

TURBOCASES

Betoning Murtal GmbH - Scheifling, Austria

Betoning Murtal was founded 2001 by a co-operation of seven local construction firms, the Betoning-Ring St. Veit and Mr Johann Hirtler. This co-operation established a new RMC plant in the industrial area of Schleifling in Styria/Austria.

Betoning Murtal is using a mobile horizontal mixing plant from the company Kaiser GmbH. The capacity of each of the four in-line aggregate silos is 80m^3 (all together 320m^3). The silos are fed through a steep angle conveyer and a distribution belt conveyer, with a capacity of 160m^3 per hour.

The three cement silos have a total capacity of 280m^3 two of these silos can store 80m^3 and the third 120m^3 .

The containers for the office of the plant manager and for the control room are integrated in the supporting structure of the cement silos.

Betoning Murtal decided for a 2.25m^3 twin-shaft mixer from BHS. The output of the plant is designed for 100m^3 per hour. A recycling plant was installed for reusing the residual ready-mix concrete.

For heating purposes, Betoning Murtal uses a 1MW *Turbomatic* thermal energy unit from the Finnish company Polarmatic Oy. This innovative system is heating both aggregates and mixing water. Furthermore, this system allows an even production of 18°C concrete in (very) cold outdoor temperatures.





The aggregate silo with the Turbomatic thermal energy unit

The Betonring Murtal is exceptionally impressed by the very easy handling and straightforwardness of the *Turbomatic* thermal energy unit. This straightforwardness results in reliability and functionality.

The *Turbomatic* thermal energy unit was delivered in a 20 feet container, which is installed next to the aggregate silos. Heating was maintained from the start date in January 2003 until middle of March 2003. Despite of a very cold February, the oil consumption was only 4000 liters during this period. This means that only 70 liters of heating oil was used for each operating hour of the *Turbomatic* energy plant. In other terms, the plant is operational with an oil consumption of only **around 0.5 liter for each 1 m³ of concrete!**



interior view of the Turbomatic thermal energy unit

Project facts

PLANT (Kaiser GmbH)

Mixer: 1 BHS 2,25m³
 Aggregates: 4 in-line silos á 80m³ = 320m³
 Cement: 2x80m³ + 1x120m³ = 280m³
 Admixture tanks: 4 pcs. á 1.500l
 Performance: 100m³/h
 Start-up year: 2002

TURBOMATIC

Type: PMC-1000
 Capacity : 1.0 MW
 Features:
 ▪ manual control