

Tower Cranes



LIEBHERR

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Liebherr Group

Liebherr was founded in 1949 by Hans Liebherr. The company has now grown into a group with more than 43,000 employees in over 130 companies on every continent of the world. Today, not only is Liebherr one of the largest construction machinery manufacturers in the world, but is also renowned in many other sectors as a supplier of technically sophisticated products and services to benefit its customers. The holding company is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

The fact that Liebherr is a family-run company has always influenced its corporate culture. In fact, Liebherr has been synonymous with stability and reliability for more than 60 years and enters into long-term, close relationships with its customers and business partners.

Achieving the highest quality is the focus of everything the company does. Every employee in the group also pursues this objective in his everyday work. Liebherr is passionate about its products and technological progress. But Liebherr takes the customer's point of view so that it develops bespoke solutions wherever possible.

In short

- > 43,000 employees worldwide
- 11 product divisions
- over 130 Liebherr companies in more than 50 countries
- on all 5 continents



Liebherr Tower Cranes

Whether it is for a small house for a family or a gigantic skyscraper – construction sites have always been fascinating places for people. Their whole existence is about making something for the future – and our tower cranes play a role in making these dreams come true.

Since the invention of the first mobile tower crane in 1949, we have been driven by the desire to make hoisting loads easier, faster and more cost-effective. That is why we supply a wide range of high-quality tower cranes featuring all systems and size classes. And to ensure that we are as close to our customers as possible, in addition to an extensive service network, we have five production plants in Germany, Spain, India, Brazil and Russia.

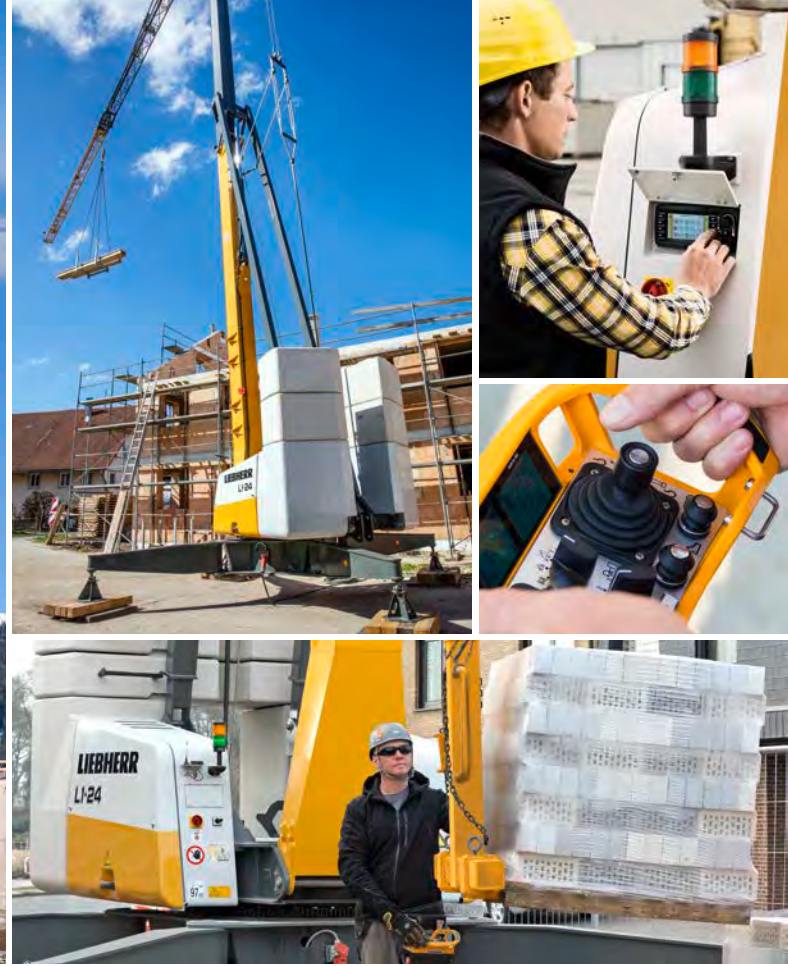
Alongside its products, Liebherr Tower Cranes provides an extensive range of other services to complete its portfolio – Tower Crane Solutions, the Tower Crane Centre and Tower Crane Service.

