RPMGlobal (RPM) redefines mine planning and scheduling. It is the new benchmark and the only solution purpose built for the mining industry. There is no other solution that can match the 45+ years RPM have focussed on to deliver the industry standard today.

Underpinning RPM’s Steeply Dipping Coal Solution (SDCS) is a powerful scheduling engine that does all the heavy lifting without compromising sophistication and capabilities. From an individual site through to multi-site and global operations, the parametric approach adopted by SDCS means Engineers can amplify their decision-making process. This embedded intelligence, together with our intuitive user interface, increases mine productivity and provides rapid ROI with a solution that is scalable, intuitive and fast to learn.

SDCS is the only Enterprise Planning solution that complies to industry standards and aligns to ISA-95 delivering true collaboration across the mining value chain

Benefits

Steeply Dipping Coal mines typically deal with geologically complex deposits with a large number of seams with thicknesses that vary significantly. They require highly selective mining techniques along the seam boundaries and pose a number of challenges not typically faced in traditional open pit mines. RPM’s SDCS has been specifically designed for mines with steep coal seams that have to rely on terrace mining techniques.

Dynamic Haulage Modelling

The ability to capitalise on opportunities for backfilling in worked out sections of the mine is an essential aspect of scheduling terrace mines. With SDCS, the dumping of waste (both in-pit and ex-pit) is scheduled at the same time as the mining, so it is able to identify the optimum waste dumping strategy throughout the schedule. SDCS is the only scheduling solution capable of scheduling mining and filling simultaneously and is the only scheduling solution able to truly optimise the mines waste placement strategy.

To ensure schedules are practical, users can specify the minimum safe distance between the toe of the dump and the active face. This ensures that potential back-filling areas are correctly exposed, whatever mining strategy is being evaluated. Dynamic haulage continuously compares available ex-pit and backfill dumping options as the face advances and the dumps are filled, ensuring the productivity of the haulage fleet is optimised throughout the schedule.

Intuitive, Practical Scheduling Rules with a Process Driven UI.

With a process driven workflow that’s 100% script free, Solutions are fast to implement and even faster to learn. The mining rules, targets and objectives used to control the schedule have been tailored for terrace mines extracting steep coal seams, ensuring optimal schedules that are both practical and feasible.

The sequential steps that form the scheduling process completely eliminates the need for complicated scripting (and costly consultants to write them). Rather than complex menus and options hidden within deeply nested dialogues, the repeatable scheduling process provides every option exactly when and where required. Whether they last used the solution yesterday or six months ago, planners will be up and scheduling in no time.

Scheduling Reserves, Automatically

In SDCS, the process of generating the scheduling database is fully automated. It reads geological data directly from grids and generates detailed 3D solids of every seam intersecting each bench. The task is performed rapidly, even with massive geological models.

Fastest Scheduling Engine Ever

It doesn't matter how big your pits are or how many you have. You may even have multiple mine sites. Whatever combination of pits and mines you are scheduling, the robust data modelling that underpins SDCS ensures detailed, practical schedules can be generated efficiently and rapidly. With one planning solution, you can be confident a robust, consistent approach to planning is adopted across all sites.
Big Data

Regardless of where data is sourced, SDCS read it in its native format without the need for translations and manual manipulation. The parametric, process-driven approach adopted by our solutions make it easy to re-align production schedules when key underlying data changes. Whether it's an updated geological model, a new pit design or a revised dumping permit, it's easy to incorporate the new data into the schedule.

Multi-scenario analysis

With their intuitive, process-driven user interface, highly automated mining rules and extreme scheduling speed, Engineers can focus on delivering value knowing the solution has the mining logic covered. You are no longer forced to accept the best option the planner can produce manually in the limited time available. Our scheduling solutions give Engineers the opportunity to explore alternative ‘what if’ scenarios and truly understand how best to drive the mines production in changing market conditions.

Integrated Product Optimiser

Always meet product targets and qualities. Automatically find the best way to wash, process, blend and stockpile the coal to maximise the value of one or more products. Unlike other mine planning solutions, SDCS is the only scheduling solution capable of optimizing such complex alternative options. And because it does this at the same time as it builds the schedule, rather than as an afterthought, it ensures the optimal mining decisions are taken every period and users are able to identify the most cost-effective scheduling and extraction sequence whilst still hitting their product targets.

Only Fully Integrated Scheduling Processes

The Steeply Dipping Coal Solution manages the entire scheduling process within a single application. Reserver generation, scheduling, dumping, product management and haulage modelling all working together in a single, streamlined process.

SDCS is the only solution that ensures the dumping strategy accounts for the mining sequence and the mining sequencer optimises dumping strategy. Detailed haulage modelling is performed for every material movement providing a true reflection of what is happening onsite. Combined with RPM’s equipment library, users can now compare schedulers with a range of different fleet configurations, all underpinned by RPM’s world-leading simulation technology that’s relied upon by most major equipment OEM’s.

Dynamic Scheduling

Solutions allow both manual interactive and automatic scheduling techniques to be combined in the same schedule. This gives engineers have the flexibility to work in detail when required and let the speed and power of auto-scheduler take over for later periods. And whether the schedules are created manually, automatically, or with a combination of both techniques, advanced destination scheduling automatically manages the movement of all coal and waste to its final destination.

True Enterprise Mining Solution

Solutions capability to digest data from any software application across the mining value chain, together with RPM’s Enterprise Planning Framework (EPF), makes it the only Enterprise-enabled software application in mining. It seamlessly can integrate with financial systems, ERPs and Fleet Management Systems to deliver one truth.
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.

RPMGlobal’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.

RPMGlobal is 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.