#### **Your Trusted Partner for Cranes**







#### Liebherr Cranes – Innovation – Quality - Safety



Since the earliest days Liebherr has always designed and built our cranes to the highest standards possible.

For 66 years now we have been building cranes

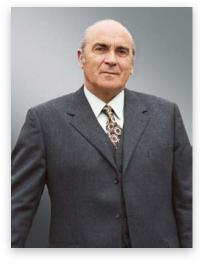






### Liebherr - the family business

**1949** Foundation by Dr. Hans Liebherr



Since **1993** under the leadership of the sister and brother



Since January **2012**, the third generation has also been involved in managing individual divisions of the Group.







#### **Divisions of the Liebherr-International**



Earthmoving



Mining



Mobile cranes



Tower cranes



Concrete technology



Maritime cranes



Aerospace and transportation systems



Machine tools and automation systems



**Domestic appliances** 



Components



Hotels





#### **Investment World-wide**

Liebherr has invested this year in new state of the art facilities in to improve the total customer experience.

- Switzerland
- Brazil
- Russia
- India
- Australia
- Canada
- Germany

Total Global Investments 2014 Euro 800 million







#### **New Global Parts Distribution Centre**

Liebherr-Logistics GmbH, service provider in Kirchdorf Germany Centre will supply spare parts for Liebherr machines around the world Open now to serve our customers better







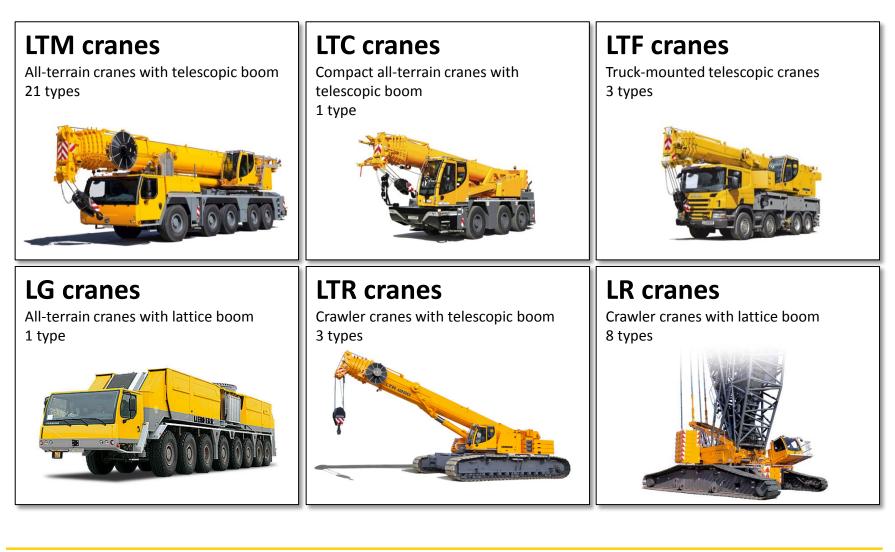
## Liebherr-Werk Ehingen GmbH Mobile and crawler cranes







