

Press release

Liebherr-Mobilmix supplies quality concrete for the wind industry

- Mobilmix 2.5 supplies temporary concrete for tower segments
- The mixing plant serves as a stopgap during the conversion of the existing plant
- Highly efficient RIV 2.5 ring-pan mixer with variable speeds
- Precast production must be continuously and reliably supplied with concrete

Enercon Emden originally purchased a Liebherr Kombimix 2.25 in 2005 for the production of concrete tower segments. The mixing plant has already been modified or extended several times in the past. Following the sale of the site to Bettels Betonfertigteile GmbH, production was expanded to include structural precast elements such as bridge elements. Concrete tower segments for wind power are still part of the product range. Now the existing system is to be further adapted to the new requirements. Bettels decided to install a highly mobile Mobilmix 2.5 of the latest generation from Liebherr to bridge the gap during the conversion work.

Bad Schussenried (Germany), July 29, 2024 – During the conversion of the existing Kombimix mixing plant at Bettels Betonfertigteile GmbH, it was necessary to ensure that the production halls were reliably supplied with fresh concrete throughout the entire conversion work. A consistently high product quality had to be guaranteed before, during and after the conversion. Bettels Betonfertigteile GmbH attaches great importance to sustainability and environmental protection. Against this background, investing in modern technologies for efficient production processes and the responsible use of resources were not on the agenda. When selecting a bridging system, it was important to be able to use the system flexibly for other construction sites at a later date. The time and cost-efficient realisation of the system was therefore an important argument.

Mobilmix impresses with its cost-effective installation and fast commissioning

Based on these requirements, a Liebherr Mobilmix from the new plant generation was chosen to bridge the conversion period. The Mobilmix was the ideal choice for this task due to its short and cost-effective assembly. The innovative folding concept combined with pre-cablings ex works enables quick installation and commissioning. Thanks to the design with a steel foundation, lateral supports and anti-slip plate covering, no concrete work is required. A simple, level, compacted floor is sufficient for installing the Mobilmix. This concept enables the mixing system to be moved quickly and easily. After the bridging operation, the system is immediately available for other operations.

When developing the new Liebherr Mobilmix, great importance was attached not only to fast assembly but also to high flexibility and sustainable concrete production. The modular design of the Mobilmix series offers a wide range of options that can be flexibly customised to the customer's needs. Another important innovation of the modern system is the smoothing of electrical power peaks. This is achieved through the use of frequency converters and their LiPerformance parameterisation, which intelligently start up and control all the drives in the system. Switching to the new Mobilmix therefore results in potential energy savings of up to 30 percent. In addition, the precise dosing of the cement with an accuracy of +/- 0.35 percent enables efficient use of resources and ensures both economical and sustainable concrete production.

The heart of the system is the highly efficient ring-pan mixer

The centrepiece of the new Mobilmix mixing plant is the RIV 2.5 ring-pan mixer, with which it is possible to produce 100 m³ of self-compacting concrete per hour in a short mixing time. The frequency-controlled agitator enables the production of the highest strength classes with short mixing times. This means: The speed of the double agitator can be adjusted independently of the main agitator. Incidentally, this highly efficient RIV 2.5 ring-pan mixer is also to be installed during the conversion of the existing system.

The inline silo has a total storage volume of 140 m³, which is divided into five compartments for the aggregates. Four cement silos, each holding 120 tonnes, were set up for cement storage. A high degree of mobility was also taken into account here with the construction on steel foundations. The cement screws can be transported in one piece and thus assembled and disassembled within a few hours if required. In addition, the mixing plant is fully enclosed for winter use and equipped with a LiClean high-pressure cleaning system and a MPS 3 plant control system.

Quickly ready for use

Thanks to the folding concept with pre-cabling ex works, the Mobilmix could be installed extremely quickly and cost-effectively. After two weeks, the Mobilmix was ready for use and the conversion of the existing Kombimix could begin immediately.

About Bettels Betonfertigteile GmbH

Bettels Betonfertigteile GmbH in Emden has been successfully producing large quantities of precast concrete parts for wind turbines in its modern factory for many years. Other precast concrete parts for building construction, such as bridge elements weighing up to 130 tonnes, round off the range.

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 – 75 years of moving forward

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 150 companies on all continents. In 2023, it employed around 50,000 people and generated a consolidated total turnover of more than 14 billion Euros. Liebherr was established by Hans Liebherr 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. The Group will celebrate its 75th anniversary in 2024 under the slogan: "75 years of moving forwards".

Images



liebherr-mobilmix-bettels.jpg

Liebherr mixing plant type Mobilmix 2.5 supplies the concrete for the precast plant.



liebherr-Turmsegmente-bettels.jpg

Bettels Betonfertigteile GmbH produces very sophisticated tower segments for the wind power industry.

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Published by

Liebherr-Mischtechnik GmbH

Bad Schussenried / Germany

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