Liebherr
Container Cranes

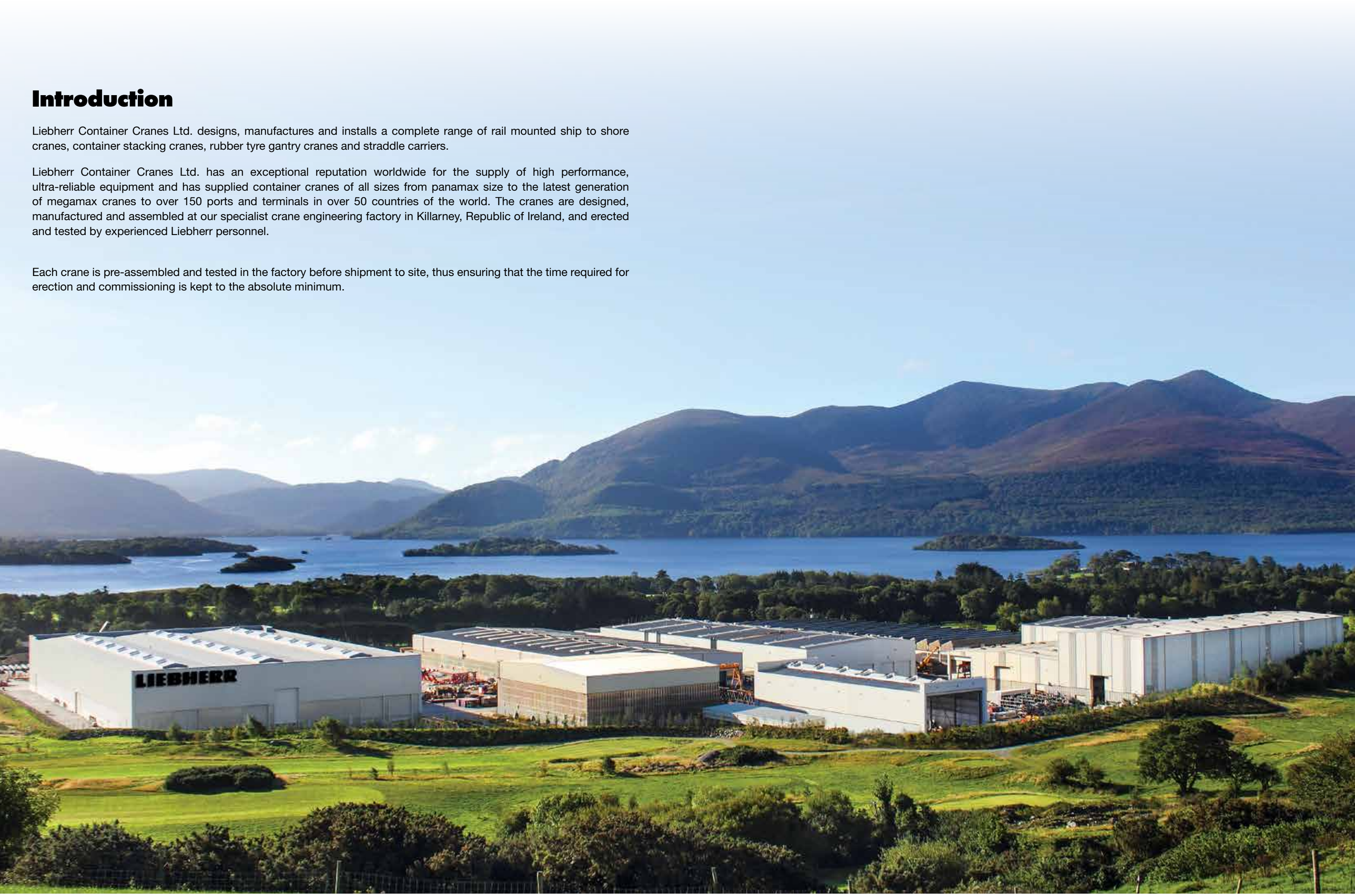
LIEBHERR

Introduction

Liebherr Container Cranes Ltd. designs, manufactures and installs a complete range of rail mounted ship to shore cranes, container stacking cranes, rubber tyre gantry cranes and straddle carriers.

