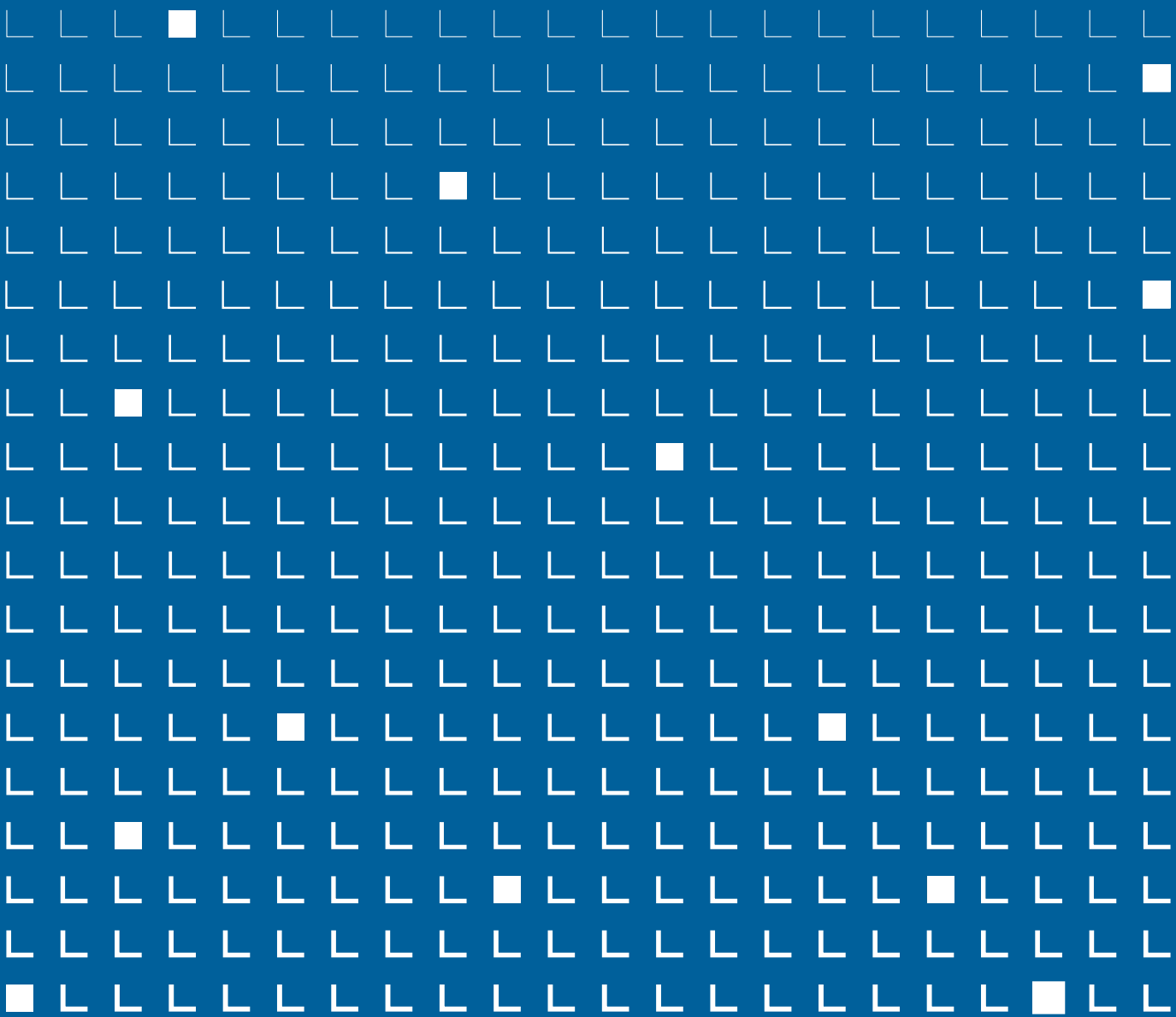
Electric material handling machines

LH 26 – LH 150 E Litronic

LIEBHERR

Material handling machines



The handling machines with electric drive

Liebherr's electrically powered material handlers offer a modern and environmentally friendly alternative to conventional drive machines. With their emission-free electric motors, they contribute to a clean working environment and fulfil the increasing requirements for environmental friendliness and sustainability.

