

# Products and Services of the **Liebherr Group**



# LIEBHERR



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**Liebherr Group**



# The Liebherr Group

Hans Liebherr established the company that bears his name in 1949. Since then it has grown into a group of more than 130 companies on all continents, employing approximately 42,000 people at the latest count. In the business year 2015 Liebherr generated the highest sales revenue in the history of the company with a total exceeding € 9.2 billion.

Today, Liebherr is not only among the world's largest manufacturers of construction machinery, but is an acknowledged supplier of technically advanced, user-oriented products and services in many other fields of activity as well. The Group's holding company Liebherr-International AG, which is based in Bulle, Switzerland, is wholly owned by members of the

Liebherr family. The Liebherr Group's corporate culture has been determined from its earliest days by its family ownership. For more than 65 years, Liebherr has demonstrated what this means in terms of stability and trustworthiness, and has striven for a close long-term relationship with its customers and business associates. Liebherr shapes technological progress and aims to retain its position at the leading edge of future technology. All its activities have top quality as their central element. This principle is upheld by all the Group's employees in their day-to-day work. Liebherr's products are the outcome of its passion and dedication: tailor-made solutions that take the customer's needs and wishes as their starting point.

# Hydraulic Excavators

Since the start of the 1950s, hydraulic excavators have been an important part of the Liebherr product range. Today the range of machines covers operating weights between 10 t and 100 t. They are constructed in Colmar (France) and Kirchdorf an der Iller (Germany).

## Efficient and Modern

These high performing, reliable crawler and wheeled excavators come in a size range to suit a whole host of applications. All machines set standards for efficiency and cost effectiveness with their modern technology. They impress with their high fuel efficiency, are environmentally-friendly, easy to service and operate, and are distinguished by their high availability and long service life.

With the Litronic equipment the hydraulic excavators from Liebherr have a useful combination of intelligent electronics and functional hydraulics. All important systems of the excavator are controlled, regulated, coordinated and monitored centrally.

## Diverse Application Possibilities

Liebherr hydraulic excavators are used in civil engineering, road construction and tunnelling, in water management, in horticulture and landscaping, in demolition, as well as in the mining industry. Diverse equipment options offer customised solutions for unusual or special tasks.

Various attachments, including backhoe buckets, bottom-dump buckets, grabs or quick-change systems, are developed and manufactured by Liebherr.



The A 918 Compact Litronic in use for earthmoving work in Kressbronn at Lake Constance (Germany)



The A 922 Rail Litronic in use for load lifting in the area of Ulm central train station (Germany)



The Liebherr crawler excavator R 950 Tunnel in use in Stuttgart (Germany)



The A 914 Compact Litronic in use for road construction work in Reims (France)



The crawler excavator R 956 in use in a quarry in Metzeral (France)



The crawler excavator R 960 used for the demolition of a silo in Frévent (France)



The A 924 Litronic on a motorway construction site in Dornstadt (Germany)

# Wheel Loaders

Liebherr-Werk Bischofshofen GmbH develops, produces and sells wheel loaders of the Liebherr Group.

The plant in the state of Salzburg has grown steadily over the decades thanks to sustainable innovations, creative solutions and high quality standards. With these strengths, and a well-balanced product portfolio, the company at Bischofshofen is on track for a successful future.

## **Comprehensive Product Range in four Different Wheel Loader Categories**

The product range is constantly being expanded and currently includes 15 different models in four different product groups:

Compact loaders, Stereoloaders®, medium-sized wheel loaders and large wheel loaders, which convince with their innovative drive concepts. The modern design of the Liebherr wheel loader is user-friendly and easy to maintain down to the smallest detail.

## **Environmentally Conscious and Modern**

The Liebherr wheel loaders make a reliable contribution to the economic success: With maximum handling capacity the operating costs are lowered and, at the same time, the environment is protected thanks to the fuel-efficient drive concept.



The L 586 XPower® in quarry operations





The L 566 XPower® used for the transportation of tree trunks



Compact loader in use on a road construction site



The L 526 for paper recycling



The Liebherr wheel loader L 538 in rehandling

# Crawler Tractors and Loaders

For over 40 years the crawler tractors and crawler loaders have been a fixed component of the Liebherr construction machinery programme. The concept of the hydrostatic travel drive was pursued right from the start. Some of the advantages of this technology include high efficiency, as well as comfortable and safe operation.

## **Environmentally Conscious and Modern**

The state-of-the-art, low-emission Liebherr diesel engines are extremely robust, time-saving in maintenance and are distinguished by low fuel consumption.

Power, agility and efficiency are the trademarks of Liebherr crawlers. Whether for material handling, heavy pushing or precision grading – high-performance and efficient machines are available for every application.

Based on the tried-and-tested basic crawler models, Liebherr also manufactures special machines for the oil and gas industry in different sizes.

## **High Performance and Innovative Technology**

These are the trademarks of the Liebherr pipe layers. The high load capacities, the hydrostatic travel drive, as well as the precise working hydraulics, enable maximum productivity, also in tough operating conditions. Whether it is pipe laying on a slope or on extremely soft ground - Liebherr pipe layers impress in every application thanks to their exceptional performance.



The crawler tractor PR 776 in mining in Australia



The crawler loader LR 636 in use at a landfill site in Greece



The Liebherr pipe layer in use in Austria

# Telescopic Handlers

With their outstanding lifting capacities and excellent manoeuvrability, the Liebherr telescopic handlers are suitable both for demanding applications in construction, and for diverse industrial activities.

## High-Performance and Solid Design

The tried-and-tested hydrostatic travel drive with stepless acceleration and the good manoeuvrability guarantee fast work processes, even when space is restricted. The universal and solid construction machine is designed for optimum performance in a variety of applications. High load capacities, intuitive operation and high-performance components allow the driver to complete his work quickly and safely.

## Meets Daily Demands

Robust and reliable: That's how the telescopic handlers from Liebherr are built. Sophisticated technology and high material and manufacturing quality guarantee a high level of availability. A high degree of utilisation and value preservation are guaranteed over the long term.



The telescopic handler TL 432-7 in the sawmill



The telescopic handler TL 432-7 for warehouse logistics



# Material Handling Technology

For over 50 years Liebherr has been successfully designing and manufacturing machines for material handling. With the various machine types of the new Handler generation, Liebherr offers efficient machines for handling large volumes for numerous applications such as scrap handling, recycling and waste management, wood handling and also for handling bulk and general cargo.

## Customised Applications

To meet every intended purpose, Liebherr boasts a comprehensive portfolio of undercarriage variants, equipment combinations, attachments and quick-change systems, as well as a wide selection of equipment options. Every machine can be individually configured depending on the deployment and requirements. The benefit for the company is an efficient machine tailored to the respective application.

## In-house Production Expertise

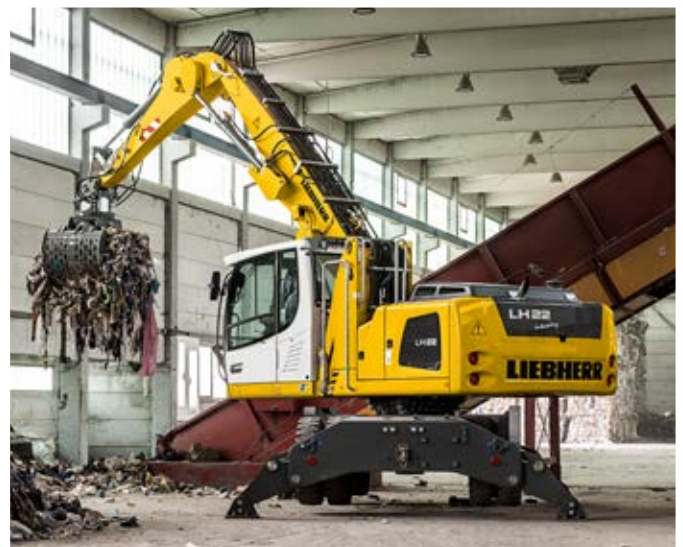
All key components such as diesel engines, electronic components, slew rings, swivelling drives and hydraulic cylinders, as well as all attachments, be it multi-tine grabs, clamshells, wood grabs or sorter grabs, are developed and manufactured by Liebherr.



The LH 40 M Litronic loading sand in the port of Utrecht (Netherlands)



The LH 35 M Timber Litronic handling logs in Wolfegg (Germany)



The LH 22 M Industry Litronic in a recycling application in Aitrach (Germany)



The LH 150 C High Rise Industry Litronic scrap handling in the port of Beverwijk (Netherlands)

# Deep foundation machines

Liebherr-Werk Nenzing GmbH manufactures a wide range of deep foundation machines: In addition to the combined piling and drilling rigs, the comprehensive product portfolio also includes rotary drilling rigs as well as piling rigs with fixed or swinging leader. A broadly diversified range of applications is covered with this variety.

## **High productivity in tough construction site applications**

The robust design, the high stability, as well as high pull and push forces, are typical of the Liebherr deep foundation machines. As a result, they convince under the most demanding operating and soil conditions with the ultimate in productivity and reliability. At the same time, the diverse machines are fuel-efficient and environmentally friendly, and can also be easily transported and quickly mobilised.

## **Full-service provider in the deep foundation industry**

In the field of deep foundation work Liebherr offers its customers not only numerous machines, but also a large number of services, enhancing efficiency on the construction site. These include technical consultation in the planning stage, application consulting on the construction site, recording, evaluation and transfer of machine data using LiDAT as well as the documentation and analysis of the processes on the construction site via PDE/PDR.

In addition to the deep foundation machines, duty cycle crawler cranes from the HS series are also manufactured in Nenzing. With various attachments these are also used for deep foundation applications.



The Liebherr rotary drilling rig LB 36 operating on a construction site in Switzerland





A Liebherr rotary drilling rig during drilling operations on the Croatian coast



The LRH 100 carrying out piling work in Gothenberg, Sweden



The LB 44 is the largest rotary drilling rig from Liebherr

# Duty cycle crawler cranes

When the duty cycle crawler cranes were included in the range of products in 1979, Liebherr was the world's first manufacturer of hydraulically driven and electronically controlled duty cycle crawler cranes. Since then the Liebherr duty cycle crawler cranes have been produced and sold by Liebherr-Werk Nenzing GmbH in Austria with great success. The proven universal machines are distinguished by their flexibility, efficiency and excellent cost effectiveness.