Liebherr Container Cranes Ltd. has an exceptional reputation worldwide for the supply of high performance, ultra-reliable equipment and has supplied container cranes of all sizes from panamax size to the latest generation of megamax cranes to over 150 ports and terminals in over 50 countries of the world. The cranes are designed, manufactured and assembled at our specialist crane engineering factory in Killarney, Republic of Ireland, and erected and tested by experienced Liebherr personnel.

Each crane is pre-assembled and tested in the factory before shipment to site, thus ensuring that the time required for erection and commissioning is kept to the absolute minimum.



Liebherr Container Cranes Ltd., Killarney, Kerry, Ireland

Quality Container Cranes from Liebherr

Port of Tauranga, New Zealand

In the modern port environment, reliability and productivity are the key parameters.

Container cranes require high availability in order to deliver the productivity rates demanded by shipping lines and port operators. This can only be achieved by purchasing the right equipment. Container cranes from Liebherr work on all five continents and use state-of-the-art technology to meet the rigorous demands of the port industry, time and time again. The high level of repeat business enjoyed by Liebherr Container Cranes Ltd. stands as a testament to this ability.

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1.1 Ship to Shore Cranes - Panamax

Panamax ship to shore cranes, Racine Terminal, Port of Montreal, Canada

1.2 Ship to Shore Cranes - Post Panamax

Post panamax ship to shore cranes, Koper, Slovenia

1.3 Ship to Shore Cranes - Super Post Panamax

Super post panamax and megamax ship to shore cranes, Port of Khorfakkan, U.A.E.

1.4 Ship to Shore Cranes - Megamax

Megamax ship to shore cranes, King Abdullah Port, Saudi Arabia

1.5 Innovative Design

With over 50 years of experience in crane design and manufacturing, Liebherr's team of experienced engineers and designers provide tailor made solutions, specific to individual requirements.

Main: Double boom cranes, Aliaga, Turkey

Inset: Hatch cover platforms, Durban, South Africa

1.6 State-of-the-Art Equipment

Liebherr utilises the latest technology, ensuring that all Liebherr cranes are built to be future proof. With Liebherr's open architecture and software, expensive upgrades are avoided. Technology such as automation and semi automation, positioning systems, profiling, OCR and collision avoidance systems, ensure that Liebherr cranes achieve industry leading productivity levels.

