

Reachstacker

# LRS 545



Similar to illustration,  
may contain special equipment

# LIEBHERR

# Design



Innovative, efficient, progressive: The Liebherr reachstacker redefines the logistics chain of ports and terminals. The machine is the result of cross-sectoral combination of technologies and design. Liebherr's collective maritime experience merges with its own in-house expertise in the fields of engine architecture and system control software to meet all demands of a modern container terminal.

## Technology outside

The LRS 545 is a reachstacker which captivates through its solid and compact design. The wedge shape guarantees smallest turning radii and secures mobility even in areas where space is limited. Additionally, the operator cabin provides an unobstructed vision of the working area. The driver can rely on wrap around glazing and a rear-view camera (optional) for 360-degree visibility, as high stacking requires utmost attention on safety.

### Features and benefits

- Reduced blind-spot for utmost operational safety
- Slim design for high mobility between narrow container rows
- Movable operator cabin for best visibility (optional)
- Supporting plate for increased lifting capacity (optional)

## Technology inside

While functionally designed on the outside, the innovative technology inside ensures maximised performance and reliability. The engine configuration of the LRS 545 also suits the environment. To fulfil stage IV and tier 4 final legislative requirements, Liebherr relies entirely on an innovative SCR (selective catalytic reduction) system. The in-house developed system reduces exhaust emissions effectively without a sacrifice in performance.

### Features and benefits

- Remote access for maintenance planning and troubleshooting
- Individual wheel drive for reduced tyre wear
- Pactronic® hybrid drive system for more power (optional)
- Two independent brake systems for increased safety
- Hydrostatic drive for stepless speed control

# Performance

The LRS 545 is designed for highly responsive operation to allow high performance in a relaxed manner. The machine is equipped with a strong but economical 4-cylinder 230kW diesel engine that provides sufficient power for the 69 tonne machine. The in-house developed motor is in compliance with the latest EU Stage IV / EPA Tier 4 final emission standards.

## Hybrid Drive

The design of the LRS 545 is based on the latest technology in order to maximise performance and eco-friendliness. Therefore Liebherr Maritime Cranes unique Pacronic is available for the LRS 545. The well-proven hybrid drive system allows for an additional 110kW. The maintenance free power booster works emission free.

## Hydrostatic Drive

The link between enhanced driving pleasure and impressive performance is characterised by Liebherr's unique drive mechanism. The hydrostatic drive ensures stepless speed control for highly sensitive and smooth operation without gear changes. In addition, engine rpm is reduced resulting in optimised fuel consumption. Furthermore each front wheel of the machine is driven separately which significantly improves the agility and reduces wear and tear of each tyre.