The use of electric motors drastically reduces the emission of harmful exhaust gases, which not only improves air quality but also minimises environmental pollution. In the face of increasing political restrictions and stricter environmental and emissions standards, our electric material handlers offer a solution that will future-proof your operations and help you keep pace with the changing demands of the times.

Performance

Liebherr material handling machines are specifically developed for the unique requirements of industrial material handling technology. A wide range of equipment for maximum reach and the ideal uppercarriage concept make it possible to fulfil all requirements. The powerful drive train, with all important components manufactured in-house, and the power of the electric motor maximise the machine's performance in terms of lifting power, precision and working speed.

Cost-effectiveness

Investing in an electric material handler pays off in the long term. Thanks to the lower operating costs and the high value retention of the machines, due to the longer service life of the hydraulic components, they offer considerable cost savings compared to conventional diesel engines. Lower energy costs and the elimination of fuel and oil filters as well as oil changes further reduce operating costs and ensure that the machine pays for itself quickly.

Ease of maintenance

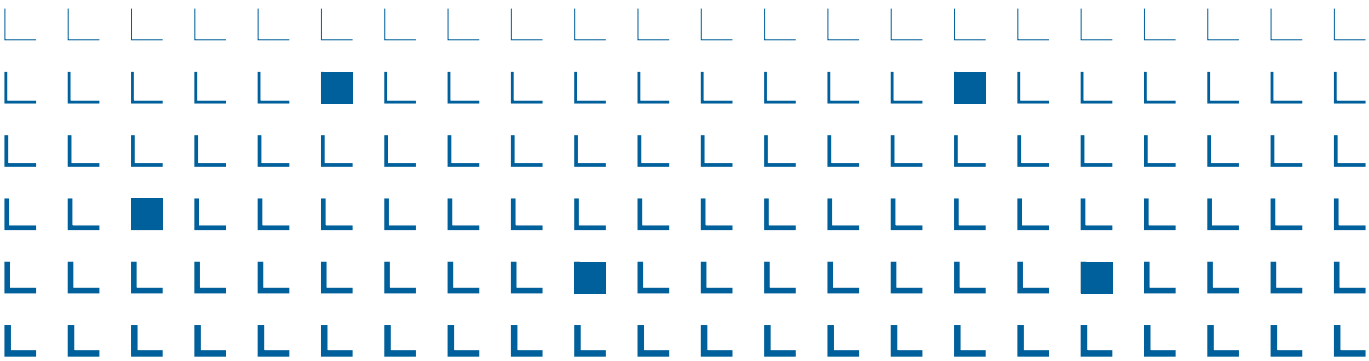
The ease of maintenance of electric material handlers is a significant advantage over conventional drive machines. Regular refuelling stops and oil level checks are completely eliminated. The service-friendly design of the machine guarantees short maintenance times and minimises maintenance costs by saving time. The optimised service concept combines individual maintenance points and reduces their number to a minimum, allowing service work to be carried out even faster and more efficiently.

Reliability

Liebherr electric machines are characterised by a high level of reliability. The significantly longer maintenance intervals compared to diesel engines minimise operational interruptions, while the low maintenance requirements and low number of wear parts increase the availability of the machines. As no refuelling is required, the machines are always ready for use, which leads to higher productivity.

Comfort

All electric material handlers have an ergonomically designed operator's cab with a high level of comfort and good visibility so that operators can concentrate fully on their work and get the maximum performance out of their machine. The electric drive increases driving comfort by minimising noise emissions and eliminating vibrations. Thanks to their emission-free operation, our electric material handlers are ideal for use indoors or in halls, ensuring a clean and quiet working environment.



Tradition in quality – Future in electricity

1949

The success story of Liebherr began with the invention of the mobile tower crane in 1949. Within a few years, the company grew from a small construction company to a renowned manufacturer of technically sophisticated machines.