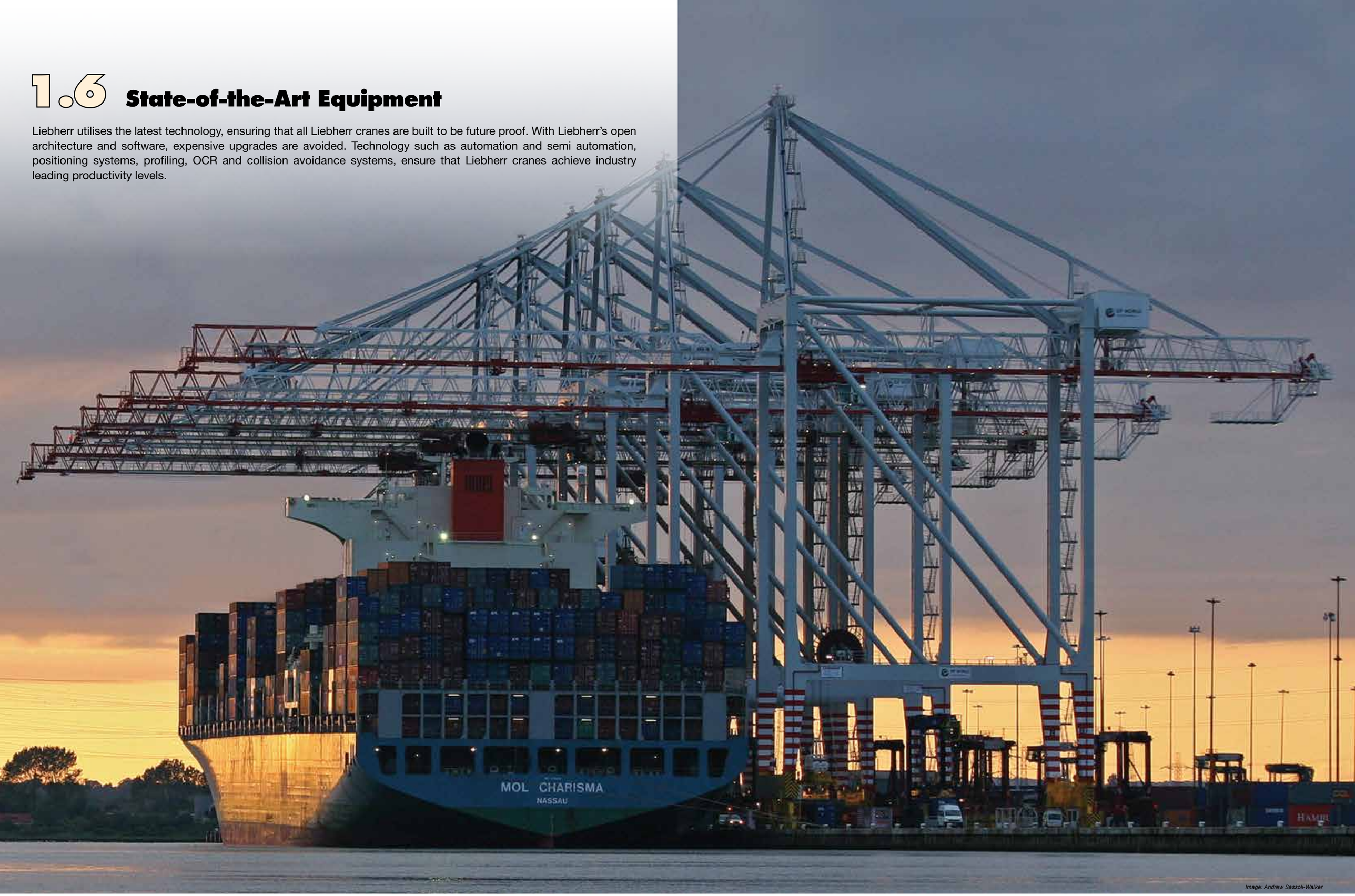


Image: Andrew Sassoli-Walker

Ship to shore cranes at DP World Southampton, U.K.

2 Wide Span Ship to Shore Stacking Cranes

This multi purpose crane is specifically engineered to offer the ultimate in flexibility. The Liebherr wide span ship to shore stacking crane optimises port performance where space is at a premium.

