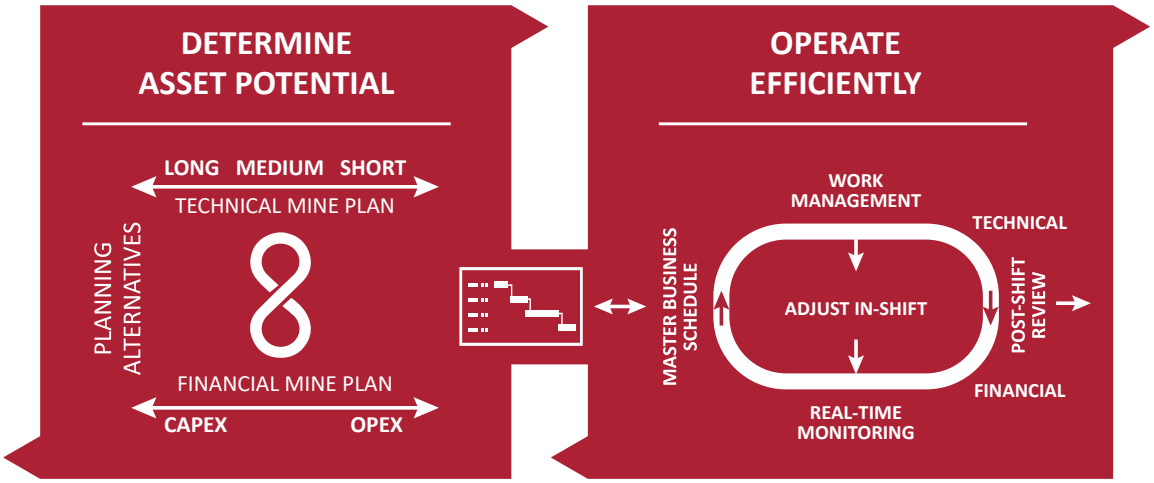
MineRP

INTEGRATED BUSINESS PLANNING

The modern mining business faces new challenges. From resource availability to capital scarcity and volatile markets, high-performance mines simply cannot work with disconnected, fragmented planning processes and unacceptably long planning cycles.



AGILE RESPONSE TO MARKET

Available ore reserves, latest operational results and downstream market demands drive production, financial and logistical plans. MineRP 4.0 is the high-performance, multi-mining method and multi-mineral integrated mine design and scheduling solution that removes the latency between changed market signals and optimal responses.

The Business Problem

- Different plans for each planning horizon prohibit reconciliation across horizons
- Assessing the impact of shorter-term planning alternatives on the longer term plans is impossible

The Value MineRP Unlocks

- Analysis of multiple alternative plans ensures optimal capital allocation to projects that will deliver best shareholder value
- Ability to respond to internal and external (market) demand fluctuations

Continuous Planning Across Horizons

The impact of current mining operations and unexpected events necessitates changes to short term mine plans, yet too often these short-term plan adjustments are made with little or no consideration of its impact on the medium- and long-term mine plan. Continuous planning demands that a single plan exists across all planning horizons, with the levels of detail increasing towards the short-term end.

MineRP does not only remove the latency from developing mine plans, but also protects the integrity of the mine plan across all horizons, thereby safeguarding the stated corporate strategy and assisting executives to deliver on the promise to their shareholders.

The Business Problem

- Different plans for each planning horizon prohibit reconciliation across horizons
- Assessing the impact of shorter-term planning alternatives on the longer term plans is impossible

The Value MineRP Unlocks

- The ability to traverse horizons and levels when assessing the impact of changes in any given horizon detail
- Find the best solution to an immediate problem while staying aligned to strategic objectives and investor promises

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MULTIPLE MINE PLANNING OPTIONS

Available ore reserves, latest operational results and downstream market demands drive production, financial and logistical plans. MineRP 4.0 is the high-performance, multi-mining method and multi-mineral integrated mine design and scheduling solution that removes the latency between changed market signals and optimal responses.

Parametric Mine Design

With other mine planning tools, developing mine planning options or scenarios takes weeks or months. MineRP's parametric design capabilities allows for the rapid generation of robust, optimised mine design alternatives in a fraction of that time.