1961

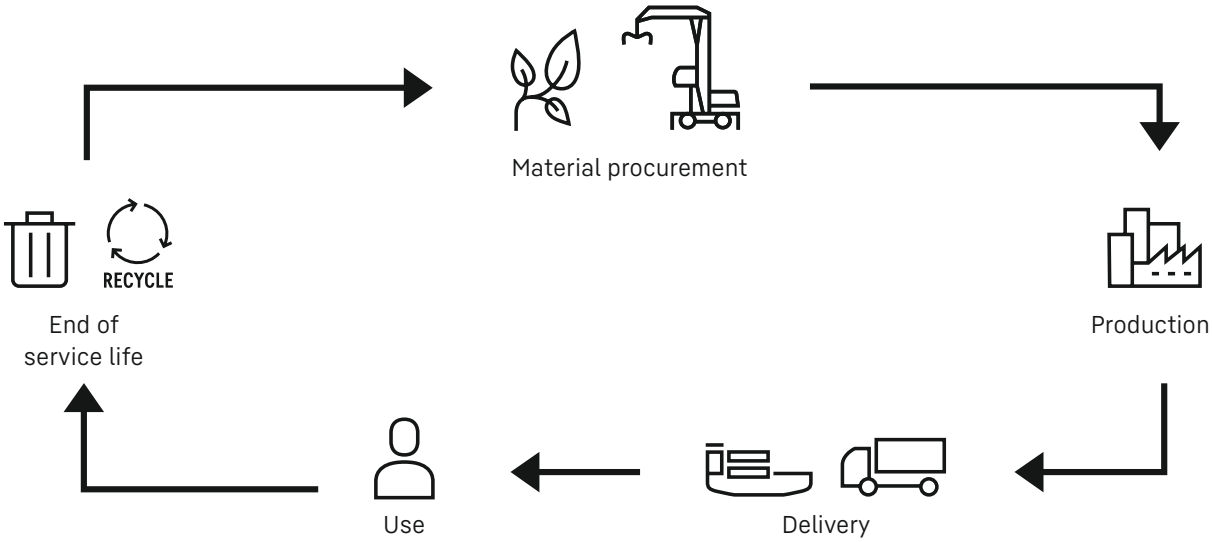
In 1961, the R 353 hydraulic excavator, equipped with the first industrial equipment, laid the foundation for the development of our material handling machines today.

1968

Liebherr finally achieved its breakthrough in the material handling sector with the market launch of the A 911 mobile material handling machine.

since 1980

Another milestone followed in the mid-1980s: our first hydraulic excavator with an electric motor.



Since then, we have consistently focussed on the further development of electric drives and sustainable technologies. Our goal is to make material handling technology even more efficient and environmentally friendly in order to promote a sustainable future. Today, we are driving forward electromobility and innovation with the same pioneering spirit that has accompanied us since our foundation – and developing solutions that are tailored to the needs of our customers and the challenges of our time.

Proven technology – new technologies

Electric motor – the centrepiece

Thanks to proven technology and a modern electric drive concept, the motor is not only low-maintenance and quiet, but also independent of emissions standards. With its high, lag-free power, it drives the hydraulic pump directly and steplessly – the centrepiece for maximum efficiency and reliability.

Arrangement of components – optimally thought out

The electrical components are clearly arranged in the control cabinet, allowing quick, easy and safe access. This well thought-out structure ensures efficiency and facilitates maintenance and service work.

Emergency stop switch – safety at the touch of a button

Our electric machines are equipped with easily accessible emergency stop switches as standard. These are located both in the cab and on the undercarriage to ensure quick and easy operation in an emergency.

Frequency inverter – advanced technology

The frequency inverter enables individual speed control and a smooth start-up to avoid inrush current peaks. It can be easily adapted to all standard power supply networks. Thanks to the precise speed control, the frequency inverter ensures dynamic working movements and combines high precision with speed.