Wide span ship to shore stacking cranes, Gavle Container Terminal, Sweden

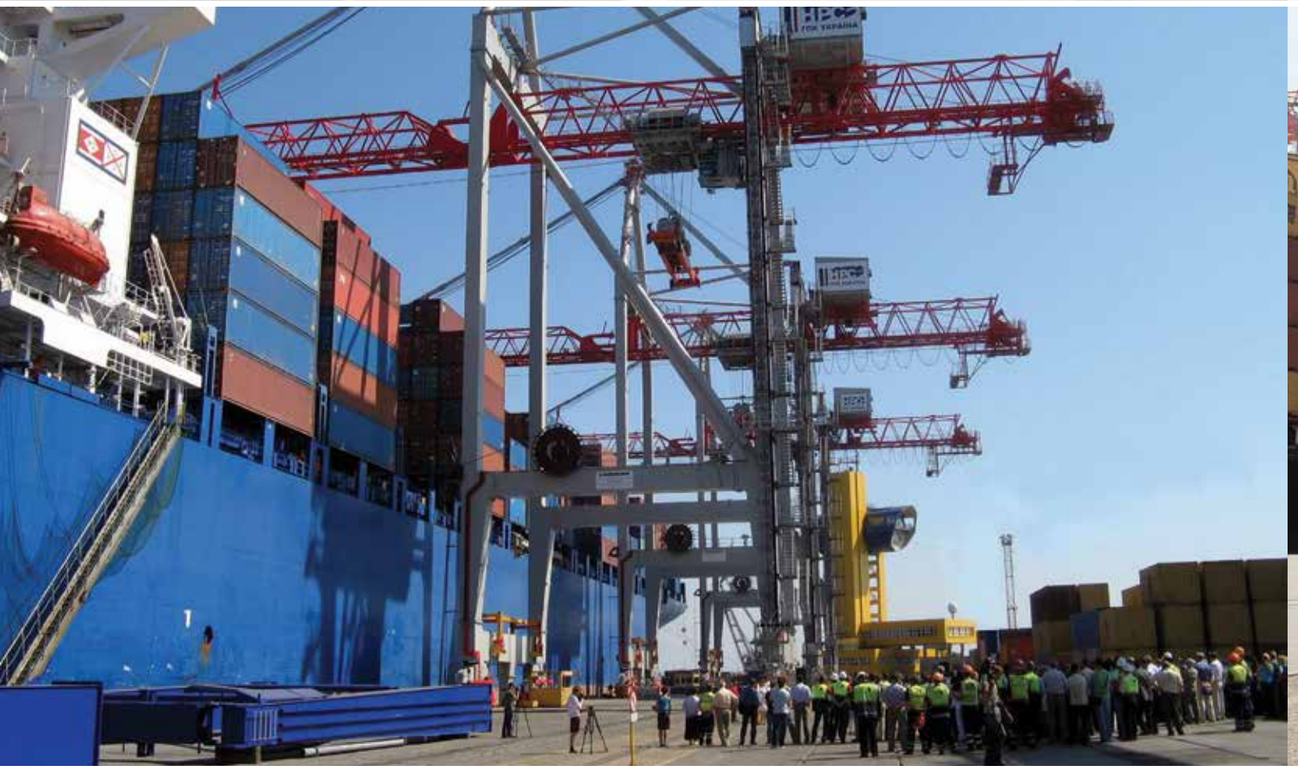
6 Performance and Reliability

With cranes supplied to over 150 ports and terminals in over 50 countries worldwide, Liebherr availability figures are the benchmark for the industry. Liebherr container cranes are designed to the highest quality standards using cutting-edge technology, which meets the stringent demands of the modern port environment. In-house expertise in structural, mechanical, electrical and electronic engineering guarantees superior standards in innovative technology, product quality and long term performance, as well as reduced life time costs.

A busy Liebherr container crane, Paranagua Container Terminal, Brazil

7 Partnership Throughout

From the beginning of every contract Liebherr Container Cranes Ltd. is an equal and active partner. For more than 50 years, Liebherr has specialised in crane equipment design, installation/commissioning, service and training of port personnel. Your success is Liebherr's goal.



Top: True partners from the earliest planning stages

Bottom: Handover, real partnership starts now

Top: Customers inspecting their cranes at the Liebherr factory

Bottom: Service and inspection visit

8 Advanced Manufacturing Technologies

Liebherr's team of experienced personnel is unrivalled in the container handling industry, with over 50 years of experience. The Irish based manufacturing facility utilises the most modern manufacturing equipment to produce their cranes. This level of expertise and technology is evident in the quality of every container crane that Liebherr has supplied.

