

## Zurich Central Station City Tunnel

Deformation measurements on excavation pits, temporary bridges, buildings, and railway tracks



📍 Zurich, Switzerland  
👤 Scheifele Jak. AG  
🕒 2022 - 2024

### Services

- ◆ Manual monitoring measurements  
Excavation pit closures
- ◆ Manual 3D track monitoring VBZ tram track systems
- ◆ Automatic 3D track and platform edge monitoring SBB
- ◆ Automatic 3D deformation measurements on adjacent buildings
- ◆ Set up and operate TEDAMOS Web as a results portal for third-party measurements (vibration measurements, manual deformation measurements)

### Technologies

- ◆ Automatic precision total stations

What was planned in the 1980s as a motorway link under Zurich's main station is being converted by the city of Zurich into a spacious, 320-meter-long bicycle tunnel and a bicycle station, with work scheduled to begin in September 2022. The work will continue until spring 2025 and the project costs amount to approximately CHF 39 million. Two ramps from the north and south sides of the station will provide access to an underground bicycle station for 1,200 bicycles, which will be free to use once operational.

On behalf of Jakob Scheifele AG, extensive manual and automatic deformation measurements were carried out on excavation pit closures, auxiliary bridges, adjacent buildings, and SBB and VBZ track systems.

The measurements were taken both in the ramp areas and inside Zurich's main station, where temporary auxiliary track bridges were monitored during the underground excavation work.