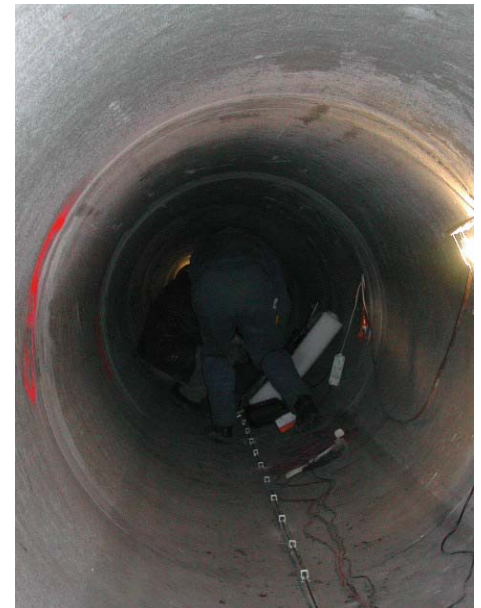


# Main pipe, Eisleben, Germany

**osmos**

Integrated safety for structures



Optical Strand installation



Optical Strand on the pipe

## Water tunnel risk assessment monitoring

### Client

Land of Saxony-Anhalt  
Department of Road construction

### Structure

Pipe construction in concrete and steel.

### Context

This canalisation is very important for the water supply of the area. A road construction has to occur above the canalisation. A risk of subsidence exists on the road as well as a risk of structural damage on the pipe because of the adjoining work

### Client's Needs

The client wishes to assess the risks that the tunnel might encounter because of the work.

### Instrumentation Installed

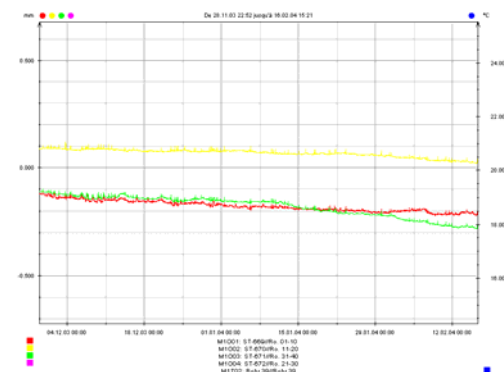
- 1 monitoring station
- 4 Optical Strands in steel spiral sheath, in the pipe
- 2 temperature sensors

### Initial Results

Initial results show the pipe deformation remains inside an acceptable interval, even during water charges.

### Client Benefits

Thanks to the introduction of the OSMOS system, it has become possible to watch the deformation on the steel lining of the water tunnel continuously.



Static deformations of longitudinal Optical Strands inside the pipe