## **Product range – Liebherr-Werk Ehingen**







#### **Milestones**



333 cranes for Russia

1981



Telescoping technology

2007



Strongest crawler crane worldwide

**1977** First AT crane LTM 1025



**1989** LICCON crane control

1995



Strongest AT crane worldwide

2012

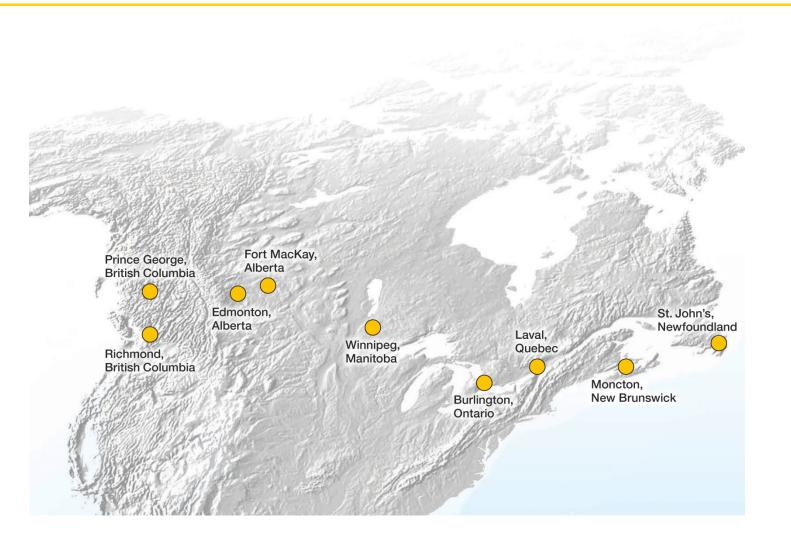






1969

#### **Service locations in Canada**







#### Service and repair shops worldwide

Canada

#### Service Strategy

- → Worldwide service at the highest level
- → Service locations worldwide located close to our customers













### **Operation range – diversification in use**



**Bridge construction** 

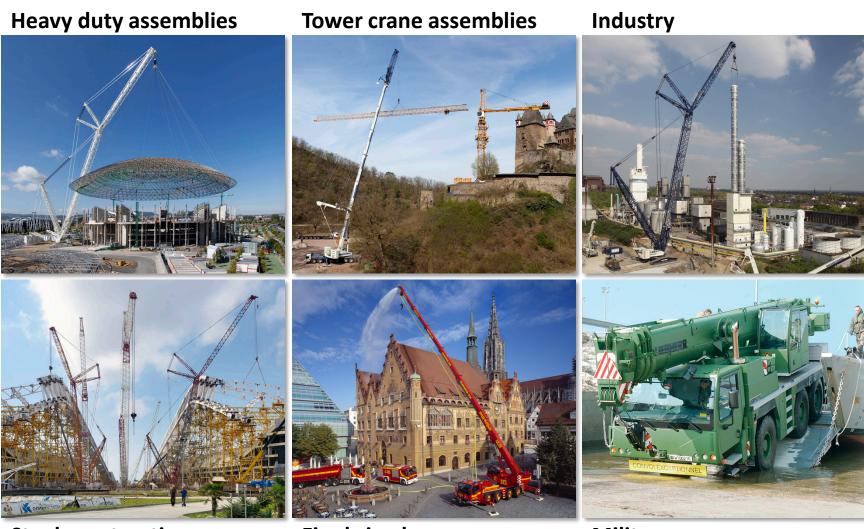
Wind power plants

#### Petro-chemistry





### **Operation range – diversification in use**



**Steel construction** 

#### Fire brigade

Military





#### **Technological competence**

This one factory has more than 250 engineers in the technical sector





#### **Technological competence**

- Liebherr is constantly improving quality.
- Inspection of all materials and all welding seams is standard.
- Each welding seam is tested to be of the highest quality.
- In-house welding competence centre is a key part of training staff.









#### Innovations

Control and monitoring of all crane functions with the Liebherr in-house developed LICCON computer system

High comfort

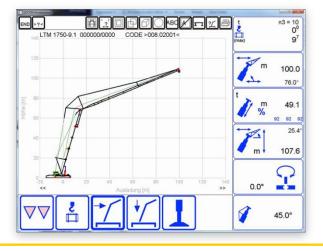
e.g. with the BTT Bluetooth Terminal or the wireless remote control





#### High safety

e.g. with the LICCON work planner





LIEBHERR

#### Latest innovations

## **PowerBoom**

Load capacity increases of more than <u>50%</u> with relatively little effort





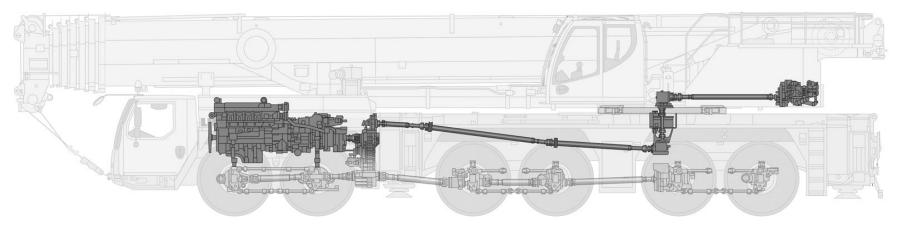


## Latest innovations

Innovative crane drive concept with just one engine and a mechanical shaft

#### Benefits:

- Cost and weight reduction
  - 98% efficiency in the drivetrain no loss of power
  - Simple and better
  - Reduction in maintenance and fuel costs
- Higher lifting capacities and/or longer booms due with the reduction in weight