In short

- approx. 2,200 employees
- 5 production plants worldwide
- 8 tower crane series
- more than 60 years of experience
- over 80,000 tower cranes manufactured since 1949







Fast-erecting cranes






The L1 series

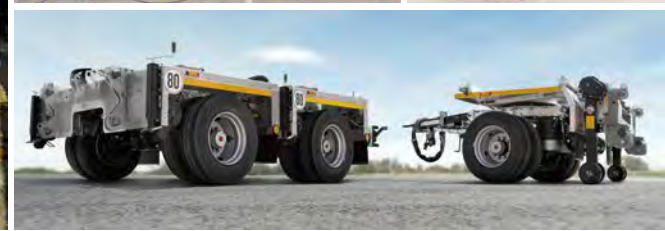
The hydraulic fast-erecting cranes in the L1 series deliver the solution for two of the most important challenges on a site: the power to move heavy loads without taking up too much space. In short: Power in compact form.

Their compact design make them ideal for constricted sites, such as housebuilding and roofing work where limited area is available. The cranes can be brought to the site fully operational in just one transport unit. The cranes can be made ready for use quickly thanks to their easy-assembly hydraulics.

The company's own control system supports the crane driver in his work. The Micromove fine positioning mode, oscillation damping and operating-range limiting system deliver enhanced safety – for both man and machine.

Technical data

	 kg	 kg	 m →	 m ↑	 m ↑
L1-24	2,500	950	25.0	19.1	25.7
	2,500	800	27.0	19.2	26.5
L1-32	4,000	1,050	30.0	21.3	29.4
Fast-erecting cranes in a mobile version – HM series					
13 HM.1	1,500	500	22.0	16.0	21.3
22 HM.1	2,000	700	27.0	19.0	33.4



Fast-erecting cranes






The K series

The K series is notable for its combination of versatility and flexibility. K cranes adjust to the site situation with variable hook heights, lifting capacities and slewing radii. This is made possible by the telescoping lattice tower with rapid climbing equipment, the adjustable jib and reducible slewing platform. The crane driver can see everything all the time – whether he is using the practical remote control on the ground or in the modular crane cabin.

Liebherr's own powerful drive units and intelligent control systems enable a high handling capacity and a high level of safety on site.

For transporting the cranes to the site, we can provide a solution which is perfectly tailored to the crane in the form of our modular LiTRAX transport axles, low-speed and high-speed axles.

Technical data

	 kg	 kg	 m →	 m ↑	 m ↑
34 K	4,000	1,100	33.0	27.0	39.0
42 K.1	4,000	1,200	36.0	28.0	41.5
53 K	4,200	1,100	40.0	31.0	43.1
65 K.1	4,500	1,350	43.0	34.6	49.3
81 K.1	6,000	1,350	48.0	40.4	57.4
125 K	8,000	1,300	55.0	41.5	65.5



Mobile construction cranes






The MK series

The mobile construction cranes in the MK series combine the mobility of a classic mobile crane with the functional benefits of a tower crane, such as working on projecting edges.

The enormously manoeuvrable taxi cranes in the MK series are designed for one-man operation. The crane driver can drive, erect and operate the MK crane using the remote control or in an infinitely height-adjustable elevating operator's cab. The vertical tower enables the crane to get very close to the building so that the entire jib length can be used at all times. With their variable steering concept and active rear wheel steering, mobile construction cranes can be moved into almost any gap.

In addition to the four-axle MK 88-4.1, the Liebherr range also includes the largest five-axle mobile construction crane on the market, the MK 140. Thanks to its VarioJib concept, this crane can reach hook heights of up to 94.4 metres.

Technical data

	 kg	 kg	 m	 m	 m
MK 88-4.1	8,000	2,200	45.0	30.2	59.1
MK 140					
Trolley mode	8,000	1,900 ^{*1,2}	58.5	39.9	75.5
Luffing mode	—	1,700 ^{*1}	65.0	—	94.4

^{*1} with additional ballast

^{*2} with Plus Package



Top-slewing cranes




The EC-B series

The EC-B series was specially developed to meet the requirements of modern construction sites. Transport, erection, handling capacity and safety – the intelligent overall concept delivers progressive solutions in every category.

