

Machines for Industrial Applications

LH 22
Litronic®

LH 24
Litronic®

LH 26
Litronic®

Engine:
136 HP - 150 HP
100 kW - 110 kW
Stage IIIB

Operating weight:
22,100 - 26,000 kg



LIEBHERR

LH 22 M

Engine:

100 kW / 136 HP
Stage IIIB

Operating weight:

22,100 – 22,900 kg

LH 22 C

Engine:

100 kW / 136 HP
Stage IIIB

Operating weight:

22,600 – 23,200 kg

LH 24 M

Engine:

105 kW / 143 HP
Stage IIIB

Operating weight:

23,800 – 24,300 kg

LH 26 M

Engine:

110 kW / 150 HP
Stage IIIB

Operating weight:

25,300 – 26,000 kg

The detailed technical data including the kinematic variants can be found in the individual technical descriptions.

Performance

Outstanding performance –
power, speed and precision



Economy

Profitable investment – economy and efficiency that pay dividends

Reliability

Durability and sustainability – quality down to the last detail

Comfort

A great advance in comfort – setting new standards

Maintainability

Maintenance – fast, simply and safe



Performance



Outstanding performance - power, speed and precision

Liebherr has been designing and manufacturing successful machines for material handling for over 50 years. The new generation of Liebherr handlers, the LH 22, LH 24 and LH 26 are high performance yet economical machines for a wide range of applications.

Wide range of models

Vastly differing types of use requires a wide range of models. To ensure that it have the perfect model for every type of use, Liebherr has a range of undercarriages, attachment combinations, working tools and quick change systems as well as a massive selection of equipment. Each machine can be configured individually to suit specific uses and requirements. The benefit for customers is that they receive an efficient machine that is perfectly tailored to their type of use.

Rapid work cycles

The Liebherr material handlers LH 22, LH 24 and LH 26 are fitted with a load-sensing-control. This divides the fluid delivered by the pump independently of the load pressures. As a result the simultaneous actuation of multiple consumers for example the movement of the attachment or the uppercarriage has no effect on the speed of the material handler. The benefit is that this makes overlaid movements possible to achieve a much higher handling capacity.

Precision operation

Precision and fine control of the material handling machine are particularly important in applications such as waste separation or scrap recycling using a magnetic system. The excellent interplay between the engine, hydraulics and electronics guarantees precision, fine control whilst also ensuring fast, powerful movements. The high efficiency of the Liebherr handlers LH 22, LH 24 and LH 26 is therefore guaranteed even for these demanding types of work.



Liebherr diesel engine compliant with stage IIIB

- Powerful, robust and reliable
- Maximum torque even at low speeds to ensure fast movements with low fuel consumption
- Common rail injection system for maximum efficiency
- Emissions treatment with maintenance-free oxidation catalyst, particle filter available as an option

Liebherr slewing rings

- Internally geared single-row four-point bearing with excellent edge clearance for fast, soft slewing movements
- Protected from dirt and wear
- Extremely robust and economical design for great reliability, a long service life and more stability

Attachment

- Components enhanced using the finite element method (FEM) for maximum service life even if subjected to heavy lateral stresses during demanding tasks
- High load capacity with excellent reach
- Cables routed internally to protect them from damage

Economy



Profitable investment – economy and efficiency that pay dividends

Liebherr material handling machines combine high productivity with excellent economy – all as standard. Liebherr manages to achieve this difficult aim through sophisticated engine technology from its own production and improved demand-controlled hydraulics.

Fuel efficiency

The fuel consumption of a material handler is very important in times when fuel prices continue to rise. The clever combination of the latest electronics and enhanced hydraulics, the time-tested standard automatic idling system and the engine cut-out reduce fuel consumption by up to 30% compared to the previous machine generation. Efficient and fuel-saving – the Liebherr handlers LH 22, LH 24 and LH 26 are truly outstanding machines in their class and not just in terms of economy.

Productivity

Liebherr offers a wide selection of working tools for every application to increase the productivity of its material handling machines. Developed and manufactured in-house using years of experience and precisely tailored to the needs of the customer. With enhanced weight yet extremely robust and with a large capacity, Liebherr working tools maximise handling volumes. The appropriate Liebherr working tool combined with the outstanding dynamics of a Liebherr machine ensure maximum handling capacity for customers.

Increased capacity

In addition the LH 22, LH 24 and LH 26 models can be fitted with the Liebherr MH40 or Likufix quick coupling system. These fully automatic quick coupling systems can increase the capacity of the material handling machine by up to 30%. A precision working tool change using a Liebherr quick coupling system is fast, safe and easy to operate.

