
Rubber Tyre Gantry Cranes

LIEBHERR

Liebherr Container Cranes Ltd.



Rubber tyre gantry crane

High tensile structural steel

- Reduced weight leading to savings in civil infrastructure costs.

Self powered trolley

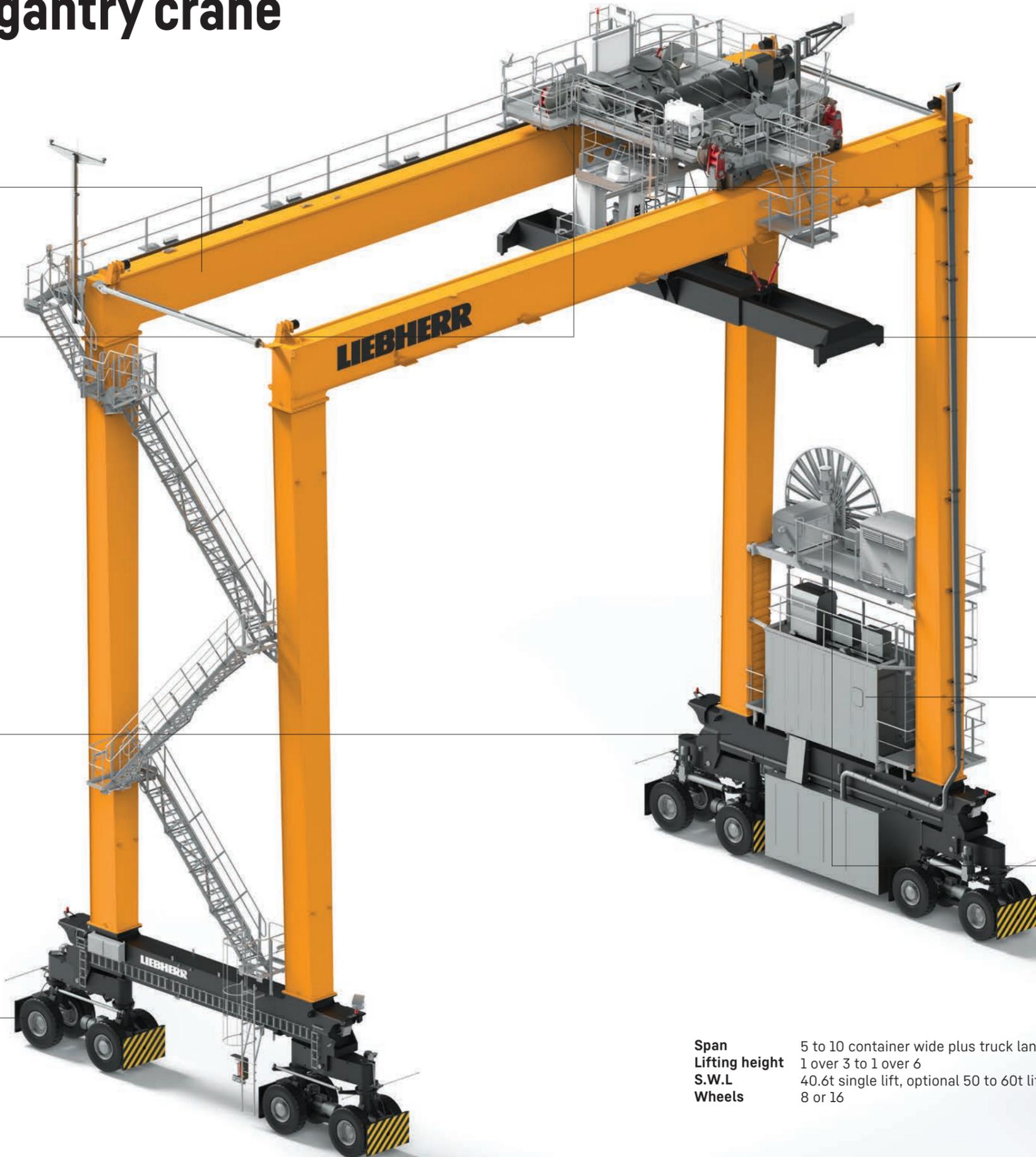
- Ensures precise positioning.

