

Project Capability

Slopes

MissionOS is a platform which manages active construction data and is an ideal tool to track the data from instrumentation to assess performance. Its powerful 3D ground modelling and production tracking aid planning, design and productivity. Our configurable metadata models automate reporting and facilitate engineering analysis and feedback.



The long term monitoring of the behaviour of structural elements such as retaining walls, tiebacks and anchoring at slopes, especially for those which are pre-stressed, should be carried out in order to study the actual performance of strain or deflection compared to the design.

Often there is a requirement for on-going site monitoring for a period of 2 to 5 years after construction is completed. It is neither practical or economic to continuously take the readings manually after the main active period.

MissionOS, is a reliable system which can communicate with the data logger of in-place probe inclinometers and strain gauges remotely, sending out notifications of any unexpected behaviour automatically.

The reporting and archiving system can feed the raw data back as reports, tables and graphs in any template, or alternatively, automatically archive them into a project library based on a pre-defined schedule.

A real time 3D model is also available to view the readings against a visible environment which includes both structural elements and soil types behind the wall.

Key Capabilities Include:

- Collects the data from a data logger of in-place instruments automatically and remotely.
- Automatically creates, sends and archives the required reports by a system scheduler.
- Auto SMS, E-mail, or AAA alarms - responses are logged via a dynamic web log.
- Have various AAA values for different elevations on deflection to form accurate AAA lines but not a simplified vertical line.
- Import design predictions and show development of movements against predicted behaviour with time.
- Monitor the every instruments' working status at any time.
- Combined 3D modelling of readings, structural elements and geological information.
- Generate the sectional view for combination of monitored lateral movement, water table, stress of anchoring and settlement behind the wall.
- Configured shift reports can track the construction progress.
- Define each single soil nail or anchoring elements into a group for general construction management and auditing.

Summary:

Manage slope and land formation production progress, site quality and submission records as well as the technical data from planning, design and measurement in one configurable environment to reduce time and costs across the project whilst keeping data alive to promote sharing and effective teamwork and analysis.

Category	Slopes	MissionOS System	Mission Monitor
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