Low fuel consumption with intelligent machine control

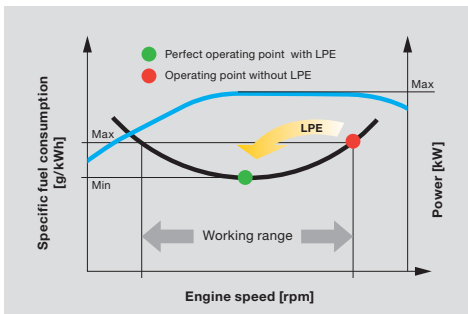
- Liebherr-Power Efficiency (LPE) enhances the interplay of the drive components and therefore the position of the operating point in the engine map to achieve vastly improved efficiency
- LPE allows the machine to be operated with the lowest possible fuel consumption to enhance efficiency whilst delivering the same performance

Liebherr working tools

- Robust and easy to service slewing drive, rotates 360°
- Excellent filling and clamping properties for effective material handling
- FEM-enhanced to produce a perfect ratio of grab weight to volume and a long service life
- Proportional control for precise positioning of the material

Liebherr quick coupling systems

- For frequency working tool changing
- Fast, easy working tool changing for greater machine capacity
- High level operating safety
- Short amortisation time
- Increase productivity by up to 30%



Reliability



Durability and sustainability – quality down to the last detail

Every day Liebherr material handlers show their qualities in a very wide range of industrial applications all over the world. Years of experience, continuous development and the latest technologies provide maximum safety in use. Their robust, compact design and the use of components produced in-house ensure that the material handling machines LH 22, LH 24 and LH 26 are designed for a long service life.

Quality

Liebherr has been synonymous with quality for decades. Key components such as the diesel engine, electronic components, slewing ring, slewing drive and hydraulic cylinders are developed and manufactured in-house by Liebherr. This great vertical integration guarantees the highest quality and allows the perfectly matching among the components. All the steel components are also designed and manufactured by Liebherr. Made of high-strength steel plates to withstand the most rugged conditions, this results in high torsion resistance and excellent absorption of the forces to which the components are exposed.

Competence

Our experience, understanding of customers' needs and producing the technical equipment to meet these needs guarantee the success of the products. For decades Liebherr assured with vertical integration and system solutions – competence from a single source. From the engine and hydraulic system to the working tool, all perfectly coordinated to ensure the maximum reliability and performance of the material handlers LH 22, LH 24 and LH 26.

Safety

In addition to the performance and economy of a material handling machine, the other main focus is on the safety of the workforce and the machine. A wide range of equipment such as the standard pipe fracture safety valves on the hoisting and stick cylinders, working range limiters for constricted indoor use, overload warning device, safety guards, safety glass and the emergency lowering system for hydraulic cab elevation provide maximum safety.



QPDM – quality and process data management

- QPDM allows production data to be logged, documented and evaluated
- Automation of documentation and test specifications
- Ability to handle large quantities whilst maintain uniform high quality

Liebherr electronics

- In-house system solutions, individually tailored to the requirements of the material handling machine
- Early inclusion in the machine development process
- Robust construction tested in the most rugged usage conditions
- Guaranteed spare part availability

Dusty jobs

- Large radiator for excellent cooling even when the machine is working at full power
- Reversible fan reduces contamination of the engine and radiator and ensures a maximum machine availability
- Retractable air-conditioning condenser for simple, fast cleaning

Comfort



A great advance in comfort – setting new standards

The newly designed driver's work station sets new standards in comfort. The Liebherr deluxe cab is spacious, has an ergonomic design and is very quiet. This ensures that the driver remains wide awake and fully concentrated throughout the working day and enables him to deliver a constant and high performance.

Ergonomic design

The modern cab design provides excellent conditions for healthy, concentrated and productive work in maximum comfort. The display unit with touchscreen, the controls and driver's seat are all coordinated to form a perfect ergonomic unit. In addition the ergonomic joysticks allow the machine operation to be both pleasant and precise.

Excellent all-round vision

The large areas of glass, different versions of cab elevations and the rear and side area monitoring systems provide the driver with an excellent view of his working area and the zone around the machine. This perfect view enhances the driver's safety and ensures that he can handle the machine safely at all times.

Low noise levels

The use of viscoelastic mounts, good insulation and modern, low-noise diesel engines from Liebherr minimises noise emissions and vibrations. The noise levels are just 71 dB(A) in the driver's cab and 100 dB(A) outside. This means that the material handling machines LH 22, LH 24 and LH 26 have low noise to preserve people and the environment.