Mobility Kit – maximum flexibility

The optional Mobility Kit enables mains-independent operation and therefore offers maximum flexibility. During mains operation, the battery is charged and stores the electrical energy. When disconnected from the mains, the machine is automatically supplied with energy from the Mobility Kit so that it can be operated and moved regardless of location.

Winding systems – perfect connection for every application

Our winding systems offer maximum flexibility and are available in different cable lengths to fulfil every requirement. Automatic winding and unwinding ensures simple operation, greater safety and optimum cable protection. The increased movement radius allows additional freedom and flexibility in use.

Cab – ergonomics meets comfort

The innovative cab design offers ideal conditions for healthy and productive work. The touchscreen display, control elements and comfortable operator's seat are perfectly harmonised. Ergonomic, swinging joysticks enable precise and comfortable working.

The advantages of electric material handlers

Efficiency redefined

Low operating costs

- High value retention due to the longer service life of the electrical and hydraulic components
- Low energy costs
- Low service costs
- Less wear and tear

Low maintenance requirements

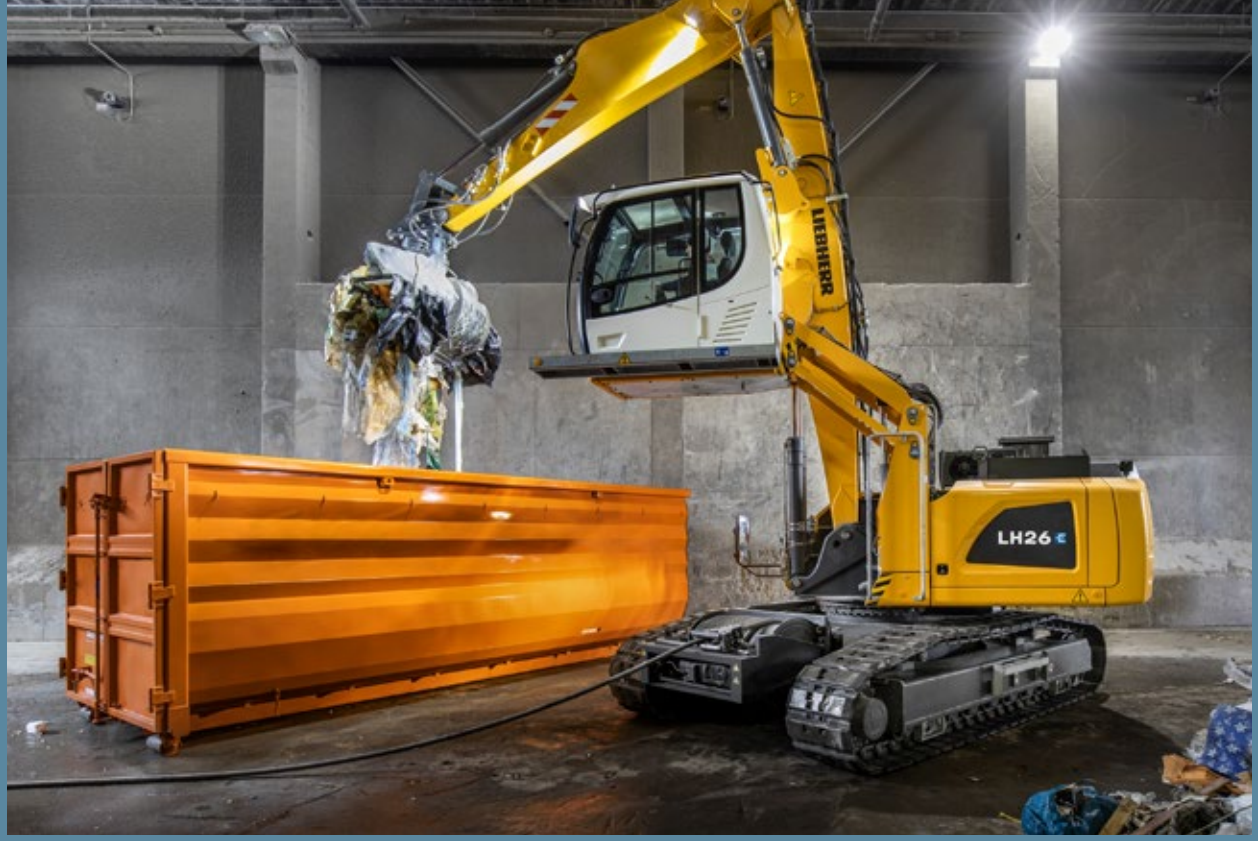
- Significantly longer inspection and maintenance intervals compared to diesel engines
- No need for fuel and oil filters or oil changes
- Optimum maintenance accessibility

