

Mobility and quality -

Concrete mixing plants equipped with Watt drive technology

EUROMIX plants rely on a high level of flexibility and low relocation costs. The required concrete can be produced and processed directly at the construction site while maintaining high quality levels. Watt bevel gear units in the K.. series reliably transport the materials required via various conveyor belts into the plant mixer...



The company SBM Mineral Processing GmbH based in Laakirchen, Austria is an international company with branches and sales offices worldwide. Sales of mobile wheel-based concrete mixing plants with capacities of 60 - 200 m³/h are becoming increasingly familiar worldwide thanks to the numerous benefits they offer.

The EUROMIX concept is **based on just-in-time production directly at the construction site** (economically efficient at a concrete requirement of approx. 3000m³). The low relocation costs combined with easy operation and maintenance, as well as the high quality standards, are the benefits to SBM customers.

The drive technology from Watt Drive used in the mixing plants includes series K. bevel gear units, covering a torque range of 2,700 – 14,000Nm. The drive units are used in all relevant parts of the plants to convey the raw materials into the double shaft mixer.

SBM produces the EUROMIX plants in 4 different sizes (1000/1600, 2000, 3000 and 4000). In the EUROMIX 2000, for example, the following drive units are used:

- Batching conveyor: 1x KUA 85A 134M4 KB
- Weighing belt: 1x KUA 110A 161M4 TF K1 KB SD
- Steep-angle conveyor: 2x KUA 80A 161L4 RSM KB

The bunker unit, with the batching conveyor and weighing belt underneath, is shown in Figure 1. The ballast stone size appropriate for the concrete grade is weighed, batched and transported on to the steep-angle conveyor. The material is moved from here into the double shaft mixer. Cement, water and the additives required are transported directly into the mixer.



Figure 1: Bunker unit with conveyor belts

Extreme operation and ambient conditions, total availability and the high operation grade of the equipment on the construction site are an extreme demand to the drive systems on components.

Drive unit specification:

The used drive units are components of the MAS range of geared motors. The optimum drive unit was designed together with the customer according to the climatic environmental conditions.

The drive units are equipped with the following additional options:

- Condensate holes - KB
- Humidity protection - K1
- Protection rating IP56
- Protective cap - SD
- PTC thermistor - TF
- Backstop - RSM
- Viton seal rings on hardened running surfaces
- Synthetic lubricants
- Double chamber seal rings



Figure 2: Concrete removal on the EUROMIX 1000/1600

Once completed the concrete can be transported away once complete either using trucks or using concrete mixer wagons.

The powerful mixers can be used to produce up to 4m³ of concrete per batch.

The reliability and high quality of the Watt geared motors increases our customers' trust in our products, with particular value being placed on low maintenance requirements and long service life.

For more information on the Watt product range, please visit our website at www.wattdrive.com.