



DynoConsult field engineers use the full suite of Dyno Nobel products and software services to enhance detonation practices and combat inefficiencies in underground operations. DynoConsult is committed to optimizing every blasting process with experience, knowledge and insight to drive world-class blasting results.

Blasting Services & Solutions

GENERAL UNDERGROUND CAPABILITIES:

- Training
- Troubleshooting with instrumentation and root cause analysis
- Overbreak control and stability
- Dilution and ore loss control
- Blast vibration mitigation
- Stoping optimization
- Drill and blast audits
- Fragmentation improvement
- Overall cost reduction
- Instrumentation and root cause analysis
- Volumetrics, planning, other CAD analyses
- Explosives properties testing

SPECIALTY CAPABILITIES:

- Drill-to-Mill projects
- Market analysis and market data analytics
- Strategy development and due diligence
- Surface and underground drill and blast training
- Expert witness
- Close-proximity blasting
- Void collapse blasting
- Equipment rescue blasting
- New technology implementation
- Contract on-site engineer
- Custom projects

Available Tools & Equipment

CURRENT SOFTWARE-ASSISTED CAPABILITIES:

- 3D blast planning, visualization, and analysis
- Vibration optimization and prediction
- GIS mapping, dashboarding, and data analytics
- 3D blast modeling and fracture modeling
- Electronic shot reporting and databasing

INSTRUMENTATION:

- Vibration monitoring, including seismographs and accelerometers
- Air overpressure monitoring
- Electromagnetic pulse recording
- Drill accuracy including borehole survey equipment and terrestrial survey equipment
- High speed video
- Terrestrial and aerial scanners and photogrammetry
- Detonation velocity recorders

UNDERGROUND CAPABILITIES



DYNO
Dyno Nobel

Past Underground Projects



Site: Mina Cozamin
Client: Capstone
Location: Zacatecas, Mexico
Commodity: Copper-Silver

DynoConsult partnered with Stantec Consulting to complete a drill and blast process review at Mina Cozamin. DynoConsult reviewed the blast design process, design implementation, drilling practices, explosives loading practices, and drill and blast

financials. DynoConsult made recommendations which were expected to double production capacity and decrease drill and blast costs by at least 30%.



Site: Federal Quarry
Client: Lehigh Hanson
Location: Illinois, United States
Commodity: Limestone

DynoConsult conducted a multi-week drill and blast root cause analysis to identify the cause of low productivity. DynoConsult used various tools and instrumentation to identify the cause of the less-than-desired pull

percentage and made recommendations to improve pull percentage to desired levels. The recommendations were expected to improve productivity and reduce overall mining costs.



Site: Brucejack Mine
Client: Pretivm Resources
Location: British Columbia, Canada
Commodity: Gold

DynoConsult was retained by Pretivm resources to conduct a general drill and blast audit of the longhole drilling operations. DynoConsult collected data from drilling and explosives performance. Recommendations were expected to improve turnaround time for each blast

and improve operational efficiencies. The operation has also engaged DynoConsult for additional training and consulting support.

The Experts



Nathan Rouse
Principle Consultant

Dr. Rouse has over 10 years of global experience in the mining and blasting industry with expertise in blast instrumentation and root cause analysis, optimization and auditing in surface and underground mines, vibration control, training, and expert witness work.



Tristan Worsley
Principle Consultant

Mr. Worsley has over 10 years of experience in performing explosives and surface and underground mining engineering work. His expertise includes drill and blast optimization, specialty blasting and equipment rescue, proximity blasting, training, and post-blast investigations.



Scott Giltner
Principle Consultant

Dr. Giltner has worked in several countries including South Africa, Zimbabwe, Russia, Peru, Australia, Dominican Republic, and Canada. His specialty area is blast optimization and instrumentation used for blast monitoring and quantifying blasting results in the quarrying, mining and construction industries.



Mikael von Herten
Principle Consultant

Mr. von Herten has over 25 years of global experience in the mining, mining equipment and explosives fields and has worked and lived in several countries including, UK, Russia, Australia, Nordic area and Turkey. His main focus has been on Business Development, Strategy and Consulting.

