

ARGE Koralm Tunnel, Austria

The project:

ARGE Koralmtunnel, Paierdorf, Austria

Executing companies:

Max Bögl Bauunternehmung GmbH & Co. KG
Swietelsky Baugesellschaft m.b.H.

The Koralmtunnel in Austria represents a key structure of the new high-performance railway between the provincial capitals of Klagenfurt and Graz. The exploratory tunnel in Mitterpichling is around 2,6km long and runs from the future west portal of the Koralm Tunnel upwards. This should be completed by the end of 2006. The second tunnel towards Koralpe is planned to take around 1,5 years and break through to the exploratory tunnel that has now been started in Paierdorf.

The exploratory shaft in Paierdorf, which is the first exploratory section, has a final depth of 125 metres and has already been completed. Since July 2005, tunnelling of the approximately six km long exploratory tunnel in Paierdorf has been making progress. Work on the approximately 2,2 kilometre long exploratory tunnel in Leibenfeld in Styria has been taking place since mid-May 2005. The total cost for the continuing exploratory projects totals around EUR 145 million and should be completed by 2009.

The problem:

Pumping out abrasive groundwater that accumulates by using submersible pumps in a storage tank. The groundwater is pumped to the surface through a 120 m high vertical shaft by way of two risers, each with three pumps that are switched one over another.

Our solution:

Use of twelve KTZ411 and five KTZ32.2 for the complete drainage of the tunnel. The pumps were switched one over another with distances of 40 metres using a cascading control system. The pumps are equipped with a pressure release valve so that the collecting pressure cannot destroy the mechanical seal.



Specifications KTZ: <https://www.tsurumi.eu/el-GR/ktz>

