

SIROVISION UNDERGROUND

A NEW CHAPTER IN UNDERGROUND STRUCTURAL MAPPING

Sirovision Underground is an integrated hardware and software system for the mapping and analysis of rock structures and mineralogy in underground topography.

The system comprises a specially designed Stereo Camera for capturing stereo photographs, and software for the generation and analysis of 3D images. This technology was developed by the prestigious Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia and is commercialised globally by Datamine under an exclusive agreement.

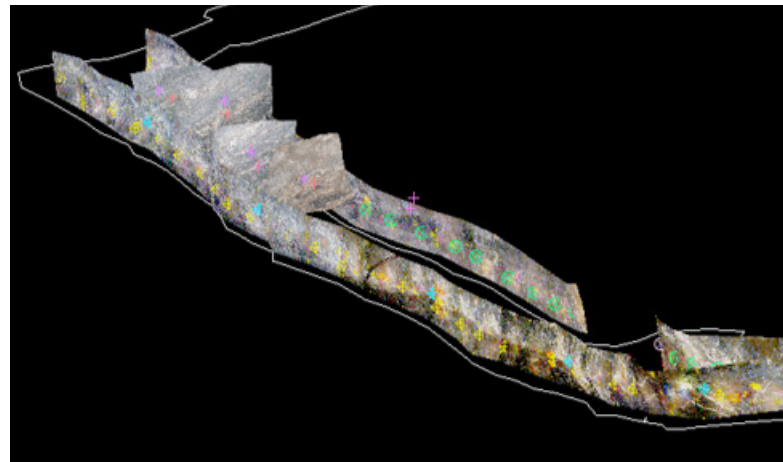
WHO USES SIROVISION?

Geologists

For mapping of lithological boundaries, identification of mineralogy and ore body volume calculations.

Mining Engineers

Assists in blast design and fragmentation analysis; calculating overbreak volumes and QA for contract supervision.



Geotechnical Engineers

For structural modelling with instant dip angle and dip direction results; automated wedge detection with mass, volume and sliding vector data; assisting in fracture frequency analysis.

WHY USE THE SIROVISION STEREO CAMERA?

Designed for purpose: The Sirovision Stereo Camera is unique in that it enables the capture of stereo photographs of underground lithology with one press of a button

Speed: A single heading can be captured in less than 4 minutes causing minimal disruption to the mining cycle

Easy to Use: Requires only two days training for technical staff

Improves Safety: Minimal “at face” time required to capture 3D digital record of the rock mass. The whole 3D heading can be mapped and analysed in the office

STEREO CAMERA FEATURES

- Twin 16 megapixel digital SLR cameras delivering high resolution true colour 3D images
- Durable and robust. Molded shell is water, dust and corrosion resistant
- USB connectivity
- Transportable by one person
- Self-contained light and laser guidance systems
- Rechargeable / replaceable long lasting batteries.

BOOK A DEMO

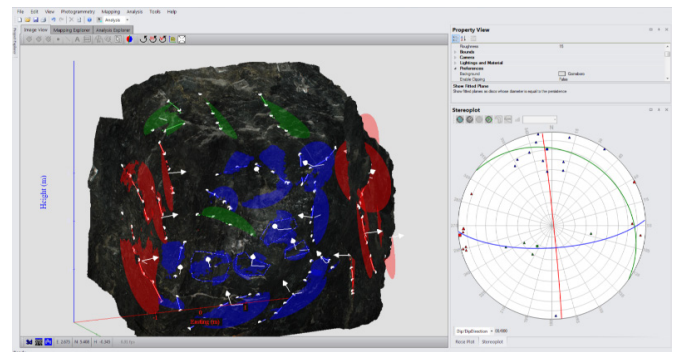
To book a free demo of Sirovision, contact your local Datamine office.

ACCURACY

Spatial Accuracy: to within 3cm

Mapping accuracy: better than +/- 0.5° for dip angle and direction

Range: 3 to 12 metres



SOFTWARE FEATURES

- Generates spatially accurate 3D images of underground headings
- Tools to digitally map structure directly on to the 3D surface producing immediate geotechnical characteristics
- Visualise discontinuity orientation data using spherical projections, rose plots and statistical analysis tools alongside their real world physical characteristics such as persistence and location in 3D space
- The *Slope Stability Analysis* tool provides automated detection of unstable wedges and blocks based on rock density, pore pressure, cohesion and friction data
- The *Mineral Classification* tool automatically maps the surface area of selected ore and mineral bodies

GLOBAL OFFICES

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