PR 756 Litronic</b>
Operating weight	kg	40,907 <sup>(1)</sup>	40,345
Blade capacity (wood chip blade)	m <sup>3</sup>	30.8	30.8
Counterweight	kg	4,000	4,000
Engine output	kW/HP	250/340	250/340
Emission stage	Stage	IIIA (compliant)/Tier 3	IV/Tier 4f

		<b>PR 764 Litronic</b>	<b>PR 766 Litronic</b>
Operating weight	kg	53,266 <sup>(2)</sup>	54,221 <sup>(2)</sup>
Blade capacity (wood chip blade)	m <sup>3</sup>	47.4	47.4
Counterweight	kg	4,950	4,950
Engine output	kW/HP	310/422	310/422
Emission stage	Stage	IIIA (compliant)/Tier 3	IV/Tier 4f

<sup>(1)</sup> Undercarriage with rigid bottom rollers

<sup>(2)</sup> Undercarriage with bogie suspension, 711 mm/28" track shoes, counterweight

## Examples of Use



# Telescopic Handlers



**Performance**

The tried-and-tested hydrostatic travel drive with infinitely variable acceleration without shifting gear and good manoeuvrability guarantees quick work processes even in limited spaces. The construction machine can be used universally and is solid from the ground up. It is designed for maximum performance in various applications. High load capacities, intuitive operation and high performance components allow the driver to complete his work quickly and reliably.

**Economy**

The Liebherr telescopic handlers are all-rounders that make a decisive contribution to the efficiency of your vehicle fleet. Many different optional attachments allow universal use and increased utilisation of the machines. Top performance, low fuel consumption and minimum maintenance guarantee economy throughout the service life of the machine.

**Reliability**

Robust and reliable: as characterised by Liebherr telescopic handlers. Advanced technology with high-quality materials and build quality guarantee maximum availability. A high level of utilisation and value is guaranteed in the long term.

**Comfort**

The cab of the telescopic handler from Liebherr is an ideal workplace. It provides an excellent all-around view, has a spacious interior, provides a safe working environment, and its ergonomic controls allow relaxed and productive operation.

**Maintainability**

At Liebherr, superior service is more than a promise, it is a guarantee to every customer. Several production facilities and an extensive service network for construction equipment means close proximity, and fast response times.

# Technical Data

## T 35-6

## T 32-7

Operating weight with standard fork, without operator	kg	7,320	7,280
Max. lift capacity	kg	3,500	3,200
Max. lift height	mm	6,132	6,925
Overall height <sup>1</sup>	mm	2,465	2,465
Overall width over standard tyre <sup>1</sup>	mm	2,327	2,327
Wheelbase <sup>1</sup>	mm	2,750	2,750
Rear overhang <sup>1</sup>	mm	784	784
Track gauge <sup>1</sup>	mm	1,920	1,920
Outside turning radius over tyres <sup>1</sup>	mm	3,812	3,812
Ground clearance (mid of vehicle) <sup>1</sup>	mm	405	405
Engine output	kW/HP	100/136	100/136
Emission stage	Stage	IIIA (compliant) / Tier 3 IV / Tier 4f	IIIA (compliant) / Tier 3 IV / Tier 4f

## T 36-7

## T 41-7

Operating weight with standard fork, without operator	kg	7,310	7,460
Max. lift capacity	kg	3,600	4,100
Max. lift height	mm	6,925	6,925
Overall height <sup>1</sup>	mm	2,465	2,465
Overall width over standard tyre <sup>1</sup>	mm	2,327	2,327
Wheelbase <sup>1</sup>	mm	2,850	2,850
Rear overhang <sup>1</sup>	mm	784	784
Track gauge <sup>1</sup>	mm	1,920	1,920
Outside turning radius over tyres <sup>1</sup>	mm	3,906	3,906
Ground clearance (mid of vehicle) <sup>1</sup>	mm	405	405
Engine output	kW/HP	100/136	100/136
Emission stage	Stage	IIIA (compliant) / Tier 3 IV / Tier 4f	IIIA (compliant) / Tier 3 IV / Tier 4f

## T 33-10

Operating weight with standard fork, without operator	kg	8,050
Max. lift capacity	kg	3,300
Max. lift height	mm	9,747
Overall height <sup>1</sup>	mm	2,465
Overall width over standard tyre <sup>1</sup>	mm	2,327
Wheelbase <sup>1</sup>	mm	2,850
Rear overhang <sup>1</sup>	mm	784
Track gauge <sup>1</sup>	mm	1,920
Outside turning radius over tyres <sup>1</sup>	mm	3,906
Ground clearance (mid of vehicle) <sup>1</sup>	mm	405
Engine output	kW/HP	100/136
Emission stage	Stage	IIIA (compliant) / Tier 3 IV / Tier 4f

<sup>1</sup> All specifications with standards tyres, standard fork or standard bucket.

