IN-SITU ASSESSMENT / AS-BUILT APPROVAL

The dibit tunnel scanner system provides a complete geometrical and visual depiction of the recorded tunnel surface at a specific time. Tunnel scanner recordings are a high-quality as-built documentation. The efficient dibit software allows easy, quick and versatile data evaluations. Owners, contractors, designers and construction supervisors can receive objective comprehensive information about the geometry and condition of the tunnel. The dibit tunnel scanner system is highly suited for in-situ assessments and as-built approvals.




APPLICATIONS

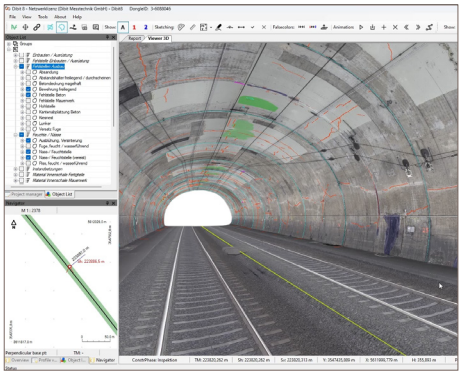
Recording In-situ Assessment

Geometrical Capture of:

- ☐ profiles, e.g. vaults, roadways
- ☐ dimensions, e.g. components, fixtures
- ☐ stations, e.g. joints, niches

Visual Capture of:

- ☐ material zones, e.g. rocks, bricks
- ☐ components, e.g. blocks, joints, niches, tunnel enlargements, rock bolts
- ☐ rehabilitation areas e.g. grouting of cracks
- ☐ areas of damage e.g. cracks, spalls, water ingresses
- ☐ installations, e.g. cables, pipes, air flaps, sign-postings, security facilities



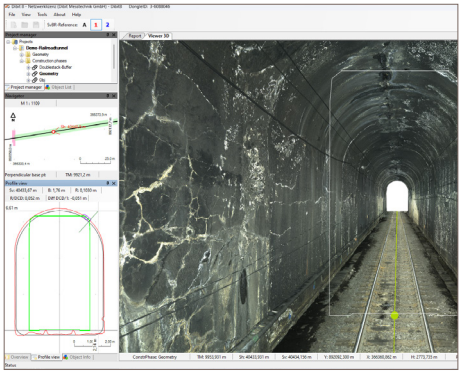
Recording As-built Approval

Geometrical and Visual Capture

- ☐ The geometrical and visual capture procedure is the same as for an in-situ assessment. In addition, component geometries are checked during a component testing to guarantee that the required specifications are maintained.

Automatic Component Testing

- ☐ block layers
- ☐ block joints depth and breadth
- ☐ recess depth and breadth



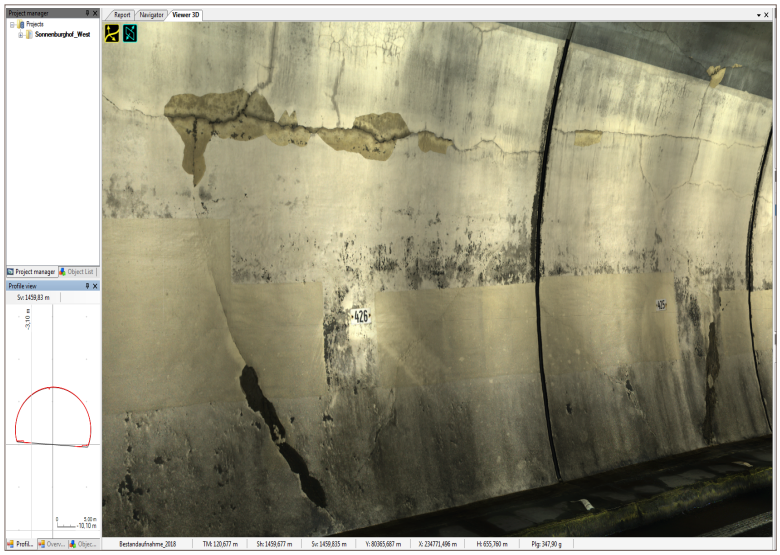
DIBIT SOFTWARE

- ☐ analysis of the tunnel surface in 2D- and 3D-views
- ☐ complete profile checks
- ☐ collision warning at clearance diagram check
- ☐ exact quantity survey
- ☐ true-color image documentation
- ☐ masking of pipes, cables, etc.
- ☐ damage information in conjunction with dibit TIS

