

## INSPECTION / EVIDENCE OF STATE

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 for easy, quick and versatile data evalu-

ations. Operators of infrastructural systems receive objective, comprehensive information about the condition of their tunnels. The dibit tunnel scanner system is highly suited for routine inspections of tunnels.



## APPLICATIONS

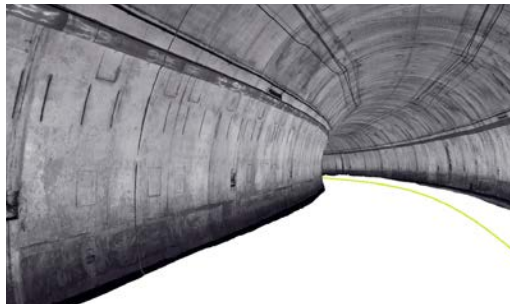
### First-pass Recording (High Definition 1 x 1 mm)

#### 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. cable, pipes, air flaps, sign-postings, security facilities

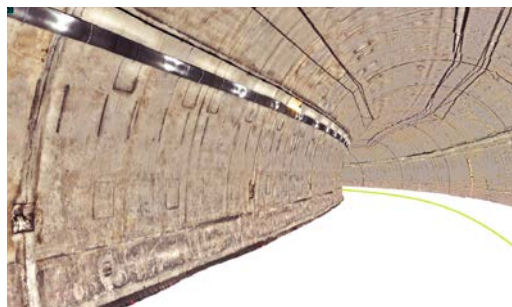


## DIBIT SOFTWARE

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

### Subsequent-pass Recording (High Definition 1 x 1 mm)

- Geometrical and Visual Capture:**  
The geometric and visual capturing proceeds as in the first-pass. Subsequent-pass recordings serve for determination of variations (damaged areas and deformations) and are compared to the first-pass.
- Automated Detection of Cracks**  
The automated detection of new cracks and crack growth.

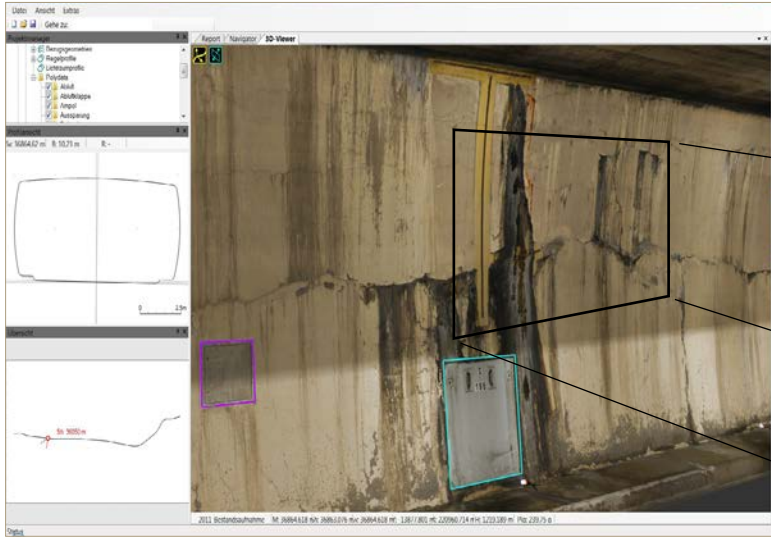


## RESULTS

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

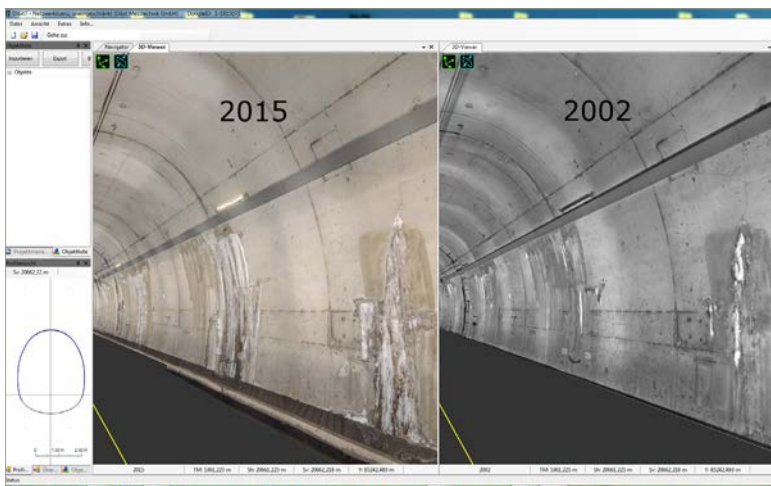


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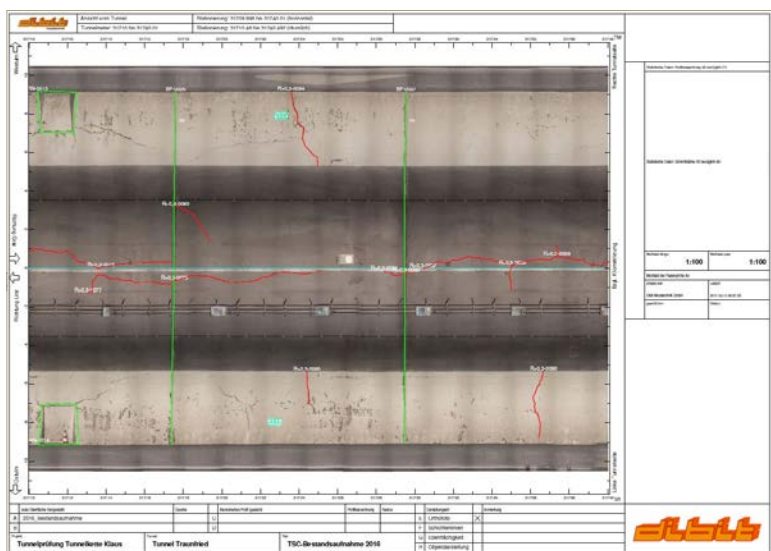
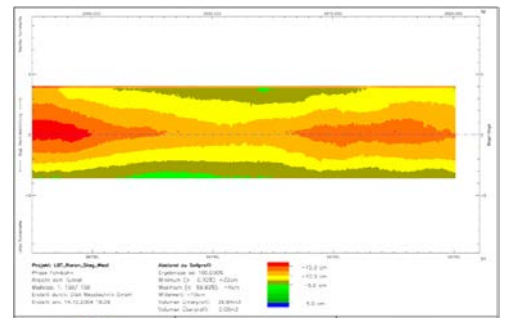
### First-Pass Recording

- capture of damaged areas and components
- analysis of crack patterns and capturing of crack lengths



### Subsequent-Pass Recording

- capture of deformations and alterations of damage-patterns
- depiction of road deformations due to invert uplift
- crack growth



### Results

- mapping of cracks, components and damaged areas (see dibit TIS)
- AutoCAD plan of crack-patterns