Detail solutions

The material handlers LH 22 to LH 26 are convincing down to the last detail and offer a wide range of features for more comfort and low fatigue working. For example the machines include automatic air-conditioning and an orthopaedic driver's seat for maximum seat comfort. A wide range of other equipment such as an auxiliary heating system, reversing warning system, LED headlights on the cab or equipment, joystick control and proportional control create a comfortable, pleasant workplace of the very highest quality.

Safe access

- Wide, non-slip steps, ergonomically positioned handles and an adjustable steering column for easy, safe access
- All access systems are designed to national guidelines and statutory regulations

Intuitive control

- 7" colour display with touchscreen and direct access using menu bar
- Tool Control for fast, easy adjustment of oil pressure and oil volume at the touch of a button when changing working tools
- Individually assignable direct access keys

Well-being effect guaranteed

- The largest and most spacious driver's cab in this machine class
- Excellent storage and holding features with optional coolbox to make cool drinks available at all times
- Front windscreen can be slid fully under the roof



Maintainability



Maintenance – fast, simply and safe

The Liebherr material handling machines LH 22, LH 24 and LH 26 are not just powerful, robust, precise and efficient but also feature integral maintenance benefits as a result of their service-based machine design. The maintenance work for the Liebherr material handlers can be carried out quickly, easily and safely. This minimises the material handling machine's maintenance costs and down times.

Integral maintenance benefits

Completing maintenance work helps keep the machine fully functional. Maintenance work does, however, mean machine down times which must be minimised. Automatic central lubrication systems for attachment and the uppercarriage as well as optional systems for the undercarriage, quick coupling system and working tools not only make it easier to observe the recommended lubrication intervals and ensure a long service life for the components, but also increase the productivity of the Liebherr material handlers LH 22, LH 24 and LH 26.

Hydraulic oils with added value

Liebherr hydraulic oils achieve a service life of 6,000 operating hours and more. Instead of having defined change intervals, the results of the oil analysis (every 1,000 operating hours or after one year) determine when the oil needs to be changed. The unique Liebherr Hydraulic Plus oil can even achieve a service life of 8,000 operating hours and more - at the same time as reducing fuel consumption by up to 5%.

Service-based machine design

The service-based machine design guarantees short servicing times, thus minimising maintenance costs due to the time it saves. All the maintenance points are easily accessible from the ground and easy to reach due to the large, wide-opening service doors. The enhance 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. Thanks to the low maintenance oxidation catalyst, the machines LH 22, LH 24 and LH 26 can deal with their emissions easily without any additional effort. If the optional Liebherr particle filter is used, the maintenance work can be carried out quickly and easily through the accessible particle filter flap which can also be reached from the ground.



Lubrication as it works

- Fully automatic central lubrication system for attachment and slewing ring
- Can be extended as an option to the connection link, quick coupling system and working tool
- Fully automatic central lubrication system for the undercarriage available as an option
- Lubricates without interrupting work to ensure better productivity and a long component service life

Excellent service access

- Large, wide-opening service doors
- Engine oil, fuel, air and cab air filters are easily and safely accessible from the ground
- The oil level in the hydraulic tank can be checked from the cab
- Short service times for more productivity

Maintenance completed quickly

- Easy access to the particle filter through easy to open particle filter flap
- The particle filter can be replaced quickly and easily to ensure short down times

Material handling machines overview

Superbly designed attachment for maximum reliability

- FEM-enhanced components
- Enhanced lever geometry between monobloc boom and hoist cylinder
- Liebherr hydraulic cylinders
- Wide selection of Liebherr working tools (optional)
- Liebherr quick coupling systems (optional)
- Pipe fracture safety valves for hoisting and stick cylinders
- Overload warning device (optional)
- Working range limiters (optional)

Ergonomic driver's work station for maximum comfort

- Pneumatic driver's seat
- Automatic air-conditioning system
- 7" large display unit with touchscreen
- Direct access keys
- Adjustable armrests
- Ergonomic joysticks
- Joystick control (optional)
- Proportional control with mini-joystick (optional)
- Tool Control for working tools
- Large windows
- Easy radio control
- Hydraulic cab elevation with emergency lowering (optional)
- Safety guards (optional)
- Cab windows made of safety glass (optional)
- LED headlights (optional)
- Rear monitor
- Side monitor (optional)
- Ventilation systems (optional)





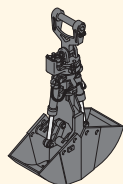
Clever technology for maximum performance and economy

