



Pitram for Underground Mines

Pitram is a management and reporting tool that turns data into information.

Pitram can be configured to the needs of any operation at any stage of the mining process. A variety of data capture and integration methods allow it to operate with or without a central control room.

“Since its implementation, Pitram has assisted Cayeli to double the amount of mine activities achieving targets. Of the mine activities monitored, there has been a 10% average increase in productivity. Cayeli management is very pleased with the program and the results that it has helped to achieve.”

Phil Jay, Mine Manager, Cayeli Bakir Isletmeleri, Copper and Zinc Mine

Reduce costs and increase productivity

The Pitram mine management and reporting solution provides a comprehensive view of a mine’s activity, enabling fast and informed decision making.

- **Achieve schedules and budgets with live monitoring and optimisation of resources**
- **Fast and accurate end-of-month reporting and reconciliation** using validated data and automated reports
- **Easily track material flow** throughout the mine for accurate stockpile levels and grade information
- **Increase asset utilisation** by monitoring locations and cycle times
- **Ensure accessibility to all staff.** Pitram can be deployed onsite in multiple languages

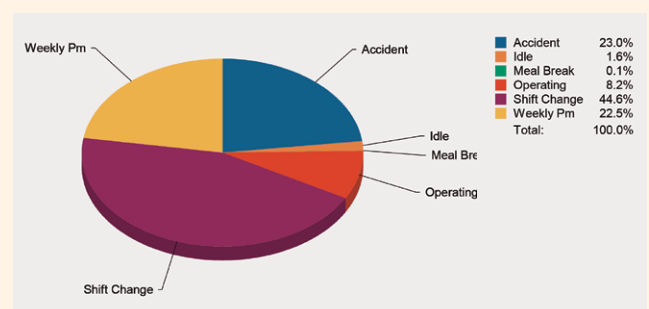


Optimise underground assets with Pitram Mobile.

Follow mining plans and performance targets

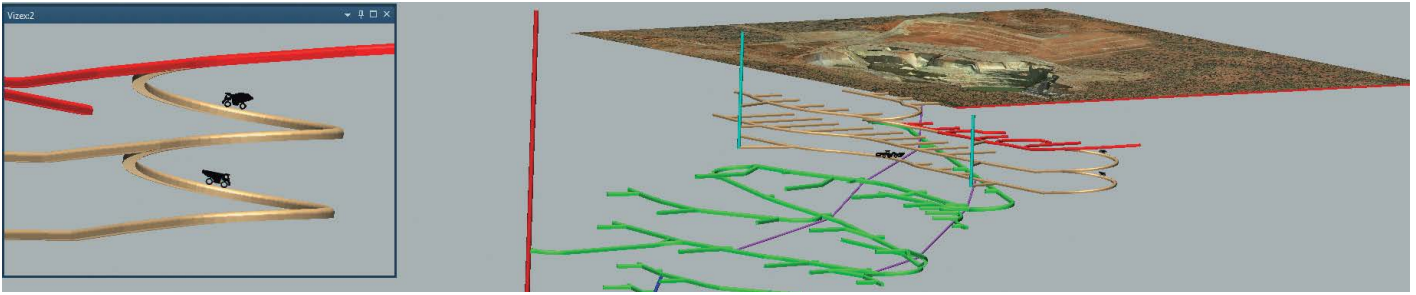
Pitram’s user-friendly interface and reports facilitate improved resource allocation and asset utilisation.

- **Make fast and informed decisions** by monitoring progress of the mine shift plan
- **Achieve shift production targets** by identifying tasks behind schedule
- **Reconcile survey to claimed values** for metres advanced and tonnes removed
- **Monitor costs by location** through recording support consumables for each cut
- **Optimise face utilisation** by tracking machine activity and location status in real time
- **Blend ore accurately** using up-to-date stockpile composition information



View breakdowns of asset utilisation.

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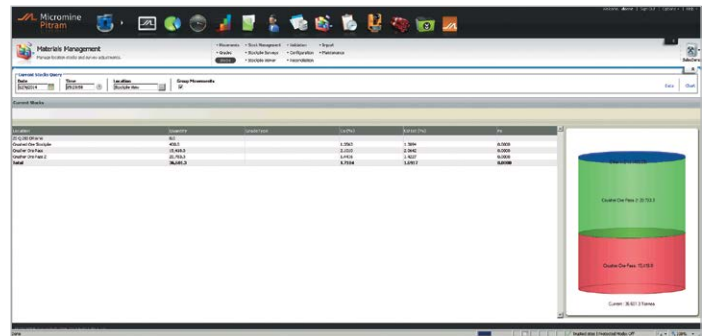


Visualise the mine operation in real-time 3D.

Access information and integrate systems

Pitram acts as a central location for data from different sources, providing easy access to more information.

- **Integrate with third party solutions** including SAP, Sandvik Automine, QlikView and Loadman
- **Visualise mine activity in 3D**
- **Position dashboards** around the mine to display critical metrics and reports
- **Access information from anywhere** using a secure web browser

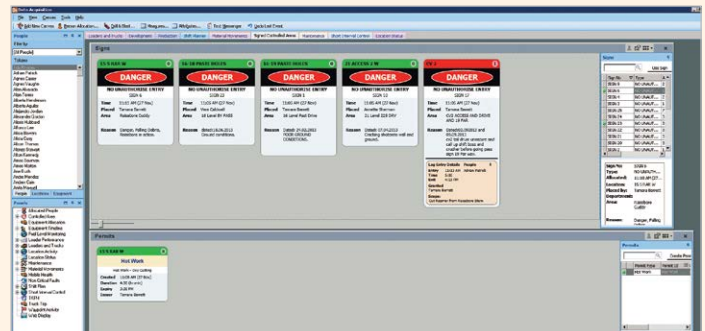


Instantly view stockpile levels and grades.

Provide and maintain a safe working environment

Pitram helps minimise, isolate and eliminate risks.

- **Facilitate emergency procedure coordination** through a central control room
- **Identify qualified equipment operators** by tracking certifications and licences
- **Monitor controlled and barricaded areas** by managing personnel access and exposure time
- **Instant maintenance alerts** through electronic prestart checks
- **Incident review and process improvement** through analysis of historical data
- **Protect personnel and equipment** with proximity detection and exclusion zone monitoring



Monitor controlled and barricaded areas.



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