

Press release

First concrete batching plant from the new Liebherr generation goes into operation at a+b

- Focus on energy efficiency and cost savings
- Plug-in modules allow maximum mobility when relocating the plant
- Improved environmental protection thanks to higher cement weighing accuracy

Liebherr has over 60 years of experience in the field of concrete batching plants and has now launched its latest batching plant generation. A mobile version went into operation just recently for a+b Asphalt- und Betonmischwerke GmbH & Co. KG.

Bad Schussenried (Germany), October 2023 - The new Betomix and Mobilmix batching plant series can be fully put together from a modular system. Customers benefit from more configuration options, shorter lead times, faster assembly and high parts availability.

a+b Asphalt- und Betonmischwerke is a leading medium-sized company for the production and distribution of ready-mixed concrete, asphalt, gravel, sand and chippings at various locations. The company was equipped with a Mobilmix 3.0 concrete batching plant from the new Liebherr system, which has gone into operation in Bad Waldsee in southern Germany. The plant delivers up to 130 m³ output per hour with the Liebherr DW 3.0 twin-shaft mixer. Up to 210 m³ of aggregates can be stored in a total of six chambers. Four types of cement or binder totalling up to 400 tonnes are stored in the cement section.

Focus on energy and cost efficiency

The new plant requires up to 30 % less energy than previous versions, while the necessary electricity supply can also be lower because power peaks can be avoided. This is achieved by frequency converters for the drives on the mixer and feeder elevator. The soft start and soft stop of the drives noticeably reduces wear and tear on the mechanical parts. Furthermore - thanks to the frequency converter - the speed of the twin-shaft mixer can be changed during the mixing process and adapted to the recipe. a+b is therefore prepared for the concretes of the future.

Lower CO₂ footprint thanks to cement savings

The biggest lever for better environmental protection is cement, because cement production demands a lot of energy. The frequency converters enable an accuracy of +/- 0.5 % when metering cement. With a typical recipe with 300 kg of cement per cubic metre of concrete, up to 7.5 kg of cement can be saved - which is the most important argument for the new batching plant generation from an ecological and financial point of view. For example, with an annual output of 50,000 m³ of concrete, this corresponds to savings of 375 tonnes of cement per year (7.5 kg x 50,000 m³). Production results in a greenhouse potential of 587 kg per tonne. According to this calculation, the new generation of batching plants from Liebherr saves up to 220 tonnes of CO₂ per year. Binding the same quantity of CO₂ would require tens of thousands of trees.

Modules for inexpensive transport and speedy assembly

The new concept is based on a consistently implemented modular design. Individual modules can be planned and manufactured independently of each other and combined with other modules. They are almost completely wired and fully assembled at Liebherr. After testing, the modules are delivered as complete transport units to the construction site.

The module dimensions are optimised and are maximum three metres wide. This makes special transports superfluous for almost all plant variants and therefore reduces transport costs. Due to their innovative folding concept and plug connections, the modules can be quickly and efficiently assembled and put into operation at the construction site.

Work in comfort thanks to numerous innovations

All the accessible areas of the batching plant are generously designed, offering adequate space and good access for maintenance and cleaning. There is also enough space for the arrangement of additional containers, such as for steel fiber dosage. A chain hoist can be installed on the balance scaffold, which can be used to lift Euro pallets with loads of up to 1,000 kg to the appropriate working level through the material hatches. Headroom was also improved in the entire inner area. All stairs and steps are 1,000 mm wide as standard. The new mixer high pressure cleaner "LiClean", together with the "creep speed" cleaning mode, enables optimum cleaning results with a high level of safety. On-site operation of the mixer simplifies daily work. Cleaning nozzles are located at the mixer outlet (see image) to clean the feeding hopper on the truck mixer; the quantity of water used is taken into account in the control system. The driver can set off immediately and no longer has to climb the ladder platform. If the time saved is calculated at five minutes per trip, with five trips per vehicle and 10 truck mixers in the fleet, almost 1000 working hours can be saved per year. The enclosure allows for smooth winter operation and significantly reduces noise emissions. This was particularly important for this plant, as it is located in the immediate vicinity of a residential area.

About Liebherr-Mischtechnik GmbH

Liebherr-Mischtechnik GmbH is a global manufacturer and supplier of high-quality concrete mixing plants, concrete pumps and ready-mixed concrete truck mixers. The company is part of the Liebherr group and is headquartered in Bad Schussenried, Germany.

About the Liebherr Group

The Liebherr Group is a family-run technology company with a broadly diversified product range. The company is one of the largest construction machinery manufacturers in the world. It also offers high-quality, benefit-oriented products and services in many other areas. Today, the group comprises more than 140 companies on all continents. In 2022, it employed around 50,000 people and generated a consolidated total turnover of more than 12.5 billion Euros. Liebherr was established in 1949 in Kirchdorf an der Iller in southern Germany. Since then, its employees have pursued the goal of impressing its customers with sophisticated solutions and contributing to technological progress.

Pictures



liebherr-mobilmix-a+b-2023.jpg

The new Mobilmix from the modular system recently went into operation at a+b.



liebherr-reinigungsduesen-mobilmix.jpg

6 water nozzles clean the truck mixer hopper after filling, the driver can start driving immediately and no longer has to climb the ladder platform. The amount of water used is taken into account in the recipe via the control system.

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