Simultaneous motion

- Simultaneous motion of all drives for increased productivity.

Performance and safety

- Anti collision, gantry align and optional DGPS for improved safety and productivity.



Ergonomic driver's cabin

- Designed with driver comfort and productivity in mind.
- Reduced fatigue.

Unique Liebherr hoist system

- No requirement for a headblock.
- Reduced weight and energy consumption.
- No additional motors or ropes for positioning of spreader leading to reduced maintenance costs.
- Eight rope reeving ensures no sway or skew.
- Precise spreader positioning for increased efficiency.

Modular drive systems

- "Plug-in" modular construction of main drives assists fault finding and results in reduced maintenance costs.

Choice of power options

- Depending on operational requirements, choose from electric (cable reel drum or busbar), diesel electric, dual or variable speed diesel, or hybrid.

Span

Lifting height

S.W.L

Wheels

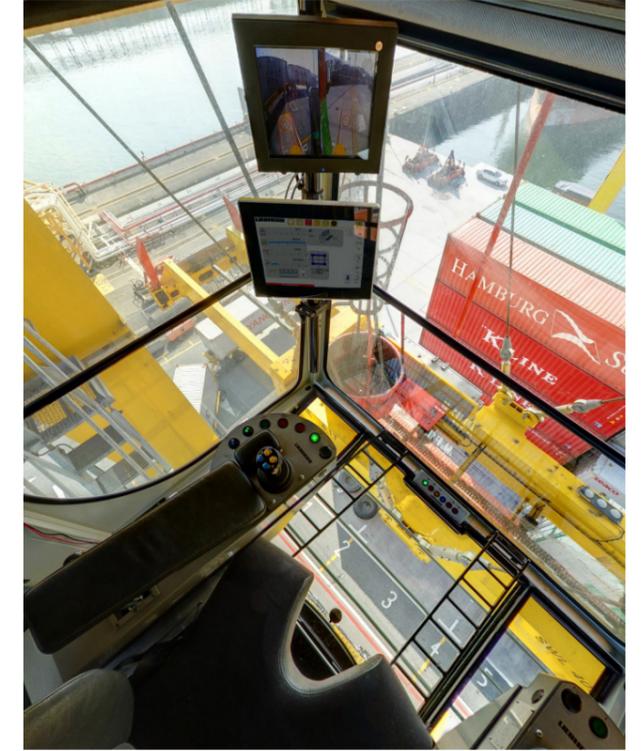
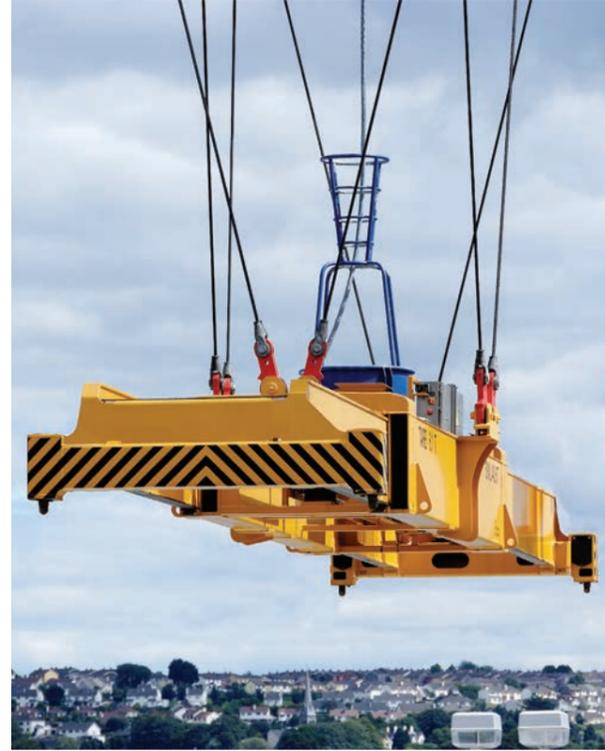
5 to 10 container wide plus truck lane

1 over 3 to 1 over 6

40.6t single lift, optional 50 to 60t lift

8 or 16

Productivity



Liebherr technology powering productivity

Liebherr cranes are engineered with efficiency in mind. Each component has been specifically designed for maximum productivity, reliability, and quality.

