



Monitoring Excavations Villa Italia – Lake Como

Background

The work was to renovate and extend a historic building in an extremely panoramic position on the shores of Lake Como. The Villa Italia building was built in the first half of the 19th century in the council district of Carate Urio.

The solution

Excavations were carried out, with a maximum face of approximately 12 metres, to construct an underground private garage. The load cells were installed on pre-tensioned carbon spring steel tie rods included in the work to support the excavation face, consisting of a retention system of piles and tie rods.


The result

Thanks to the use of a toroidal load cell and the *WineCap™* monitoring system, it was possible to measure the workload variations undergone by the tie rods and anchoring. This equipment enabled the excavations to be completed safely, by evaluating and monitoring soil forces on the containment structures. di contenimento.



WSD12T-EX6



The winning choice 

- ✓ WSD12T-EX6 (strain gauge data logger for load cells)
- ✓ CAP165CE (electric load cell for tie rods, full scale 1500 KN)