

JK Value Chain Optimisation Training

A holistic approach to process optimisation

The Mine-to-Mill™ approach identifies the conditions needed to optimise the financial performance of your mining operation and maximise the profitability and sustainability of your business.

The University of Queensland's Julius Kruttschnitt Mineral Research Centre (JKMRC) and JKTech were directly involved in developing the Mine-to-Mill™ philosophy and have been implementing it to maximise operational profitability for industry clients over 20 years.

Mining involves a series of operational stages usually managed independently of one another. Often, we find that the conditions required to optimise one stage can produce negative impacts on the performance in another stage in the operation.

The JK Value Chain Optimisation Workshop uses case studies from around the world to show you how a coordinated and collaborative approach at your operation can lead to benefits in terms of increased plant throughput, better energy efficiency and lower operating costs.

The workshop is interactive and includes aspects of Mine-to-Mill™, Process Plant Auditing and Optimisation, and Drill and Blast Optimisation.

The objective is to show you how to improve communications between the mine and the mill, and enable them to jointly develop strategies to maximise bottom line performance.

The presenters explain the methodology and discuss the critical

actions required to successfully implement the program in a way that can be sustained over time.

The workshop will present case studies and practical industrial problems for participants to solve by using this approach. The presenters have implemented successful Mine-to-Mill™ programs across the globe for more than a decade.





Course outline

The topics covered include:

- Mine-to-Mill™ philosophy
- Drill and Blast impacts on downstream processes
- Introduction to crushing and grinding
- Introduction to flotation and recovery
- Rock breakage during blasting
- Rock breakage in crushing and grinding
- Rock characterisation for Mine-to-Mill™ purposes
- Drill and Blast process audit
- Ore loss and dilution management
- Blast damage control
- Mill surveys
- Blast modelling
- Plant modelling
- Integration of models and simulations
- Mine-to-Mill™ case studies

Who should attend?

Anyone with responsibility for maximising operational performance will benefit from this workshop.

This includes:

- Mine managers, engineers and planners
- Managers and superintendents of operations and concentrators
- Asset optimisation managers
- Business improvement managers and consultants
- Mining academics and researchers
- Mining educators and trainers
- Government officers with responsibility for mining

Benefits to participants:

- Guidelines for Mine-to-Mill™ implementation, supported by the case studies from around the world
- Communication strategies that will enable mining engineers and metallurgists to work collaboratively to improve performance
- Increased awareness of how technical and operational decisions impact up and down the value chain
- The ability to recognise the limitations of traditional optimisation methods and the potential benefits of a holistic optimisation approach

JK Value Chain Optimisation training is offered as either an in-house professional development program or a generic open course.

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