## Liebherr Container Cranes

# **Rubber Tyre Gantry Cranes**



# LIEBHERR



5 to 10 containers wide plus truck lane

#### Lifting heights

1 over 3 to 1 over 6

#### SW

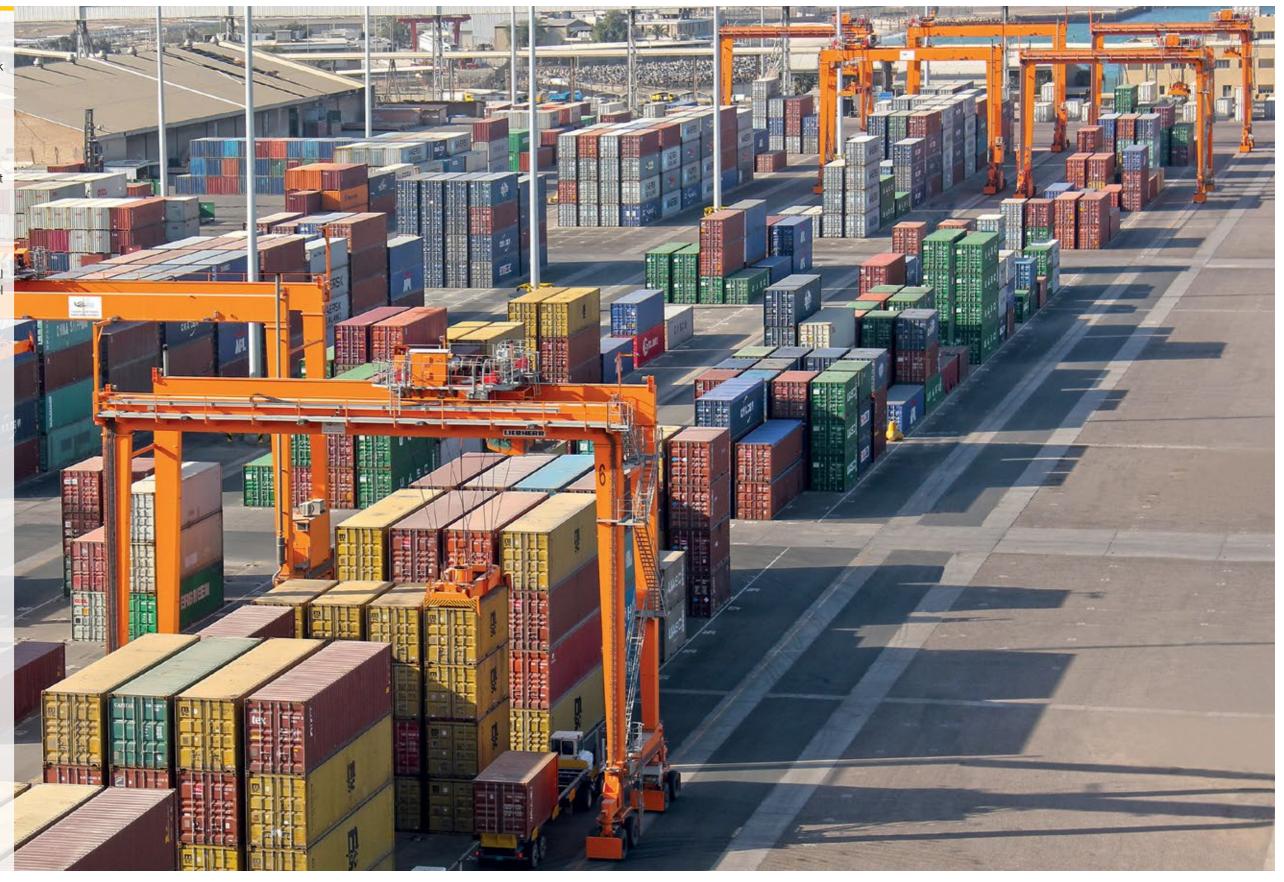
Up to 50 single lift and 60 t twin lift

#### Wheels

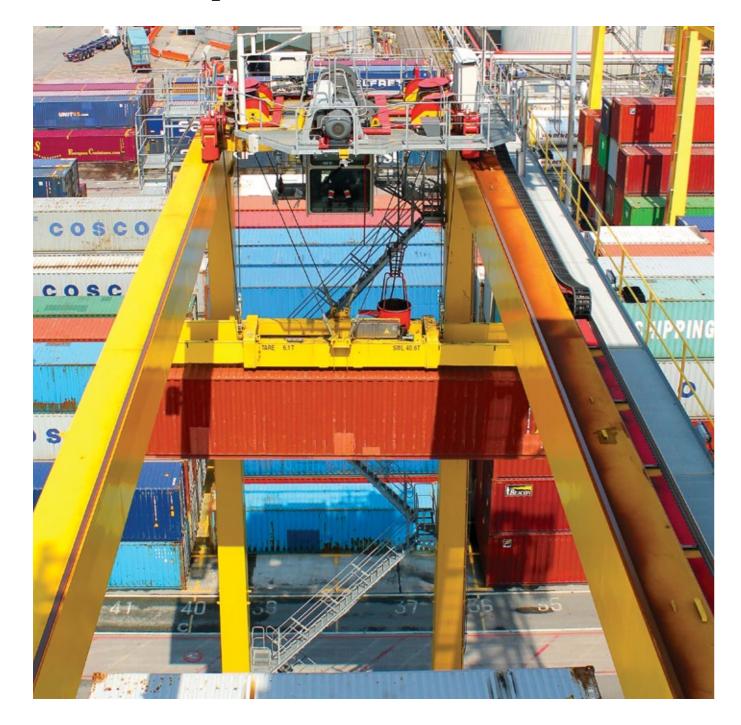
8 or 16 wheel models

#### **Power options**

All electric, diesel electric, dual speed diesel, variable speed diesel hybrid.



## **Productivity**









# 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

A Liebherr engineered 