RPMGLOBAL XECUTE

The Mary

XECUTE minimises data entry and maximises planning value, adaptability and agility by using automation to connect planning with operations, with 3D cross-team collaboration, and integrated design and scheduling.

Combining RPMGlobal's proprietary Product Optimiser with a game-inspired 3D interface, XECUTE enables planners to build an optimal ultra-short-term schedule that's easy to understand and communicate, providing a coherent link between medium term planning and operational execution.

Inherently multi-user, XECUTE allows a greater level of collaboration and planning efficiency than ever before. Enterprise data feeds provide planners with the most up-to-date schedule inputs and allow schedule outputs to be automatically pushed to downstream systems, closing the loop between planning and execution.

Enabling a fundamental shift in mine planning outcomes by harnessing ultra-short-term mine planning data.

Benefits

Design flexibility

XECUTE can utilise imported designs or allow planners to create or alter designs in the scene. This allows an organisation to choose the right level of design flexibility that balances the need to conform with long term design processes and the need to react to unexpected events, and short-term goals.

Improved plan-to-plan compliance

Plan compliance through long, medium, and short term plans has always been an issue in mining. XECUTE takes guidance published from longer term planning tools and makes it available to the user both spatially and numerically, providing the greatest opportunity for short term planners to comply with the longer term plan. This results in a much better alignment between the short term tactics and the long term strategy.

Optimal schedule and product blending

XECUTE is built on RPM's scheduling platform, a mature, proven and powerful scheduling engine. Utilising RPM's proprietary Product Optimiser, planners can define objectives and constraints to optimise the allocation of material to destinations and material movement through the mining value chain. This allows, for example, blending of material to hit mill or product specifications, maximising saleable product tonnes, or providing for better stockpile management by material attributes.

Continuous live plan

An operational mine site is continuously changing. With XECUTE mine planners are always using the most accurate and up to date information coming from authoritative sources. This allows planners to make the best decision with the most accurate information.

React to reduce downtimes and delays

The ability to visualise not only the current task but how changes affect subsequent tasks delivers clarity never before seen in mine planning. Reacting to unplanned events quickly and accurately has a significant impact on utilisation, production delays and ultimately the bottom line.

Improved cross-team communication

XECUTE is an Enterprise tool and as such allows for data and information to flow freely between systems. Communication and efficiency are improved across the site with critical data from each system transferred and used in other tools without a human in the loop, manually entering data and updating inputs to other systems. Rich graphical display and animation enhances communication between planning horizons and between planning and operations teams.

Easy user interface

Just like the computer games that inspired it, XECUTE has been designed with user interface experts to make it quick to learn and easy to use. The innovative menu interface removes clutter without sacrificing functionality and allows users to design activity areas, assign resources, resolve dependencies, and much more with a simple click of the mouse. Users benefit from a tool that helps rather than hinders them, and the mine benefits from a better plan.

Features

Dynamic product optimization

XECUTE uses RPM's proprietary Product Optimization algorithm to select the best destination for excavated material in each shift, maximising benefits and minimising costs. Dynamic Product Optimization allows material to be blended to achieve specified grade targets, maximising operational value.



Live feed from FMS shows real-time progress against plan.

Multi user collaboration

Collaboration between departments has historically been difficult due to the customised, desktop software used in the mining industry. XECUTE is a true multi user tool that allows multiple departments and people to use the same model and plan simultaneously. Drill planners in a remote operations centre can work on the same model at the same time as the production planner at site and immediately see changes as they are made.

Schedule guidance

Longer term plan outputs published from RPM's XPAC Solutions can be automatically brought into XECUTE, providing spatial and numerical schedule guidance to the short term planner. Guidance data can be interrogated to provide planning context, giving planning teams an unprecedented ability to collaborate and improve plan-toplan compliance.



Flexible design and just-in-time reserving improves material and blend targeting.

Integration with fleet management systems

XECUTE allows the mine planner to publish the plan directly to FMS. This saves valuable time and reduces the chance of miscommunication when relaying the plan. As the plan is executed, data is automatically fed from FMS back to XECUTE, closing the planning-operations loop and providing planners with a live, reactive, continuous planning environment. Machine positions, bucket positions and progress through a shift are all available to the mine planner to ensure targets are being achieved.

Gaming experience

With a deeply immersive visual interface based on gaming technology, XECUTE provides planners with the spatial context for every mine planning decision. Design shapes can be created and updated, evaluated and scheduled in the same environment without switching to another application. This dramatically reduces the time required to define and evaluate the impact that change has on production, maintenance and ultimately the operation's success.

Geology override

Geologists and supervisors can update the geology of an area without the need to update the entire block model. This allows changes to be made to the geological model of the plan without having to publish a new block model for the whole operation, reducing the delay between assay and planning.

A platform for true collaboration across the mining value chain or manage variability and enhance productivity with the industry's sole ultra-short term planning solution.

Adaptive gantt chart

XECUTE's interface combines a graphical scene with a Gantt style schedule view. Users can manipulate and alter the plan and immediately see the effects on the schedule in the Gantt chart. Navigating and understanding the schedule has never been easier, as planners can use their preferred method of interacting with the schedule

ERP Integration

Visibility across the entire mining value chain is critical – not just across the operational layer but also to the Corporate layer. RPM has invested in developing connectors between ERP's and RPM's Enterprise Planning Framework (EPF). Using RPM's connectors, XECUTE can take an automated data feed of maintenance orders. As the maintenance department update their plan it is immediately replicated within XECUTE giving clear visibility of issues and conflicts before they occur. Using an open standard interface also allows XECUTE to take maintenance information from any other Enterprise Resource Planning (ERP) or maintenance system, including RPM's own AMT.



Schedule guidance gives short term planners the best opportunity to achieve long term strategic objectives.

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 decision-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 decisionmaking 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** or email **info@rpmglobal.com**.