

Workshop B Contour Blasting

Geomechanics for Contour Blasting and Wall Damage Control

With a renewed approach and a forward-looking perspective on the mining industry, Geoblast presents through this course a comprehensive view of the optimal integration of the key disciplines involved in achieving improved results in contour blasting (TRIM blasting). Above all, it promotes an integrated vision focused on better compliance with mine plans and the overall value proposition of the mining business. This course also provides a platform for knowledge exchange, sharing of experiences, and exploration of the latest trends in drilling, blasting, and associated geotechnics.

Topics:

1. Opportunities and Challenges in Drilling, Blasting & Geotechnics (P&T&G)
2. Contour Blasting & Pre-split Design
3. Geomechanical Characterization and Classification and Its Application in Blasting
4. Modelling, Simulation, and Vibration Prediction
5. Review of Geotechnics and Blasting as Inputs to Short-Term Planning
6. Damage Mechanisms and Criteria – Evaluation / Cross-Hole / PPV / Gas
7. Operational Geotechnics, Geotechnical Reconciliation, and Full Control
8. Simulation Methodology Using Elementary Waves, Delays, and Sequences for Far-Field Vibration Prediction
9. Geotechnical Risk Analysis in Mine Plans and Potential Mitigation Measures
10. Roundtable Session for Open Questions and General Discussion

Session format: 45-minute sessions → 10 sessions (~7.5 hours total)

Language: Spanish and English

**“SLOPE FOR SAFETY
PERFORMANCE”**

Speaker Summary: CARLOS RICARDO SCHERPENISSE OJEDA

He is a Civil Engineer and holds a Bachelor's degree in Engineering Sciences from the University of Santiago, Chile.

He has extensive and well-recognized experience in the field of blasting, with involvement in the execution and supervision of numerous projects focused on evaluation, optimization, and comprehensive improvement of drilling and blasting operations, with emphasis on damage control and fragmentation, in both underground and open pit mining.

He has had direct participation and oversight in projects related to Mine-to-Mill® integration, technical audits, and has served as a member of Geotechnical Review Boards in Chile and Peru, as well as in blasting damage control and full control projects.

He has 38 years of experience and has authored more than 40 technical publications in the field of blasting, presented at international mining conferences and journals.

He is a founding partner of GeoBlast S.A., a geoscience and blasting consulting firm established in Santiago, Chile in 1996, which currently employs nearly 300 highly specialized professionals and technicians. He currently serves as Chief Technical Officer and director of the GeoBlast group of companies.

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Speaker Summary: ALEX RUBÉN CALDERÓN ROJO

With over 30 years of experience, Alex has made significant contributions to both mining operations and projects in Chile and internationally. His leadership in multidisciplinary teams, particularly in geosciences and mine planning, highlights his expertise in both open pit and underground mining.

Since November 2024, Alex has joined Geoblast as Technical Manager, with the objective of promoting and ensuring the technical quality of engineering services, peer reviews, and related activities.

In 2023 and 2024, he was responsible for overseeing the annual budget for Antofagasta Minerals, ensuring that mine plans and production targets were achieved across the group.

From 2019 to 2022, he led the Planning and Development teams at Minera Antucoya, focusing on geological resources, geotechnical and ore recovery models, and mine planning.

His earlier roles include leading mine planning teams, serving as a mining expert at Antofagasta Minerals' headquarters, and conducting geotechnical analysis for major underground projects such as Chuquicamata and Ernest Henry Mine in Australia.

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