> *Even with highly constrained mine designs, optimisation has never generated less than 3,5% improvement in NPV. Concerted enterprise effort can deliver up to 35%!*

Integrated with SAP for Planning and Operations

Executives have to deliver technical and financial plans that are fully aligned at every level of detail. Integration with SAP via the MineRP Unified Business Planning solution enables integrated financial and technical mine planning.

With MineRP and SAP, financial planning projections are largely automated and seamlessly integrated with a digital operating plan to facilitate continuous revision, validation and financial assessment of operating variances and changes.

The Business Problem

- Poor integration between financial and technical mine plans means that changes to either cannot be validated for feasibility in the other.
- Little or no integrity between the financial budget and the technical mine plan polarises technical and financial disciplines and weakens the business

The Value MineRP Unlocks

- MineRP translates mining actions into financial transactions. What this means is that financial budgets retain the necessary links to planned mining activities required to simulate and visualize the impact of budget changes on the technical mine plan, and vice-versa
- Retaining the spatial link between mining actions and ERP transactions unlocks area and activity-based costing and control previously impossible to achieve

THE ONLY TRULY INDEPENDENT PLATFORM

Running on the only independent platform that truly integrates all your mining technical data, from Geology to Design, Scheduling, Survey and everything else, MineRP gives mine planners unbeatable access to every bit of information they need to understand the orebody and generate the most effective extraction strategy for every mineral or mining method.

Live geological, production and financial inputs form the basis of all planning. This in turn enables in-depth analysis, with full financial and technical impact assessments.

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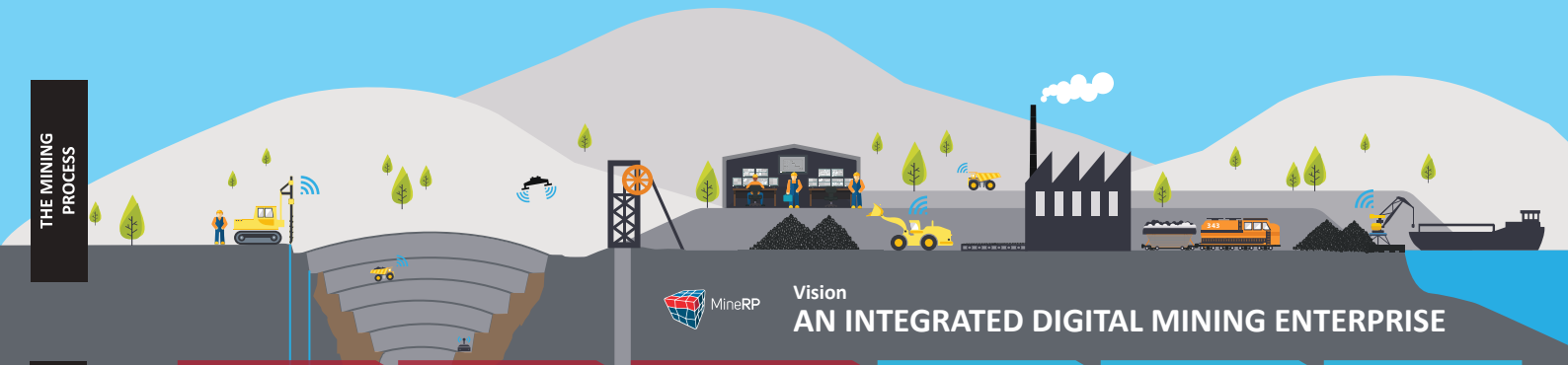
MineRP

DISCOVER | ESTABLISH | EXPLOIT | BENEFICIATE | TRANSPORT | SELL & REHABILITATE

THE MINING PROCESS



INTEGRATED BUSINESS PROCESS

MineRP

Vision

AN INTEGRATED DIGITAL MINING ENTERPRISE

UNDERSTAND THE ASSET
- Geology
- Planning
- Engineering
- Survey
- Safety
- Environment

DETERMINE ASSET POTENTIAL
- LONG MEDIUM SHORT
- TECHNICAL MINE PLAN
- PLANNING ALTERNATIVES
- FINANCIAL MINE PLAN
- CAPEX OPEX

OPERATE EFFICIENTLY
- WORK MANAGEMENT
- TECHNICAL
- MASTER BUSINESS SCHEDULE
- ADJUST IN-SHIFT
- POST-SHIFT REVIEW
- FINANCIAL
- REAL-TIME MONITORING

