

METALLURGY

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MINERALS SERVICES

WHEN YOU NEED TO BE SURE

SGS

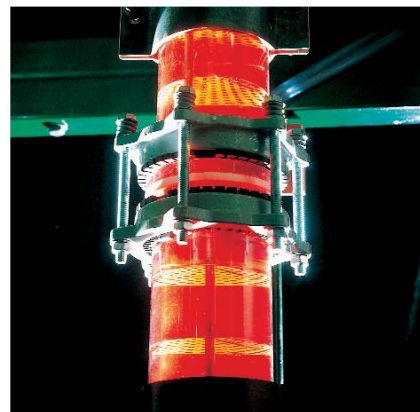
SGS

BANKABLE SERVICES FOR RISK REDUCTION

For decades, the minerals sector has looked to SGS Minerals Services for our experience in flowsheet development, bankable feasibility studies and process control. Our demonstrated success in metallurgical testing has provided thousands of companies and mines with effective flowsheets and practical technical solutions to processing problems. From that core of capability, we continue to carve new ground in the processing industry with our innovative approaches to process modeling, geometallurgy, production forecasting and advanced control systems.

Having worked with nearly every commodity, our comprehensive network of metallurgical laboratories across the globe has the depth of experience to provide an effective, safe and sustainable resolution to any processing challenge. The exploration, mining engineering and financial communities trust us based on our long term proven operational expertise.

Why not work with the best?



METALLURGICAL SERVICES

- Flowsheet development • Bankable pilot plants • Independent assessments
- Column flotation and cell hydrodynamics
- Rheology • Process modeling using CEET and FLEET • Power consumption studies • Applied research and development at bench and pilot scale
- Market sample preparation for downstream review • Bulk sample preparation

GEOMETALLURGY

- Geometallurgical mapping and modeling
- Ore variability programs • Process modeling • Production forecasting

MINERALOGY SERVICES

- Process mineralogy • X-ray diffraction
- Mineral identification and quantification
- Mineral chemistry • Image analysis
- Quantitative mineralogy • Mine waste and acid rock characterization
- QEMSCAN analysis • Trace element searches

DIAMOND EXPLORATION SERVICES

- Exploration sample processing (density and magnetic separation) • Caustic

fusion • Indicator mineral selection, chemistry and evaluation • Bulk sample processing utilizing 1 and 15 tph DMS plants • Diamond selection, classification and evaluation • Diamond recovery by grease table and SORTEX™

IN-PLANT SERVICES

- Metallurgical commissioning • Audits and troubleshooting • Plant optimization programs • Contact cells • Froth cameras and spargers • Process control • Metal accounting and monthly metal balances

OPERATIONAL SUPPORT

- Integrated on-site laboratory facilities to support grade control, plant operation and environmental programs • On-site metallurgical and analytical laboratories
- Metallurgical plant management
- Technical staffing services • Technology transfer

EXPERT SYSTEM CAPABILITY

- Logistics • Scheduling • Database hosting • Simulations • Asset management

RISK REDUCTION

- Minimize technical risk
- Prove critical components of the metallurgical flowsheet
- Demonstrate integrated, continuous operation
- Understand the geometallurgical aspects of orebody variability
- Develop a water balance
- Quantify the effect of recycle streams and contaminants on process efficiency

REDUCE OPERATIONAL RISK

- Generate accurate design and engineering data
- Ensure a faster, smoother start-up
- Quantify ore variability

MINIMIZE ENVIRONMENTAL RISK

- Characterize by-products and waste products to predict environmental impact
- Design recycle or recovery processes
- Evaluate the various alternatives to cyanide or roasting
- Develop protocols to address environmental regulations

REDUCE COMMERCIAL RISK

- Produce bulk quantities of product for market evaluation
- Generate reliable data for estimating capital and operating costs
- Enjoy highly accurate production forecasts

CONTACT DETAILS

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