## Diversity in all areas

The universal machines are used in deep foundation applications as well as in material handling, gravel extraction and building demolition. The HS series covers machines of all performance categories from 30 t to 300 t – and includes the world's largest duty cycle crawler crane, the HS 8300 HD, which is also equipped with a hybrid drive.

Liebherr duty cycle crawler cranes convince with their robust steel construction and their high-performance and innovative drive technology. As a result, they work very reliably even in demanding applications. Moreover, the customer benefits from optimised performance and enhanced safety, simple and fast transportation and quick set-up on site.

The new Liebherr simulators for duty cycle crawler cranes also deserve a special mention. They allow the operators to prepare for future tasks in a virtual yet realistic environment. This improves the confidence of the operator, and thus safety on the construction site.



The HS 8030 HD in grab operation on the Neckar (Germany)



Dynamic soil compaction with a HS 8100 HD in the desert in Kuwait



A duty cycle crawler crane from Liebherr at work with a slurry wall grab

# Mining Excavators and Trucks

Since Liebherr's move into the mining industry, its equipment has set standards in open-cast mining operations around the world. Through advanced technologies, long-life components and comprehensive on-site Customer Service, Liebherr mining trucks and excavators ensure the highest levels of time and cost-efficiency – even under the toughest of conditions. Liebherr is continuously growing our innovative capacity and a dedicated focus on quality ensure maximum customer value in all product areas.

## Mining Trucks

Liebherr Mining Equipment Newport News Co. has been manufacturing large mining trucks designed to handle payloads of up to 363 t/400 tons for the international mining industry since the mid-1990s. The trusted diesel-electric drive concept ensures the highest level of cost-effectiveness and, when paired with a Liebherr R 996 B or R 9800 mining excavator, the trucks are perfectly suited for the demands of mining environments. Customers can expect a high level of performance from these machines at the lowest cost per ton.

## Mining Excavators

The Liebherr-Mining Equipment Colmar SAS product line includes nine different excavator models with operating weights from 100 to 800 t/120 to 880 tons and bucket capacities up to 47.5 m<sup>3</sup>/62.1 yd<sup>3</sup>. These machines are powered by diesel engines or electric motors with power ratings up to 4,000 hp. Independent of size, Liebherr mining excavators are known for their exceptional performance, simple operation, and easy serviceability.

## Our Mission. Your Success.

Liebherr works hard to maintain a robust and collaborative partnership with every customer: from first contact, to customised machine build, to ongoing after-sales support with training, parts, and service. Highly trained Liebherr service personnel ensure correct preventative and scheduled maintenance, as well as prompt emergency service throughout the life of the equipment to guarantee optimal equipment uptime.



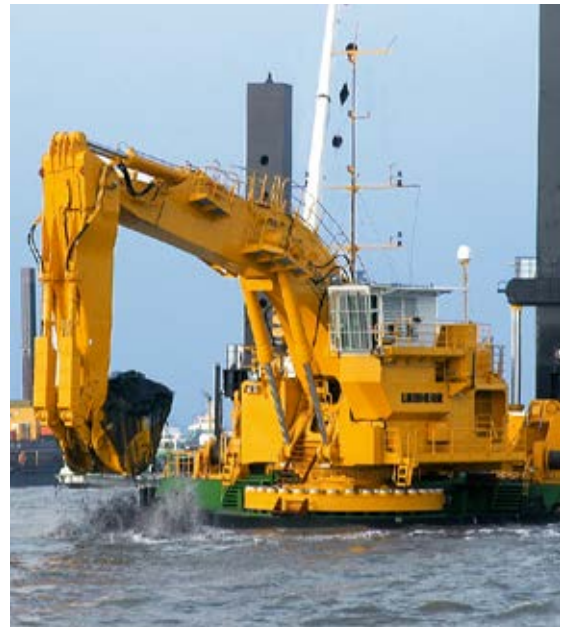
Replacement of Liebherr GET in South Africa



The Liebherr R 996 B with face shovel configuration in South Africa



The T 284 has a top speed of 64 km/h/40 mph



The dredging excavator P 995 in the port of Hamburg

# Tower Cranes

The invention of the mobile tower crane in 1949 not only represents the birth of this product, but also the entire Liebherr Group. Liebherr Tower Cranes is now a successful global provider of tower cranes with five production sites in Biberach an der Riss (Germany), Pamplona (Spain), Guaratinguetá (Brazil), Pune (India) and Nizhny Novgorod (Russia).

## Large Product Range

The portfolio covers a wide range of high-quality tower cranes of all systems and size classes. These include fast-erecting cranes, top-slewing cranes, luffing jib cranes and special cranes. The flexible fast-erecting cranes and high-performance top-slewing models prove themselves in residential construction, as well as in industry and large projects all over the world.

## Services Complement the Technology

As a supplement to the products, Liebherr Tower Cranes offers a wide range of services. Tower Crane Solutions advises and plans for special projects; Tower Crane Service guarantees spare parts supply and offers support for crane erection, comprehensive maintenance activities, as well as a broad range of training courses. The Tower Crane Center supports customers and partners all over the world in the rental and used crane business.



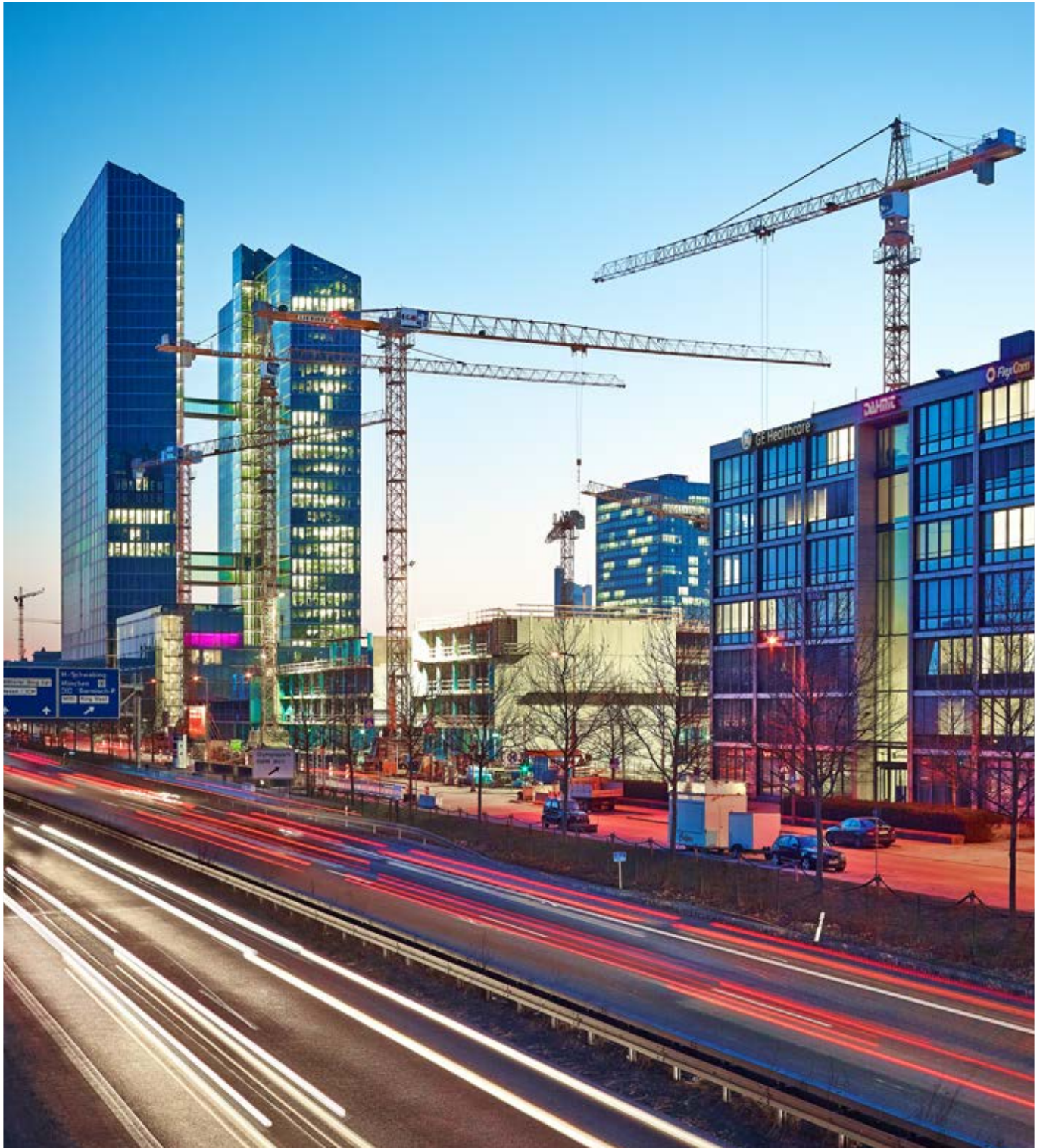
630 EC-H cranes for the construction of Forth Crossing Bridge in Scotland



K cranes on Kitzsteinhorn mountain in Austria



HC-L and EC-B cranes for the construction of a skyscraper in Canada



EC-B and EC-H cranes for the construction of a new company head office in Germany

# Mobile Construction Cranes

The mobile construction cranes of the MK series combine the mobility of a classic mobile crane with the functional advantages of a tower crane such as working at projecting edges or the high handling capacity. The Liebherr plant in Biberach works closely with other Liebherr plants on the development of these cranes.

## Flying High

In 2000 Liebherr presented the first mobile construction crane with the MK 80, whose chassis and superstructure formed a single unit. In addition to the four-axle cranes, the Liebherr programme also now includes the largest five-axle mobile construction crane on the market. It reaches hook heights of up to 94.4 metres.

## Fantastic Advantages

The extremely agile taxi cranes of the MK series are designed for one-man operation. The crane driver can move and mount the MK himself, and operate the crane by means of remote control or in an elevator cab with adjustable height. Mobile construction cranes reveal their true strengths in particular where space is limited. The vertical tower enables work directly at the building, where the entire jib length can always be used. With the variable steering concept and the active rear-axle steering mobile construction cranes fit in almost every gap.