The result is a crane delivering excellent productivity, with exceptional lifetime costs and industry leading longevity.

Eight rope reeving system

Sway elimination

The eight rope reeving arrangement for the hoist as located on the trolley ensures load sway is eliminated in hoist, trolley, long travel and skew directions.

Combined with superior fine positioning for stack building and truck handling, allows for productivity increases of between 30 - 40% when compared to alternative designs .

Electric spreader

The all electric spreader connected directly to the hoist ropes without a head block reduces tare weight, providing a more energy efficient cycle. Single or twinlift execution can be provided.

Liebherr drive systems

Liduro drives

Liebherr engineered AC drive control system ensures maximum reliability and ease of service and repair.

The drives feature a crane specific modular design utilising high quality components throughout and a liquid cooling system.

Drive management systems

Liebherr's drive management system delivers simultaneous motion of hoist, trolley and travel, with increased performance and reduced energy consumption. Drive control is optimised.

Tools for productivity

Ergonomic drivers cabin

A spacious ergonomically designed cabin with a high degree of glazing for optimal visibility is provided.

Driver comfort is ensured with the latest in control console and seat technologies coupled with air conditioning and driver aids.

Options

- Twinlift 50 tonnes/60 tonnes
- DGPS automatic gantry steering
- Container position recognition
- Stack profiling
- Interface to terminal operating system
- Contactless anti-collision system
- Remote access to CMS
- Automation
- Remote control

Performance and reliability

Liebherr rubber tyre gantry cranes benefit from extensive in-house expertise in structural, mechanical, electrical and electronic engineering thereby guaranteeing the highest standards in innovative technology, product quality and long term performance as well as reduced operating and lifetime costs.

Direct driven wheels

Liebherr RTGs feature direct driven long travel wheels driven via motor/gearbox coupling units. The RTGs are available in a variety of models with 8 or 16 wheels. 16 Wheel RTGs deliver lower wheel loads with differential axles leading to reduced tyre wear.

Steering mode

Liebherr's gantry align steering is supplied as standard on all RTGs, eliminating crabbing and boosting performance.

Motor selection

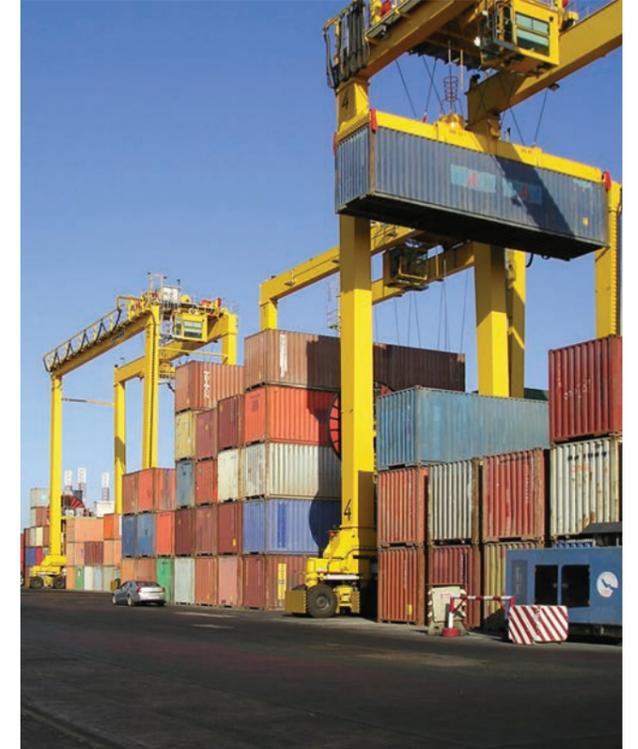
All drives are sized for maximum torque and power requirements guaranteeing extended lifetime. The Liebherr hoist unit delivers exceptional control.

Diesel engine/genset

Fuel efficient engines/ gensets from leading industry suppliers.



Power options



For all operational requirements

A choice of environmentally friendly power solutions, coupled with Liebherr Liduro drive systems delivers power dynamically as required.

