

A complete tunnel belt conveyor with two external belt conveyors for the Belchen Tunnel

An elaborate conveyor belt system for the Belchen Tunnel

Tunnel renovations are expensive and sometimes even require the construction of an additional renovation tunnel. This was the case for the Belchen Tunnel, which is part of the A2 motorway between Egerkingen and Basel. ARGE Marti Belchen (Marti Tunnelbau AG) has been entrusted with the construction of this renovation tunnel. At the beginning of 2015, they awarded us the contract for a complete tunnel belt conveyor as well as two external belt conveyors. The excavated material was put either in intermediate storage or in the end dumpsite "Fasiswald". A further special feature of this order: the delivery of an Easy-Slide, a new device with an astonishing effect.

Overview

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Project

Client: ARGE Marti Belchen (Marti Tunnelbau AG) Total value of order: CHF 5.5 million Created: 2015/2016

Tunnel belt conveyor

- Length: 3 200 m
- Conveying capacity: 1000 t/h
- Belt width: 1000 mm
- Conveyor speed: 3.0 m/sec.
- Driving power: 600 kW
- Belt storage with a capacity of 500 mm belt

External belt conveyor in the dumpsite "Fasiswald"

- Consisting of 6 individual belts
- Entire conveyor line: 1120 m
- Belt width: 1000 mm
- Conveyor speed: 3.0 m/sec
- Full driving power: 900 kW
- Gradient up to 14°

External belt conveyor in the material hall

- Consisting of an inclined belt and subsequent reversing and driving belt
- Entire length: 155 m
- Belt width: 1000 mm
- Conveyor speed: 3.0 m/sec
- Full driving power: 200 kW

The first use of the Easy-Slide

This order involved yet another special feature: the delivery of an Easy-Slide. This device is a completely new product. It has never been built anywhere else before, let alone used. The Easy-Slide is 55 m long and weighs approx. 80 tonnes. It guides the tunnel conveyor suspended

on the ceiling tunnel down to the tunnel floor, where it comes to rest as a floor installation in its final location. Then, the formwork can drive over the tunnel conveyor.