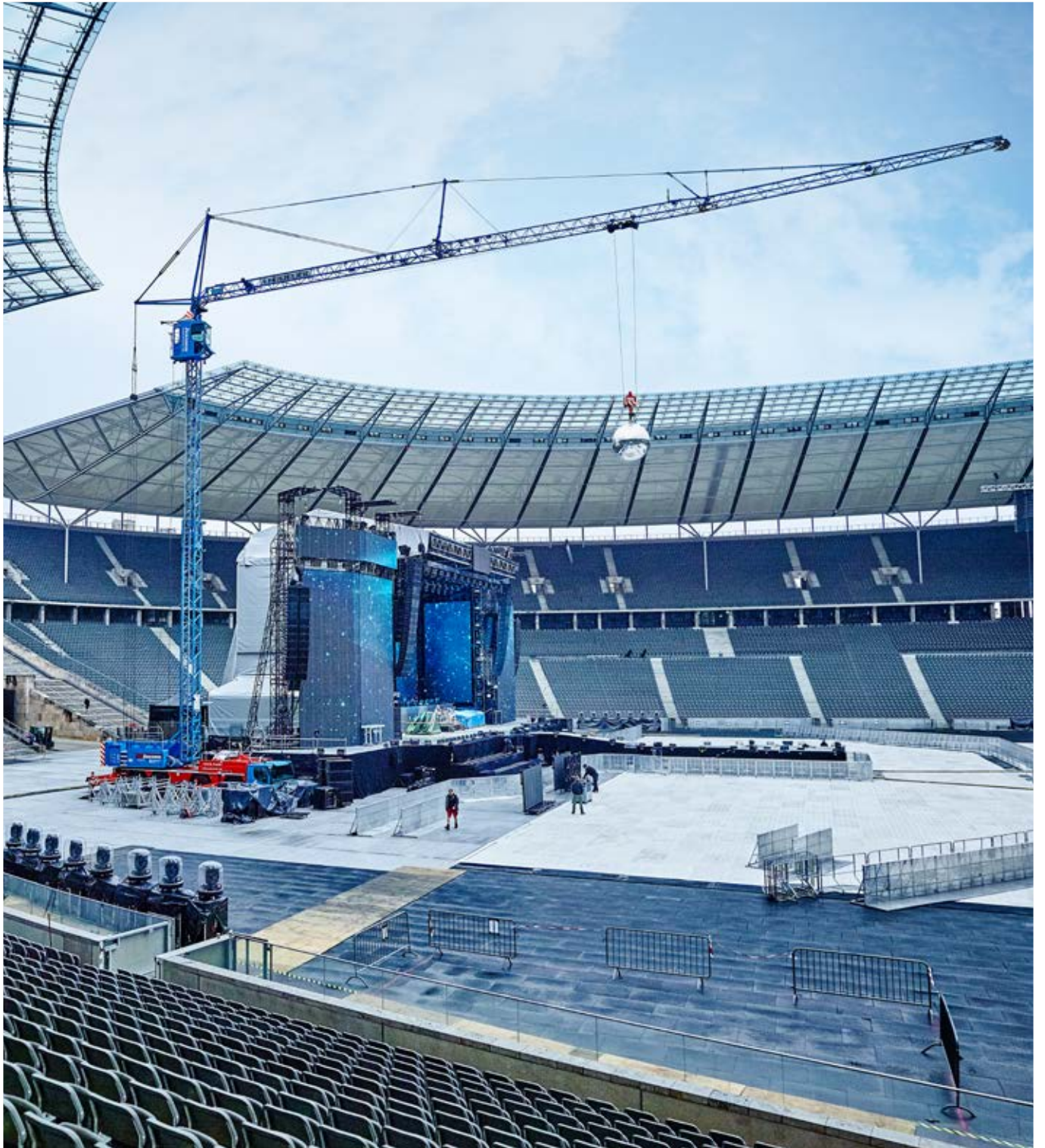


The MK taxi cranes enable several applications in one day



The MK 140 in use at a car park





The MK 88 used for stage assembly in the Olympic Stadium in Berlin

# Truck Mixers and Mixing Plants

Liebherr can look back on over 60 years of experience in the development and manufacture of concrete mixing plants. The current portfolio of mixing plants ranges from small compact systems to large systems for mass concrete for the construction of dams.

## Modular Concept and Mobility of Plants

The series of Betomix plants is particularly successful. These plants have a modular design and can be realised in countless variants and performance capacities depending on customer requirements. The Mobilmix mobile mixing plants have also established themselves very well on the market. They can be constructed in two days and easily transported from one construction site to the next. Liebherr only uses highly efficient mixer systems it develops itself. The high weighing accuracy

of the Liebherr mixing plants ensures considerable cement savings and high efficiency for the operator.

## Ready-mix Concrete

Truck mixers from Liebherr are used worldwide, over 90,000 units have already been manufactured and sold. The programme starts with the agile small types from 5 m<sup>3</sup> nominal volume for use in halls of concrete and prefab factories. In the area of ready-mix concrete, mainly types with 8, 9 or 10 m<sup>3</sup> nominal volume are used. Depending on the country of operation, truck mixers up to 16 m<sup>3</sup> are possible. Semitrailers with a high load capacity round off the programme. A useful optional accessory is the LTB conveyor. Concrete, sand or gravel can be distributed or poured directly at the construction site.



At Kohler & Müller in Engen-Welschingen (Germany), the concrete mixing plant, type Betomix 3.0, produces up to 110 m<sup>3</sup> of concrete per hour



The truck mixer HTM 1004 ZA/38 is approved for a total weight of 38 t



The truck mixer HTM 904 is the best-selling model



The truck mixer HTM 1004 with double telescopic conveyor LTB 12+4+1



The truck mixer HTM 904 in lightweight version en route for the roadshow in Austria

# Concrete Pumps

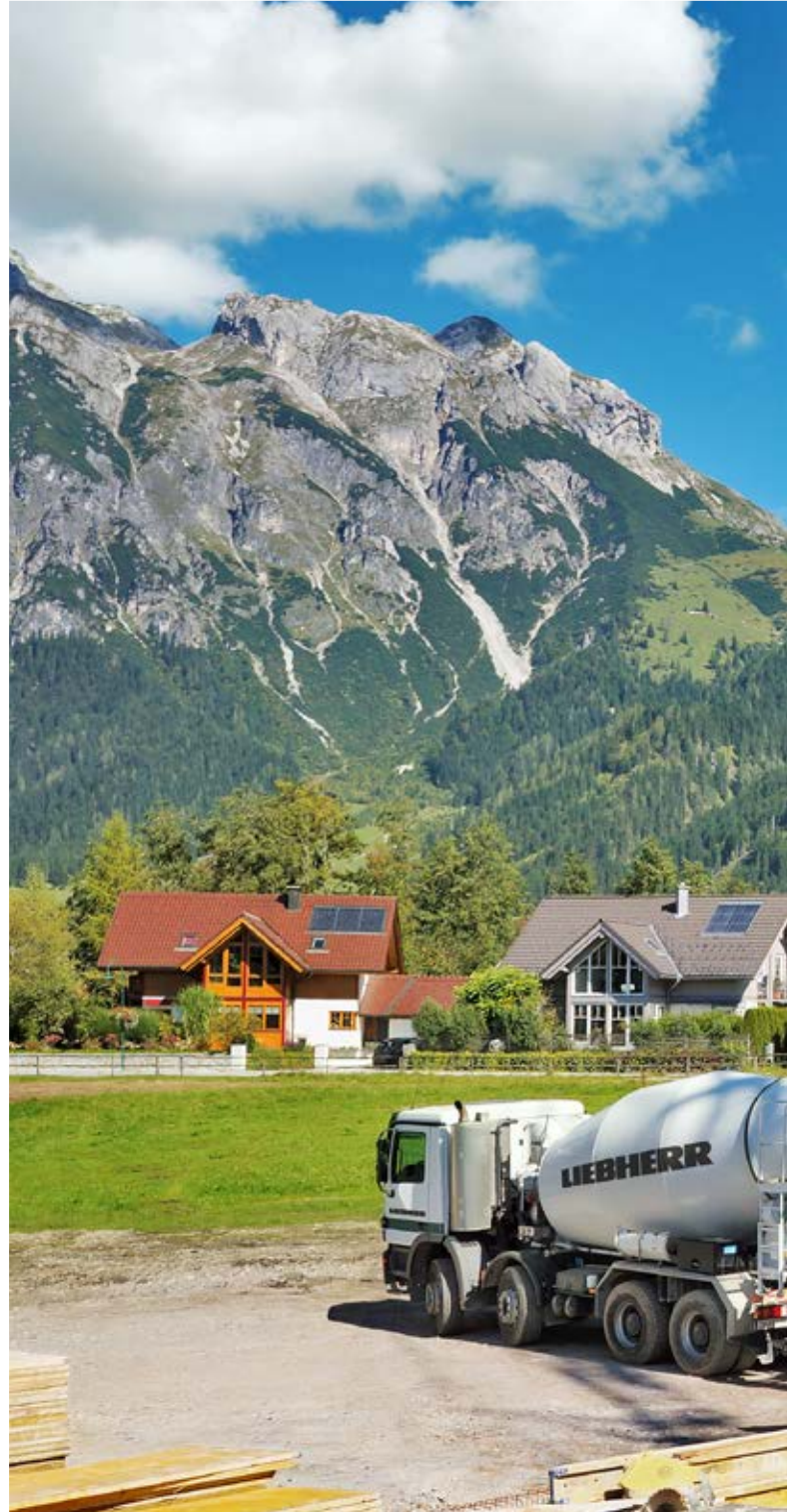
Liebherr possesses the entire variety of high-quality concrete pumps „Made in Germany“. The innovative design, as well as a global service network, ensure high availability and maximum customer benefits.

## **Truck-mounted Concrete Pump with Extra Stability**

Liebherr manufactures truck-mounted concrete pumps with a vertical reach from 24m to 50m. The smaller types, also called hall champions, impress primarily with their compact design and low unfolding heights. They can therefore also be used inside buildings. The larger truck-mounted concrete pumps can be supplied with the patented XXT outrigger upon request. This outrigger is particularly flexible in use, very stable and absorbs forces directly from the boom without taking unnecessary turns. The powerful pump units are characterised by smooth running and a long service life.

## **Enormous Performance of Stationary Pumps**

The stationary pumps from Liebherr are suitable for all types of pumping on construction sites over longer periods. There are different performance classes with pumping capacities of up to 135m<sup>3</sup> per hour. Depending on the type of application, trailer or crawler concrete pumps are used. Comprehensive concrete distribution systems such as distributor booms or climbing booms round off the programme.



The Liebherr truck mixer HTM 904 and truck-mounted concrete pump 37 R4 XXT for concreting in Werfenweng (Austria)



# Mobile Cranes

Every second all-terrain mobile crane supplied worldwide originates from the modern crane production site of Liebherr-Werk Ehingen GmbH. Research and development, production, as well as global sales and service, are combined at the site. The global market leader thus has comprehensive expert knowledge on the entire life cycle of a mobile crane.

