Presentation Outline
- Company Overview
- Introduction to range of LHMs
- Insight to LHM Design & Features
The Liebherr Group

- Company founded by Dr Hans Liebherr in 1949
- The Liebherr Group today (2014):
  - over 120 companies worldwide
  - more than 32,000 employees
  - € 8.334 billion turnover
- Decentralised structure with straightforward, autonomous corporate units – divisional structure
- Holding company: Liebherr-International AG, Bulle, Switzerland
A Successful Family Business

The family business is run by siblings Isolde Liebherr and Dr. Willi Liebherr.

- High level of independence in all decision making
- Traditional values
- Long term orientation
- Investments:
  2011: € 650 Mill.
  2012: € 850 Mill.
  2013: € 780 Mill.

(E.g. R&D, building of plants and factories, service stations and increasing presence across national borders, etc..)
Long Term Orientation

- Investments:
  2011: € 650 Mill.
  2012: € 850 Mill.
  2013: € 780 Mill.

Annual IBJ Awards
(International Bulk Journal – Belgium)

Crane of the Year
- 2009 – LHM 280
- 2010 – LHM 500
- 2011 – LPS 600

“Testament to Liebherr’s consistent commitment to highest quality standards in combination with innovative strength...”
# Divisional Structure

## Liebherr-International AG

<table>
<thead>
<tr>
<th>Division</th>
<th>Name</th>
<th>Location</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthmoving</td>
<td>EMtec (Kirchdorf)</td>
<td>Kirchdorf</td>
<td>Earthmoving Equipment</td>
</tr>
<tr>
<td>Mining Equipment</td>
<td>CMCtec (Biberach)</td>
<td>Biberach</td>
<td>Construction Cranes, Mixing technology</td>
</tr>
<tr>
<td>Maritime Cranes</td>
<td>MCCtec (Nenzing)</td>
<td>Nenzing</td>
<td>Crawler Cranes, Foundation Equipment</td>
</tr>
<tr>
<td>Mobile Cranes</td>
<td>LWE (Ehingen)</td>
<td>Ehingen</td>
<td>Mobile Cranes, Crawler Cranes</td>
</tr>
<tr>
<td>Aerospace</td>
<td>Aerospace (Toulouse)</td>
<td>Toulouse</td>
<td>Aerospace Technology, Transport Technology</td>
</tr>
<tr>
<td>Machine tools</td>
<td>Verzahntechnik (Kempten)</td>
<td>Kempten</td>
<td>Machine tools, Material-Flow Technology</td>
</tr>
<tr>
<td>Domestic Appliances</td>
<td>Hausgeräte (Ochsenhausen)</td>
<td>Ochsenhausen</td>
<td>Domestic Appliances</td>
</tr>
<tr>
<td>Maritime Cranes</td>
<td>MCCtec (Nenzing)</td>
<td>Nenzing</td>
<td>Maritime Cranes, Crawler Cranes</td>
</tr>
<tr>
<td>Foundation Equipment</td>
<td>LWN (A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCC (IRL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSW (UK)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR (G)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Integration of Expertise

![Integration of Expertise](image-url)
Production Locations of Liebherr-MCCtec GmbH

MCCtec
(Nenzing)

- Turnover: € 1.24 billion. (2013)
- Employees: 3,600 + (2013)
- 4 product plants with a total surface of 670,300 m²
- 23 sales and service stations

Ireland (LCC)
Austria (LWN)
Germany (MCR)
U.K. (LSW)
Product Range Liebherr - MCCtec GmbH

Mobile Harbour Cranes

Worldwide Population – 1250++
Product Range Liebherr - MCCtec GmbH

Gantry Cranes, Container Cranes

Worldwide Population – 550 ++
Product Range Liebherr-MCCtec GmbH

Ship and Port Cranes

Worldwide Population – 4000 ++
Product Range Liebherr-MCCtec GmbH

Offshore Cranes

Worldwide Population – 750 ++
Product range Liebherr-MCCtec GmbH

Duty Cycle Crawler Cranes

Worldwide Population – 2500 ++
- PRODUCT RANGE
- CRANE CONFIGURATIONS
Introduction to LHM Solutions

Container Handling

Heavy Lifts

Bulk Handling
Multipurpose Function and Applications

- Spreader
- Heavy Lift
- Scrap
- Magnetic Lifts

AKR Group – 3 x LHM 420

Video Demo
Multi-Applications
The Range

LHM 600
208 T
58m

LHM 550
144 T
54m

LHM 420
124 T
48m

LHM 280
84 T
40m

LHM 180
64 T
35m

LHM 120
42 T
30m
Variable Configuration

Optimal Adaptation on all Customer Requirements (quay, rail and water-related needs)

- **PORTAL**
  - Wheel loads up to 50t

- **UNDERCARRIAGE**
  - Up to 28 axle sets

- **PONTOON**
  - For sheltered water
  - Barge list up to 3°

- **Crane Super Structure**
  - 2 Boom Variants
  - 2 Tower Hinge Point Heights
  - 2 Power Pack Variants

- **LPS**
- **LHM**
- **LFS**
- **LBS**

---

17 Port Equipment
LHM 500 – Hyundai Steel, South Korea
LHM 420 – AKR Group, Indonesia
LHM 180 and LRS 645 – Bayswater Singapore
LBS 500 – PT Indominco Mandiri, Indonesia
LFS 500 – Puerto de Coronel, Chile
LFS 180 – PT Pamapersada, Indonesia
Multi Media Presentation
Multipurpose Function and Applications

- Modular Principle
- Types of applications
- General Arrangement
- Design Feature - Slewing Platform
- Design Feature - Undercarriage & Mobility
- Design Feature - Sycratronic & Cycoptronic
Pactronic® (Power Accumulation Control System)

High reliable **HYBRID** solution
(in comparison to equivalent conventional power drive)

- Energy recirculation (energy storage)
- Less energy consumption
- Reduced exhaust emissions
- Reduced noise exposure
- Increase of hoisting power
- Increase of efficiency
- Decrease of maintenance (smaller or less diesel engines)

Filling of accumulator done by using of return power
(lowering of load)

Additional filling of accumulator by separate pump
- from reverse power other gears
- from power reserves diesel motor

Advantages Accumulator
- Unique lifetime
- Easy Recycling
- No maintenance, only visible inspection

Pactronic - Link
LIDAT

Continuous Transfer of operational data (in the background)
  ➢ Direct transfer to analyse systems (SCULI)

Remote diagnostics

In real time alarming
After Sales Support and Services

- Worldwide network of customer service centres
- Efficient supply of spare parts
- Lifetime Service and Maintenance Support of all machines
- Experienced service engineers posted at service stations worldwide

Incl. Manufacturing head office, sales & service stations & representative offices

Comprehensive and Efficient Spare Parts Supply

More than Euro 2 Million worth of stocks ready for customers
World Wide After Sales Network
For more information……..

Come and visit us at our booth
Liebherr stand number 18

Thank you for your attention!