



# GEOTECHNICAL ENGINEERING

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## CAPABILITY STATEMENT

# WE ARE MEC MINING

MEC Mining is a global mining consultancy specialising in mine planning, onsite management and technical services solutions for the international mining industry.

Since 2005, MEC has grown into a leading consultancy firm with an experienced team of consultants; specialising in both the open cut and underground coal and minerals sectors.

Through our teams' real-world experience, our engineers have an owner's point of view when executing a project.

We deliver high-quality work that enhances the value of our clients' assets and our experienced team of consultants bring a diverse range of knowledge to each project.

Importantly, we offer a flexible approach to all services and will gladly tailor our services to meet individual project or company requirements.

## OUR GEOTECHNICAL ENGINEERS

MEC Mining has a team of skilled geotechnical engineers who are leaders in their field and backed by extensive site based experience. We have been providing solutions to clients in both open pit and underground mines, in a variety of commodities, ground and stress conditions. Our geotechnical engineers work closely with our mining engineers and consultants to develop safe, cost effective and practical mining designs and recommendations. Our team designs effective programs for site characterisation, geotechnical risk minimisation and control, and monitoring solutions. We provide operational support and training at all levels. This has many advantages including the opportunity for clients to benefit from our wide range of consulting skills. The team is adept at using MEC Mining's collaborative experience, advanced software, and efficient processes to generate value adding outcomes.



## OUR GEOTECHNICAL ENGINEERING EXPERTISE

The MEC Mining geotechnical engineering expertise include:

- ▶ Site Operational Secondments for Underground and Open Pit
- ▶ Site Procedure and Process Development and Optimisation
- ▶ Establishment and auditing of Geotechnical Management Plans and critical Standards
- ▶ Studies (Bankable, Feasibility etc)
- ▶ Independent Technical Audits and Peer Review
- ▶ Geotechnical Data Collection, Validation and Analysis
- ▶ Rockmass Characterisation and Domaining
- ▶ Pit Slope Design and Stability Analysis including Underground Interactions
- ▶ Underground Design and Stability Analysis including Stopes, Shafts, Portals and Boxcuts
- ▶ Ground Support Design and Optimisation including Site Trials and QAQC Programs
- ▶ Backfill Design, Stability Assessments, Instrumentation and QAQC Programs
- ▶ Instrumentation, Seismic System and Monitoring Program Design and Analysis
- ▶ Geotechnical Performance Review, Optimisation, Failure Investigations and Strategic Guidance
- ▶ Contractor Management, Drilling Program Management
- ▶ Numerical Modelling
- ▶ Stability Assessment of Natural Slopes and Waste Dumps
- ▶ Geotechnical Staff Training and Mentoring, Ground Awareness and Hazard Training
- ▶ Closure Design and Assessments

## OUR GEOTECHNICAL CAPABILITIES SPAN ACROSS


- ▶ Open Pit Coal
- ▶ Open Pit Metals
- ▶ Underground Coal
- ▶ Underground Metals



# GLOBAL EXPERIENCE



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