## Cutting-edge Technology for Outstanding Performances

Liebherr offers the right crane for every lifting task and customer requirement. The wide spectrum of mature crane concepts ranges from the two-axle 30-tonne to the heavy

duty crane with a load capacity of 1,200 tonnes. High-performance, efficiency and safety characterise the mobile cranes from Liebherr. The recognised high quality of the mobile cranes and the high technological standard is the result of the efforts of the qualified employees.

## Service from the Global Market Leader

Liebherr mobile cranes are used worldwide. Thanks to direct sales and a close-knit global network of separate sales and service locations, the Liebherr plant in Ehingen is in constant contact with its customers.



Assembly of telescopic booms



Liebherr mobile cranes are distinguished by their excellent all-terrain performance



Final assembly of the mobile cranes in the Liebherr plant in Ehingen



Bridge assembly with a LTM 11200-9.1 in Canada

# Crawler Cranes

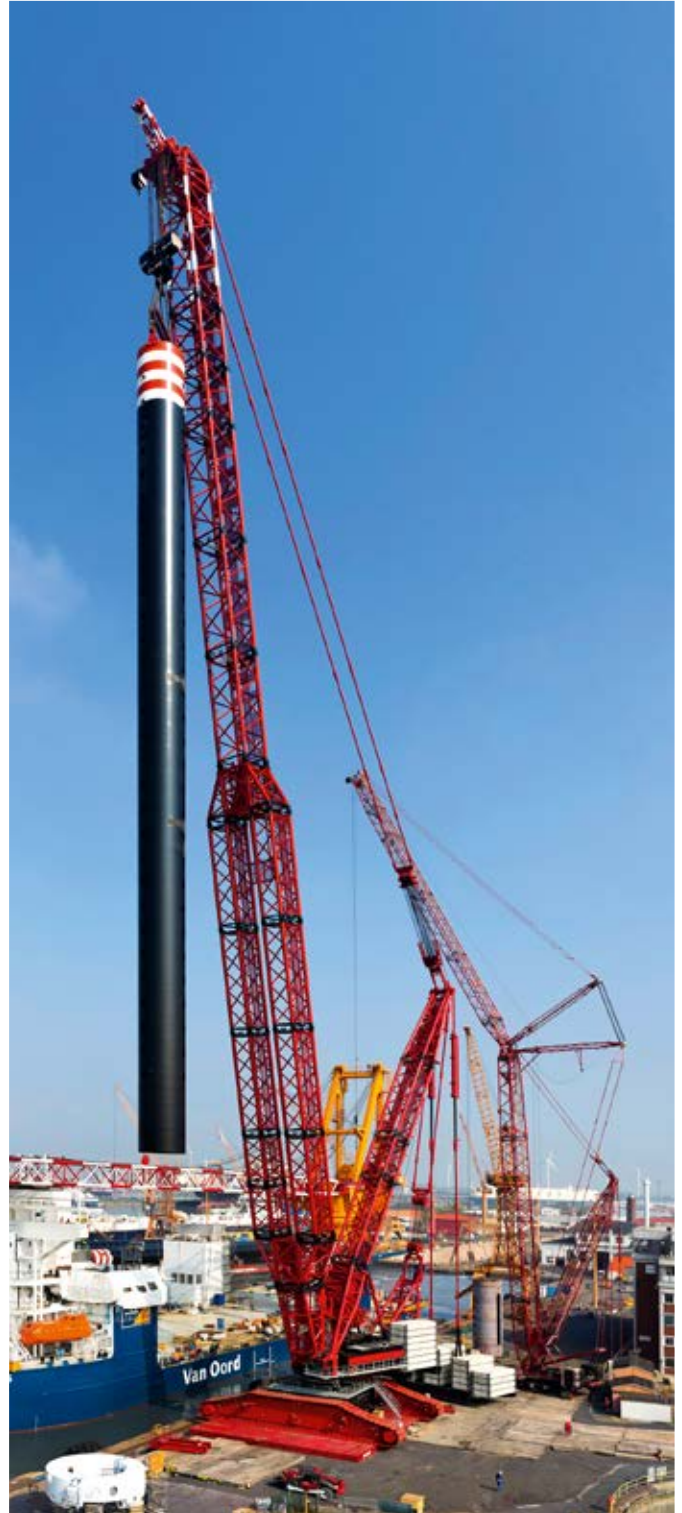
Whether in the wind industry, for heavy lift applications or for lifts with a particularly large jib length: Liebherr crawler cranes are used worldwide in applications where heavy loads have to be moved safely and efficiently. They are developed and built in Ehingen (Germany) and in Nenzing (Austria).

## Genuine powerhouses

The Liebherr crawler cranes convince with excellent load capacities up to 3,000 tonnes, impressive lifting heights and reaches. The dimensions and weights of the components which are suitable for transportation make the cranes particularly mobile. The models also impress with accurate control technologies, innovative materials, quality and reliability.

## Large product range

The Liebherr plant in Ehingen manufactures crawler cranes with capacities from 350 tonnes. With extremely variable boom systems and load capacities up to 3,000 tonnes, they can be used for a diverse range of applications. Liebherr-Werk Nenzing GmbH manufactures crawler cranes with load capacities between 100 and 300 tonnes. Beside numerous other advantages the robust steel structure for reduced wear and a longer service life, the optimised drive technology as well as excellent handling for transportation and set-up ensure optimum customer benefits.



The LR 13000 mounts 940 tonne jack-up legs onto a ship





Ultrasonic testing of weld seams



An LR 1300 in Chile at an altitude of approximately 4,500 m



The Liebherr crawler cranes LR 11000 and LR 1750 for tandem lift in Romania

# Port Equipment

For cargo and container handling requirements in seaports and inland ports, the Maritime Cranes division manufactures various container handling cranes, mobile harbour cranes and stackers. Rail-mounted ship to shore container cranes are available in an extensive range of sizes from panamax through to the latest generation of megamax cranes. For landside container handling, rubber tyre gantry cranes, rail mounted stacking cranes, straddle carriers and reachstackers are available.

## Mobile Harbour Cranes

The series of mobile harbour cranes includes seven sizes with load capacities from 42 t to 308 t. With deliveries to over 100 countries worldwide, Liebherr mobile harbour cranes impress in all applications. Their flexible fields of application include highly efficient container handling, bulk cargo handling, handling of scrap or general cargo, as well as heavy lifting – with a simple exchange of the lifting attachment. Unique technology such as the optimised undercarriage concept or the in-house developed crane control system make the Liebherr mobile harbour crane to one of the most powerful material handling machines in the world.

## Space-saving Port Crane Technology

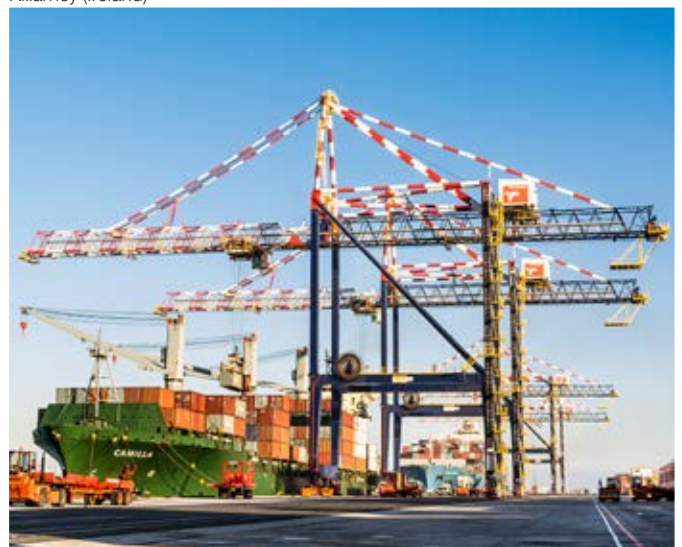
Fixed and rail-mounted cargo cranes for handling bulk cargo, containers and general cargo are particularly suitable for efficient and space-saving operation in inland ports and smaller sea ports. The so-called Liebherr material-handlers, also specially designed for use in ports, complete the product range.



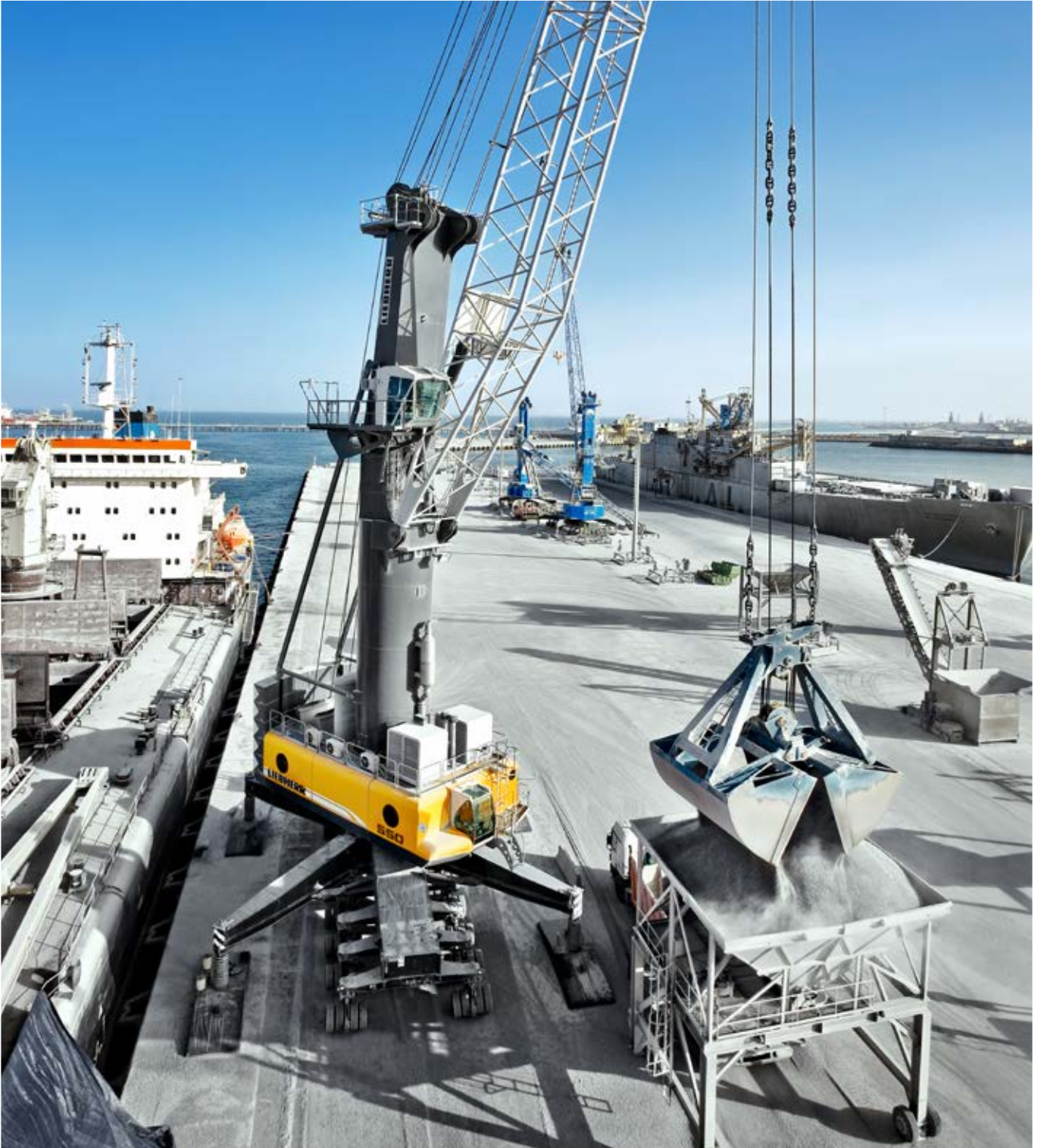
Assembly of a ship to shore container crane boom in the Liebherr factory in Killarney (Ireland)



