

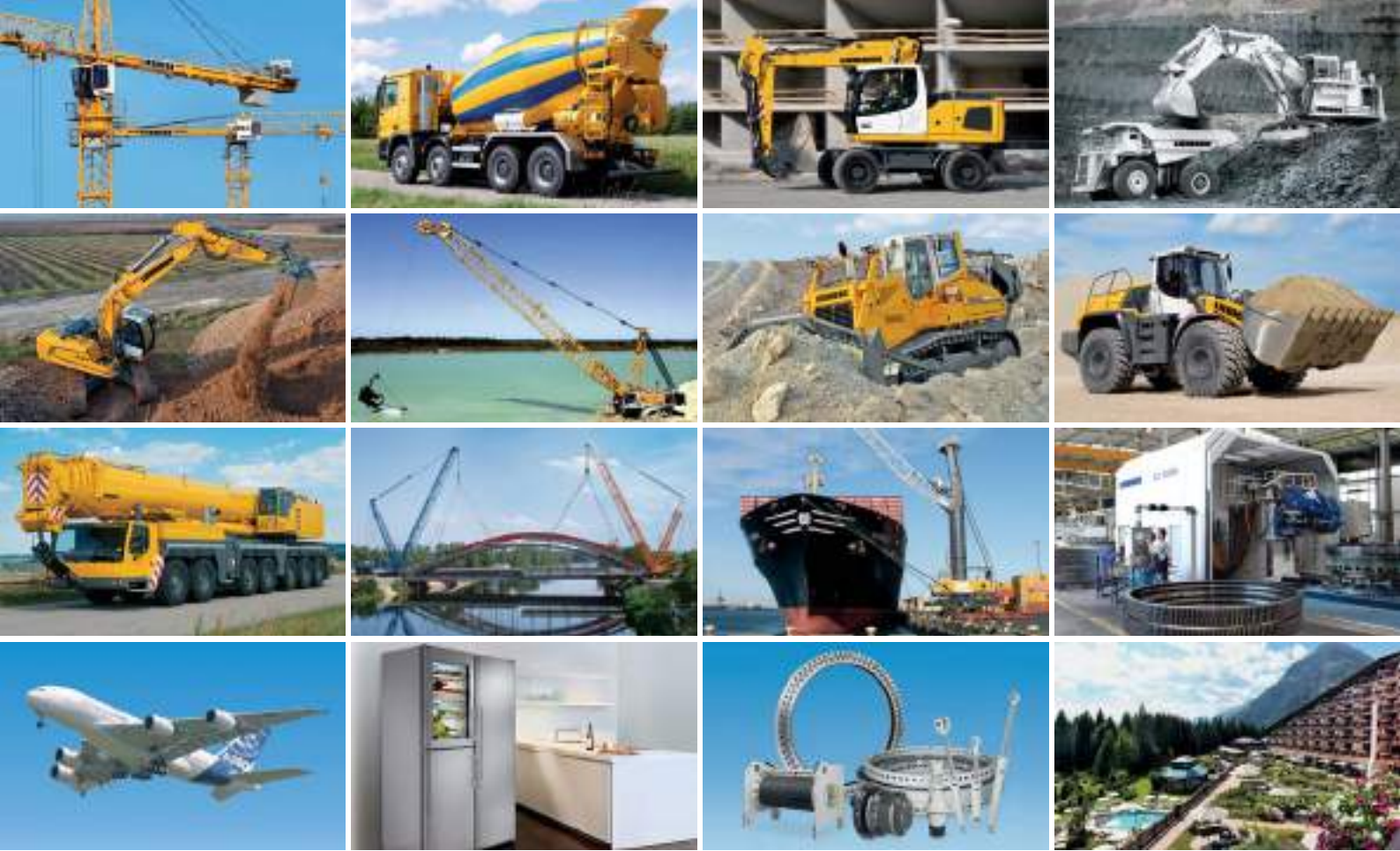
Tower Cranes



<https://cranemanuals.com>

LIEBHERR

Liebherr Group of Companies	4
Liebherr Tower Cranes	7
Product range	9
Fast-erecting cranes	10
Mobile construction cranes	14
Top-slewing cranes	16
Special cranes	24
Crane driver elevator	26
Services	
Tower Crane Service	28
Tower Crane Solutions	30
Tower Crane Center	32
Global production	34



Liebherr Group of Companies

Liebherr was founded in 1949 by Hans Liebherr. The company has now developed into a group of companies with a workforce of over 39,000 people in more than 130 companies across all continents. Today Liebherr is not only one of the largest manufacturers of construction machinery in the world but is also renowned as a supplier of technically advanced, user-oriented products and services in many other industries. The holding company is Liebherr-International AG based in Bulle, Switzerland, whose shareholders are all members of the Liebherr family.

