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# Ship cranes

## Product range

[www.liebherr.com](http://www.liebherr.com)

# LIEBHERR

Maritime cranes



# Made in Rostock, moving the world



## Quality

Liebherr cranes are built with strict quality assurance at every stage, from design to service. A DNV-certified management system ensures consistent standards across all sites. Every part is traceable from the first steel plate to the final assembly. Clear processes and a strong commitment to excellence help us exceed customer and regulatory expectations.

## Experience

Today, the Liebherr group incorporates more than 50,000 employees in more than 150 companies throughout the world. From the beginning Liebherr has been improving its products and services to meet the requirements of this demanding and steadily developing market. Liebherr's history in the maritime cargo industry began in 1958 with the delivery of the first ship crane. Since then, the company has developed into a worldwide maritime service partner for ports and terminals, shipyards and shipping companies, as well as the offshore construction and exploration industries.

## Innovation

With over 2,000 ship cranes delivered, Liebherr proves its expertise in maritime lifting. Our design is based on core technologies and in-house engineering. Every crane meets the highest standards in safety, reliability and performance. Ongoing R&D and close customer collaboration help us set the benchmark for modern ship cranes.

## Competence

Liebherr ship cranes are developed and built in Rostock, Germany. Modern facilities, high vertical integration, and strict quality standards ensure top product quality and reliable processes. This expertise allows Liebherr to offer tailored solutions for diverse maritime needs.

## Advantages of our location

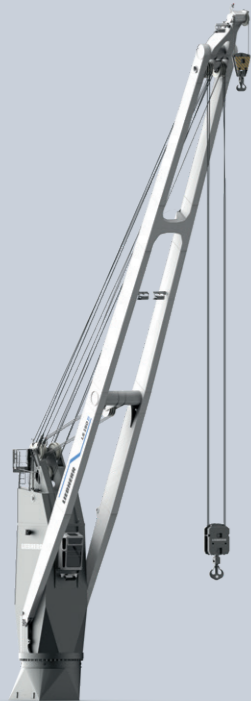
Innovative lifting technology and state-of-the-art expertise ensure your project is executed efficiently and safely. The Port of Rostock offers optimal accessibility, free from shipping obstacles such as locks or bridges, and accommodates vessels with a draught of up to 13 metres. Seamless connections to the German rail network and direct access to the A19 and A20 motorways further enhance logistics and transport efficiency. Equipped with a Liebherr TCC 78000, one of the world's most powerful gantry cranes, Liebherr provides a high degree of flexibility for handling goods with a weight of up to 1,600 tonnes, including the option for single-lift assembly. Liebherr offers the possibility to integrate an Installation, Commissioning and Testing phase (ICT). Factory Acceptance Tests (FAT) can also be carried out on the test bed directly on site.

## Platinum sustainability rating from EcoVadis

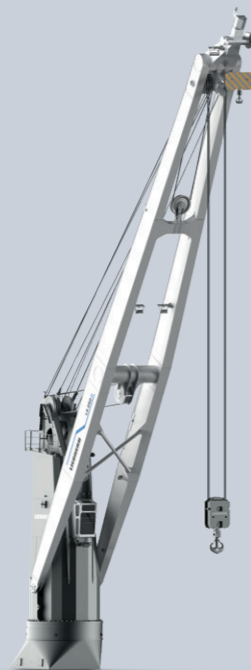
For its long-standing commitment to sustainability, Liebherr-Rostock GmbH was awarded a platinum medal by the independent rating agency EcoVadis. This puts the company in the top 1% of all evaluated companies of its industry. EcoVadis scores sustainability using indicators in four key areas: Environment, Labour and Human Rights, Ethics and Sustainable Procurement.

The Liebherr Group aims to honour its responsibility to society and the environment at all times. In its long history, the company has grown successfully through responsible and future-oriented behaviour.

