micromine pitram

Automated data capture and real-time fleet visibility to keep you in control.

Pitram Vision

The Pitram Vision solution tracks key mining activities in real-time, improving data accuracy across development and production tasks. Data is then available to end users for analysis and integration with other systems.

Pitram Vision is an AI solution that captures and displays loading status and Load-Haul-Dump (LHD) cycle-data via machine learning, providing productivity and efficiency benefits.

Removing operators from the data capture loop improves the accuracy and granularity of operational loader data, whilst releasing equipment operators to focus on the task at hand in challenging environments.

Pitram Vision is the key to enabling the scrutiny and review of data collected by loader operators in real-time, displayed via Micromine Pitram dashboards, video-playback on the surface or straight to head-office.
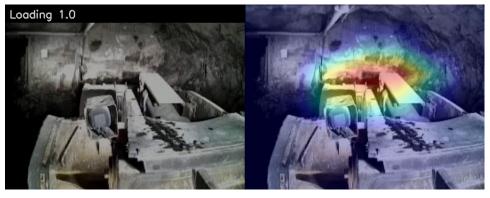
Automating the data capture process.

Pitram Vision utilises advanced AI technology combined with deep machine learning. The solution tracks all loading cycle variables, including:

- loading time
- travelling empty time
- dumping time
- the number of buckets to stockpile or truck
- hauling time

Ruggedized on-board cameras are installed on loaders to track these variables. The video feed is processed on the vehicle computer (Pitram Mobile edge device), with the extracted information transferred directly to the Micromine Pitram servers for processing, completely automating the data capture process.

Key Benefits

- Pitram Vision is the latest AI solution that automates data capture in real-time, direct from your loading fleet.

- Reliable and accurate automated data capture not tied to equipment specific hardware sensors or left up to operators.

- Detailed visibility of loading cycle processes that can be leveraged for improvement initiatives.

- Pitram Vision's machine learning algorithm accuracy is greater than 99%.

- The first provider to successfully implement machine vision technologies for productivity in underground environments.

- Pitram Vision is OEM independent, applicable to any vehicle or fleet composition.

Pitram Vision Class Activation Mapping

"Micromine Pitram is a trusted brand in underground mining productivity and fleet management solutions, globally. Micromine Pitram manages data related to equipment, personnel, locations and materials, providing an overall view of current mine status, enabling improved control over operations."