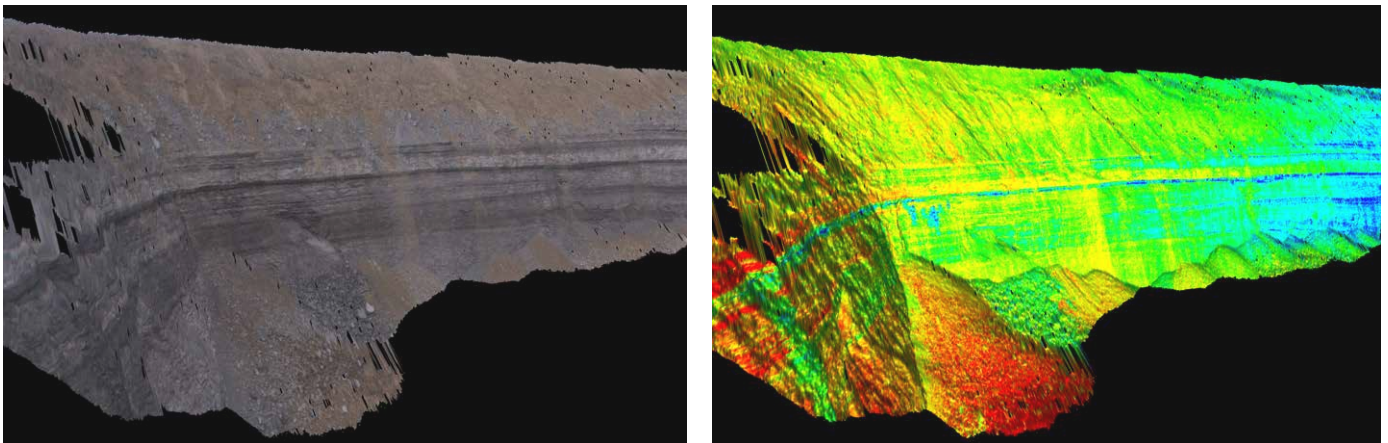


Highwall mapping enhanced by 3D laser scanning

Maptek™ I-Site™ 8800 laser scanners provide versatile systems for mine site surveying tasks. Surveyors, geologists and geotechnical engineers can collect and update crucial highwall data safely, easily and accurately.



Highwall scan showing image captured simultaneously and rendered onto 3D points (left); and by intensity only (right)

The Maptek™ I-Site™ 8800 laser scanner has an extra long range of 2000 metres, a superior battery life, and ergonomic design. I-Site laser scanners are surveyor-friendly, and include in-built digital level compensator and automatic backsighting. Pre-defined scanning resolutions suit all scenarios.

The Hand Held Controller manages temperature input for scan noise correction, return to backsight, scan plan overview window, registered scan overview, multiple zoom on Acquire preview and File Manager, pause and scan queuing.

Scanning a highwall, development face, stockpile or pit wall provides detailed three-dimensional images of a mine. Accurate models are available within minutes.

Scans can be located automatically onto the system's hand-held controller, removing the need to post-process data in the office.

The integrated high-resolution digital panoramic camera allows geologists to accurately map, model and interrogate geological structures.

The 70 megapixel panoramic lens offers unparalleled quality from a laser scanner. Scanning and photography are captured at the same time. The 3D photos can be readily shown with a single mouse click in Maptek™ I-Site™ Studio software.

Unlike methods that only colour individual points based on a photograph, I-Site laser scanners use all of the pixel information to render onto a 3D point cloud.

There is no need to calibrate and align cameras to capture images. Geologists can digitise boundaries, structures and other features directly onto a 3D image in true local grid coordinates without any interpolation from 2D to 3D.

A simple mouse click will generate a detailed 3D model from the point cloud for geotechnical interrogation of fault planes or joint sets.

Points, polygons or lines can be created directly onto the 3D model for accurate calculation of dips and strikes. The 3D CAD drawings can be exported and combined with other geological information in external databases.

Highlights

- Scan highwalls safely and easily, while capturing the detail needed for mapping
- Detailed and accurate models within minutes
- Digitising on 3D image on the screen saves time
- A highwall scan can be undertaken in less than 5 minutes, at the same time as performing routine daily or end-of-month surveys

New Geotechnical module

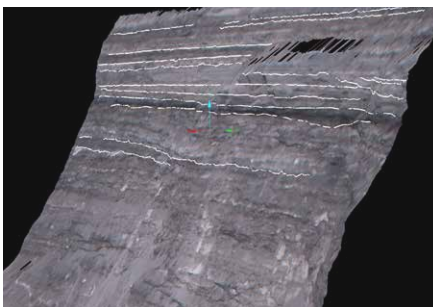
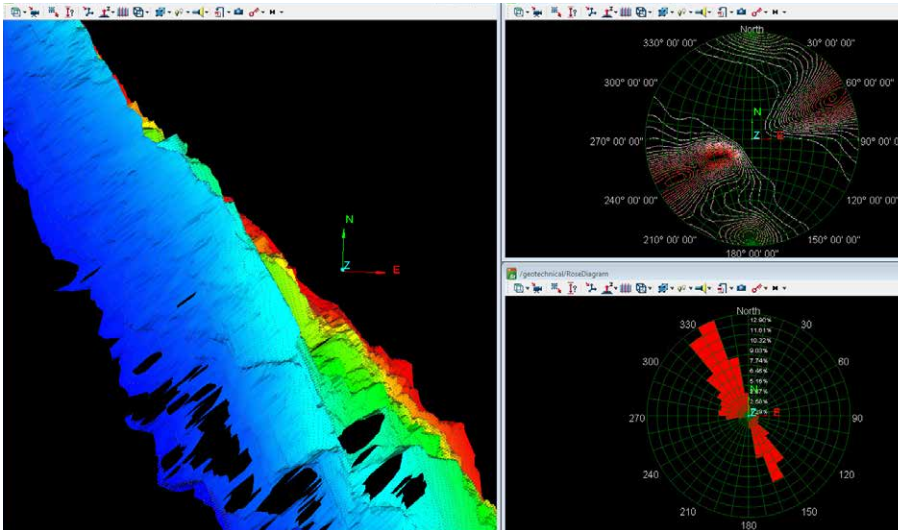
The I-Site Studio Geotechnical module follows a simple intuitive workflow to allow geologists and geotechnical engineers to take control of the information they need to analyse structures and surfaces.

By accessing data straight from the scan all the important detail is preserved and can be confidently used to identify areas of structural weakness that will affect mine planning and operational decisions.

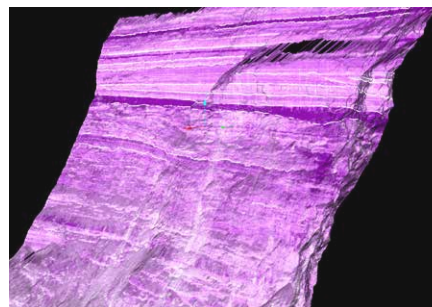
Features include:

- Colour surfaces by dip and strike to easily identify fractures
- Generate stereonets to highlight structural trends
- Apply stereonet contours to help identify discontinuity sets
- Generate rose diagrams to show dominant trends
- Analyse surface change to monitor movement in walls, batters, faces

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Fully rendered photograph in perspective mode



Digitising on the 3D image saves time