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 perfomance and reduced energy consumption. Drive control is optimised for automation.

# 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/65 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

### **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.

# Rubber tyre gantry crane overview

#### High tensile structural steel

 Reduced weight leading to savings in civil infrastructure costs.

#### Self powered trolley

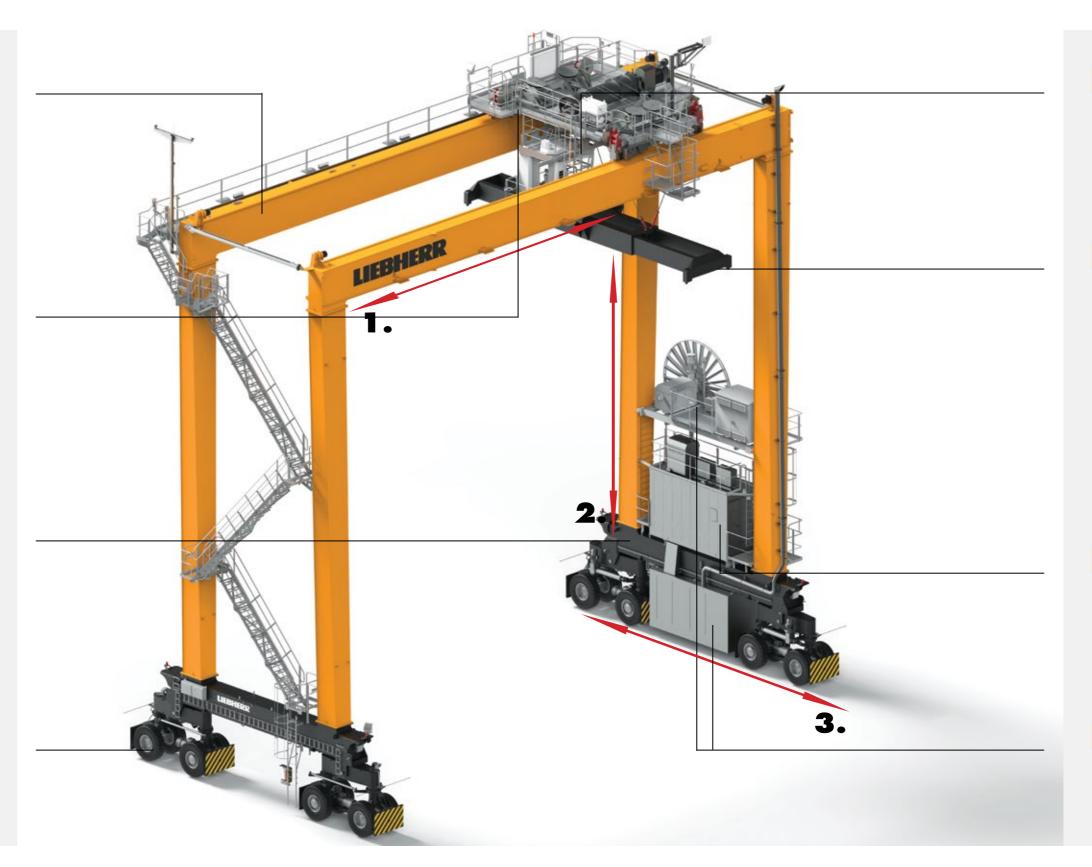
• Ensures precise positioning.

