


Monitoring of the Borehole Wall for Structural & Geotechnical Analysis

DMT SlimBoreholeScanner Monitoring of the Borehole Wall

The DMT SlimBoreholeScanner produces an optical image of the anchor borehole wall. This provides an objective information that can be also used for future comparisons. With an integrated orientation device, the borehole images can be oriented in 3D-space and be used for digital documentation of the rock conditions. With DMT analysis software, the pictures can be used for geological structure analysis of bedding, foliation, joints, faults and veins. The structures can be identified, oriented in space, statistically analysed and finally be used for an update of the geological-geotechnical model during the construction phase of a tunnel.

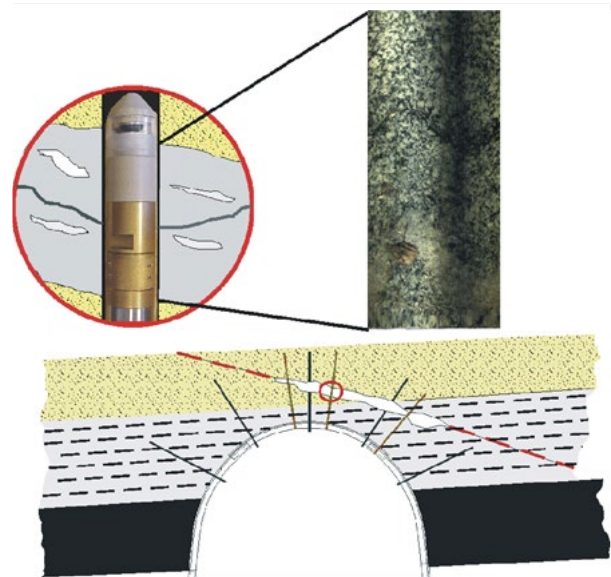
Tool characteristics

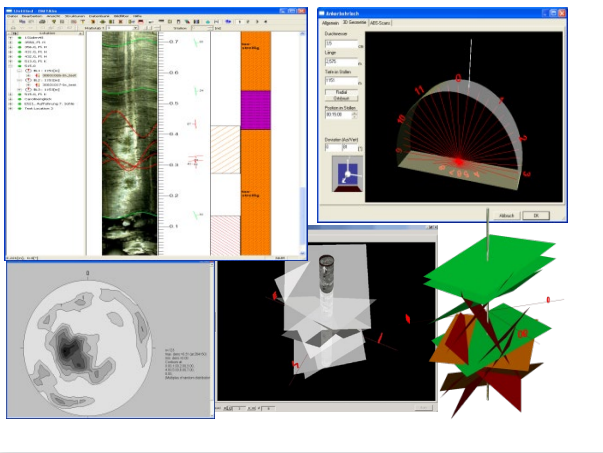
- Diameter: 23 mm, length: 113 cm
- Stand-alone system
- 360° optical scanning in short and slim drill holes
- Digital image storing for objective comparisons
- Oriented acquisition of discontinuities from anchor boreholes
- Mobile monitoring tool for the determination of fracture widths
- Software for statistical and quantitative analysis 
- Intrinsically safe for application e.g. in coal mining [I M1 Ex ia I M1]

The digital video module

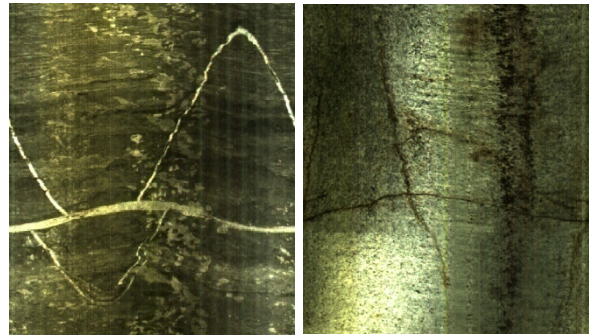


Inspection of the roof rocks with the DMT SlimBoreholeScanner





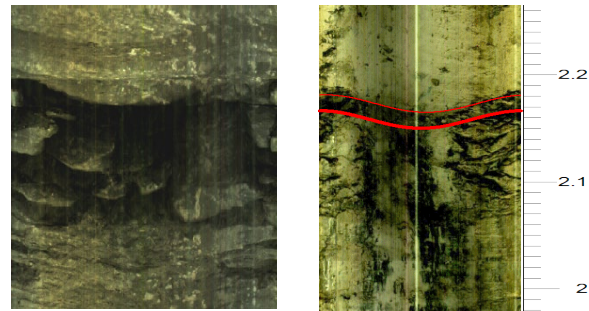
Borehole images of mineralized (left) and open (right) joints



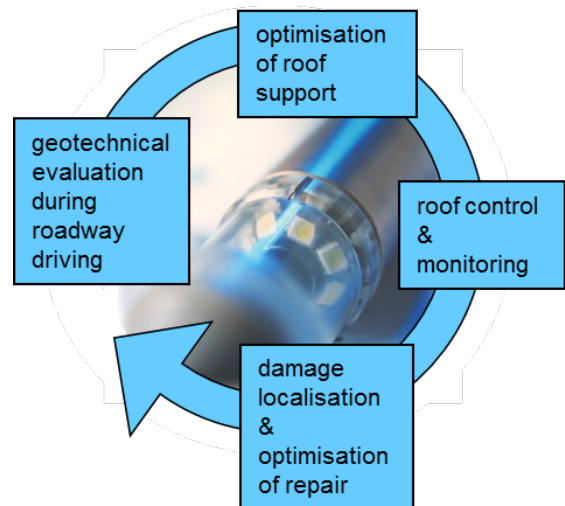
Advantages of application for injection techniques

- Determination of opening of discontinuities (e.g. of joints and faults)
- Detection of cavities
- Assessment of the rock disruption
- Thereby optimisation of injection techniques according to the on-site rock conditions
- Supervision of the roadway roof and monitoring of the loosening of the roof rocks before and after the injections
- Documentation of successful injections

Borehole cable Borehole image of a shatter zones with decoder box



Benefits of the DMT SlimBoreholeScanner during the lifetime of a roadway



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DIN EN ISO 9001 certified	DIN EN ISO 14001 certified
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TÜV NORD GROUP

Disposal information:
 Our products are subject to the WEEE directive.
 DMT has committed itself to take back all electrical and electronic components sold and to dispose of them professionally.
 Please contact: products@dm-group.com

WEEE Registration Number: DE 25917380

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