



ENGINEERING SERVICES



Whether you need to determine the feasibility or optimize economics; are developing an operation or are already in production, GEOVIA's engineers are available to assist you. As the largest global provider of mining software, we have decades of combined expertise working with diverse commodities and finding solutions for the most challenging operational situations.



Our engineering services include pit design, pit shell generation, sequencing, and more. We ensure you are able to leverage your geological and mining data to unlock your project's full economic potential.

Using our software, we offer the following engineering services to help you with your project:

- Pit Optimization
- Scenario and Uncertainty Analysis
- Open Pit Mine Design
- Underground Mine Design
- Development Scheduling
- Production Scheduling
- Block and Sub-level Cave Planning
- Tailings Modelling

Here are some examples of engineering services we've provided for clients:

OPEN PIT MINE DESIGN

A nickel operation urgently needed to complete six pit designs in one week as part of a feasibility study, but they were short staffed for mining engineers. A GEOVIA engineer who was an expert in GEOVIA Surpac™ worked with the client's existing engineering team to complete all six designs, merged with local topography and adjacent pits.

UNDERGROUND MINE DESIGN

Our client in Chile was looking to begin planning for a second level in their underground block cave operation. In order to determine the best location, they needed assistance from experts in cave mining. GEOVIA's experts used GEOVIA PCBC™ to run several options for different levels and cave methods and then computed the NPV and production schedules for each different mine plan scenario to determine the optimum solution for highest economic value. Additionally the estimation of the remnant ore after first level is completed was required to incorporate this material as broken ore mixed with dilution for the evaluation of the second level.

PRODUCTION SCHEDULING

Currently in a development phase with the haul roads, plant and conveyor belt under construction, a nickel operation needed a tactical schedule to improve on their strategic mine plan. GEOVIA created a sustainable solution for scheduling the deposit, delivering a one-year and three-year scheduling plan which routed materials for feed based on targeted ratios and also satisfied tight constraints with regards to stockpile capacities.

For more information visit 3ds.com/GEOVIA/Services or email GEOVIA.Services@3ds.com

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