

**RPM**GLOBAL

# HAULSIM

Delivering Real Operational Improvements that  
Save Countless Dollars on Capital Expenditure



**HAULSIM** connects the fleet assets, mining operational plans and the people to build a 'digital twin' of any mining operation - open pit or underground - to deliver an accurate representation of any mine sites haulage operations.

With a 3-D Discrete Event Simulation (DES) engine, at its core, HAULSIM is the only mining simulation software that can quantify the impact of changes as the models reflect the complex and dynamic nature of a mine site in its entirety; including the variability, interactions and dependencies that occur in these systems.

Decisions to a mine haulage system can be based on real data giving the user the ability to test multiple 'why' and 'what-if' scenarios to reduce operating costs through optimised performance, and ensure overall operational safety and efficiency.

## Reduce Operating Expenditure with Discrete Event Simulation

Mine haulage represents the highest cost component of any mining operation meaning optimisation of mine haulage fleet is paramount. HAULSIM and Discrete Event Simulation drive down operating costs through prediction of production, allowing users to take control of uncertainty in their mining operations.

## Control Uncertainty

Providing more insight than ever before, users can control uncertainty in their mining operations with the use of HAULSIM to model and visualise every aspect of their haulage system in 3D. The impact of changes to mine haulage systems can be simulated and quantified rapidly, giving users confidence in their planning and design improvement decisions.

## Make Simulation a Pivotal Part of Your Planning Process

HAULSIM brings simulation in house, reducing reliance on costly specialist consultants. HAULSIM is fast to set up and easy to use - users can build models in a drag and drop environment and generate simulations rapidly. This means multiple scenarios can be explored at any given time. Minor incremental adjustments or major changes can be made with ease, and the visible impact of these changes is available within minutes.

**HAULSIM models incorporate real operational constraints and parameters including:**

- Current fleet usage statistics such as breakdowns and rosters
- Modelling of congestion and queuing at sources and destinations
- Truck speed (calibrated using GPS data)
- Road rules
- Haulage networks and road conditions
- Other infrastructure such as crushers, stockpiles and orepasses.

## Knowledge and Power

RPM has over 35 years of experience in developing mining simulation tools with origins in modelling truck and loader options over a single route. Integrating mining knowledge with powerful simulation capabilities, RPM are pioneers of simulation, providing the mining sector with its first industry-specific haulage simulation solution. Featuring the industry's largest equipment database, HAULSIM is a complete 3D haulage simulation solution.



## Increased Mine Productivity through Detailed Analysis

With a holistic focus on the haulage network, HAULSIM features a 3D user interface for users to identify bottlenecks, congestion, and other areas of improvement quickly and easily. With a focus on operational efficiency, both large and small decisions can be made with confidence using tested assumptions. Users can also calibrate models to form accurate predictions on future performance. Eliminate the cost and risk of real world testing using



### HAULSIM to visualise the effects of 'what-if' scenarios such as:

- Adding, removing or modifying equipment
- Variations to equipment task assignment
- Improvement of maintenance practices
- Haulage route and speed limit changes
- Changes in truck or loader allocation
- Adding or changing traffic control
- Production versus cost
- Change in configuration of ore passes, crushers and stockpiles and analyse the timing of interactions between different pieces of equipment
- Congestion and bottleneck improvement strategies.

## Have Complete Confidence in Capital Decisions

HAULSIM is the most powerful simulation tool on the market for modelling, analysing, visualising, and optimising mine haulage networks giving users complete confidence in the accuracy of mine plans. Decisions to invest capital in new infrastructure or equipment can be made with a clear view of predicted outcomes.

## Enterprise Planning Framework

Enterprise integration and collaboration will deliver the operational improvements mining companies need to realise the next wave of productivity improvements. Whilst most mining companies have realised value implementing an integrated strategy in their Corporate functions, such as finance and HR, they have not extended this to their Technical Mining Operations (TMO). Consequently the TMO is a complex web of point solutions, data sources and silos that delivers complex structures and inadequate functional collaboration.

RPMGlobal's Enterprise Planning Framework (EPF) is a strategic platform that consumes and exchanges data from multiple sources including ERP, Business Intelligence (BI) tools, mine planning and command and control fleet management systems (FMS). It supports management processes, eliminates reliance on disconnected spreadsheets, individual departmental point solutions and fragmented BI technologies. Integrating the data delivers timely decisions-making as well as greater communication and visibility across the mining operations.



## About RPMGlobal

RPMGlobal is the global leader in the digital transformation of mining. We provide data with context, transforming mining operations. Our Enterprise approach, built on open industry standards, delivers the leading digital platform that connects the systems and information and seamlessly, amplifying decision-making across the mining value chain.

RPMGlobal integrates the planning and scheduling, with maintenance and execution, with simulation and costings, on RPM's Enterprise Planning Framework, the mining industry's only digital platform that delivers insight and control across these core processes.

RPM's Advisory Team advise the global mining industry on their most critical issues and opportunities, from exploration to mine closure. Their deep domain expertise, combined with their culture of innovation, and global footprint, ensures our mining customers continue to lead.

RPM are the global leader in Enterprise mining software, Advisory services and Professional development who operate offices in 23 locations across 13 countries and have worked in over 118 countries.

For more information visit [rpmglobal.com](https://rpmglobal.com) or email [info@rpmglobal.com](mailto:info@rpmglobal.com).