

New construction of University Hospital K2, Basel

Automatic excavation pit and building monitoring



- 📍 Basel, Switzerland
- 👤 ARGE K2 (Marti, Implenia, Eberhard)
- 🕒 2023 - 2030

Services

- ◆ Automatic settlement measurements with hose level systems in the surrounding existing buildings with a total length of several hundred meters
- ◆ Automatic geotechnical monitoring of the excavation pit with in-place inclinometers, anchor force measurements, flat presses, and extensometers
- ◆ Visualization of all measurement data on the TEDAMOS web portal, including automatic alarms

Technologies

- ◆ Hose balance measuring system with 35 sensors
- ◆ 17 in-place inclinometers
- ◆ 30 anchor force measurements
- ◆ 14 6-way extensometers
- ◆ Pressure monitoring for flat presses
- ◆ TEDAMOS Web, password-protected customer portal with 24/7 access

The new construction of Clinic 2 at Basel University Hospital comprises a 60-meter-high ward tower, which will be directly connected to the existing Clinic 2 building. The project is located right in the heart of Basel.

The excavation pit for the five basement floors is located directly between the existing Clinic K2 building and the listed Markgräflerhof building. To the northwest, the excavation pit connects to the OP-Ost operating theater building and the MTA building. Due to the depth of the excavation pit and the infrastructure in the immediate vicinity, the buildings and the excavation pit itself are being closely monitored. Terradata is providing various services in the field of measurement sensor technology, together with its local monitoring partner Jermann Ingenieure+Geometer.



