About Cube

Practical & Professional Advice

Cube Consulting provides specialist consulting services and software systems to the global mining industry. We are a quality team of geologists and mining engineers with a wide range of skills and experience, applicable from advanced exploration projects through to operational mines across multiple commodities.

Established in 2000 in Perth, Western Australia, Cube Consulting has grown to become a world class Mining Services Company, working with our customers to add value to their projects through considered and practical advice.

- Geological Services based on extensive operational and field based experience.
- Mine Engineering Consulting Services supporting sound commercial decisions.
- Technology solutions focused on Mine Grade Control and estimation.
Helping our clients succeed

Geology Services

Cube Consulting geologists all have backgrounds in operational mining, where they each gathered valuable real-world experience allowing them to provide practical, high-quality advice and consulting services. When you engage with the Cube team, the person you meet with is most likely the one who will work on your project, collaborating with specialists as required.

We are happy to tackle the difficult problems – with experienced geologists and geostatisticians on the team, we firstly want to solve the problem and secondly, we work hard to add value to our client’s mining company by transferring technical knowledge back to the business.

Cube geologists provide the following services:

- Resource Estimation and Reporting
- Resource Auditing and Review
- Project Evaluation and Review/Independent Review
- Due Diligence
- Geological Interpretation and Modelling
- Reporting – JORC, NI43-101, SAMREC
- Geological Data Management
- Geostatistics – Linear, Non-linear, Multivariate, Simulation
- Mine Grade Control systems
- Mine Reconciliation Procedures and Reporting Review
- Geological training and mentoring

Experienced mining professionals work with our clients in collaboration to mitigate risks, enhance project value and provide data to enable sound commercial decisions.
Resource Estimation

Resource estimation is a core strength of the Cube Consulting geology team. From undertaking first principles geological interpretation, through to application of advanced geostatistical modelling techniques, Cube geologists deliver what you need to move a resource through to the next project milestone.

We undertake independent mineral resource estimations suitable for public reporting based on JORC 2012, SAMREC and NI 43-101.

Geostatistics

We are specialists in single and multi-element analysis, able to offer advice in all aspects, from confirming domains and boundary conditions, comparing drill data types, characterising spatial continuity and nugget effect through to estimation methodology including linear and non-linear techniques.

We will undertake a thorough review and offer informed advice to ensure you have confidence in understanding the risks and uncertainty associated with your project resource.
Mine Engineering Services

Cube Consulting’s mining engineering team’s extensive experience allows us to offer practical solutions for a variety of mining activities spanning a wide range of commodities, mineralisation styles and geological environments. We combine our years of experience with the latest technologies to deliver innovative practical solutions that add value to our clients’ businesses.

The mining engineering team works closely and collaboratively with our clients, who range from some of the world’s largest mining companies through to smaller operations in need of expert technical advice. Our experienced mining engineers work on projects alongside their clients with a view to mitigating risk, enhancing project value and enabling sound commercial decisions. We offer independent mine engineering and project management services.

Cube mining engineers provide the following services:

- Evaluation Studies – Conceptual to definitive feasibility studies
- Mine optimisation studies and sensitivity analyses
- Cut-off grade studies and strategies
- LOM and Strategic scheduling
- Ore reserve reporting
- Detailed open pit and underground mine design
- Due diligence evaluations
- Project and study management

We deliver results through pragmatic approaches. We pass on skills and knowledge to our clients on project completion so they can continue to work effectively.
Mine Studies

Whether you are conducting a preliminary assessment or have moved through to feasibility, Cube Consulting mining engineers possess the key experience and skills to deliver a quality mining study. With efficient and effective study management skills garnered through many feasibility studies, a depth of knowledge of constructing and operating mining operations and many years operational experience, we will see that we take a strategic yet practical approach to your project.

Conducting any mining study is an iterative process with dynamic input parameters – we advise you when we think it necessary to revisit parameters which may have a significant impact on the study outcome. Our mining engineers manage parameters in a formalised manner so there is absolute clarity around the investigation and prevailing conditions.

Life of Mine and Strategic Scheduling

A critical part of any mining study is the strategic schedule – how many decisions have already been made or are “hard-coded”, how large is the impact of various constraints in the system and what targets do we need to achieve to ensure the success of the project. The ultimate goal is that the schedule provides evaluation of financial impacts of selected key constraints and targets, enabling informed decision making with regards to development of the mine.
Technology Solutions

The key solution from Cube Consulting is the GCX grade control system for Surpac.

GCX provides a logical sequence of commonly performed grade control tasks, integrated into an easy-to-use and intuitive set of menus and forms. Whether you are using a simple estimation technique or more advanced techniques, once we have a full understanding of your requirements, GCX implementation is rapid. Parameters such as material classification and presentation settings are stored externally, meaning you have full control over your system and reporting and maps are produced with ease.

GCX is available for both open pit and underground environments.

Included with GCX, but available separately for resource modellers, is our Estimation Control System (ECX) which provides the flexibility needed to manage estimations in multi-element and multi-domain environments in a repeatable and auditable fashion. The ECX system allows dynamic estimation into folded domains, providing significant time savings and added functionality to Surpac.

We provide full training and documentation to ensure the system is implemented successfully and geologists are productive. GCX and ECX are the most comprehensive and modern estimation and grade control systems available, developed by the grade control specialists.