- Liebherr diesel engine compliant with stage IIIB
- Full power at just 1,800 rpm
- Maintenance-free oxidation catalyst
- Liebherr particle filter (optional)
- Load-sensing-control
- Liebherr-Power Efficiency (LPE)
- MODE selection (Sensitive, ECO, Power, Power-Plus)
- Preheating system for fuel, coolant, engine oil and hydraulic oil
- Sensor-controlled automatic idling system
- Refuelling system with refuelling pump (optional)
- Safety grill in front of radiator intake
- Large-mesh radiator for dusty jobs (optional)

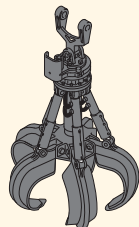
Integral maintenance benefits for maximum productivity

- Fully automatic central lubrication system for uppercarriage and attachment
- Fully automatic central lubrication system for the undercarriage (optional)
- Large, wide-opening service doors
- Central maintenance points accessible from the ground
- Hydraulic shut-off cock
- Magnetic rod in the hydraulic system
- Liebherr hydraulic oil biologically degradable (optional)
- Retractable air-conditioning condenser
- Cab air filter can be replaced quickly and conveniently from outside
- Easy access to the oxidation catalyst and particle filter
- Toolbox can be locked on both sides
- Extended tool kit (optional)

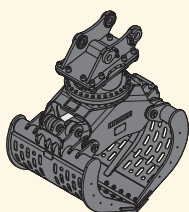
The perfect solution for every application



Shells for loose material



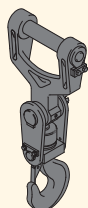
Multiple tine grapples



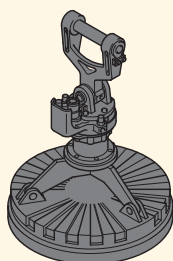
Sorting grapple



Wood grapple

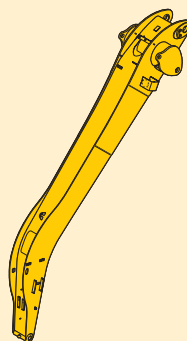


Load lift hook

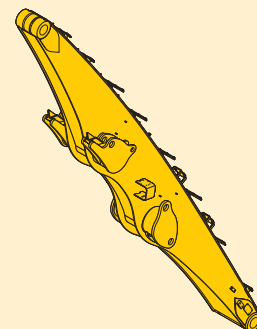


Magnet devices

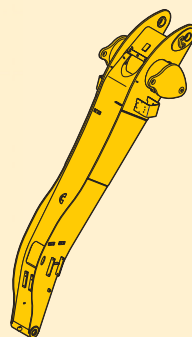
Working tools



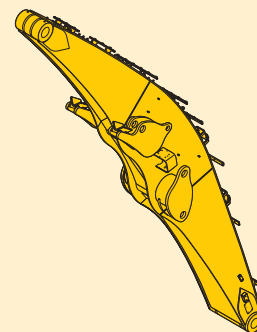
Industrial-type angled stick



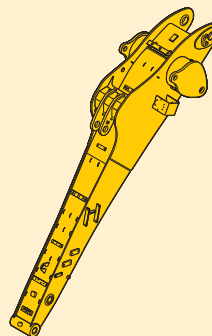
Industrial-type straight mono boom



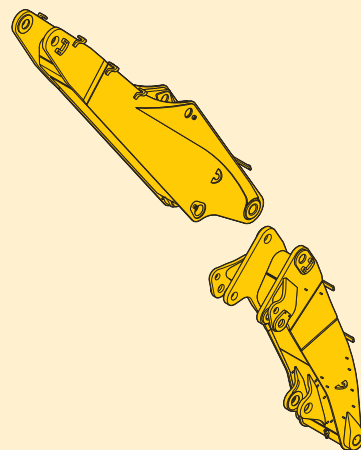
Industrial-type flat angled stick



Industrial-type angled mono boom



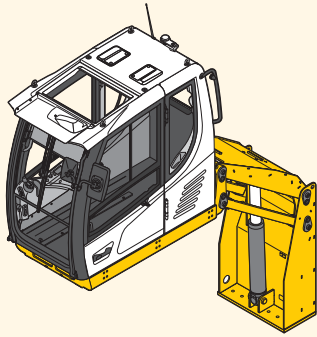
Industrial-type stick with tipping kinematics