## Benchmarks

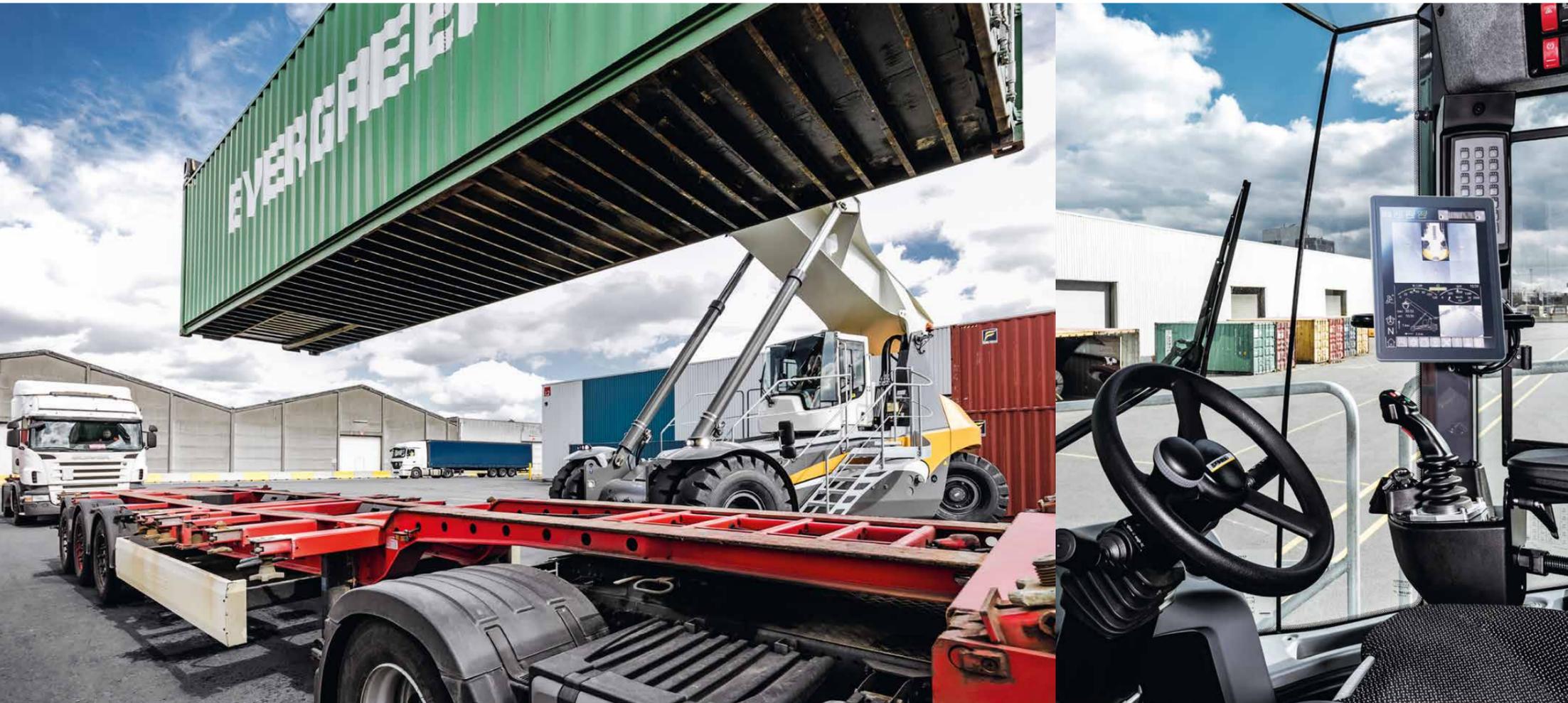
The machine stacks five containers high in the first row and four standard containers high in the third row. Moreover, it is capable of handling 45 tonnes in the first row and 21 tonnes in the third row, by use of the optional supporting plate.

### Features and benefits

- 4-cylinder 230kW diesel engine
- Eco-friendly drive concept for additional 110kW
- Maximum speed 25 km/h (forward and backward)



# Driveability



## Visibility and Comfort

The distinctive feature of the newly designed Liebherr cabin is a large glass panel that unites the front window with the side windows. The exclusion of the A-pillar combined with the curved window design allows an outstanding panoramic view for the driver. Optimally placed wide angle mirrors and a rear view camera ensure a complete view behind the machine. This guarantees maximum safety of the workers, the machine and the load, while increasing productivity at the same time. Versatile ergonomic adjustments of the driver seat ensure high comfort and thereby reduce fatigue.

## Handling

Pedals are installed for acceleration and braking of the LRS 545. The machine is operated by an ergonomic adjustable steering wheel while the spreader is handled by a joystick on the right hand side. The touchscreen human machine interface (HMI) is within easy reach and does not, like all operating and signalling elements, disturb the outside view. The operating and control instruments are well laid out and are user-friendly. All operation-relevant data can be recorded quickly. The adequate level of operating comfort allows the operator to work particularly efficiently and safe.

## Topview Camera System

The innovative topview system offers the driver an excellent rear and side view from a bird's eye perspective, without any blind spots. Due to the logical composition of three camera images, the complete rear area is covered by the system at an angle of 270°. The topview system thus meets the highest demands for secure handling with the Liebherr reachstacker.

### Features and benefits

- Up to 5.9m<sup>2</sup> of tinted anti-glare toughened safety glass
- 16 highly economical LED lights for uniform illumination
- Ergonomically designed operator cabin to prevent fatigue
- Liebherr rear-view camera (optional) – visualisation on the touchscreen display
- Liebherr topview camera system (optional) – rear view from a bird's eye perspective, without any blind spots

# 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 applications.

## 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 41,000 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](http://www.liebherr.com)