Two Liebherr rubber tyre gantry cranes stack containers in the Port of Shuaiba (Kuwait)



Liebherr ship to shore container cranes at work in the Port of Cape Town (South Africa)



The LHM 550 for bulk cargo handling in the port of Al-Ardiya (Kuwait)

# Ship, floating and offshore cranes

With the product series of ship cranes and floating cranes, Liebherr offers practical handling equipment for all types of ships, barges and transshippers. The diverse range includes wire luffing and cylinder luffing ship cranes for container and general cargo handling, as well as heavy lift cranes. High performance four-rope grab cranes designed for continuous operation are particularly suitable for loading and unloading bulk cargo – both in sheltered waters and on the open sea.

## Versatile Deployment Possibilities

Offshore cranes from Liebherr are not only used on oil and gas platforms, but also for the construction of offshore wind turbines, for handling remote-controlled submarine vehicles or for laying pipelines and telecommunication cables on the seabed.

The Liebherr range of products in the offshore area includes rope luffing machines, cranes with hydraulic cylinders or with large diameter bearings, as well as mast cranes. For the construction of offshore wind turbines and platforms, Liebherr offers a wide range of offshore heavy duty cranes with load capacities up to 2,000 t and a maximum boom length of over 100 m.

## Safe and Field-tested

Depending on requirements, the Liebherr offshore cranes are installed with a diesel or an electric drive. In addition, all safety-relevant components and electrical components can be explosion-proofed. The cranes are suitable for use at ambient temperatures of up to -50° C, and in special deep sea version, for work at depths of up to 3,600 m under the surface of the water.



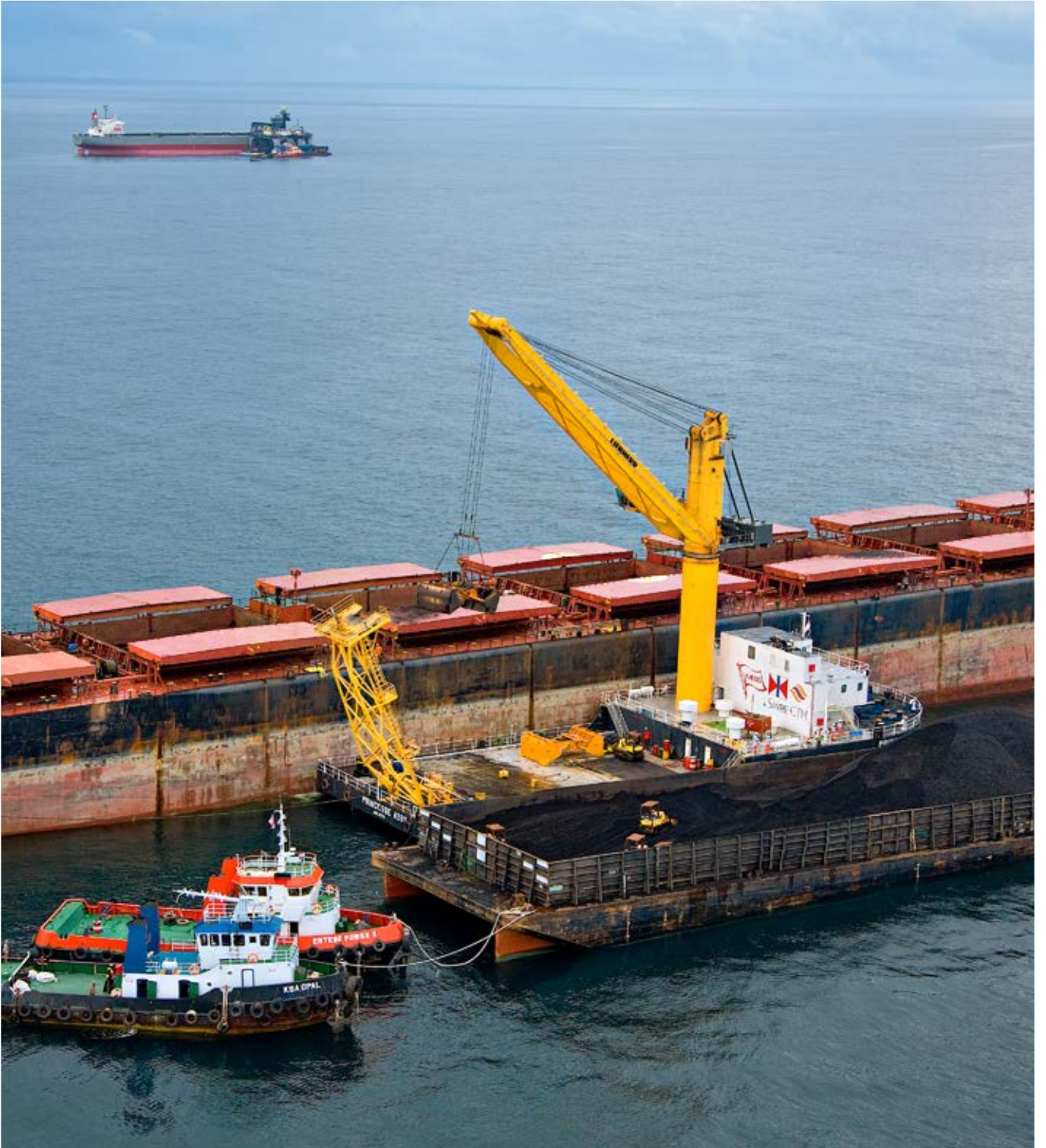
BOS cranes on a semi-submersible accommodation vessel lift loads up to 300 tonnes



Two CBB 4700 ship cranes in tandem lift during the transfer of a Liebherr LPS in Rostock



Pipe Laying Service Vessel (PLSV) with a RL-K 7500 for pipe installation in deep waters



The Liebherr CBG 350 on a barge for coal handling on open seas

# Aerospace

Liebherr-Aerospace is a leading supplier of systems for the aviation industry and has more than five decades of experience in this field. The range of aviation equipment produced by Liebherr for the civil and military sectors includes flight control and actuation systems, landing gears and air management systems, as well as gears and gearboxes.

## Diverse Use

These systems are deployed in wide-bodied aircraft, single aisle and regional aircraft, business jets, combat aircraft, military transporters, military training aircraft, civil helicopters and combat helicopters. They make a substantial contribution to the performance of the aircraft and to the safety and comfort of the passengers and crews.

## Comprehensive Service

Liebherr-Aerospace has four aviation equipment production plants at Lindenberg (Germany), Toulouse (France), Guaratinguetá (Brazil) and Nizhny Novgorod (Russia). These production sites offer a worldwide OEM customer service with additional support centres in Saline (Michigan/USA), Seattle (Washington/USA), Montreal (Canada), Sao José dos Campos (Brazil), Hamburg (Germany), Moscow (Russia), Dubai (UAE), Singapore and Shanghai (People's Republic of China).

The customer service activities include repair and maintenance work, technical support, documentation and spare parts, as well as an AOG service (Aircraft on Ground). As a reliable partner of aircraft manufacturers and operators, Liebherr-Aerospace covers the entire life cycle of an aircraft.



Field service at a landing gear



H135 with main and tail rotor servo controls from Liebherr on board



Working on air-conditioning system components



Certification of an actuator



The A380 flies with Liebherr technology

# Transportation Systems

Liebherr-Transportation Systems is a well-known manufacturer of systems and components for rail applications. The company stands for competitive technical solutions in the area of conventional and air cycle air conditioning systems, hydraulic actuation systems and electronic components for all types of rail vehicles, and draws on many years of experience in the development and manufacture of these technologies.

## System Solutions for Comfort and Security

The customised system solutions are successfully used in high-speed trains, long-distance trains, trams, other rail cars, as well as buses. They improve the ride comfort and increase safety.

With continuous investment in research and development, Liebherr-Transportation Systems designs solutions and components for the future of the railroad and automotive industry.

## Global Presence

In addition to its own manufacturing, sales and service sites in Korneuburg (Austria), Marica (Bulgaria), Mannheim (Germany), Paris (France), as well as Sunderland (UK) and London Gatwick (UK), Liebherr's transportation systems division has access to the Group's development and service facilities around the world. As part of this global organisation, Liebherr-Transportation Systems is present for customers wherever they may be.



© Siemens

The Railjet has air conditioning technology from Liebherr on board



Maintenance of electro-hydraulic actuator



© Bombardier

Liebherr equips the Flexity Berlin tram with air conditioning systems





The modern, environmentally-friendly air cycle air conditioning system from Liebherr ensures comfort in the ICE 3

# Gear Cutting Machines and Gear Cutting Tools

Liebherr develops and produces high-quality gear cutting machines, gear cutting tools and automation systems. The innovative products are distinguished by their high precision, availability and user friendliness. Furthermore, customers around the world value the outstanding energy efficiency and cost effectiveness of the machines and systems.