## Examples of Use



# Reachstacker





**Performance**

The telescopic boom allows an unrivalled range of up to 8.5 metres and stacking height of up to 8.9 metres. Another advantage is the possibility of log handling below ground level. The wood grab can be rotated 360° and swivelled back and forth.

**Economy**

The lumber handling device of the latest generation combines a modern and innovative concept with extraordinary efficiency and economy. Like all Liebherr Reachstackers, the Log Handler is also equipped with a stepless hydrostatic drive, which is characterised above all by enormous fuel savings. In addition, the Liebherr Pactronic® hybrid drive system, fitted as standard, enables a significant reduction in CO<sub>2</sub> emissions while at the same time reducing fuel consumption.

**Reliability**

Sophisticated design and proven quality standards make the Liebherr Log Handler a hallmark of reliability. Key technologies and important assemblies such as the entire drive and control technology, hydraulic elements and the diesel engine are manufactured in-house.

**Comfort**

When designing the driver's cabin, particular attention was paid to ergonomic principles. The cab sets new standards in terms of ergonomics and ease of operation. The all-round glazing around the cabin and the flattened design of the device reduce the blind spot and ensure a clear view of the entire working area at all times.

**Maintainability**

The design of the Log Handler is optimised for quick and easy service. All relevant parts are easily accessible, ensuring short idle times. A team of more than 600 experienced and versatile factory-trained service engineers operates in more than 50 countries around the world.

# Reachstacker LRS 545 Log Handler Overview

## Flexible grapple with high output

- Extraordinary grapple capacity (8.2 m<sup>2</sup>)
- Can be rotated through 360°
- High flexibility in longitudinal and transversal direction
- Inclination up to 70° inwards possible
- Quick opening and closing

## High-performance powerpack

- Maintenance intervals (1,000 h)
- Easy servicing
- Hydrostatic drive permits infinitely variable switching
- Optimised performance thanks to Liebherr hybrid drive - Pactronic® as standard
- No wear parts required such as differential and gearbox
- Long service life
- Two independent braking systems – hydraulic (maintenance-free) and mechanic
- Short braking distances

## Single-wheel drive for drive axles

- Reduced slip
- Possible to drive within narrow radii
- Reduced transverse forces on the rear axle

## Features

- Fixed log pusher, with replaceable slider lip
- TopView system for enhanced security (optional)
- Electrical deep temperature package (optional)





#### **Boom with great flexibility**

- Extensive working range
- Loading and unloading first and second track row
- Easy access for service (grapple can be lowered to the ground)

#### **Spacious cabs with enhanced comfort**

- Protective structure meets FOPS Level II
- Excellent visibility
- Air-suspended, ergonomic driver's seat with seat heating
- Trainer's seat available (optional)
- Safety belt available
- High-performance windshield wiper on windscreen, roof panel and rear window
- Electrically adjustable exterior mirrors
- Air-conditioning system available (optional)
- Auxiliary heating (optional)
- Radio
- Monkey-head for controlling the grapple function
- Steering wheel for controlling the Log Handler
- Ergonomic layout of operating elements and monitor

#### **Robust cladding**

- Reliable and corrosion-resistant
- Easy service accessibility
- All relevant service components easily accessible

# Technical Data

## Lifting capacity

Max. lifting capacity	kg	30,000
Max. lifting height	m	8.9
Max. radius	m	8.5

## Tyres

Dimensions	18.00 x 25/PR40	
Number of tyres	4/2	
Tyre inflation pressure	bar	10

## Wood grapple

Wood grab capacity	m <sup>2</sup>	8.2
Turning angle	360°	

## Work speeds

Travel speed, unladen	km/h	25.0
Travel speed, rated load	km/h	20.0
Max. opening period of grapple	s	8.0
Max. closing period of grapple	s	6.0
Max. rotation period of grapple (360°)	s	10.0

## Engine

Power	kW/HP	230/312 at 1700 rpm
Model	Liebherr D944	
Fuel tank	l	500

The diesel engine complies with the exhaust gas certification for mobile machines in accordance with EPA/CARB TIER V.

## Weight

Total weight (unloaded/loaded)	kg	80,000/110,000
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# Examples of Use







# 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. 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 applications.

## 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 then, the family business has steadily grown to a group of more than 130 companies with nearly 44,000 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.com](http://www.liebherr.com)