

Cavity Monitoring System *Optech CMS V500*

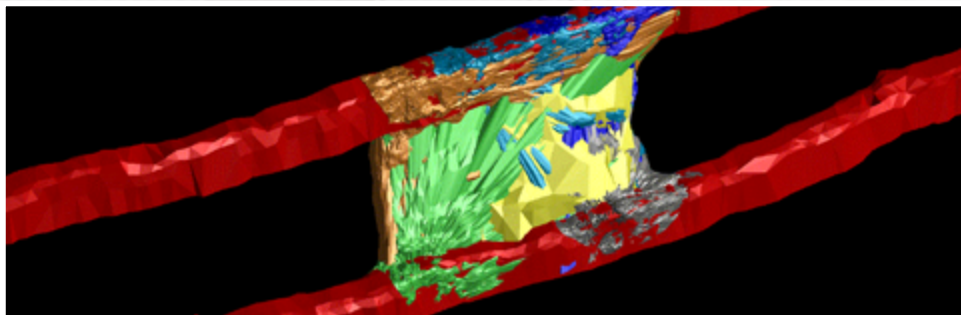
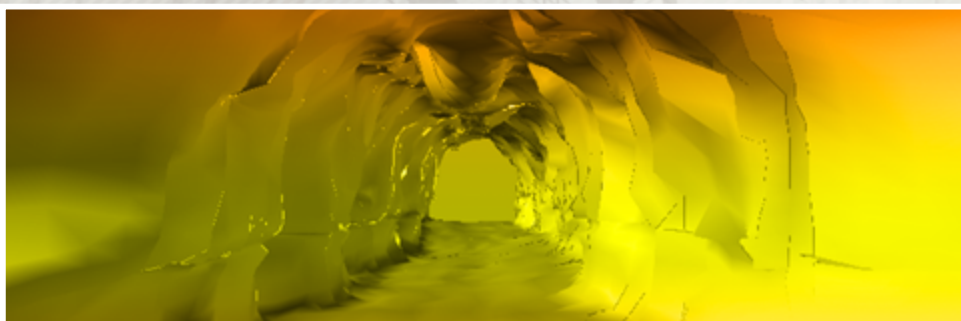


Hardware

- Fast data acquisition
- In-field resectioning and backsighting
- Completely redesigned hardware
- Communication and power cables removed
- Optional cart-based system

Software

- Real-time lidar and camera visualization
- One interface for all survey functions
- Manual control of sensor
- Laptop-based programming, control and processing
- Universally accepted data formats



Cavity Monitoring System Optech CMS V500

CMS is the ideal scanning solution for dangerous and inaccessible cavities.



The optional cart safely deploys the scanner into bottom-access stopes or drawpoints without exposing the surveyor to loose or falling material. The cart's rotation mechanism orients the CMS to any given angle, enabling it to maximize data density over the cavity's primary area of interest.

Optech CMS V500 Cavity Monitoring System

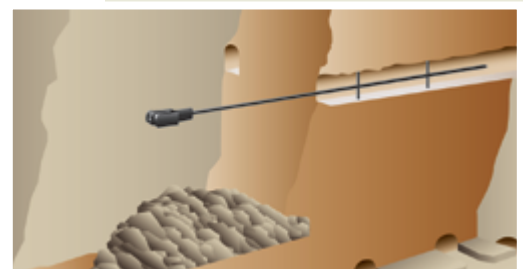
Developed for practical operation using real-world experience, Optech CMS has become the standard for fast, reliable and efficient underground surveying with hundreds of systems shipped worldwide. CMS improves mine efficiency and safety by accurately surveying inaccessible or dangerous areas like ore passes, raises and storage bins while the operator stands safely clear. Once inserted CMS measures the cavity's size, orientation and volume with thousands of laser points, giving surveyors and engineers a crucial look at their mine's actual structure.

New V500 Model

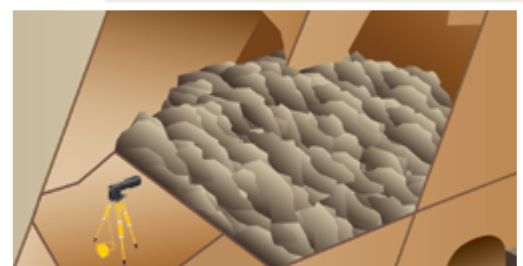
The new Optech CMS V500 builds on the past models by adding new functionality and improving existing features to increase efficiency. The unique integrated camera captures still images and streams video in real time, making CMS a visual inspection tool. With the redeveloped Windows-based interface operators can now control the scanner manually and perform in-field resectioning and backsighting. Optech has completely reworked the physical design to improve efficiency with a reduced 130-mm insertion diameter and a wider 360° × 320° extension angle, and has eliminated external cables through wireless connectivity and an internal battery to improve hardiness and shorten setup times.



Bottom Access with Cart



Stope Method



Caving Method



Vertical Method

Feature	Benefit
Internal camera	Inspect ore passes, raises, storage bins
Production of accurate geo-located models	Quantify and minimize dilution
Multiple environmental settings	Operate in dusty and gaseous atmospheres
Real-time visualization	Data is field verified
360° × 320° field of view	Full data coverage in a single scan
Wi-Fi operation and internal battery	No power or communication cables required
Cart option	Safely deploy system into dangerous areas