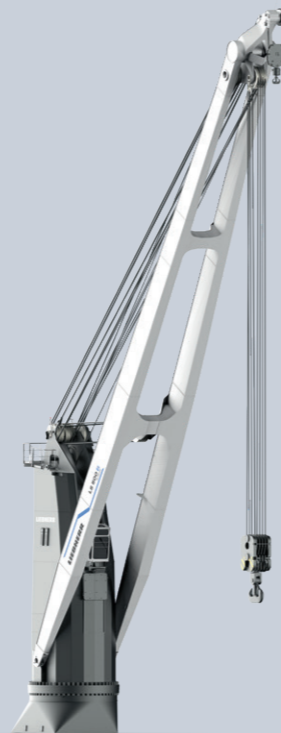
# Liebherr LS series



**LS 150**  
Main hoist: 150 t SWL  
Aux. hoist: 45 t SWL



**LS 250**  
Main hoist: 250 t SWL  
Aux. hoist: 45 t SWL



**LS 500 E**  
Main hoist: 500 t SWL  
Aux. hoist: 60 t SWL



**LS 800 E**  
Main hoist: 800 t SWL  
Aux. hoist: 60 t SWL



**LS 1200 E**  
Main hoist: 1200 t SWL  
Aux. hoist: 80 t SWL

The Liebherr ship crane series (LS series) is a robust solution for heavy-lift operations, with lifting capacities from 150 to 1,200 tonnes. Designed for the demanding heavy cargo segment, these cranes ensure reliable performance even under challenging conditions. Their compact design allows seamless integration into vessel structures, reducing installation complexity and simplifying interface management. At the core is the advanced Litronic® crane control system, enabling maximum lifting speed based on real-time load conditions and ensuring optimal load moment utilisation. This intelligent system sets benchmarks for precision, speed and safety. Combined with assistance systems, the LS series is fully equipped for current and future heavy-lift operations.

# Efficient drive solutions for every operation



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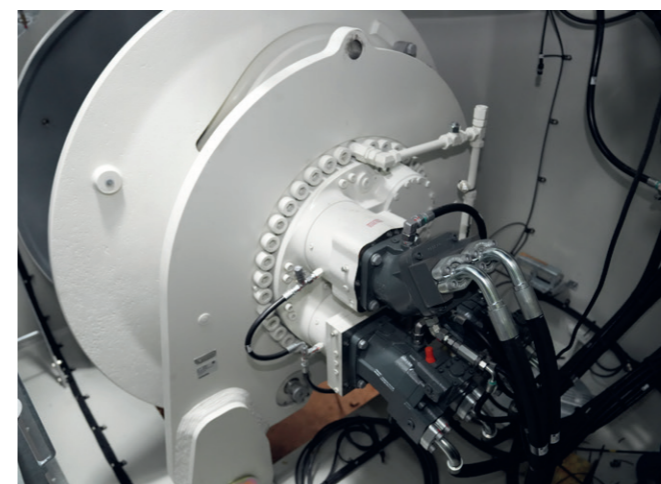
## Drive systems

### Electro-hydraulic

Liebherr's electro-hydraulic drive featuring compact closed-loop technology guarantees maximum efficiency and precision. The closed hydraulic system minimises energy loss and delivers consistent performance. Seamlessly integrated with Liebherr's advanced control systems, the drive provides a powerful, responsive, and reliable solution for modern maritime handling applications. As the inventor of hydraulic crane technology, Liebherr draws on decades of experience to deliver the most precise solutions available on the market. Our hydrostatic drive system is designed to operate with a low oil volume, reducing environmental impact and maintenance needs. This reliability is further the benchmark for the highest industrial standards from Europe, ensuring long-term performance and trust in demanding maritime environments.

### All-electric

The all-electric ship cranes are designed to handle cargo efficiently on board. The electric drive system ensures smooth operation, precise load control, and reduced maintenance needs, while optimising energy use. Designed for challenging maritime conditions, they provide consistent performance and long-term operational value. Seamless integration into the ship's power management system is possible, ensuring optimal coordination and energy efficiency across onboard operations.



# Precision in every move

The LS series is designed to adapt seamlessly to the complex requirements of heavy-lift operations. With flexible boom configurations and a wide range of optional features, each crane can be tailored to the specific layout and operational profile of any vessel. Beyond structural adaptability, the LS series integrates advanced control systems and smart assistance functions that enhance safety, efficiency, and ease of operation, even in the most demanding lifting scenarios.

## Digital solutions and assistant systems for LS cranes

### Multi-Hook Operation

The function for electrical cranes allows to operate in parallel, ensuring maximum efficiency during complex lifts. For ergonomic handling, operators can alternatively control up to three hoists simultaneously, with quick switching between hoists supported by the intelligent control system. Integrated control logic guarantees intuitive operation and smooth transitions. Advanced overload protection accounts for multi-hook configurations, enhancing safety in demanding lifting scenarios.