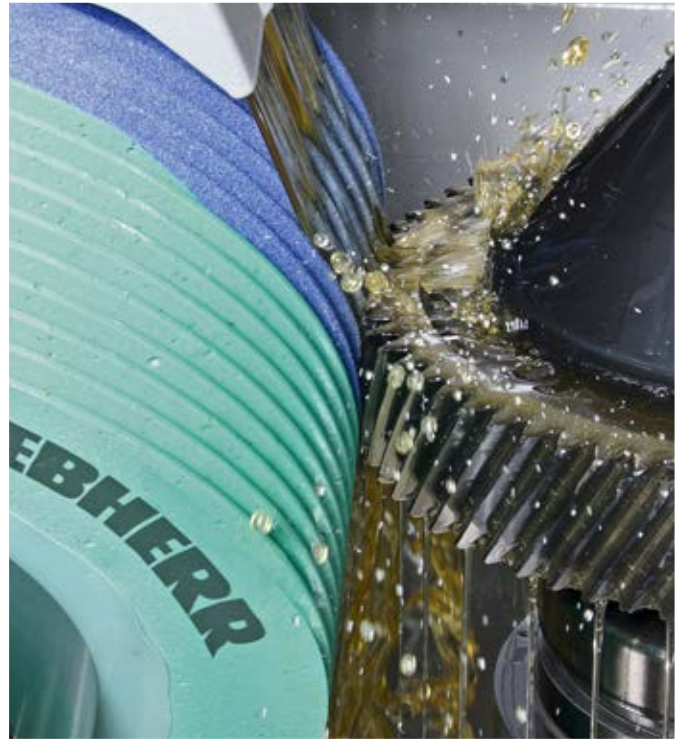
## **Gear Cutting Machines**

Liebherr offers a wide selection of high-quality gear cutting machines. The division is continuously further developing the machines and particular emphasis is placed on high energy efficiency. From the automotive industry to wind turbine manufacturers, customers around the world trust Liebherr machines.

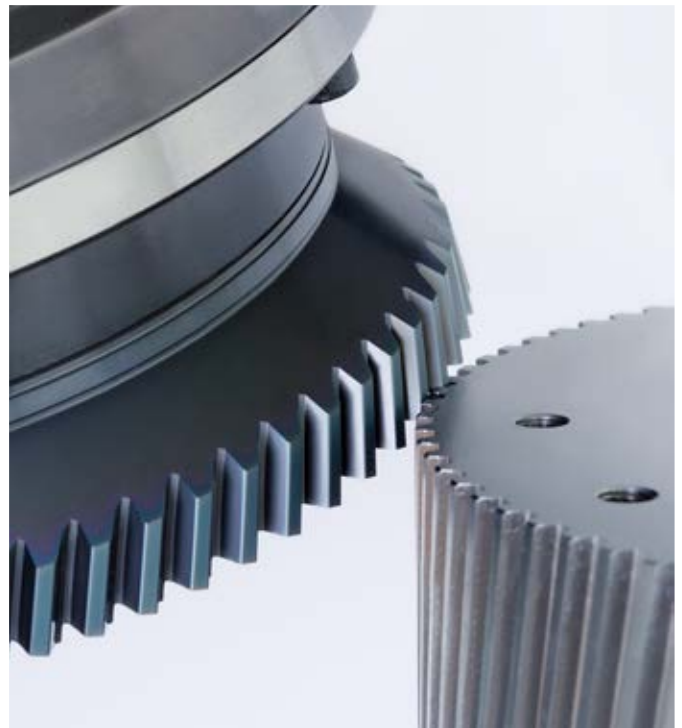
The range of gear cutting machines includes gear hobbing machines, gear shaping machines, as well as generating and profile grinding machines, for soft and hard machining of cylindrical gearing with workpiece diameters up to 16,000 mm. With the new user interface, the gear cutting machines from Liebherr are particularly intuitive and comfortable in operation.

## **Gear Cutting Tools**

Liebherr is one of the world's leading manufacturers of gear cutting tools and stock tools. Liebherr develops individual solutions for customers. Included in the scope of services are special designs for all gears capable of being made through shaping. Moreover, Liebherr ensures high-quality machining of gear cutting tools from all manufacturers. Innovative developments and the long service life of the tools distinguish the division as a reliable partner.



Fine machining through grinding and polishing



New tool for gear skiving machines



Liebherr gear cutting machines for soft and hard machining of cylindrical gearing with workpiece diameters between 60 mm and 16,000 mm

# Automation Systems

In the automation systems area, Liebherr has established itself worldwide as a specialist for automation solutions. The Group produces systems for the automation of machine tools, as well as innovative solutions in manufacturing and factory automation.

## From Robots to Handling Systems

The broad range of automation systems ranges from linear robots and robot applications to conveying and storage systems through to solutions for pallet handling systems. This makes it possible to realise projects in all areas of production and assembly. Liebherr guarantees the customer above-average availability of the systems.

## Lower Costs and Greater Flexibility

Automation solutions from Liebherr reduce production costs and enable a flexible response to changes in demand from the market at short notice. They are essentially designed for economy, ease of use, quality and reliability in combination with a high degree of flexibility.



The plastic chain conveyor (KKB) as conveying system for crankshafts for example



Bin Picking: Economic unloading of bulk materials



Portal robot for workpieces with weight between 0.5 kg to 1,500 kg



Linear pallet handling system (PHS) for transport loads from 500 kg to 13,000 kg

# Combustion Engines and Injection Systems

Since 1984, Liebherr has been developing and manufacturing high-performance and robust combustion engines at the site in Bulle, Switzerland, for diverse applications in building construction, deep foundation, mining, in special vehicles, stationary applications, as well as agriculture and forestry machinery.

## **Powerful Diesel Engines Based on a Modular Design**

Diesel engines from Liebherr are designed especially for use in offroad applications. Thanks to an innovative modular system, engines have identical performances, cooling system requirements and the same interfaces during installation for regulated and unregulated markets (Tier 0, Stage IIIA, Stage IV and Stage V). This allows the customer to use the same machine design for various emission standards.

## **Ready-to-install Gas Engines**

The high-performance Liebherr gas engines impress with their high level of efficiency and reliability. Optimised for operation with natural gas, biogas and special gases, they are suitable for diverse applications. Customers particularly appreciate that Liebherr supplies the units ready for installation.

## **Injection Systems „Made by Liebherr“**

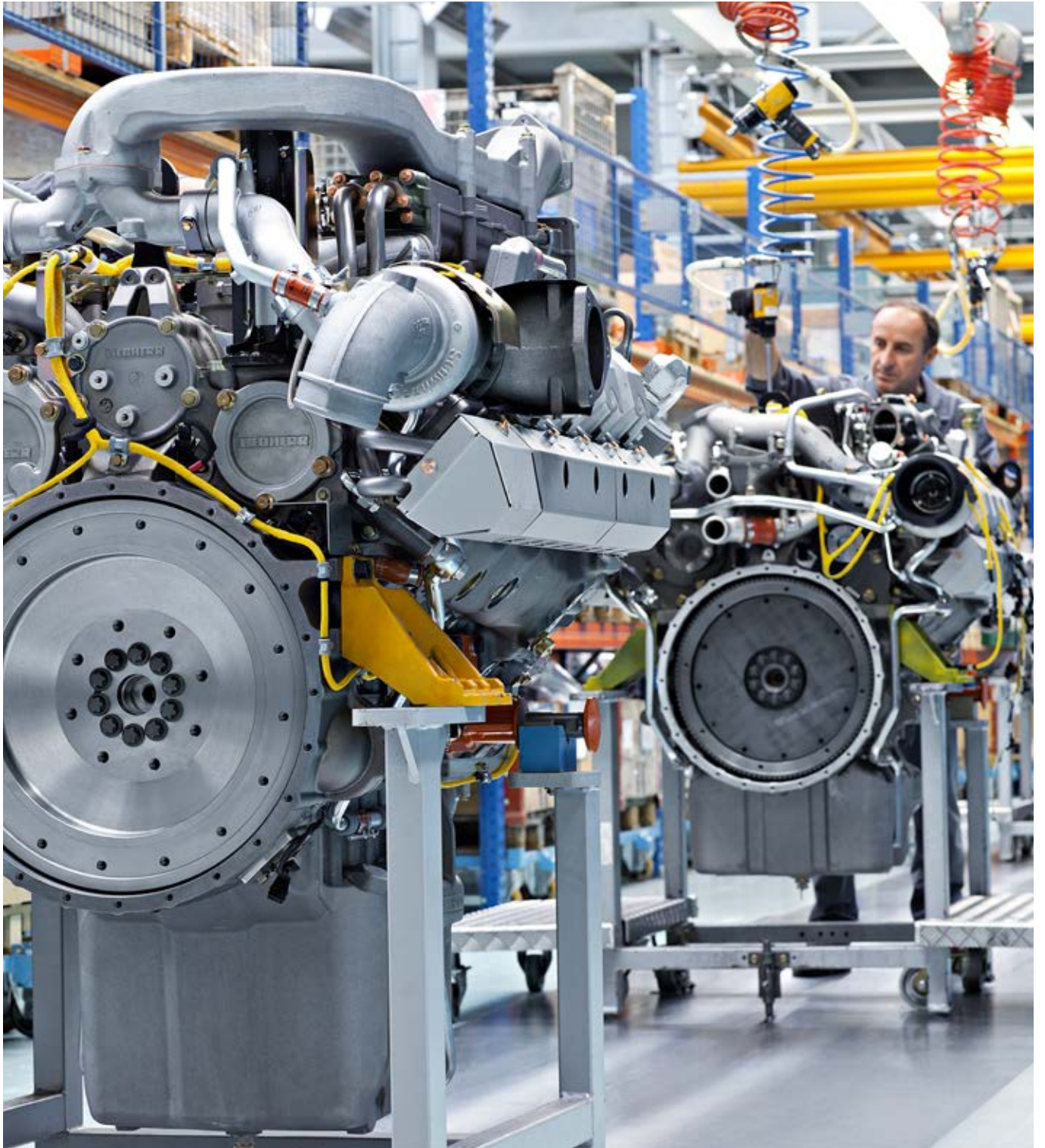
Since 2013, Liebherr has been producing its own injection systems. The reliable common rail systems and engine controls from Liebherr guarantee high efficiency of the engine with low fuel consumption. As a result, they enable compliance with the increasingly stricter emissions standards for diesel engines.



