Tunnels Monitoring

RFI – Exilles tunnel



Background

Tunnels are an integral part of railway infrastructure. The mechanical deformation that can transpire over time in a tunnel represents a considerable risk to safety, during the tunnel construction phase and when it is operational. It is essential to always have up-to-date information on the stability and reliability of the structure.

The solution

A wireless Capetti Elettronica system consisting of a GSM control unit and dataloggers connected to potentiometer crackmeters was chosen to measure crack conditions in tunnel walls.

The result

A twofold benefit was achieved with this system:

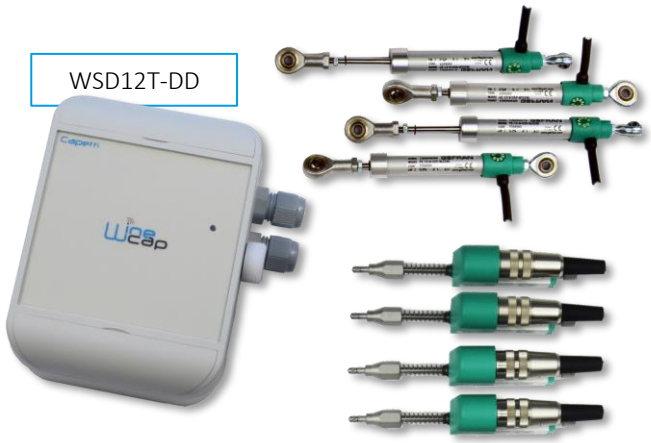
- ongoing supervision of the relevant parameters during excavations and on completion of the tunnel;
- precise monitoring, thanks to a flexible, automatic data capture system, for optimal monitoring of the structural condition of the works, and prompt, accurate diagnosis of all events that could transpire.

gdtest GEODESIGN AND TESTING

Capetti ELETTRONICA DAL 1973



WSD12T-DD



The winning choice WiCap

- ✓ WSD12T-DD (cracks extension)
- ✓ WSD12-4D (displacement measure)
- ✓ MWDG-GSM (gateway)