High productivity

- Always ready for use
- Minimised downtime
- Low maintenance
- No refuelling stops necessary

High level of comfort

- Zero emissions – absolutely emission-free
- Low noise and heat emissions
- Low-noise and low-vibration operation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Innovative solutions for an emission-free future

Sustainable technologies

Frequency converters

The frequency inverter controls the speed optimally and adapts it to different mains sources. It also taxes the starting current and therefore only consumes as much power as necessary.

- **Energy saving:** Minimises power consumption by adjusting the speed as required.
- **Limiting the starting current:** Controls the starting current so that only the required amount of current is used.
- **Simple control:** Makes it easier to control the speed as required compared to the star-delta circuit.
- **Cost-efficient design:** Reduces wear and tear as well as the need for cables and fuses and enables a more favourable system design.

Mobility Kit

With the Mobility Kit, the LH 26 Industry E can be driven when disconnected and used for light work. This innovative addition to corded operation offers the best of both worlds: Uncoupling – driving – coupling – continuing to work!

- **Maximum flexibility:** The extended movement radius increases flexibility at the operating location.
- **High productivity and comfort:** The maximum flexibility of the machine ensures optimum capacity utilisation and increases comfort for the operator.
- **Increased safety:** The machine can be moved quickly and easily out of a hazard zone, which increases safety at the operating location.
- **Environmentally friendly:** Even with the Mobility Kit, there are no harmful emissions, which means that the advantages of the electric machine are retained.

Cost savings of up to

35 %*

Minimum service effort – maximum efficiency

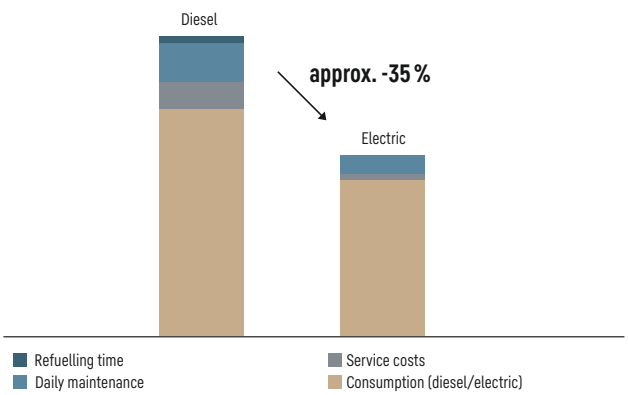
Maintenance-friendly

- Maintenance-free electric motor
- No motor-related components requiring maintenance
- Easily accessible service points thanks to large and wide-opening service doors
- Optimised service concept reduces the number of service points to a minimum

Economic efficiency

- Significantly longer maintenance intervals lead to lower operating costs over the service life
- High cost savings compared to diesel engines thanks to ease of maintenance

