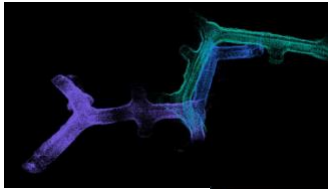
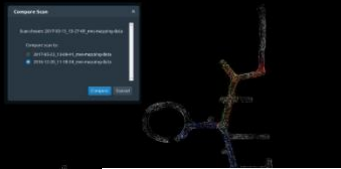


## MVS Software Suite



Import new scans collected from the MVS Mobile Sensor kit.

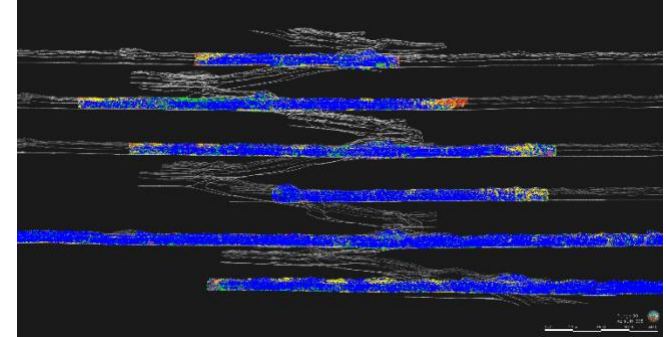
Globally align data to local site coordinates & survey files.



Obtain results in various file formats, including ASC, OBJ, and other supported formats.



Capture a Digital Mine  
In Minutes



At Mine Vision Systems, we provide the end-to-end solution for capturing, computing, and delivering 3D Geo-Spatial data for underground mines. Data can be reviewed in real time to make fast decisions on smart mine production. MVS delivers the hardware and software necessary to create a digital mine today.

The MVS mobile rapid-mapping solution can be applied across a wide range of projects and services:

- Survey mapping, and updates to existing maps;
- Shaft Inspections;
- Convergence (change) detection in underground movement;
- Volume Estimation;
- Visual representations of underground mines through 3D point clouds, textured mesh images and videos, and fly through videos of your mine.

**All Solutions shown are available  
for your site now!**

**Contact us for initial consultation:**  
+1-412-404-7481  
[info@minevisionsystems.com](mailto:info@minevisionsystems.com)

5877 Commerce Street  
Suite 202  
Pittsburgh, PA USA  
15206

[www.minevisionsystems.com](http://www.minevisionsystems.com)



## 3D Rapid Mapping Solutions

~ *Underground Mapping* ~  
~ *Shaft Inspection* ~  
~ *Change Detection* ~



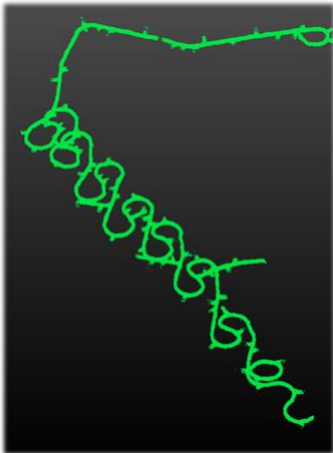
# Create your digital mine today.

## 3D RAPID MAPPING CAPTURE SYSTEM

The Mine Vision Systems (MVS) Sensor System is a mobile rapid-mapping solution providing 3D representations of underground mines.

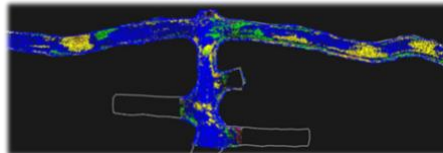
### Underground Mapping

The MVS Mapping System rapidly collects 3D data of underground mines and provides same-day actionable information. No need to disrupt or stop production as the MVS Solution operates alongside workers and equipment. Efficiently update and perform: survey maps, mine plans and designs, fleet management maps, ventilation planning, clearance analysis, and volume estimation.



### Convergence Monitoring

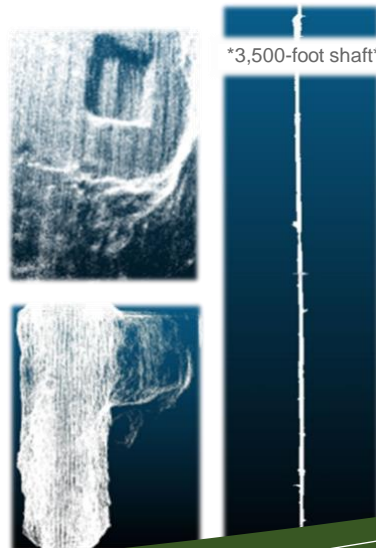
The MVS Convergence System enables identification and interaction with geotechnical changes over time. Reduce costs through early identification of failing roof supports and avoid downtime due to unknown movement. Provide improvements to occupation health and safety hazards at your site. The MVS Convergence Monitoring system will help you understand the geotechnical complexities and challenges of your mine, providing actionable insights for declines, ore drives/drifts, and stopes.



Heat-map 3D point cloud representing movement in an underground tunnel.

### Shaft Inspection

The MVS Shaft Inspection System provides a safe, cost effective method to inspect all types of shafts. The MVS Shaft Inspection system allows users to locate structural issues, measure change, monitor debris buildup, and assess and diagnose ventilation problems.



## Digitize your mine in 3 steps.

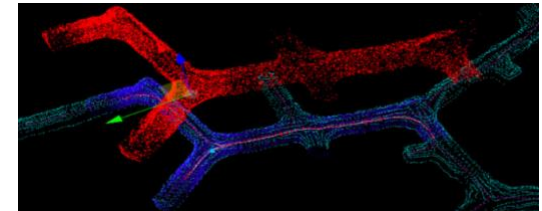
### Step 1: CAPTURE

The MVS Sensor Solution is a mobile lidar and stereo camera sensor that captures data at vehicle speeds up to 15 kph. Mount the MVS Sensor directly onto a mine vehicle. Simply drive through an underground mine to collect dense 3D data inside the mine.



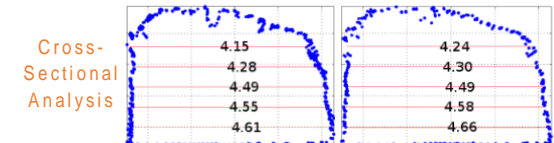
### Step 2: COMPUTE

Leverage our proprietary MVS Software to process real-time videos, 3D point clouds, and textured mesh images of the mine.



### Step 3: REVIEW & DELIVER

Use the proprietary MVS Software, or export to other compatible mine planning systems, to perform real time analysis and analytics.



Scan Title/Date	Measurement from Control Point #17 (In meters):		
	to Point #13	to Point #15	to Point #20
Level 100: November 17	4.81	4.86	5.16
Level 100: January 8	4.83	4.88	5.12
Level 100: January 25	5.03	4.91	5.01
<b>Movement (Meters)</b>	<b>0.22</b>	<b>0.05</b>	<b>-0.15</b>
<b>Movement (Inches)</b>	<b>8.6</b>	<b>1.9</b>	<b>-5.9</b>



[www.minevisionsystems.com](http://www.minevisionsystems.com)