

# **SIKA AT WORK** THE BRENNER BASE TUNNEL AUSTRIA - ITALY

THE WORLD'S LONGEST UNDERGROUND RAILWAY CONNECTION

CONCRETE: Sigunit<sup>®</sup>, Sika<sup>®</sup> ViscoCrete<sup>®</sup>, SikaCem<sup>®</sup>, Sikadur<sup>®</sup>, SikaPump-Start<sup>®</sup>, Sika<sup>®</sup> MonoTop<sup>®</sup>, Sika<sup>®</sup>-PM 500, AlivaFlexoDrain<sup>®</sup>



**BUILDING TRUST** 

### THE BRENNER BASE TUNNEL AUSTRIA - ITALY

By Oscar Marazzini, Sika Services AG; Simon Keller, Sika Services AG

#### **PROJECT DESCRIPTION**

The Brenner Base Tunnel is the heart of a 2,200 km long railway axis running between Berlin and Palermo and considered a priority project (the TEN-1 axis) by the European Union, since it is one of the key trainroutes through Europe. The only way to cross both the flatlands and the Alps with a high-speed line is to use a base tunnel between Innsbruck, Austria and Franzensfeste, Italy. At 64 km, the Brenner Base Tunnel will be the longest underground railway connection in the world, a pioneering work of engineering and it will markedly improve passenger travel and freight transport through the heart of Europe.

#### **PROJECT REQUIREMENTS**

Sprayed concrete must have

- Concrete: SpC 30/37 (28) II/J2 XC2 XF1 GK8 F59
- w/c-ratio: 0.50
- Open Time: 60 min
- Compressive Strength after 48 hrs: 10 MPa
- Compressive Strength after 28 d: C 30/37

#### SIKA SOLUTION

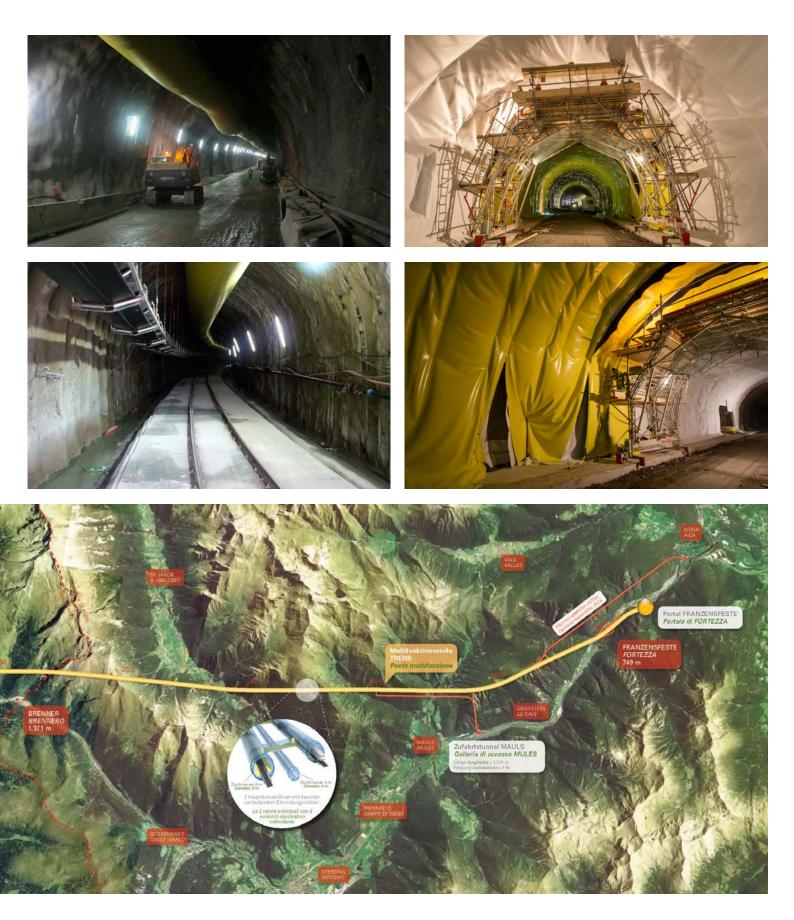
Sika provides a comprehensive solution in sprayed concrete for the intermediate construction site in Mauls. This includes not only the perfectly aligned Sika products listed below, but also customer support throughout the duration of the project including on-site personnel for experiments, tests and quality control.

#### SIKA PRODUCTS

Sigunit®-L53 AF Sigunit®-LT Sika® ViscoCrete® SC-305 BBT Sika®-PM 500 SikaCem®-501 Sikadur®-31 SikaPump-Start® 1 Aliva FlexoDrain® W Sika® MonoTop®-612 Blitz Accelerator Accelerator Superplasticizer Spraying Equipment Fast Setting Cement Epoxy Resin Lubrication agent Drainage System Repair Mortar







## BRENNER BASE TUNNEL, AUSTRIA



#### PROJECT PARTICIPANTS

 Owner:
 Galleria di Base del Brennero – Brenner Basistunnel BBT SE

 Contractor:
 1. Lot: ATB (Pizzarotti / Bilfinger Berger / Alpine Meyer Reder Bau / Condotte)

 2. Lot: Conzorzio Brennero 2011 (PAC / Oberhosler / Implenia)

 Concrete Producer: TransBrenner (WipptalerBau, Progress, Beton Eisack)

Our most current General Sales Conditions shall apply. Please consult the Data Sheet prior to any use and processing.



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