## Latest innovations

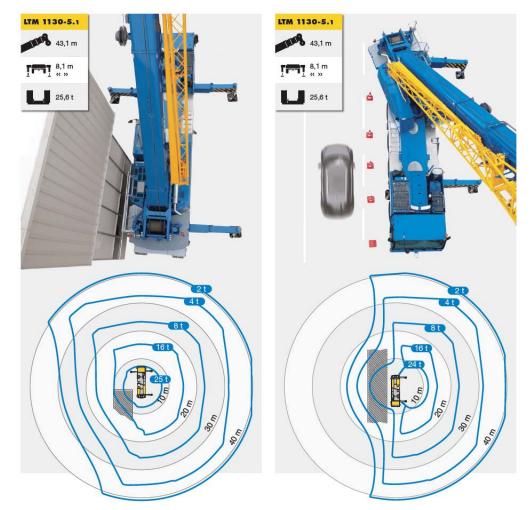
#### VarioBase

Every individual crane outrigger support can be extended to any length – though this crane feature operation is made safer by the advanced load moment limiter.

#### Improved safety !!!

More lifting capacity and larger working range











## **Extensive Training Centres**

- Training of more than 8,700 persons annually
- Approximately 600 training courses with around 80 different topics
- Training topics
  - Product and technology
  - Crane operation in practice
  - Crane operator training
  - Crane maintenance and trouble shooting
  - Information and data processing









#### **Our People**

#### Think Safety

- At Liebherr quality, functionality and safety always come first.
- Every, individual crane is continuously tested in depth during the production process and at then retested at the acceptance area.
- Every, individual crane is analysed statically with 1.5-fold safety and is being tested at the acceptance area with 25 % overload









#### **Our employees - the key to success**

- Long-Term Employees are the Standard at Liebherr → Ensuring the cranes get built to the highest quality.
- Good education and ongoing training for all employees is part of the Liebherr way.
- People that care and are proud of their work simply build better cranes for our customers

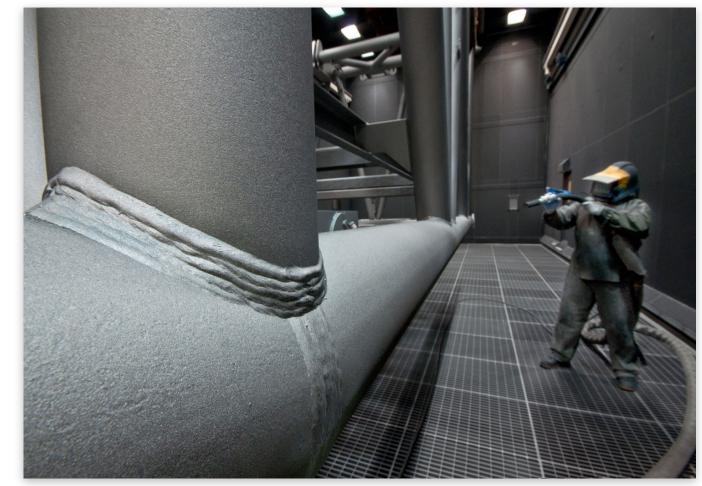








#### What Does a Quality Crane Partner Provide You



- Technology
- Safety
- Quality
- Parts
- Service
- Support





### **Did You Know Each Year This Factory**

- Uses 160,000 different parts in series and spare parts
- Daily 140 160 trucks are off loaded at the factory.
- 210,000 tonnes material per year are used.
- 50,000 Sea-Freight Container-boxes per year are utilized.
- 325 km lattice tubes,
  650 km hydraulic hoses,
  325 km hydraulic pipes per year
- Crane documentation is written in 31 languages







#### Thank you for your attention

#### **Our Core Values**

# Highest quality in everything we do



## We accept responsibility

We are a trustworthy partner

Our employees are a key factor in our success