The fact that Liebherr is a family-owned company has dominated the corporate culture ever since the company was founded. For over 60 years Liebherr has been synonymous with stability and reliability and has always focussed on long-term, close working relationships with its customers and business partners.

The main focus of everything the company does is to achieve maximum quality. Every single employee of the group of companies pursues this objective in their everyday work. Liebherr is passionate about its products, and concentrates on the point of view of its customers in order to develop bespoke solutions for them.

In short

- 41,000 employees worldwide
- 11 product divisions
- over 130 Liebherr companies in more than 50 countries
- on all 5 continents



Liebherr Tower Cranes

The invention of the mobile tower crane in 1949 marked the start of Liebherr Tower Cranes. This product division within the Liebherr Group of Companies is now the leading global manufacturer of mobile construction and tower cranes and has five production plants in Germany, Spain, India, Brazil and Russia.

Its range of products includes an extensive program of high-quality tower cranes featuring all systems and size classes. They include fast-erecting, top-slewing, luffing jib and special cranes. The flexible fast-erecting cranes and powerful top-slewing cranes are ideal for housebuilding and also in industry and for large projects all over the world.

But Liebherr Tower Cranes offers far more than just the products. Additional services include: Tower Crane Solutions, Tower Crane Center and Tower Crane Service.

In short

- approx. 2,100 employees
- 5 production plants worldwide
- 8 tower crane series
- more than 60 years of experience
- over 70,000 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: Compact power.

Their compact design makes them ideal for constricted sites, such as house building and roofing work with a limited area. A version with full steel ballast ensures cost-effective and fast transport and erection procedures. 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, loadswing 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
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.

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	55.0
120 K.1	8,000	1,450	50.0	37.4	54.8



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 axle steering, mobile construction cranes can be moved into almost any gap.

In addition to the four-axle MK 88, the Liebherr range now 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	8,000	2,200 ^{*1,2}	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 Litronic control system 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
110 EC-B 6	6,000	1,500	55.0
110 EC-B 6 FR.tronic	6,000	1,400	55.0
130 EC-B 6	6,000	1,500	60.0
130 EC-B 8 FR.tronic	8,000	1,300	60.0
150 EC-B 6 FR.tronic	6,000	1,600	60.0
150 EC-B 6 Litronic	6,000	1,800	60.0
150 EC-B 8 FR.tronic	8,000	1,500	60.0
150 EC-B 8 Litronic	8,000	1,700	60.0
172 EC-B 8 Litronic	8,000	2,100	60.0
202 EC-B 10 Litronic	10,000	2,200	65.0
250 EC-B 12 Litronic	12,000	2,250	70.0
285 EC-B 12 Litronic	12,000	2,600	75.0
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

The EC-H series

The cranes in the EC-H series dominate the image of many building sites with the unmistakable silhouette with the tower head 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 drive units 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 Litronic control system 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 →
200 EC-H 10 Litronic	10,000	2,650	60.0
280 EC-H 12 Litronic	12,000	2,800	75.0
280 EC-H 16 Litronic	16,000	3,100	70.0
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 Litronic crane control system helps ensure that the crane is controlled efficiently and safely. The level luffing at the touch of a button, in particular, ensures that the crane can work precisely and safely.

Technical data

	 kg	 kg	 m
180 HC-L 8/16 Litronic	16,000	2,600	55.0
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 25/50 Litronic	50,000	7,600	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

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

further cranes 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



Crane driver elevator

LiUP

Up 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 a tower crane.

Technical data

Payload	200 kg (2 people or 1 person with tools)
Speed	up to 25 m/min
Loading process	30 – 60 minutes
Travel height on one battery charge	300 m



Services

Tower Crane Service

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

The wide range of training available from Tower Crane 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 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 Service also provides extensive support for crane erection, maintenance and safety tests.

The core areas

- Training centre
- Technical service
- Spare parts supplies
- Site erection



Services

Tower Crane Solutions

Custom 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
- Shipbuilding yards



Services

Tower Crane Center

The Tower Crane Center in Bad Waldsee has a worldwide presence dealing with rental and used machines. It uses the worldwide 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 passion for engineering.



Germany

Liebherr-Werk Biberach GmbH

Biberach an der Riss

- since 1954
- approx. 1,300 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. 400 employees
- approx. 400,000 m² total area



Brazil

Liebherr Brasil Ltda.*

Guaratinguetá

- since 1974
- approx. 1,100 employees
- approx. 950,000 m² total area

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





<https://cranemanuals.com>



Cranes for generations

