

Hospital „Kantonsspital Graubünden“, SUN extension project

Monitoring of the excavation pit and existing hospital infrastructure during construction phase



📍 Chur, Switzerland
👤 Kantonsspital Graubünden
🕒 2014 - 2017

Expertise

Engineering Surveying, TEDAMOS

Systems

- ◆ 2 automated total stations measuring 100 target points
- ◆ 9 vibration sensors
- ◆ 2 water level gauges
- ◆ Web-based, password-protected online portal allowing 24/7 access

Find more information on the SwissMonitor solution under <http://en.swissmonitor.ch>

When Graubünden's central hospital (Kantonsspital) was substantially expanded between 2015 and 2017, the project included – among other elements – a large new building including an underground car park. The 22 m deep excavation pit bordered immediately on the existing ward building. In addition, a conduit tunnel for the energy supply infrastructure was constructed underneath the present buildings containing the highly sensitive operating room and the magnetic resonance imaging (MRI) equipment. A high-profile monitoring system allowed the real-time surveillance of potential displacements 24/7.

Our services

- ◆ Consulting for all surveying aspects during the entire planning and construction phase
- ◆ Design and installation of the automated monitoring system
- ◆ Additional manual inclinometer and deformation measurements
- ◆ As-built documentation and control