



Slope Stabilization

Reference Details:

Owner ASFINAG,
Austria +++ **Main Contractor** Grund-Pfahl und Sonderbau GmbH, Kematen subsidiary, Austria

DSI Unit DSI Austria,
Salzburg, Austria

DSI Services
Manufacture and supply of 12,000 m permanent *GEWI*[®] soil nails with double corrosion protection, 400 pcs. in lengths varying from 25 to 38 m.



Brenner Expressway - Slope Protection using Double Corrosion Protected *GEWI*[®] Soil Nails

"Matreiwald" Slope Stabilization, A 13 Brenner Expressway

In the past few years massive slope slides and settlements have occurred on the A 13 Brenner expressway at Matreiwald, about 16 km south of Innsbruck. In late 2004 ASFINAG, the operating company of the Brenner expressway, tendered the execution of high-quality stability measures to avoid further damage to the expressway that could possibly be caused by further slides of the slope.

Special challenges posed by the construction site

The slope inclination at that site is 33 degrees to partly over 40 degrees, rendering all activities such as anchor fabrication, excavation, shuttering and concreting very difficult. The steepness of the site made it necessary to secure the drilling equipment with winches. For this purpose, the heavy equipment had to be placed on the emergency lane of the expressway for attachment.

The slope was redeveloped and stabilized by the installation of 12,000 m of double corrosion protected *GEWI*[®] Soil Nails, consisting of 400 individual units between 25 and 38 m long and 27 reinforced concrete ribs 80x80 cm ranging between 10 and 30 m in length and three shotcrete beams 40x150 cm, each 70 m long.