

JKTech Specialist Consulting

Geometallurgical Services

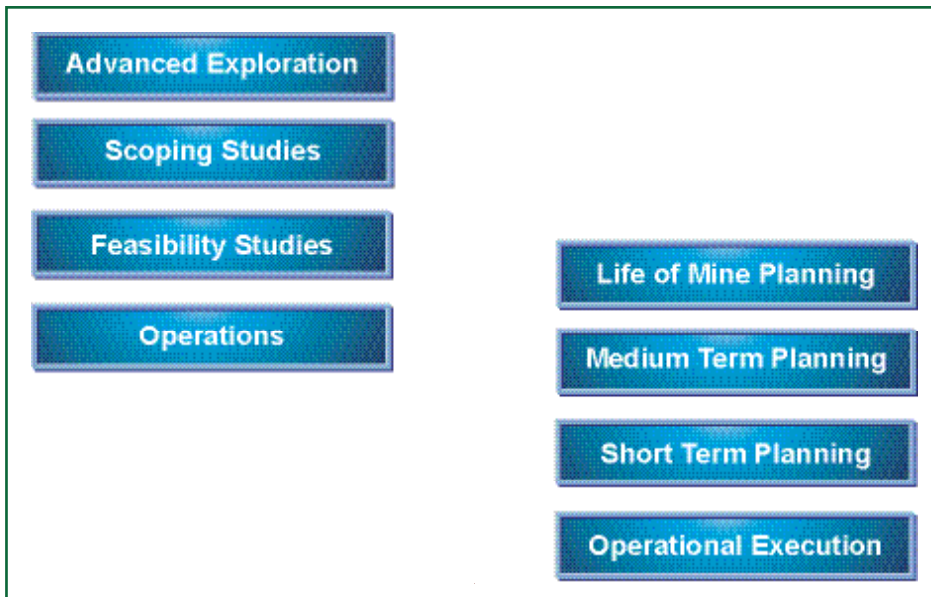


JKTech and partner QG have all the capabilities for a successful geomet program. We integrate ore deposit knowledge with financial, technical, and sustainability drivers to improve mining process effectiveness and risk management.

- Design and facilitate geomet programs
- Determine project drivers
- Conduct specialised geomet tests
- Evaluate and predict impacts of variability
- Guide sampling programs
- Build process response models
- Evaluate financial and risk options
- Integrate optimisation for planning and scheduling
- Build internal geomet capabilities for clients

Our unique capabilities include:

- Geological, geochemical, mineralogical evaluation
- Metallurgical expertise in testing and evaluation
- Spatial modelling and resource estimation
- Economic evaluation and optimisation
- Project management services
- Knowledge transfer through professional development



- Benefits:**
- Communicate orebody knowledge
 - Link disciplines
 - Improve process design
 - Link planning and processing
 - Improve project development
 - Manage operational risk
 - Evaluate financial options
 - Improve business systems

Stages of project development for geomet



Geometallurgy at JKTech-QG

5,000 m2 geometallurgical testing laboratory

- Core logging, core scanning and core photography facilities
- Comminution and flotation testing facilities

Specialised geometallurgical tests for characterisation of processing performance attributes

- Ci, Equotip, RBTLite, RBTEExpress
- Larger numbers of samples with smaller volumes than traditional metallurgical tests
- Quantification of mining process responses across the ore deposit

Geological, geochemical and mineralogical services

- MLA, SEM, EMP, XRD, optical, mapping
- Assay, litho-geochemistry, XRF
- Data evaluation, geostatistics, modelling

Comminution, flotation, mining consulting expertise onsite

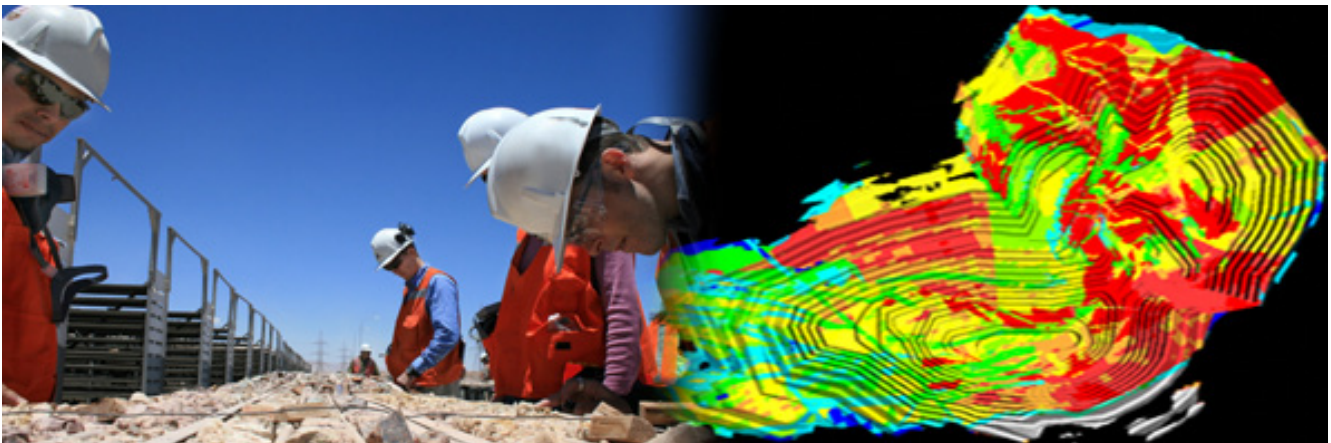
- 3D integrated extraction domaining
- Integrating process flow sheet and plant requirements
- Spatial process response modelling
- Mining and mine planning solutions

Multi-simulations analysis, variability evaluation

- Scenario-based project evaluation (QG-SBPE)
- NPV- and risk-based economic analysis
- Sustainability and Extraction Efficiency (SEE) integration

Knowledge transfer, training, skills development

- Geomet team building, communications, courses
- Executive level project management, change management services



JKTech Services

- Consulting (comminution, flotation, mineralogy, mining & geometallurgy, social responsibility, risk management, and sustainability)
- Specialist Software (JKSimMet, JKSimFloat, JKMultiBal, JKSimBlast)
- Specialist Equipment (ore breakage characterisation, flotation characterisation)
- Metallurgical Laboratory Services
- SMI Knowledge Transfer

JKTech's range of technologies is supported by the ongoing research activities of the Sustainable Minerals Institute at The University of Queensland.

