

PRODUCT BRIEF B



MILL RELINE DIRECTOR (MRD) discrete event simulation provides clear line of sight into the complex and important process of mill relining. It creates a 'digital twin' of your mill. MRD benchmarks reline performance against industry norms, rigorously models 'what if' scenarios and quantifies the impact of variations to processes, equipment and resources on reline duration and mill availability. MRD delivers actionable insights to greatly inform plant design, maintenance planning and decision-making.



- Minimise lost production hours, improve availability, throughput and profitability
- Benchmark reline time and mill availability against industry norms
- Independently assess plant designs, relining processes, equipment and crew performance
- Identify safety and productivity improvements for reducing mill relining risk and duration
- Reduce downtime unpredictability and associated costs
- Understand the impact of decisions before they are made
- Quantify CAPEX and OPEX ROI

Historically, the complex process of mill relining made it difficult to measure how individual changes to process, training, plant and equipment could impact shut down duration. Now MRD gives mill operators unparalleled data-driven insight into these events. This helps mill operators make decisions about how and where to invest in initiatives to improve mill availability, predictability and relining safety. \$\sigma\textsup{\sigma}\$

Stephen Gwynn-Jones

Group Manager - Products, RUSSELL MINERAL EQUIPMENT

RME is the world's leading Original Equipment Manufacturer (OEM) of mill relining systems.



MRD studies completed since 2015



MRD hours filmed at mineral processing sites

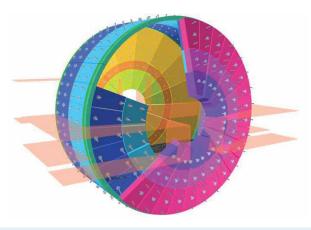
RELATED PRODUCTS & SERVICES

RME also offers MILL RELINE DIRECTOR Safety (MRDS) filmed studies to identify high risk activities and ways to reduce hours of risk exposure

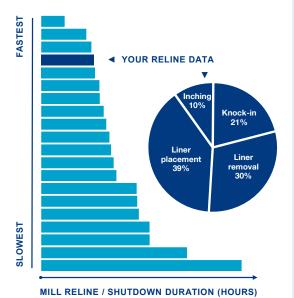
fast, reliable, safe



MRD SOFTWARE MODEL FOR A CUSTOMER'S 40' SAG MILL



MRD INDUSTRY BENCHMARKING FOR EQUIVALENT 36' - 40' SAG MILL RELINES



FEATURES

- Comprehensive offering Integrates time and motion studies + discrete event simulation and analysis + extensive industry datasets
 - + RME's vast mill relining experience
- 'Digital twin' capability Creates an accurate virtual replica of any past or future planned SAG/AG/Ball mill reline
- Bespoke modelling framework Constructs individualised simulations from site-specific data
- 'What if' scenario modelling Model considers multiple variables (plant layout, equipment, conditions, processes, crews) for analysis and comparison
- Quantified performance improvements Predicts commercial outcomes from variables for determining economic benefits and informing maintenance strategies
- Real-world industry performance datasets Extensive real-world industry performance datasets including statistical distribution for variability modelling
- Reline optimisation presentation and report Improvement strategies resulting from mill, circuit and liner design and optimisations to reline process, equipment and crew



- Flexible range of options: (1) Filmed site studies utilising up to 12 cameras placed in and around the mill during a reline operation (2) New plant (non-filmed) studies, and (3) Operational plant (non-filmed) desktop studies
- Benchmark reline performance, improve productivity and resources utilisation and increase mill availability
- Ensure plant layout does not hinder maintenance activities, enables safe working practises and maximises mill availability and production
- Defensible data for justifying CAPEX and OPEX requests and budget processes



LEARN MORE



product.management@rmeGlobal.com



RME Regional Service Centre



rmeGlobal.com

WE ARE RME

ПΠ

RME was born 35+ years ago with a strong resolve to address our Customers' challenges. Since then, the RME Mill Relining System has quartered our Customers' time-to-reline and eradicated a great many safety issues. This same pursuit continues to drive the development of RME INSIDEOUT Technology which aims to eliminate fatal risk by enabling relining from outside the mill. 777

Cherylyn Russell

Non-Executive Director, RUSSELL MINERAL EQUIPMENT