Colgar milling and boring hall

Top: Gas plasma cutting

Bottom: Turbine shot blasting

Top: Portal section fabrication line

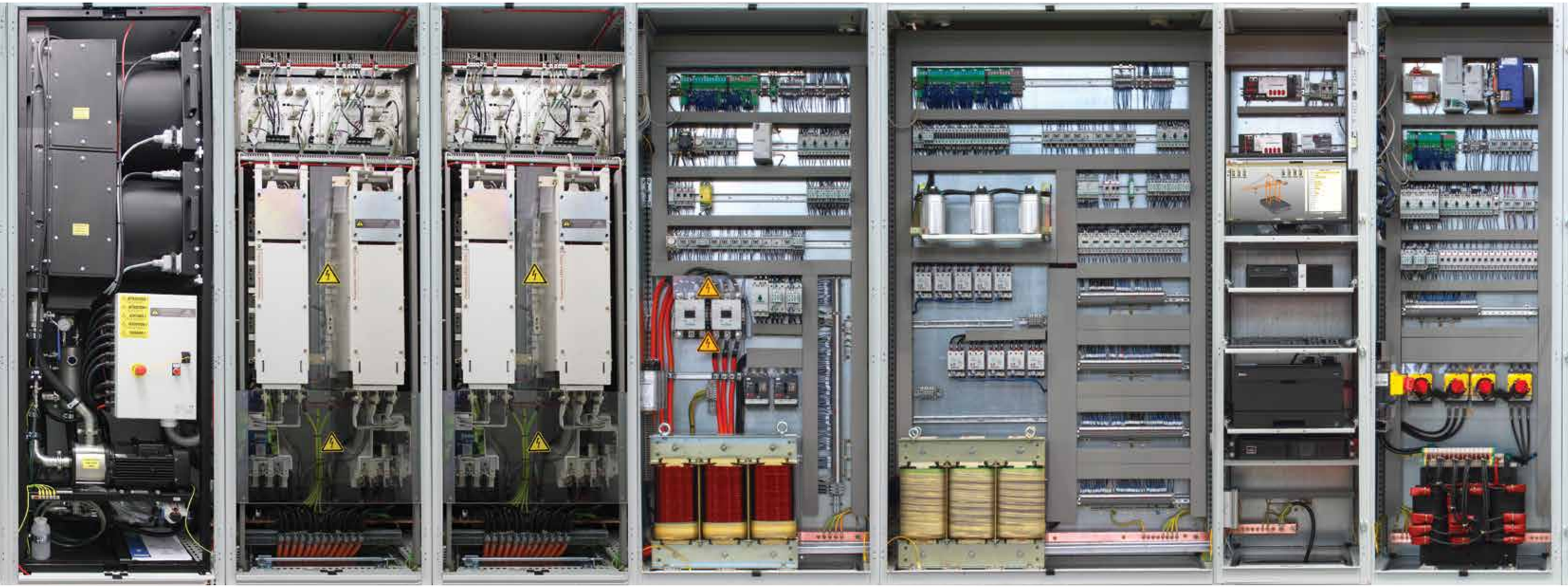
Bottom: Main beam and boom fabrication

Top: Robotic / semi-automatic shot blasting

Bottom: Robotic welding

8.1 Technology in Detail

The structural and mechanical design of a Liebherr container crane has evolved over time into a perfectly adapted, highly productive, reliable machine. The incorporation of technological features such as port crane specific Liebherr Liduro drive systems, crane management and reporting software and a myriad of technological aids are essential steps in maintaining high productivity in an increasingly demanding port environment.



Top: Liebherr RTG switchgear

Bottom: Liebherr Liduro drive systems and switchgear

Top: Liebherr engineer preparing Liebherr drive systems

8.2 Pre-Assembly and Quality Control

All the main structural components are pre-assembled before each crane leaves the factory, to ensure a professional and speedy installation. A specialised team of quality control personnel confirm adherence to strict certified quality procedures, ensuring that each and every Liebherr crane is manufactured to the highest industry standards.

ZERTIFIKAT

CERTIFICATE

DVS ZERT

hereby certifies that the company
bescheinigt hiermit, dass das Unternehmen

Liebherr Container Cranes Ltd.

Liebherr Container Cranes Ltd.
Killarney, Co. Kerry
Republik Irland

has furnished proof to fulfil the quality requirements
for welding according to
den Nachweis erbracht hat, die schweißtechnischen Qualitätsanforderungen nach

EN ISO 3834-2:2005

in the extent mentioned on reverse side.
in dem auf der Rückseite angegebenen Umfang zu erfüllen.

Registration No./Registrier-Nr.: IE-2003-006 Certified since:/Zertifiziert seit: 2003

Lead Assessor/Ltd. Betriebsprüfer: Ing. (grad.) W. Pugs

Certification Body/Zertifizierungsstelle: Dipl.-Ing. Lehmann

DAP-ZE-3277.00

DVS ZERT e.V., Aachener Straße 172, D-40223 Düsseldorf, www.dvs-zert.de

Gesellschaft für Schweißtechnik International mbH
Schweißtechnische Lehr- und Versuchsanstalt SLV München

GSI SLV München

Certificate
for execution and constructor's qualification of steel structures
acc. to DIN 18800-7:2008-11
Class E