Choose from all electric, diesel electric, dual/variable speed diesel or hybrid.

All electric

An all electric RTG from Liebherr delivers many benefits. Reduced maintenance, fuel and lubrication costs results in substantial savings and the elimination of engine noise and emissions. RTGs can be factory fitted for electric operation or an E-RTG solution can be retro fitted. Power regeneration on the RTG to the grid also means that energy costs are further reduced. Options include a cable reeling drum or conductor bar system.

Electric RTGs can be fitted with an auxiliary generator or battery to allow movement between container stacks.

Diesel

Liebherr RTGs may be supplied with a variable or dual speed diesel engine. Controlled by Liebherr Liduro drive systems, the engine delivers optimum power levels as required while reducing the engine speed wherever possible reducing fuel consumption. The automatic stop start functionality also ensures significant savings on fuel bills are achieved when compared with traditional RTG power options.

Hybrid

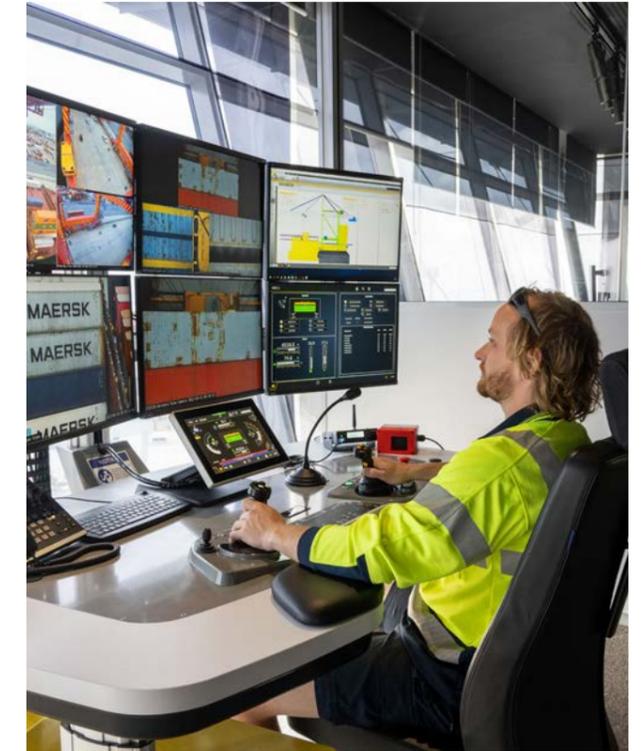
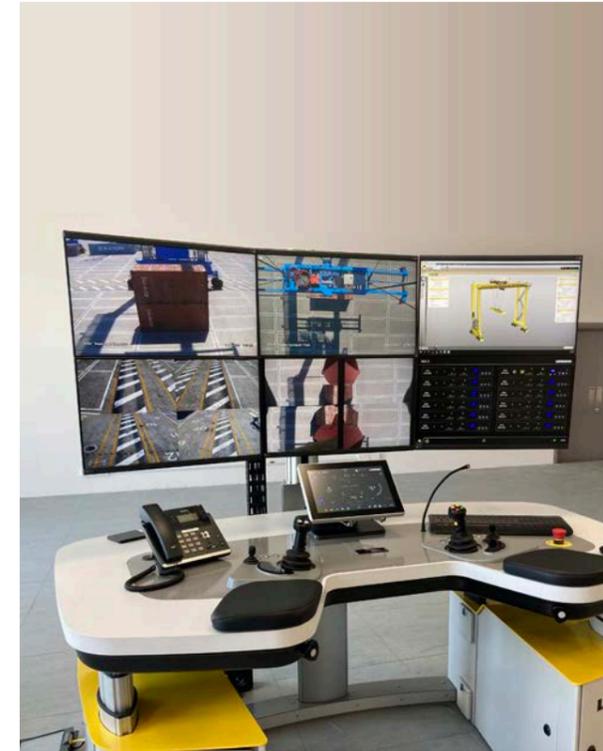
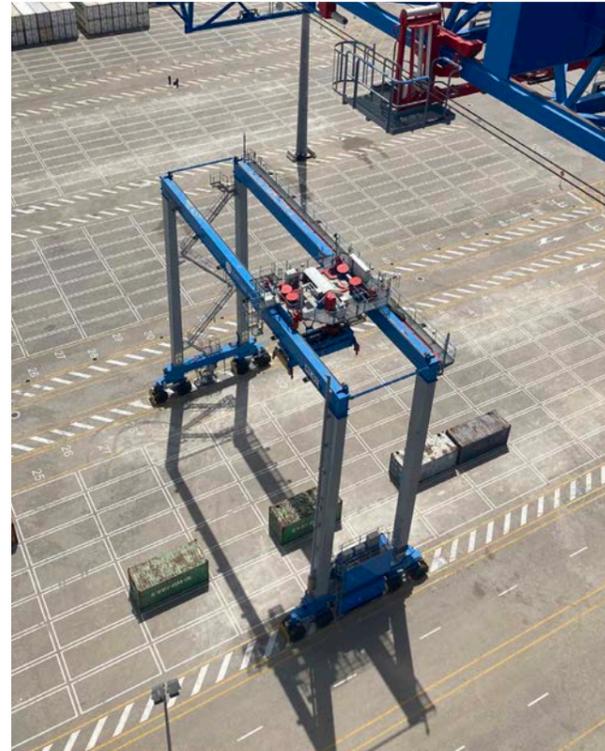
Diesel electric