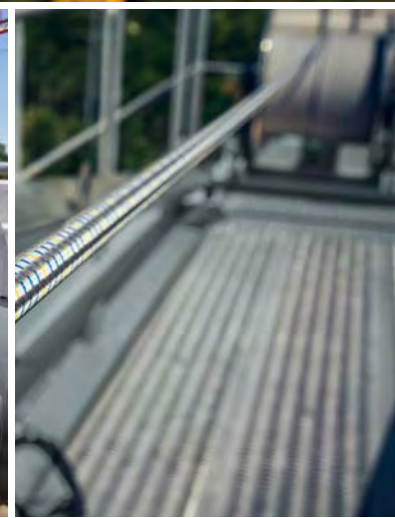
Compact transport units and efficient erection solutions such as the sophisticated compact head, LiConnect quick-release connections for the jib and counter-jib and safe electrical plug connectors ensure a high level of cost-effectiveness for transport and assembly.

Various climbing and guying systems mean that there is almost no limit to the possible uses. The intelligent assistance systems of the Tower Crane Litronic ensure efficient, safe crane control. This enables these cranes to be adapted to the personal requirements of the crane driver and site quickly.

Technical data

	 kg	 kg	 m →
71 EC-B 5 FR.tronic	5,000	1,000	50.0
85 EC-B 5	5,000	1,300	50.0
85 EC-B 5 FR.tronic	5,000	1,300	50.0
125 EC-B 6	6,000	1,600	58.0
150 EC-B 8 Litronic	8,000	1,400	62.5
172 EC-B 8 Litronic	8,000	1,800	62.5
202 EC-B 10 Litronic	10,000	2,200	65.0
220 EC-B 10	10,000	2,250	68.0
220 EC-B 12	12,000	2,050	68.0
250 EC-B 12 Litronic	12,000	2,250	70.0
340 EC-B 12	12,000	2,400	78.0
340 EC-B 16	16,000	2,100	78.0
380 EC-B 12 Litronic	12,000	3,700	75.0
380 EC-B 16 Litronic	16,000	3,400	75.0
1000 EC-B 100 Litronic*	100,000	9,600	46.5
1000 EC-B 125 Litronic*	125,000	19,350	36.5

* on request



Top-slewing cranes




Fibre version

Liebherr Tower Cranes has invested a great deal of time and effort into research and development work to create a reliable, safe alternative to steel ropes – fibre cranes with high-tensile fibre ropes.

The fibre rope weighs around one-fifth of a conventional steel rope. When combined with the lightweight hook block on the fibre cranes, this creates potential for a significant increase in capacity. The fibre rope is significantly lighter and easier to handle, a major benefit for erection and service work.

Due to its special strand construction, the rope will last four times longer and can withstand a high number of bending cycles. This means it is subject to low wear and therefore delivers a long service life. The rope also guarantees operational safety as the various wear states are clearly identifiable by coloured markings on the cover.

Technical data

	 kg	 kg	 m
240 EC-B 10 Fibre	10,000	2,500	68.0
240 EC-B 12 Fibre	12,000	2,400	68.0
278 EC-B 12 Fibre	12,000	2,850	70.0
370 EC-B 12 Fibre	12,000	2,800	78.0






Top-slewing cranes

The EC-H series

The cranes in the EC-H series dominate the image of many building sites with the unmistakable silhouette with the tip and interior cabin. These high-top cranes are ideal for medium and large construction projects, such as industrial and plant construction. EC-H cranes are the best option for high lifting capacities. The heavy-duty motors made by Liebherr also ensure high handling capacities.

Various climbing and guying systems mean that there is almost no limit to the possible uses. All EC-H cranes with the Tower Crane Litronic can be adapted to the personal requirements of the crane driver and site quickly. Intelligent assistance systems control the tower cranes efficiently and safely.

Technical data

	 kg	 kg	 m →
420 EC-H 16 Litronic	16,000	3,700	75.0
550 EC-H 20 Litronic	20,000	4,000	81.5
550 EC-H 40 Litronic	40,000	4,000	81.5
630 EC-H 40 Litronic	40,000	5,800	81.4
630 EC-H 50 Litronic	50,000	5,200	81.4
630 EC-H 70 Litronic*	70,000	10,700	30.9
1000 EC-H 40 Litronic	40,000	11,500	81.4
1000 EC-H 50 Litronic	50,000	11,000	81.4

* on request



Top-slewing cranes




The HC-L series

The luffing jib cranes in the HC-L series are used for high-level work on constricted sites. They can be used on almost any site as a result of the small slewing radius and luffing jib, even if there is little space available. With high lifting capacities and fast hoist speeds, they ensure that building work proceeds quickly.

