

## Tunnel monitoring Wallring

Continuous measurement monitoring of an underground tunnel



The "Transportsiel Wallring" is the final drainage measure in the inner city relief program that has been underway in central areas of Hamburg since 2011. It involves the construction of two large underground sewage drainage channels in the city center. One of these, the "Transportsiel Wallring," will run between Stephansplatz and Alter Elbpark. While the tunnel boring machine crosses the existing tunnels of the Hamburg elevated railway, the two tubes are monitored for deformation and vibrations using measuring equipment. This project was a collaboration with Hanack und Partner GmbH.

📍 Hamburg, Germany  
 👤 Hamburg High Railways  
 🕒 2017

### Services

- ◆ Permanent 3D monitoring of the two tunnel tubes of the Hamburg elevated railway using automatic total stations
- ◆ Monitoring of vibrations in both tunnel tubes
- ◆ Checking for water ingress into the tunnel tubes using high-resolution cameras
- ◆ Alarm when limit values are exceeded

All recorded data is documented in TEDAMOS Web, our password-protected customer portal with 24/7 access.

### Technologies

- ◆ 2 automatic precision total stations
- ◆ 2 automatic vibration measuring devices
- ◆ 2 high-resolution cameras for monitoring water ingress