Real-time Deformation Monitoring

Trimble has introduced today two new features for its Trimble 4D Control software solution for monitoring systems. The features include support for geotechnical sensors and a user-friendly Web Module. The solution has been developed for monitoring dams, bridges, buildings, pipeline support piers, large-scale construction and excavation sites, underground and open pit mines, landslides, tunnels, and other structures.

The announcement was made at the XIV International Congress of the International Society for Mine Surveying in South Africa.

Trimble 4D Control software is a solution for both real-time and postprocessed monitoring. The fully scalable and versatile approach of the system makes it easy for surveying organisations to get started in monitoring. By leveraging geotechnical sensors, surveying instruments and tools they already have, Trimble enables surveyors to customise a monitoring solution to meet the needs of even the most demanding applications.

Organisations can now integrate geotechnical sensors used to measure non-georeferenced movements and pressures in a monitored structure or rock face. Geotechnical sensors, such as tilt meters, piezometers and others, can be combined with Global Navigation Satellite System (GNSS) and optical total stations as a fully integrated part of the Trimble 4D Control solution, each with user defined tolerances and alert levels.

The Trimble 4D Control solution also features a secure Web Module providing remote and distributed access to Trimble 4D Control from virtually any location worldwide with Internet access. The Web Interface module can serve as a backup station, can centralise multiple monitoring sites into one dedicated control room or simply enable distributed access to the system within an organisation. In addition, the Web Module can connect up to four user-defined internal or external links (URLs), enabling direct access to on-site Webcams or weather station results.

https://www.gim-international.com/content/news/real-time-deformation-monitoring