In the luffed position of the jib between 15° and 70°, even when not in use, they can be slewed freely when used on sites with lots of cranes and overlapping slewing ranges. Various climbing and guying systems mean that there is almost no limit to the possible uses.

On all HC-L cranes, the intelligent Tower Crane Litronic helps ensure that the crane is controlled efficiently and safely. Level luffing at the touch of a button, in particular, ensures that it can work precisely and safely.

Technical data

	 kg	 kg	 m
190 HC-L 8/16 Litronic	16,000	2,500	55.0
230 HC-L 8/16 Litronic	16,000	1,900	60.0
280 HC-L 12/24 Litronic	24,000	3,200	60.0
280 HC-L 16/28 Litronic	28,000	3,000	60.0
357 HC-L 12/24 Litronic	24,000	4,500	60.0
357 HC-L 18/32 Litronic	32,000	4,100	60.0
542 HC-L 12/24 Litronic	24,000	4,800	65.0
542 HC-L 18/36 Litronic	36,000	4,300	65.0
710 HC-L 32/64 Litronic	64,000	7,200	65.0






Top-slewing cranes

The HC series

The HC series comprises large cranes designed for very high hook heights and very large radii which can manage enormous lifting capacities. These cranes are often used over a long service life, for example for handling loads at mines or shipyards.

HC cranes can position even very heavy loads precisely and sensitively. The company's own drive units and control technology ensure that the drive units are perfectly tailored to each other and that sensitive loads can be positioned correctly.

Technical data

	 kg	 kg	 m →
1250 HC 40	40,000	12,500	81.0
1250 HC 50	50,000	12,000	81.0
2000 HC 60	60,000	22,000	81.4
3150 HC 60	60,000	32,000	80.0
3150 HC 70	70,000	50,000	60.0
4000 HC 70	70,000	25,500	90.0
4000 HC 80	80,000	34,000	100.0
4000 HC 100	100,000	22,500	96.0
5000 HC 80	80,000	42,000	100.0








Special cranes

Tower cranes on crawler tracks

Fast-erecting cranes and top-slewing cranes are available on crawler track travel gear for difficult terrain. These cranes with crawler undercarriages are extremely mobile and therefore particularly cost-effective. Crawler cranes are used when cranes have to be able to change location quickly and also generate low ground pressure. The expertise from three Liebherr companies was used in the crawler undercarriage.

Technical data

					
42 KR.1	4,000 kg	1,200 kg	36.0 m	28.0 m	41.5 m

other cranes available on request






Special cranes

The Derrick crane

The last one out clears up. The Derrick crane is designed as a specialist dismantling crane for cranes from high-rise buildings and other high structures. It can be dismantled into very small units and transported through building elevator shafts with small lifting gear. In addition to cranes, Liebherr can also provide a complete Derrick service which includes all planning. Furthermore, this special crane can also be used as a construction crane for special requirements.

Technical data

	 kg	 kg	 m
200 DR 5/10 Litronic	10,000	7,500	25.0



The smart assistant

Tower Crane Litronic

To support crane operators and service technicians in their work while boosting handling capacity, reliability and safety, our Tower Crane Litronic crane control system comes with a series of modern assistance systems.

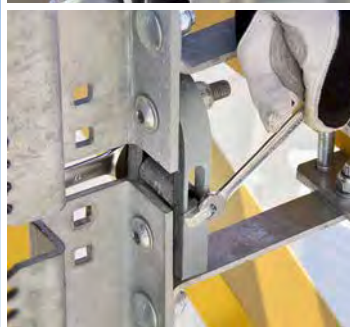
Micromove fine positioning mode comes into its own whenever sensitive components have to be positioned accurately. This function allows loads to be positioned particularly gently and with millimetre precision using reduced speed.

The operating-range limiting system enables you to deliberately avoid areas and obstacles which a load should not be slewed over, for example railway tracks, motorways or kindergartens.

The Load-Plus function enables you to increase the lifting capacity of your crane for individual hoists by up to 20 % – all at the touch of a button.