Comparison of maintenance and operating costs of diesel and electric machines

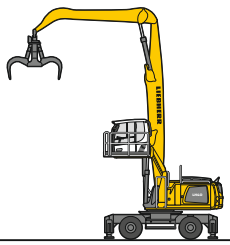


* compared to the diesel engine

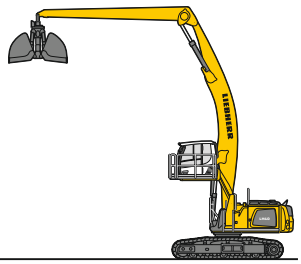
Technical data

LH 26 M Industry E Litronic

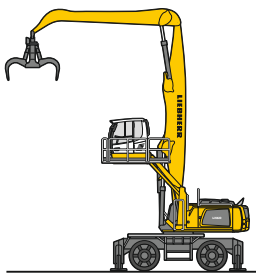
LH 26 C Industry E Litronic



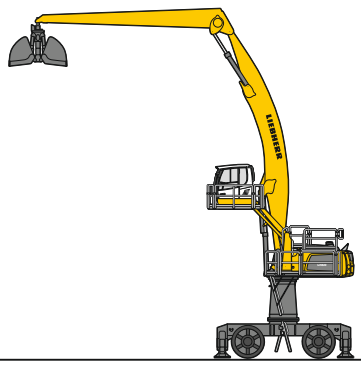
LH 40 M Industry E Litronic



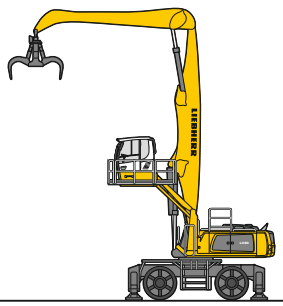
LH 40 C Port E Litronic



LH 60 M Industry E Litronic



LH 60 M High Rise Port E Litronic

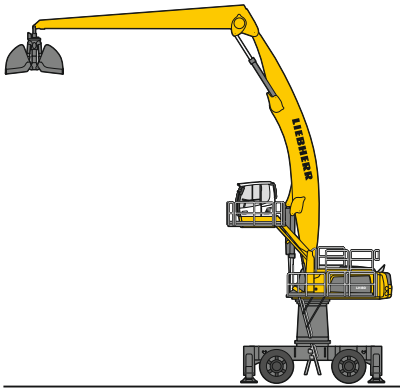


LH 80 M Industry E Litronic

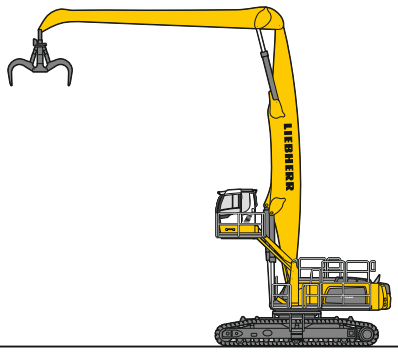
Technical data

		LH 26 Industry E Litronic	LH 40 Industry E Litronic	LH 40 Port E Litronic	LH 60 Industry E Litronic	LH 60 Port E Litronic	LH 80 Industry E Litronic
Versions		M / C	M / C	M / C	M / M High Rise / C / C High Rise	M / M High Rise / C / C High Rise	M / M High Rise / C / C High Rise / C Gantry
Reach	m ft in	13 42'8"	16 52'6"	18 59'1"	20 65'7"	23 75'6"	22 72'2"
Operating weight*	kg lb	26,200–27,900 57,800–61,500	37,600–43,200 82,900–95,200	41,100–50,300 90,600–110,900	54,000–79,800 119,000–176,000	61,400–81,300 135,400–179,300	72,600–120,500 160,100–265,700
Engine output	kW	90	145	145	180	180	220
System performance	kW	105	227	233	334	322	427

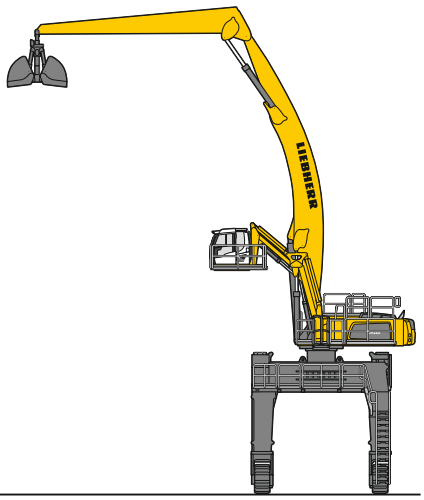
M = Mobile C = Crawler E = Electric * without attachment