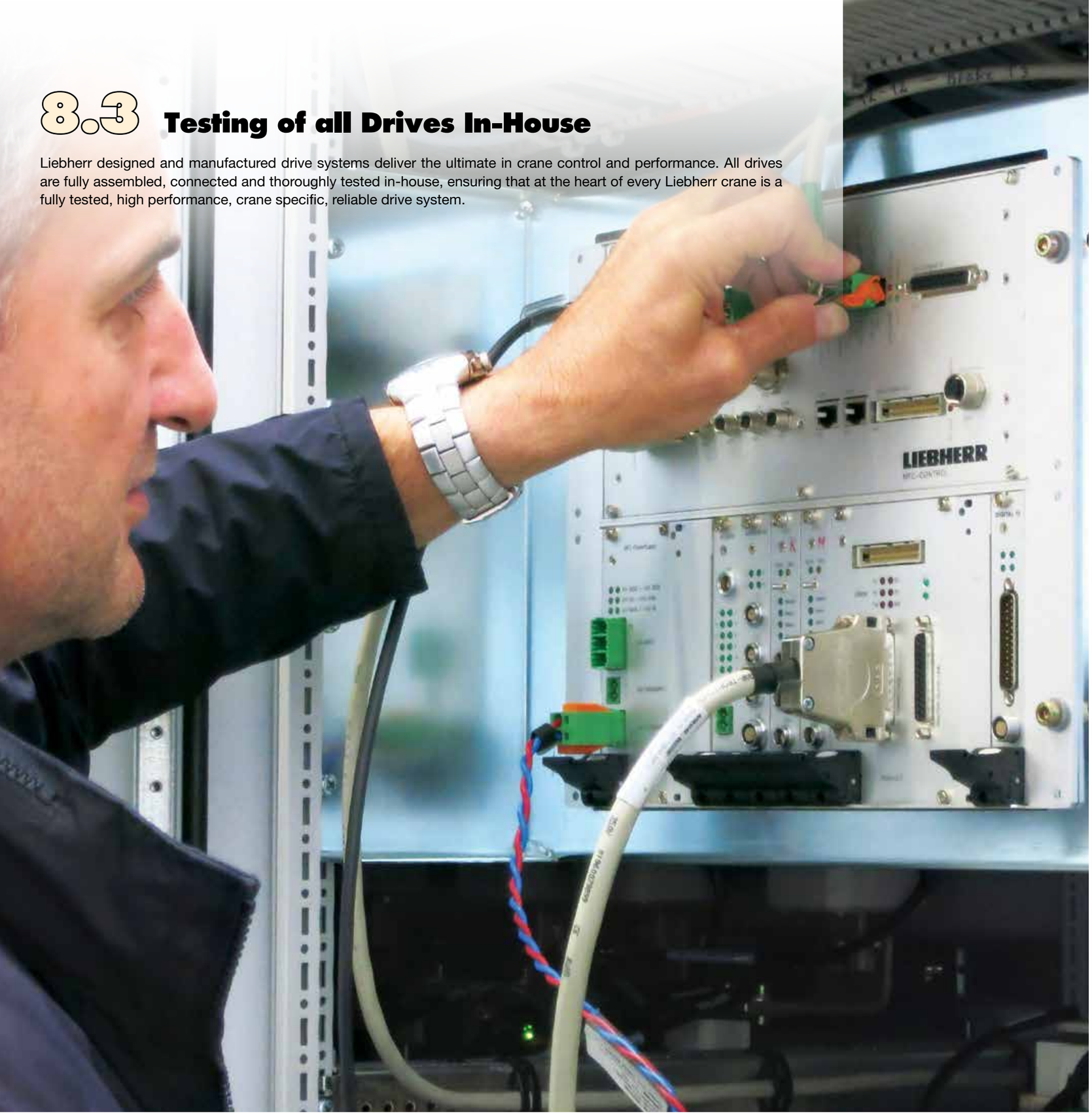
The firm	Liebherr Container Cranes Ltd.
in the plant	Killarney, Co. Kerry, Republic of Ireland
is hereby certificted that it is qualified to carry out welding works in the following fields of application:	
DIN-Standards/Regulations	DIN 18800-7 DIN EN 13001-3-1 - cranes
Welding Processes	Manual metal-arc welding with covered electrode (111) fully mechanized and partially mechanized metal-arc active gas welding (135) Tubular cored metal arc welding with active gas shield (136) TIG-welding (141) Submerged arc welding (12)
Base Materials	S235, S275 and S355 acc. to DIN EN 10025
Extensions	fully mechanized metal-arc active gas welding and submerged arc welding
Welding Supervisor(s) (Name, christian name, date of birth, profession)	Mr. Fitzpatrick, John Paul — born June 2nd 1979 International Welding Engineer Mr. Cronin, Garvin — born June 3rd 1984 International Welding Engineer Mr. Sullivan, Kevin — born Aug. 3rd 1961 Welding and Testing Coordinator The Welding Supervisors are supported by Mr. Williams, Enda — born April 26th 1962 Quality Manager
Remarks	please turn over
Certificate No.	15/701/0616
issued on	November 5th 2015
General requirements p.t.o.	Sighturesi:

Main Photo: Gantry travels in final assembly
Inset: Welding certificates

Top: Phased array ultrasonic testing
Middle: Magnetic particle inspection
Bottom: Surface paint depth check

8.3 Testing of all Drives In-House

Liebherr designed and manufactured drive systems deliver the ultimate in crane control and performance. All drives are fully assembled, connected and thoroughly tested in-house, ensuring that at the heart of every Liebherr crane is a fully tested, high performance, crane specific, reliable drive system.



All Liebherr drives are tested in house for up to a week before shipping

8.4 Final Assembly

Before a crane is dispatched, all electrical and machinery houses are assembled and electrically connected prior to testing. Container crane and RTG gantry bogies are assembled. Main beams and booms are equipped with cabling, lights etc. Trolleys and cabins are assembled, wired and tested, ready for shipping. Extensive testing in final assembly ensures a fast and efficient installation.

An overview of final assembly

9 Transport and Shipping

Liebherr has extensive experience in shipping of cranes to all parts of the world. All cranes are exported through the nearby Port of Fenit. In order to speed up the on-site installation, crane sections are assembled and tested to the maximum extent possible, prior to loading on to the delivery vessel.

Loading of machinery trolley prior to shipping

Delivery to Fenit Port and stowage on board, prior to transport to site for commissioning

9.1 Fast and Efficient Installation

Installation planning is carried out by Liebherr engineers, in close co-operation with the client. All crane installations are undertaken by, and under the supervision of trained Liebherr personnel. The crane installations department is staffed by skilled and experienced engineers who have been selected on the basis of outstanding ability demonstrated in their various skills. Their wide international experience under a variety of working and climatic conditions has contributed greatly to Liebherr's worldwide success.

On-site installation and commissioning of a Liebherr ship to shore crane

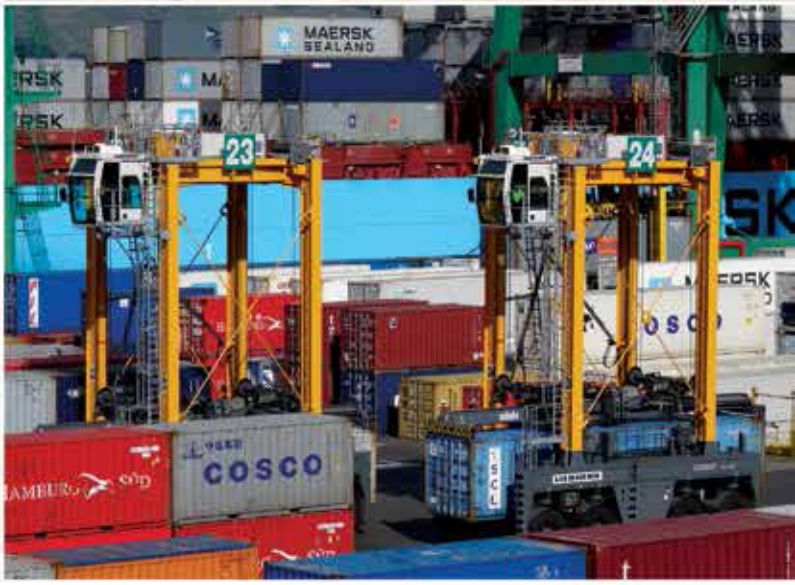
Assembly on-site

9.2 Experience to Suit Every Project

With experience in the design and delivery of cranes since 1958, Liebherr Container Cranes Ltd. is a partner that will bring this extensive knowledge to each new project undertaken.

Construction of ship to shore cranes at a nearby site and barging to final port is an alternative means of installation

Loading / unloading and moving to the rails



seijiro yazawa iwai

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