Assistance systems

- Micromove fine positioning mode
- ABB operating-range limiting system
- Load-Plus to increase lifting capacity
- safety-monitored climbing
- level luffing
- wind force moment control and oscillation-damping system



Crane driver elevator

LiUP

Up to the top at the touch of a button. Using the LiUP crane driver elevator, the crane driver can reach the cabin in around 2 minutes at the touch of a button. The special feature of the elevator is its internal position which ensures greater safety and economy. The LiUP can remain in the tower for transport and use with the ready-installed rails. This saves time and money for the erection and dismantling of tower crane.

Technical data

Payload	200 kg (2 people or 1 person with tools)
Speed	up to 20 m/min
Charging cycle	30 – 60 minutes
Transport height with one battery charge	300 m



Services

Tower Crane Customer Service

With its Tower Crane Customer Service, Liebherr is a fair, reliable service partner for tower cranes and mobile construction cranes.

The wide range of training available from Tower Crane Customer Service provides all user groups of tower cranes and mobile construction cranes with the perfect training courses. By training personnel properly, Liebherr can ensure greater safety and productivity on your site.

Many practical difficulties can be solved simply by the site personnel talking to the technical consultants at Tower Crane Customer Service. Competent, specialist contacts answer any technical questions and thus provide fast help.

A dense worldwide network of Liebherr service technicians and service partners, combined with excellent logistics ensure rapid, reliable supplies of spare parts. Tower Crane Customer Service also provides extensive support for crane erection, maintenance and safety tests.

The core areas

- Training Center
- technical service
- spare parts supplies
- site erection



Services

Tower Crane Solutions

Bespoke solutions direct from the manufacturer – Tower Crane Solutions specialises in providing advice and planning for special projects in housebuilding and industrial construction as well as projects in power station, plant and wind turbine construction.

Tower Crane Solutions create special solutions for sites and tower cranes, dealing direct with the customer. The team of experienced specialists uses the worldwide Liebherr network and coordinates the collaboration between various areas of competence, such as design, structural engineering, production, sales, rental and Tower Crane Service.

In addition to special technical solutions and design adjustments to the cranes, Tower Crane Solutions also provides effective site consultancy and design services. The aim is to provide the customer with maximum benefits for his construction projects.

The core areas

- major projects
- complex special projects
- power station and plant construction
- wind energy
- shipyards



Services

Tower Crane Center

The Tower Crane Center in Bad Waldsee has a worldwide presence dealing with used machines and rental and uses the global network of Liebherr companies and partners to do so.

Start where others stop. The Liebherr Tower Crane Center serves the market for used Liebherr tower cranes around the world – focusing in particular on cranes, components and accessory parts which have to meet special challenges. The service includes purchasing, renovating and modifying, planning logistics and sales.

The Tower Crane Center ensures that global rental fleets of tower cranes are in contact with each other and coordinates crane stocks all over the world.

The core areas

- inspection and repair of rental and used machines
- networking and coordination of rental and used machines
- planning of crane combinations and modifications with Tower Crane Solutions



Global production

Crane production

Since the construction of the first tower crane over 60 years ago, Liebherr has maintained the very highest quality in its products.

Modern production processes from cutting to size to final assembly enable the company to manufacture an extraordinary range of products which extends from small fast-erecting cranes to large and special cranes. Each crane is continuously safety-tested during the production process using modern methods.

Designers at five locations around the world work closely with production staff on technically demanding and market-focused tower cranes – with a passion for engineering.



Germany

Liebherr-Werk Biberach GmbH

Biberach an der Riss

- since 1954
- approx. 1,500 employees
- approx. 200,000 m² total area



Spain

Liebherr Industrias Metálicas, S.A.

Pamplona

- since 1990
- approx. 250 employees
- approx. 175,000 m² total area



India

Liebherr CMCtec India Pvt. Ltd.

Pune

- since 2011
- approx. 80 employees
- approx. 220,000 m² total area



Russia

Liebherr-Nizhny Novgorod OOO*

Dzerzhinsk

- since 2006
- approx. 650 employees
- approx. 1,200,000 m² total area



Brazil

Liebherr Brasil Ltda.*

Guaratinguetá

- since 1974
- approx. 1,000 employees
- approx. 950,000 m² total area

* Mixed production company in which products are also manufactured for other divisions in the Group.





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