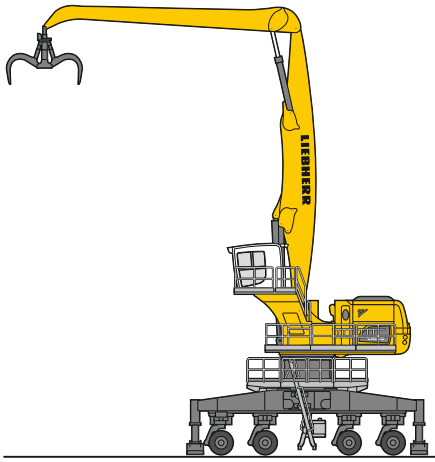
LH 80 M High Rise Port E Litronic



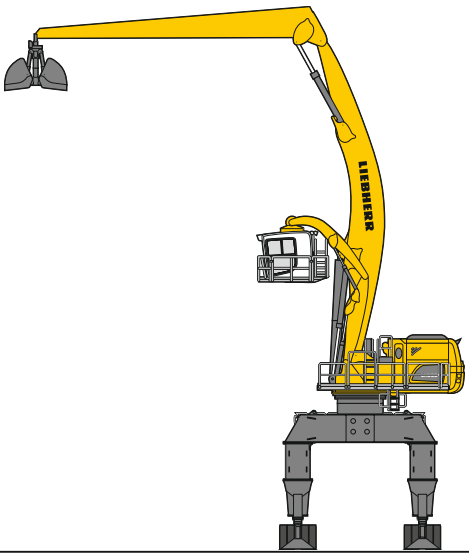
LH 110 C Industry E Litronic



LH 110 C Gantry Port E Litronic



LH 150 M High Rise Industry E Litronic



LH 150 M Gantry Port E Litronic

Technical data

		LH 80 Port E Litronic	LH 110 Industry E Litronic	LH 110 Port E Litronic	LH 150 Industry E Litronic	LH 150 Port E Litronic
Versions		M / M High Rise / C / C High Rise / C Gantry	C / C High Rise / C Gantry	C / C High Rise / C Gantry	M Gantry / C / C High Rise / C Gantry	M / M High Rise / M Gantry / C / C High Rise / C Gantry
Reach	m ft in	25 82'	24 78'9"	27 88'7"	28 91'10"	30 98'5"
Operating weight*	kg lb	81,700–124,700 180,200–274,900	105,000–138,000 231,500–304,200	110,000–140,000 242,500–308,600	135,000–185,000 297,600–407,900	135,000–185,000 297,600–407,900
Engine output	kW	220	300	300	400	400
System performance	kW	408	492	478	661	614

The perfect solution for every application

Perfectly tailored to your requirements

We offer the optimum solution for your specific requirements. With a wide range of undercarriage variants, cab and uppercarriage extensions, equipment combinations and cable variants, our machines are perfectly tailored to the needs of our customers. Depending on the operating conditions, individual requirements and work processes, we customise our machines precisely to ensure maximum efficiency and performance.

- Lifting capacity
- Reach
- Planned useful life
- (Network) infrastructure
- Operating location (indoor or outdoor)
- Travel characteristics and length

Scrap handling

Port handling

Waste handling

Timber handling

Examples of use

LH 150 C High Rise Industry E Litronic in scrap handling at Schrott- und Metallhandel M. Kaatsch GmbH in Plochingen, Germany

LH 26 M Industry E Litronic in waste management at Breitsamer Entsorgung Recycling GmbH in Munich, Germany.

LH 26 M Industry E Litronic in waste management at customer AWA Entsorgung GmbH in Eschweiler, Germany.

LH 26 M Industry E Litronic in scrap handling at MTB Recycling in Trept, France.

LH 26 M Industry E Litronic in waste management.

The Liebherr Group

Global and independent: more than 70 years of success
Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 50,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit
Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the company founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified product programme
Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product programme includes earthmoving machinery, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value
Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. For Liebherr, customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

www.liebherr.com

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