RESULTS

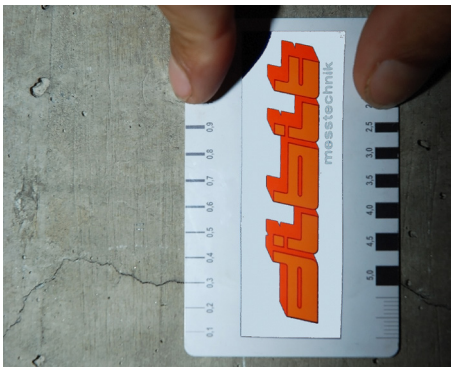
- ☐ comprehensive true-color 3D-model
- ☐ cross sections
- ☐ contour maps
- ☐ ortho-images
- ☐ lists of calculation results in Microsoft Excel format

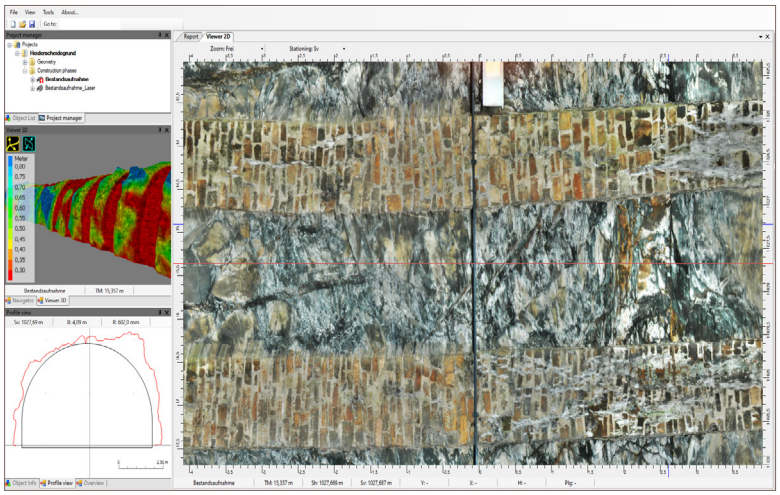
IN-SITU ASSESSMENT/ AS-BUILT APPROVAL



Recording In-situ Assessment

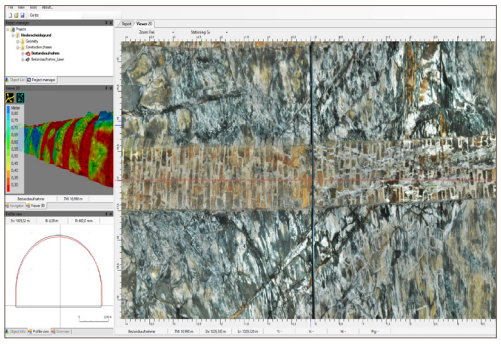
- ☐ depiction of the tunnel vault via ortho image
- ☐ capturing of cracks and analysis of crack patterns

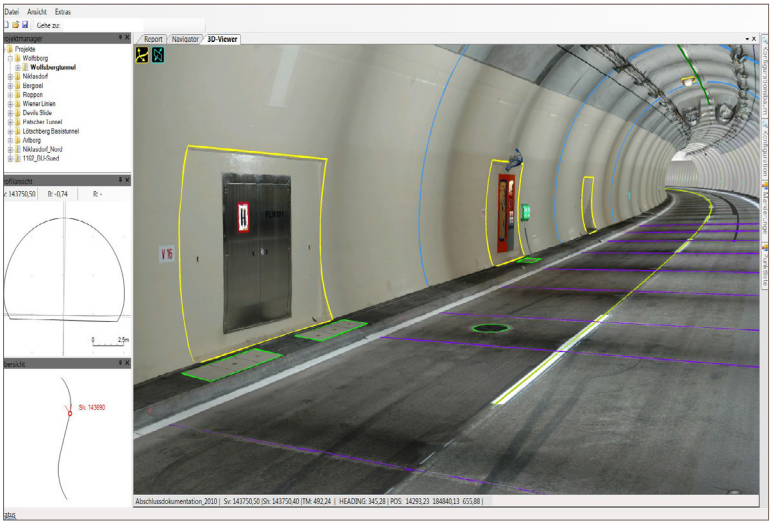




Recording In-situ Assessment

- ☐ capture of material zones
- ☐ detailed analysis of material conditions





Recording As-built Approval

- ☐ capture components of ring joints, concreting sections, niches and electric recesses (see dibit TIS)
- ☐ testing components of a particular electric recess with regard to predefined geometry values such as minimum depth