### Constant Rope Length Control

The Constant Rope Length Control system for all-electrical cranes automatically adjusts the rope length of unused auxiliary hoists during crane operations. Whether the auxiliary hooks are freely suspended or secured in the pendulum hook garage, the system ensures to remain in the correct position without any manual intervention. This intelligent feature not only simplifies handling for the crane operator but also significantly enhances safety and efficiency throughout the lifting process.

### Tandem Lifting Assistant

The Tandem Lifting Assistant is a support system designed for coordinated lifting operations involving two cranes. In this mode, one crane is designated as the Master, while the other operates as the Follower. Once activated, the main hoist of the Follower crane automatically synchronises its hook speed with that of the Master crane. Vertical movements, hoisting and lowering, are matched in real time, ensuring both cranes maintain the load at a consistent level. This automated synchronisation reduces the need for manual coordination, enhances operational safety, and improves efficiency during tandem lifting tasks.

### Liebherr Collision Alert System (LiCAS)

LiCAS is an advanced assistance system that enhances operational safety during cargo handling with Liebherr ship cranes. It continuously monitors the distance between cranes and alerts the operator in case of unsafe proximity.

### Adaptive Load Charts

The Adaptive Load Charts function allows the crane operator to select from different load chart configurations depending on the operating scenario. This enables optimal utilisation of lifting capacities in combination with the respective outreach. As a result, operational safety is increased and the crane's performance is improved under changing conditions.

### Linear Slewing Mode

In this operating mode, the crane's movement coordinate system switches from the crane-based reference point, such as the main hook, to the vessel's fixed coordinate system. The operator issues movement commands via a master controller or an alternative input device in longitudinal and transverse directions relative to the ship. The crane control system interprets these inputs and automatically translates them into a combination of slewing and luffing motions. This feature enables more intuitive and precise control, particularly during operations such as opening and closing weather deck and tweendeck panels.

### Level-Luffing Mode

Level-Luffing Mode function ensures that the crane hook remains at a constant height, even when the boom is moved up or down. By automatically adjusting the hoisting gear in sync with the boom's motion, this feature delivers smooth and stable load handling.





# Liebherr LS-C series



**LS-C 60**  
Max. SWL: 60t  
Outreach: from 16 m to 32 m

**LS-C 80**  
Max. SWL: 80t  
Outreach: from 18 m to 36 m

**LS-C 100**  
Max. SWL: 100t  
Outreach: from 28 m to 43 m

## Compact design for flexible cargo handling

The Liebherr ship crane cylinder luffing series (LS-C series) offers space-efficient lifting solutions that can be tailored to a wide range of vessels. With lifting capacities of up to 100 tonnes, these cranes are ideal for handling break bulk, containers and dry bulk. Engineered to maximise vessel efficiency, LS-C cranes feature a low self-weight and a boom pivot point positioned to minimise the height of installation, enabling optimal use of loading space. Their low centre of gravity enhances vessel stability and increases cargo intake, contributing to safer and more efficient operations. With over 1,000 units in operation worldwide, LS-C cranes demonstrate proven reliability, underpinned by a comprehensive product portfolio.

# The power of modular design

The LS-C series from Liebherr represents compact, modular ship cranes offering maximum flexibility. Thanks to its design and standardised components, the crane can be perfectly adapted to different vessel types and applications – ensuring highest reliability, easy maintenance, and maximum availability.

## Product details

- Reduced self-weight for increased cargo capacity
- Compact design for maximum deck space
- Low construction height for ideal integration into vessel structures
- Cabin beneath the boom leads to an unobstructed view of deck and cargo hold
- Double-acting hydraulic cylinders ensure secure and stable boom movements, especially at minimum outreach

## Engineered for your requirements

- Customisable boom lengths to match vessel layout and cargo profiles
- Optimised reeving arrangements for different lifting capacities and operational scenarios
- Selection of boom head designs for container, general cargo, or bulk handling

## Advantages

- Compact design with low centre of gravity for vessel stability
- Maintenance-friendly with corrosion-resistant chrome and nickel-coated hydraulic cylinders
- High operational efficiency is achieved through the ability to perform all crane movements simultaneously at maximum load



## Operation mode:



### Bulk handling

Bulk materials such as ores, coal and agricultural goods can vary in density and flow behaviour. The LS-C is designed to handle these materials consistently and reliably, ensuring stable operation and reduced wear.