Test bench for gas engines



Assembly of common rail systems in the cleanroom



Assembly line for v-engines

# Hydraulic and Mechanical Drive Technology

A wide range of components of the hydraulic and mechanical drive technology is developed and manufactured at a total of five sites in Europe, Asia and North America. The broad range of services also includes the remanufacturing of used components, among other things.

## Longlife Hydraulic Pumps and Motors

Since 1978, Liebherr has been offering high-quality axial piston pumps and motors for open and closed circuits. The longlife units for the medium- and high-pressure range cover a wide range of applications in mobile and stationary hydraulics. Powerful valves and pilot control devices complement the product range.

## Hydraulic Cylinders for Every Application

With piston diameters of up to 500 mm and stroke lengths up to 8 m, the cylinder portfolio impresses with a large variety. Innovative solutions for lightweight and crane applications, earthmoving and mining machines, maritime applications, as well as stationary plants, are planned in close cooperation with the customer. Resilient dampers and intelligent sensor technology round off the offering.

## Diverse Large Diameter Bearings

Liebherr manufactures ball bearing and roller bearing slewing rings in various dimensions and versions. Decades of experience, comprehensive engineering know-how and expertise, together with state-of-the-art manufacturing plants, ensure top-quality products. The large diameter bearings are used not only in construction machines and cranes, but also in wind turbines and maritime applications.

## Equipped for Tough Conditions: Gearboxes and Rope Winches

Every year Liebherr manufactures tens of thousands of gearboxes and rope winches with the utmost reliability and quality. Liebherr offers custom-fit gearbox variants from the slewing drive or travel drive in large-scale production to tailored gear ring rope winches or planetary plug-in gearboxes.



Development of axial piston unit with use of the finite element method (FEM)



Assembly of slewing drives DAT 1000





Assembly unit for hydraulic cylinders



Inductive hardening of tooth flanks of large diameter bearings

# Electric Drive Technology and Electronics

Liebherr offers a wide range of reliable products from the areas of control technology and electronics.

## **User-friendly Human-machine Interfaces**

Display and operation units from Liebherr impress with their ergonomic design and connectivity. They can be easily integrated in user-friendly human-machine interfaces.

## **Intelligent Control and Regulation Electronics**

Liebherr manufactures control and regulation electronics in the competence centre for electronics in Lindau. The freely programmable control systems convince, for example, in mobile machinery or special vehicles. In aviation and rail technology individually designed assemblies have been tried and tested in ventilation and cooling systems, among others.

## **Power Electronics with High Availability**

Liebherr power electronics for industrial applications were developed for use in harsh environmental conditions. The frequency converter systems, power modules, energy storage devices and DC/DC converters impress primarily owing to their high availability and efficiency. Power electronics for aviation are used in flight control systems, refuelling systems and ventilation and cooling systems.

## **Switchgears for Every Customer Requirement**

As a development partner, Liebherr offers customised switchgears. We manufacture one-offs, as well as small-scale and medium-scale quantities. These are designed according to the respective requirements such as, for example, a higher degree of protection or special installation dimensions. Liebherr also designs customised automation solutions and electric drive systems for stationary and mobile applications.

## **Efficient Electric Machines**

For over 50 years Liebherr has been developing and manufacturing efficient electric motors and alternators for diverse customer needs at the site in Biberach. State-of-the-art design and simulation processes are the foundation for the construction of compact asynchronous and permanent magnet motors, as well as synchronous and asynchronous alternators with high power density.



Installation of switchgear for container cranes



Winding room of electrical machines for mining trucks and port cranes



Fitting circuit boards with SMD technology

# Domestic Appliances – Household

Liebherr-Hausgeräte specialises in the manufacture of refrigerators and freezers and is one of the leading European providers with annual production of approx. 2.2 million appliances. This product division came into existence in 1954 at Ochsenhausen and has been playing an important role in the development of the group for many years.

## Modern Manufacturing Network

Freestanding refrigerators, fridge-freezers, freezers, chest freezers, as well as built-in appliances, are produced at the sites in Ochsenhausen (Germany), Lienz (Austria), Marica (Bulgaria) and Kluang (Malaysia). Wine cabinets and customised solutions are also part of the unique portfolio.

## Quality, Design and Innovation

In order to meet the high quality standard, comprehensive endurance tests are performed on all components during the development process. The refrigerators and freezers impress with innovative ideas and top comfort. All designs are developed in modern development centres at the various production sites. The focus is on the needs and requirements of the customers.

Examples of this include the extra-long freshness of the food thanks to BioFresh and the LED lighting concept. It guarantees homogeneous lighting in the entire inner space. For many years the focus has been on energy-saving appliances during the design phase. A key area during development is the further optimisation of energy consumption without having to compromise on convenience features such as BioFresh and NoFrost.

## BluPerformance – the New Dimension of Cooling and Freezing

With the „BluPerformance“ line, Liebherr presents a new range of particularly energy-efficient refrigerators and freezers. All BluPerformance appliances are in the energy efficiency class A+++ or A+++/-20% and are thus 20% more economical than the limit value of the best energy efficiency class to date A+++. With the largest range of efficient appliances, Liebherr sets standards in terms of efficiency and sustainability.



The innovative LED lighting concept from Liebherr guarantees homogeneous lighting



With the BioFresh technology, food which is rich in vitamins and minerals is stored at the correct temperature and the ideal humidity



With the BioFresh technology, food which is rich in vitamins and minerals is stored at the correct temperature and the ideal humidity

# Domestic Appliances – Commercial

Liebherr-Hausgeräte also offers a high-quality and diverse product range for commercial applications. The appliances must work reliably under extreme conditions in a professional environment. Thanks to high-quality components, they meet the professional standards in gastronomy, retail, business and laboratories. The refrigerators and freezers for commercial use are produced at the two sites Lienz (Austria) and Kluang (Malaysia).

## Modern Appliances for Professionals

Particularly high requirements are placed on commercial appliances. They offer all the advantages that really matter in a professional setting: high-quality components and maximum useful volume, efficient cooling power, reliable temperature consistency and exemplary easy-to-clean design.

## Efficient Operation

The refrigerators and freezers convince above all with their maximum efficiency. Thanks to ultramodern components and environment-friendly refrigerants, as well as precise controls, the quality and freshness of the products are preserved – and the appliances are cost-effective at all times. With the precise electronics in conjunction with the optimised cooling system, Liebherr appliances are very powerful – with particularly low energy consumption. The high quality guarantees the long service life and functional reliability of the appliances.



The GKPv 6573 model with insulated glass door is equipped with separate switchable LED overhead lighting. This lighting has a longer service life and uses considerably less energy than conventional lighting



The new Liebherr supermarket chests combine promotional goods presentation and ergonomic ease of use



The innovative wine cabinets are a visual highlight for gastronomy and the hotel industry. Thanks to optimised technology, these are even more efficient and quieter and offer improved bottle capacity

# The Hotels of the Liebherr Group

Located in Austria, Ireland and Germany, surrounded by wonderful nature and designed with a love for detail, you are invited to stay and relax. The wonderful settings and the exclusive service leave nothing to be desired.

## Six Hotels – Each One with its Outstanding Charm

Located in the midst of the grand Tyrolean mountains, the InterAlpen-Hotel Tyrol offers not only a wonderfully secluded location but also spacious rooms, an outstanding spa and

an exquisite cuisine. The Löwen Hotel Montafon impresses with its Alpine hospitality, traditional cuisine and lavish spa facilities. In Ireland, guests can relax in The Europe Hotel & Resort, the Ard na Sidhe Country House or The Dunloe, explore the picturesque landscape and enjoy the panoramic views of Ireland's green meadows and enchanting lakes. Situated in the old town of Memmingen, the Hotel Falken is the ideal starting point to discover the highlights of the town and the beautiful Allgäu region.



The Dunloe, Killarney (Ireland)



The Europe Hotel & Resort, Killarney (Ireland)



Ard na Sidhe Country House, Killorglin (Ireland)



Hotel Falken, Memmingen (Germany)

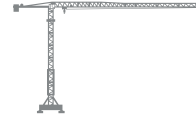




Löwen Hotel Montafon, Schruns (Austria)



Interlpen-Hotel Tyrol, Telfs (Austria)



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## **Earthmoving**

## **Mining**

## **Mobile Cranes**

## **Tower Cranes**

## **Concrete Technology**

# Divisions of the Liebherr Group

Liebherr shapes technological advances in numerous industries. The eleven divisions of the Liebherr Group and the broad product portfolio represent decades of experience and remarkable expert know-how. The exchange between the business areas encourages innovative ideas and cross-industry developments.

### **Earthmoving**

Liebherr manufactures a broad range of earthmoving machines at sites in Germany, France, Austria, China, Brazil and Russia. Special deep foundation machines and material handlers for diverse applications are also part of this business area.

### **Mining**

The division supplies the mining industry with machines for quarrying raw materials in surface mining. The mining excavators and dump trucks from Liebherr are produced in France and the USA.

### **Mobile Cranes**

Liebherr offers the broadest range of telescopic and lattice boom cranes on mobile and crawler chassis worldwide. They are manufactured in Germany and Austria.

### **Tower Cranes**

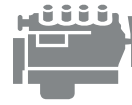
The division develops tower cranes and mobile construction cranes, which satisfy diverse requirements. They are manufactured in Germany, Brazil, India, Russia and Spain.

### **Concrete Technology**

Liebherr is active around the world as a full-service provider of concrete technology. The stationary mixing plants, truck mixers, concrete pumps and other equipment for making and transporting concrete are produced by the division in Germany, Brazil, China and Thailand.

### **Maritime Cranes**

For maritime cargo handling, Liebherr offers ship, floating, off-shore, container and mobile harbour cranes, reachstackers, as well as other material handlers specially designed for use in ports. The division's plants are located in Ireland, Great Britain, Germany and Austria.



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### **Maritime Cranes**

### **Aerospace and Transportation Systems**

### **Machine Tools and Automation Systems**

### **Domestic Appliances**

### **Components**

### **Hotels**

#### **Aerospace and Transportation Systems**

The division develops innovative systems and components for aircraft and rail cars. Liebherr is close to its customers thanks to the production sites in Germany, France, Brazil, Russia, China, Austria and Bulgaria and the service outlets all over the world.

#### **Machine Tools and Automation Systems**

Liebherr is one of the leading manufacturers of gear cutting machines, gear cutting tools and automation systems. They are manufactured in Germany, Italy, India and the USA.

#### **Domestic Appliances**

Liebherr develops refrigerators and freezers both for private households, and for professional use in industry, commerce, trade, gastronomy and laboratories. The production sites are located in Germany, Austria, Bulgaria and Malaysia.