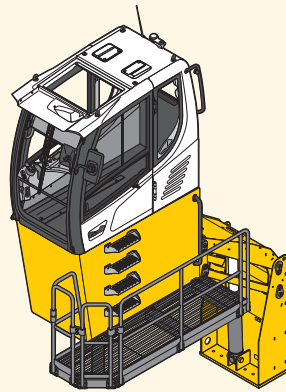
Two-piece boom

Attachments

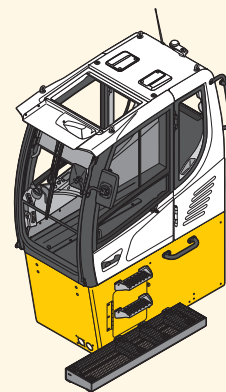
Cab elevation



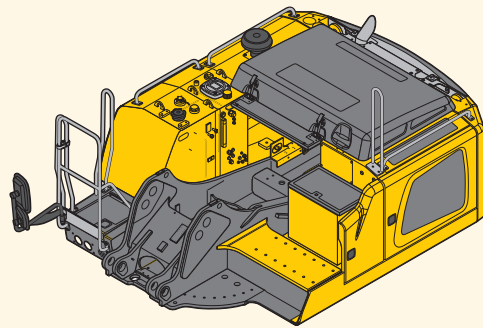
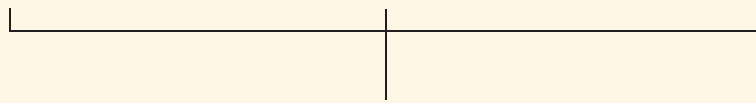
Hydraulic cab elevation



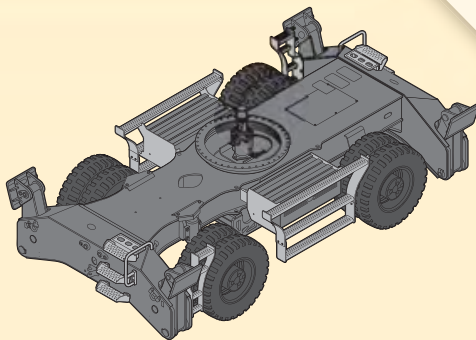
Hydraulic cab elevation with adapter



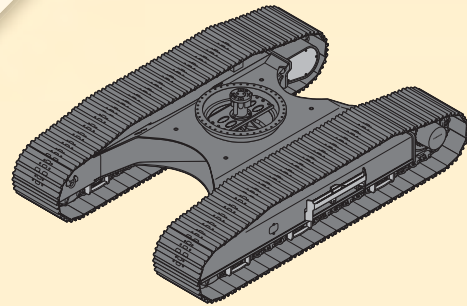
Rigid cab elevation



Uppercarriage



Mobile



Crawler

Undercarriage

Experience progress.

The invention of the mobile tower crane in 1949 also marked the birth of the Liebherr company. During its first decade the small construction company developed into an established manufacturer of construction machines and other technically advanced products. The R 353 and its first industrial attachment were launched in 1951 to lay the foundations for

the production of today's material handling machines. The A 911 mobile material handling machine a few years later enabled the company to make the breakthrough into material handling. Over the years the machines have been developed as technology has progressed.



First tower crane TK10

1949



Production plant in Kirchdorf

1970



First hydraulic cab elevation

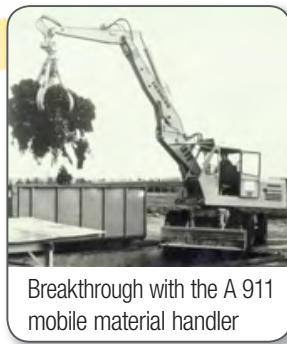
1983

1961



R 353 with the first industrial attachment

1968



Breakthrough with the A 911 mobile material handler

1974



Silenced material handling machine

Liebherr has now been developing and manufacturing material handling machines for a very wide range of applications in the scrap, port and timber handling sectors and for the waste and recycling industry for over 50 years. In the development of its machines, Liebherr chooses quality, durability and reliability from the very outset, together with performance and economy.

Years of experience in design and construction are not only reflected in the end product but also in the components which are developed, designed and manufactured by Liebherr itself. This multiple sector expertise is used in product design from the early phase of the development process and thus allows high level technical innovations to be made.



Opening of the assembly building for material handling machines

2007



Launch of the lightweight stick

2011



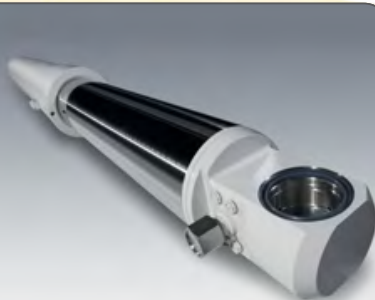
Launch of the new LH series

2013

2010



Awarded the Bauma Design Prize for the LH 120



Awarded the Bauma Innovation Prize for the ERC cylinder

2014



Awarded the IF Award for the material handling machine LH 60

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 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 130 companies with over 39,000 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

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