### Break bulk handling

Break bulk is less standardised and uniform, because individual shapes and sizes define general cargo and make it special in handling. Accordingly, flexibility is required in the load lifting equipment.



### Container handling

Container vessels require reliable and fast lifting solutions that minimise laytimes, reduce costs, and increase handling volumes by enabling more containers to be processed in less time.



# Innovation that lifts more than loads

## Litronic

Developed and manufactured in-house by Liebherr, the Litronic system is an innovative, all-in-one solution that integrates cutting-edge technologies for advanced and reliable crane control. Acting as the direct interface between the crane and the operator, Litronic provides real-time operational data through various analysis tools, ensuring optimal performance. Thanks to the intelligent control system, the crane always achieves maximum speed depending on the respective load. The system also ensures a stepless load curve through automatic load moment control, optimising utilisation in every lifting situation. Adjustment occurs automatically – no manual switching is required. Designed for flexibility, Litronic allows for the modular integration of additional functionalities, offering a tailored solution for diverse operational needs.

## Parts Assistant

The Parts Assistant is a smart digital solution that makes service and maintenance for cranes easier, faster, and more reliable. With this intuitive tool, users can identify spare parts simply by taking a photo, scanning a label or QR code, or entering a description. The integrated AI delivers accurate results in seconds, helping crane operators and service teams find exactly what they need without delay. Obtaining the identified parts is just as straightforward. After selecting the crane and the desired service interval, the Parts Assistant automatically generates a customised shopping list with all required components. Users can even define their preferred container sizes for oils and fluids, and the system adjusts the order accordingly. If there's any uncertainty about a part, an expert check can be requested directly within the app. Available on iPhone, Android, and the web, the Parts Assistant ensures that support is always at hand.

## Liebherr Connect

Liebherr Connect uses the latest technology to ensure reliable and safe machine connectivity. It is the requirement for the use of digital Liebherr products and services, such as LiDAT smartApp or LiDAT Web. Customers benefit from stable and secure machine networking, which also enables remote access. The machine records and transmits machine and/or location data. Liebherr uses this data exclusively for customer service and product development. The customer hereby grants their express – revocable – consent at any time for data to be recorded and transferred.

## XpertAssist

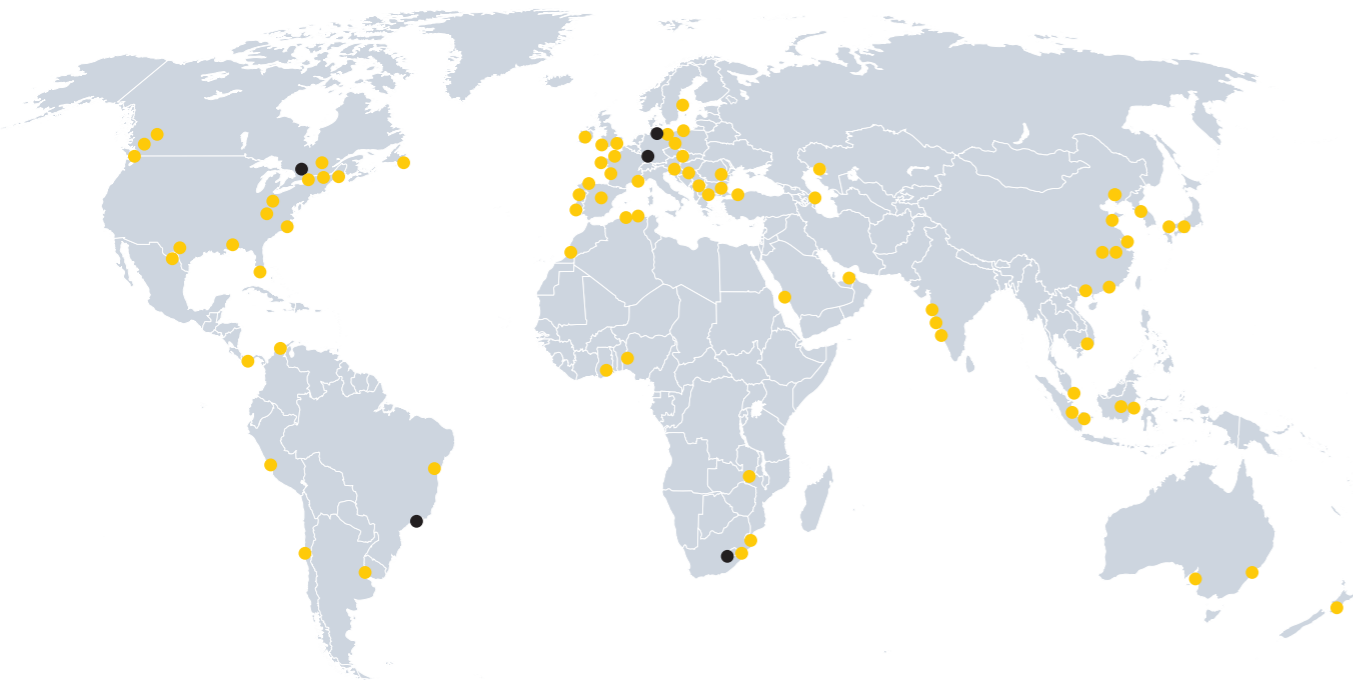
The XpertAssist subscription offers an extension of the common remote maintenance service, including a direct audio/video uplink to Liebherr's special trained customer service, featuring augmented reality elements for enhanced diagnosis and advanced technical advice.



