State-of-the-art Betomat in Austria



LIEBHERR





Situation

The Fröschl company with locations throughout Tyrol and headquarter in Hall is one of the best-known domestic construction companies in the Innsbruck area (Austria). For many years, the company has been supplying ready-mixed concrete to construction sites in the entire region - in every required quality class.

Task

The wishes and requirements for the replacement purchase of the technically obsolete mixing plant were high: today and in the future, it was supposed to cover the entire concrete logistics chain and deliver flawless concrete efficiently and flexibly. Furthermore, Fröschl Beton was concerned that the mixing plant would allow the production of both standard and special concrete in one mixing tower and that two mixer trucks could be loaded at the same time with different types of concrete.

Solution

After an extensive planning phase, Liebherr's Betomat concept was chosen because it enables the operation of two completely separate mixing plants within one mixing tower. The compact design of the two weighing and mixing lines as well as the Liebherr quality and service were compelling.

The base of the Betomat consists of an on-site concrete building and a 600 m³ round silo (nine chambers) mounted on it. The mixing tower is fed with aggregates via two charging hoppers and a powerful bucket elevator with an hourly output of 200 m³/h.

The mixing plant is equipped with two mixer systems: a ring-pan mixer with agitator system and a twin-shaft mixer. This means that normal standard concretes as well as high-performance and special concretes can be produced very efficiently. When in operation with both mixer systems, the plant achieves a possible output of around 160 m³ of compacted fresh concrete per hour. Thanks to the separate weighing lines, two vehicles can be loaded efficient simultaneously with different types of concrete.

For environmentally-friendly operation, the housing and exhaust air filter systems reduce dust emissions. Noise emissions are also minimised. Residual concrete quantities from the truck mixer and plant cleaning as well as rejected concrete quantities are processed in the LRS 908 residual concrete recycling plant. Washed-out material and residual water can be returned to concrete production. This enables considerable cost and material savings.

The longevity of the plant is ensured not only by high-quality components but also by a precisely fitting steel construction. To ensure smooth operation even during the cold winter months, the entire plant is insulated with a 100 mm insulated wall and equipped with heating.

The state-of-the-art concrete mixing plant has been proving its worth since spring 2019. With the new mixing tower, the Fröschl Beton company is ideally positioned for the future.

Technical data	Betomat IV-600
Theoretical discharge output in compacted mixed concrete	160 m³/h
Mixer type	RIM 2.5-M (ring-pan-mixer)
Max. aggregate storage capacity	600 m³ (9 chambers)
Number of drive lanes	2
Output recycling plant LRS 908	approx. 22 m³/h