



■ Slope Stabilization



Reference Details:

Owner

Pensionsversicherungsanstalt
der Arbeiter, Wien +++

Geotechnical Consulting

Prof. Heinz Brand, Vienna
Structural design,
Engineering Brand, Vienna

+++ Anchor Installation

Ferro Betonit, Linz

DSI Services Supply of
DYWIDAG Strand Anchors 6-
0.62", each 14 to 35m long;
Load-testing of anchor and
evaluation.



Restressable DYWIDAG multistrand anchors for slope stability

Bad Schallerbach, Austria: Centre for Rehabilitation Bad Schallerbach

The new centre for rehabilitation in Bad Schallerbach, Austria, featuring 142 beds, has two lower and four upper levels and a total volume of 90,000 m³. Excavation for the 5,800 m³ surface required an active stability of the 11 m high slope.

Concrete piles were driven 18 m deep into the soil over a length of 230 m. Shotcrete between the piles completed the retaining wall. The soil conditions required that the wall be anchored with approximately 4000 m of strand anchors each 14-35 m long. The 6-0.62" DYWIDAG strand anchors were designed for a service load of 750 kN according to the Austrian code ONORM B4455. Several load tests were necessary to determine the bond length in the dry sandy soil.

The anchors were detailed as restressable for incremental loading and to avoid overloading due to anticipated creep of the slope. A centre-rod in the wedge plate enables regressing without the need for inconvenient long stressing tails.

DSI Austria supplied all anchor components and conducted and evaluated the loadtesting. Construction started in January 1995 and was completed in March 1998.