# Worldwide at your service

Our worldwide network of highly qualified and experienced engineers and technical advisors is at your disposal, providing rapid response times and highest levels of expert service. This ensures you keep your machines running at an optimum level delivering exceptional productivity and reliable performance.

- Sales & service network
- Reman centre



Find out more about our customer service.

With decades of experience, Liebherr provides effective support through trained technical advisors and service engineers in 50 subsidiaries worldwide. Our experts offer inspections, customised maintenance programmes and training at our centres or on-site, ensuring efficient and reliable operations. Whether regular maintenance, repairs, remote support or tailored solutions, our competent service maximises availability and reliability of Liebherr maritime products.

**Reman**  
Your used components become our most valuable resource. Through our Reman programme, we transform them into new parts that meet industry standards, covering key components like engines, hydraulics and gearboxes, while offering three remanufacturing levels: repair, general overhaul and exchange components to meet every need and help conserve resources.



**Assembly & commissioning**  
During the assembly and commissioning of all cranes, a team of experienced engineers ensures a safe and efficient setup from the outset. Our process prioritises optimal installation ensuring long-term operational consistency. In addition to training at our facilities, we offer on-site instruction upon request, covering all technical aspects of the crane during and after installation.



**Testing**  
Every single ship crane goes through an extensive testing programme. Prior to delivery all electrical and hydraulic installations undergo detailed examination. After assembly at the shipyard our service engineers conduct final adjustments and prove the crane's functions through to an overload test.



**Training**  
We offer training solutions on demand at our facilities as well as on-site to fulfil your specific training needs. The focus is on creating a sustainable awareness of efficient and safe crane operations. Our philosophy includes training your engineers in all aspects of crane maintenance, repair and operation.



**Technical service & maintenance**  
Our experienced, multi-skilled and factory-trained service engineers are based around the globe. They are available ad hoc or on a contractual basis. By continuously expanding our worldwide sales and service network, we offer the maritime industry the best possible support.



**Maritime technology**  
Complex jobs require efficient solutions. Our digital services support you at various tasks from simulated training over remote support or fault analysis. With our economical, time-saving and sustainable offering, we supply you with suitable solutions for your needs.



**Spare parts**  
We recommend and supply critical and strategic parts throughout the whole service life of your machines to keep them running efficiently. With a selection of necessary spare parts, we fulfil highest quality standards and requirements on cost-effectiveness and availability.

# MyLiebherr

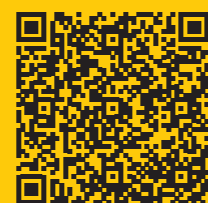
MyLiebherr is your ticket to our online world with a variety of services for your Liebherr machines. You will benefit from comprehensive services and additional features such as:

- Individual management of your machines
- Ease of contact with your Liebherr service partner – round the clock
- Straight forward and secure management of your customer data
- Instant access to the latest documentation and parts list of your machine
- Simple parts ordering from your Liebherr service partner



**Manage machines,  
buy parts or check  
availability on**

[www.myliebherr.com](http://www.myliebherr.com)



### All digital services in one place

Simply register your machines and you will be able to download the latest documentation, to access the spare parts catalogue for your products, and to order your parts and licences directly online.

# Industrial design codes



All ship cranes are designed and certified in accordance with internationally recognised design standards and regulations. These general design regulations ensure compliance with global safety and performance requirements.



**More information:**



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