#### **Components**

The division develops components for mechanical, hydraulic and electrical drive and control systems. They are manufactured in Germany, Switzerland, China and Mexico.

#### **Hotels**

The Liebherr Group operates a total of six first-class hotels in Ireland, Austria and Germany.

# Locations of Liebherr Companies





Liebherr Worldwide can also be found online at [www.liebherr.com](http://www.liebherr.com)

# Summary of Group Companies

## Western Europe

### Austria

**Hotel Löwen Schruns GmbH**

Schruns

**Interalpen-Hotel Tyrol GmbH**

Telfs

**Liebherr-Hausgeräte Lienz GmbH**

Lienz

**Liebherr-International Austria GmbH**

Bischofshofen

**Liebherr-MCCtec GmbH**

Nenzing

**Liebherr-Transportation**

**Systems GmbH & Co KG**

Korneuburg

**Liebherr-Werk Bischofshofen GmbH**

Bischofshofen

**Liebherr-Werk Nenzing GmbH**

Nenzing

**Liebherr-Werk Telfs GmbH**

Telfs

### Denmark

**Liebherr-Danmark ApS**

Hedensted

### Finland

**Liebherr-Finland Oy Ab**

Helsinki

### France

**Liebherr-Aerospace Toulouse SAS**

Toulouse

**Liebherr-Aerospace & Transportation SAS**

Toulouse

**Liebherr-Components Colmar SAS**

Colmar

**Liebherr-France SAS**

Colmar

**Liebherr-Grues à Tour SAS**

Niederhergheim

**Liebherr-Grues Mobiles SAS**

Niederhergheim

**Liebherr-Location France SAS**

Niederhergheim

**Liebherr-Malaxage & Techniques SAS**

Niederhergheim

**Liebherr-Mining Equipment Colmar SAS**

Colmar

**Liebherr-Mining Equipment SAS**

Colmar

**Liebherr-Nenzing Equipements SAS**

Niederhergheim

### Germany

**Liebherr-Aerospace Lindenberg GmbH**

Lindenberg

**Liebherr-Baumaschinen**

**Vertriebs- und Service GmbH**

Kirchdorf an der Iller

**Liebherr-Betonpumpen GmbH**

Neu-Ulm

**Liebherr-Components Biberach GmbH**

Biberach an der Riss

**Liebherr-Components Deggendorf GmbH**

Deggendorf

**Liebherr-Components Kirchdorf GmbH**

Kirchdorf an der Iller

**Liebherr-Elektronik GmbH**

Lindau

**Liebherr-EMtec GmbH**

Kirchdorf an der Iller

**Liebherr-Ettlingen GmbH**

Ettlingen

**Liebherr-Hausgeräte GmbH**

Ochsenhausen

**Liebherr-Hausgeräte Ochsenhausen GmbH**

Ochsenhausen

**Liebherr-Hydraulikbagger GmbH**

Kirchdorf an der Iller

**Liebherr-International Deutschland GmbH**

Biberach an der Riss

**Liebherr-IT Services GmbH**

Kirchdorf an der Iller

**Liebherr-Logistics GmbH**

Kirchdorf an der Iller

**Liebherr-MCCtec Rostock GmbH**

Rostock

**Liebherr-Mietpartner GmbH**

Ludwigshafen am Rhein

**Liebherr-Mischtechnik GmbH**

Bad Schussenried

**Liebherr-Nenzing Service GmbH**

Hamburg

**Liebherr-Purchasing Services GmbH**

Kirchdorf an der Iller

**Liebherr-Transportation Systems**

**Mannheim GmbH**

Mannheim

**Liebherr-Verzahntechnik GmbH**

Kempten

**Liebherr-Werk Biberach GmbH**

Biberach an der Riss

**Liebherr-Werk Ehingen GmbH**

Ehingen/Donau

**Liebherr-Wohnungsbau GmbH**

Kirchdorf an der Iller

### Ireland

**Killarney Hotels Ltd.**

Killarney

**Liebherr-Construction Equipment**

**Ireland Limited**

Rathcoole

**Liebherr Container Cranes Ltd.**

Killarney

Italy

**Liebherr-EMtec Italia S.p.A.**

Lallio

**Liebherr-Italia S.p.A.**

Monfalcone

**Liebherr-Utensili s.r.l.**

Collegno

Netherlands

**Liebherr-Maritime Benelux B.V.**

Amersfoort

**Liebherr-Nederland B.V.**

Amersfoort

Portugal

**Liebherr-Máquinas de Construção**

**Portugal, Lda.**

Benavente

Spain

**Liebherr Iberica, S.L.**

Azuqueca de Henares

**Liebherr Industrias Metálicas, S.A.**

Pamplona

Sweden

**Liebherr-Sverige AB**

Västerås

Switzerland

**Liebherr-Baumaschinen AG**

Reiden

**Liebherr-Components AG**

Nussbaumen

**Liebherr-Component Technologies AG**

Bulle

**Liebherr-Export AG**

Nussbaumen

**Liebherr-Hotels AG**

Bulle

**Liebherr-Industrieanlagen AG**

Bulle

**Liebherr-International AG**

Bulle

**Liebherr-Intertrading AG**

Bulle

**Liebherr Machines Bulle SA**

Bulle

**Liebherr-Service AG**

Nussbaumen

United Kingdom

**Liebherr-Great Britain Ltd.**

Biggleswade

**Liebherr-Rental Ltd.**

Biggleswade

**Liebherr Sunderland Works Ltd.**

Sunderland

## Eastern Europe

Azerbaijan

**Liebherr-Azeri LLC**

Baku City

Bulgaria

**Liebherr-Hausgeräte Marica EOOD**

Radinovo

**Liebherr-Transportation Systems**

**Marica EOOD**

Radinovo

Czech Republic

**Liebherr-Stavební stroje CZ s.r.o.**

Brno

Hungary

**Liebherr-Építőipari Gépek**

**Magyarország Kft.**

Győr

Kazakhstan

**Liebherr Kasachstan TOO**

Almaty

Poland

**Liebherr-Polska sp. z o.o.**

Ruda Śląska

Romania

**Liebherr-Romania S.R.L.**

Bucharest

Russia

**Liebherr-Aerospace Nizhny**

**Novgorod OOO**

Nizhny Novgorod (75.1%)

**Liebherr-Nizhny Novgorod OOO**

Nizhny Novgorod

**Liebherr-Russland OOO**

Moscow

Turkey

**Liebherr Makine Ticaret Servis**

**Limited Şirketi**

Istanbul

## Near and Middle East

Saudi Arabia

**Saudi Liebherr Company Ltd.**

Jeddah (60%)

United Arab Emirates

**Liebherr Middle East FZE**

Dubai

# Summary of Group Companies

## America

### Argentina

**Liebherr-Argentina S.A.**  
Buenos Aires

### Brazil

**Liebherr Aerospace Brasil Ltda.**  
Guaratinguetá  
**Liebherr Brasil Ltda.**  
Guaratinguetá

### Canada

**Liebherr-Canada Ltd.**  
Burlington, ON

### Chile

**Liebherr Chile SpA**  
Santiago de Chile

### Colombia

**Liebherr Colombia SAS**  
Bogotá D.C.

### Mexico

**Liebherr Mexico, S. de R.L. de C.V.**  
Mexico City  
**Liebherr Monterrey, S. de R.L. de C.V.**  
Monterrey  
**Liebherr Servicios Monterrey,  
S. de R.L. de C.V.**  
Monterrey

## USA

### HL Farm, LLC

Newport News, VA

**Liebherr Aerospace Saline, Inc.**  
Saline, MI

### Liebherr-America, Inc.

Newport News, VA

### Liebherr Automation Systems Co.

Saline, MI

### Liebherr Components North America Co.

Saline, MI

### Liebherr Concrete Technology Co.

Newport News, VA

### Liebherr Construction Equipment Co.

Newport News, VA

### Liebherr Cranes, Inc.

Newport News, VA

### Liebherr Gear Technology, Inc.

Saline, MI

### Liebherr Mining Equipment

**Newport News Co.**

Newport News, VA

### Liebherr Nenzing Crane Co.

Medley, FL, and Houston, TX

## Africa

### Algeria

**Liebherr Algérie, EURL**  
Algier

### Ghana

**Liebherr-Ghana Ltd.**  
Accra

### Morocco

**Liebherr-Maroc SARL**  
Casablanca

### Mozambique

**Liebherr-Mozambique, Lda.**  
Maputo

### Nigeria

**Liebherr-Nigeria Ltd.**  
Abuja (90 %)

### South Africa

**Liebherr-Africa (Pty) Ltd**  
Springs

### Zambia

**Liebherr Zambia Ltd.**  
Lusaka



## Far East/Australia

### Australia

**Liebherr-Australia Pty. Ltd.**  
Adelaide

### India

**Liebherr Appliances India Private Limited**  
Mumbai

**Liebherr CMCTec India  
Private Limited**

Pune

**Liebherr India Private Limited**  
Mumbai

**Liebherr Machine Tools India  
Private Limited**

Bangalore (60%)

### Indonesia

**PT. Liebherr Indonesia Perkasa**  
Balikpapan

### Japan

**Liebherr Japan Co., Ltd.**  
Yokohama

### Malaysia

**Liebherr Appliances Kluang SDN. BHD.**  
Kluang

**Liebherr Sales Kluang SDN. BHD.**  
Kluang

### New Caledonia

**Liebherr-Nouvelle-Calédonie SAS**  
Nouméa

### PR China

**Liebherr (HKG) Limited**  
Hongkong SAR

**Liebherr LAMC Aviation  
(Changsha) Co., Ltd.**

Changsha (50%)

**Liebherr Machinery  
(Dalian) Co., Ltd.**

Dalian

**Liebherr Machinery (Xuzhou) Co., Ltd.**

Xuzhou

**Liebherr Machinery Service  
(Shanghai) Co., Ltd.**

Shanghai

**Liebherr Purchasing (Dalian) Co., Ltd.**

Dalian

**Xuzhou Liebherr Concrete**

**Machinery Co., Ltd.**

Xuzhou (50%)

**Zhejiang Liebherr Zhongche**

**Transportation Systems Co., Ltd.**

Zhuji (70%)

### Singapore

**Liebherr-Singapore Pte Ltd**  
Singapore

### South Korea

**Liebherr Mobile Cranes Korea Ltd.**

Seoul

### Thailand

**Liebherr (Thailand) Co., Ltd.**

Rayong





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