#### Simultaneous motion

• 1,2 & 3. 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, diesel electric, dual or variable speed diesel, or hybrid.

## **Performance & 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

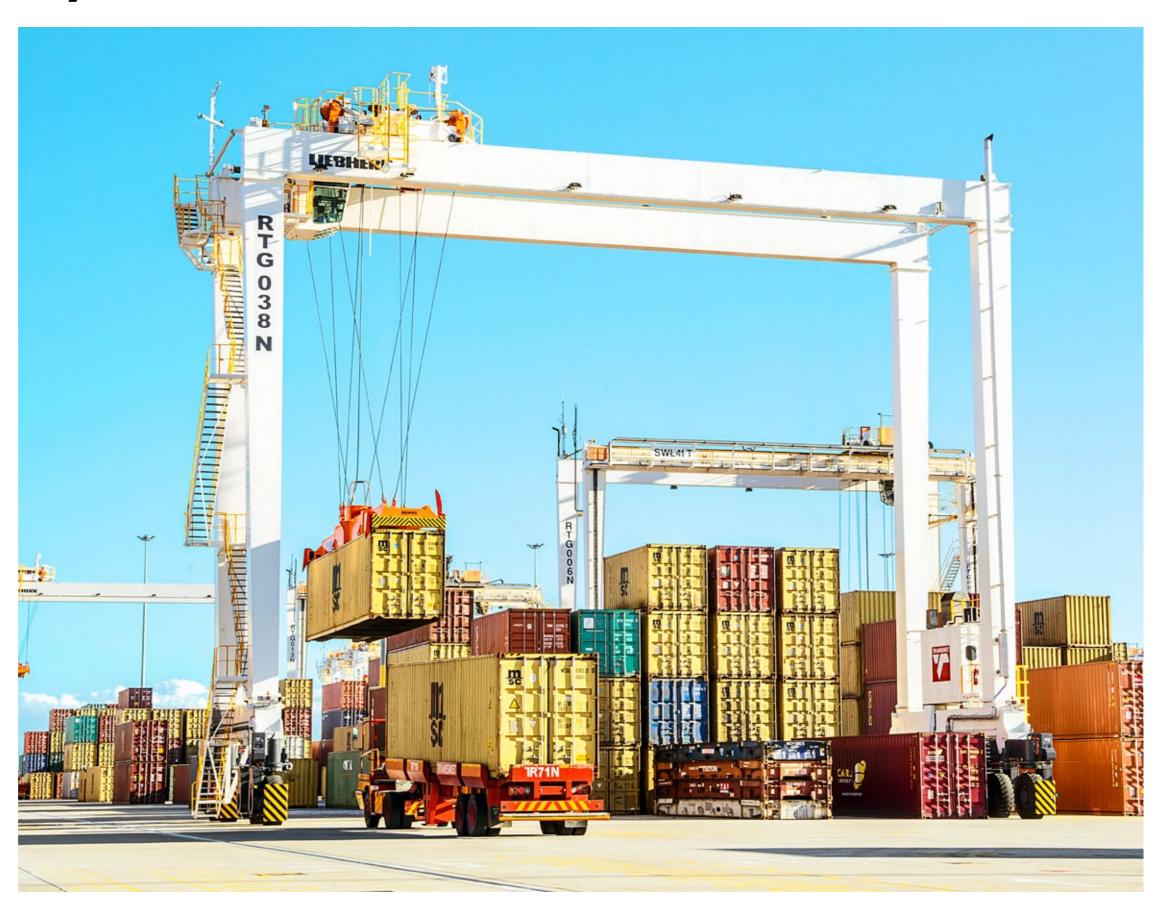
Liebherr's gantry align steering is supplied as standard on all RTGs, eliminating crabbing and boosting performance. Hydraulic steering is available as an option.

#### **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

#### 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 fittled 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 busbar system.

Electric RTGs can be fitted with an auxiliary generator or connection for a portable generator to allow movement between container stacks.

### Diesel

#### **Dual speed diesel**

Liebherr RTGs are supplied with a dual speed diesel engine as standard. Controlled by Liebherr Liduro drive systems, the engine switches to idle mode when full power is not required reducing fuel consumption. Significant savings on fuel bills are achievable when compared with traditional RTG power options.

#### Variable speed diesel

A Liebherr variable speed engine delivers optimum power levels as required while reducing the engine speed wherever possible. Liebherr's drive system ensures precision control over the entire process resulting in further savings in fuel consumption.

### 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, this option offers substantial savings without any loss in productivity. Using stored power from the reserve when ever possible, the reduced dependability on the diesel engine typically delivers fuel savings of up to 40% dependent on operation.

## **Liebherr Container Cranes**





















#### **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 130 companies with over 48,000 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