BENEFICIATE THE ORE
- Crushing
- Grinding
- Processing
- Smelting
- Refining

TRANSPORT THE PRODUCT
- Rail & Shipping Schedule
- Train Loading
- Rail Transportation
- Stockyard Management
- Ship Loading & Berths

SELL THE PRODUCT
- Contract Management
- Price Management
- Exchange Rates
- Commodity Prices
- Demand Shipping

CAPABILITIES MINERP ENABLES

Enabled by MineRP | Enabled by our Partners

- Spatially Enabled Digital Twin of the Enterprise
- Resources & Reserves Management (Ore Body Knowledge
- Volumetric Sciences
- Integrated Mine Planning
- Integrated Financial Planning
- Integrated Supply Chain Planning
- Transactional R&R Inventory
- Ore Accounting (Mix & Blend)
- Mineral (Metal) Accounting
- Unified Scheduling Process
- Digitally Orchestrated Dispatch & Execution
- Continuous Data Collection & Tracking
- Real-time Operational Adjustment
- Asset & Resource Management
- Plant Automation and Control
- Outbound Logistics
- Maintain and Control Safe and Healthy Work and Natural Environments

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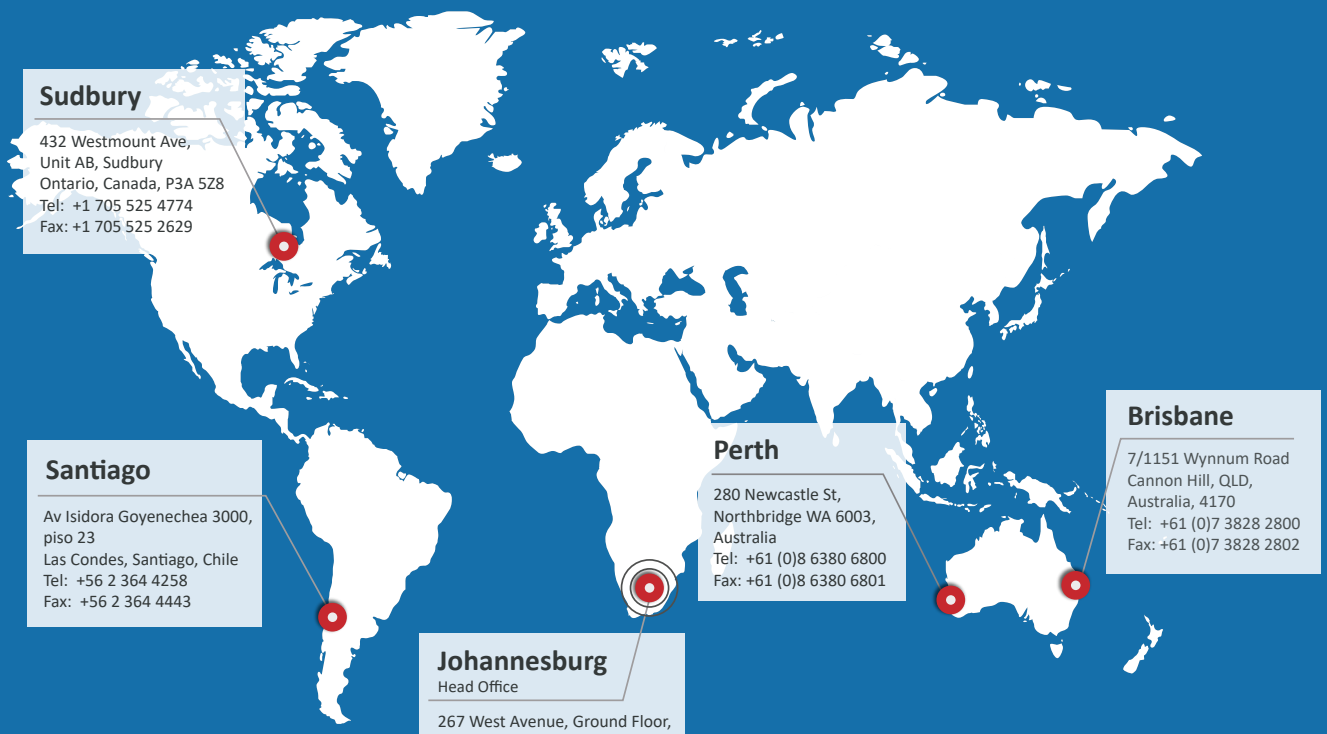

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