For those who require the ultimate in operational flexibility. A diesel engine and an electrical solution can be provided. This allows end users to plan for all eventualities and offers further flexibility.

Hybrid

Fitted with an energy storage solution, either battery or capacitor depending on operational requirements, this option offers substantial savings without any loss in productivity. Using stored power from the reserve whenever possible, the reduced dependability on the diesel engine typically delivers fuel savings of up to 50%.

Automation



Productivity

Automation systems from Liebherr increase safety, productivity, predictability and reliability whilst reducing maintenance and environmental impact. Algorithms take care of the most monotonous tasks with human intervention only when needed ensuring a better all-round performance.

Benefits

Environment

Liebherr's automation systems ensure that your equipment is performing optimally. Each movement is measured and precise, resulting in reduced power requirements, emissions and noise.

Safety

The introduction of smart technology reduces the opportunity for human error. Extensive safety protocols are embedded throughout our automation systems.

Efficiency

Automation brings many benefits including increased predictability, allowing improved operational planning with greater visibility. Operating 24 hours a day, the machines don't get tired and can carry out housekeeping of the stack in quieter periods, growing capacity and operational efficiencies.

Remote Operator Station

Whilst the entire cycle can be automated, sometimes manual control is necessary.

The Liebherr Remote Operator Station (ROS) allows the crane operator to work in the comfort of an office environment whilst experiencing the same control as an on-board operator.

Depending on operational requirements, the ROS can be used for full remote control, exception handling or manual pick or place of containers.

Liebherr ROS architecture

The ROS is designed to promote operator comfort and well-being through ergonomic design. It allows for multiple adjustments of desk and screen positions and height to accommodate operators of different sizes. The desk is specifically designed with the operator's needs in mind. The ability to independently adjust the height of the desk and screens reduces strain on the operator, ensuring a comfortable position and preventing fatigue, whilst the adjustable armrests provide further support whilst operating the crane.



Product Range

Liebherr Container Cranes supply ship to shore container cranes, rail mounted gantry cranes and rubber tyre gantry cranes, designed to custom specifications, to discerning customers worldwide. Liebherr cranes have been designed and built in Killarney, Ireland since 1958, with the first container crane being manufactured in 1967. Each crane manufactured today, is built on the strength of this vast experience and innovation.

Exceptional Customer Support

Liebherr is a one-stop shop for customer and product support for the lifetime of the crane. From our base in Ireland, we offer spares and service worldwide. Service is available round the clock, 24/7 and is just a call away at any time of the day or night.

State-of-the-art Technology

Developed in house and utilising the latest technology and considerable experience of the Liebherr group, our cranes offer an extensive suite of productivity and safety technologies from automation to 3D profiling to boost throughput and efficiency.

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 140 companies with over 50,000 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.

