

DIAGNOSTIC METALLURGICAL SERVICES

SGS MINERALS SERVICES

SGS Lakefield Orestest Pty Ltd (SGS) was originally founded in 1993 as Orestest Pty Ltd. SGS has since developed into a major metallurgical services organisation located in a purpose-built laboratory in Perth, Western Australia.

The laboratory is dedicated to providing high quality metallurgical testing across the broad spectrum of the minerals industry including:

- Gold ores
- Nickel laterites
- Base metal
- Iron ore
- Mineral sands
- PGM ores
- Rare-earths and other exotics
- Diamond ores
- Environmental services

SGS provides a comprehensive range of test work capabilities including bacterial leaching, crushing, screening, grinding, ultra fine grinding, gravity, magnetic & electrostatic separation, solvent extraction, electrowinning, flotation, pressure leaching, pressure oxidation, pressure acid leach and cyanide speciation. Pre-feasibility studies, on-site diagnostic metallurgical services, environmental testing and analytical services are also included in our range of capabilities.



APPROACH

SGS can assist companies in this process by providing diagnostic metallurgical services that draw from the considerable experience and expertise of its staff in the relevant areas of extractive metallurgy, chemistry, process flowsheet definition and costing. The approach is proving to be a successful one and may comprise of:

Site-based Audits and Reconciliations

For example:

- Independent assessment of metallurgical recovery.
- Characterise the nature of lost valuables.
- Identify the potential to improve recovery.
- Recommend flowsheet or process modifications.

Management of Metallurgical Projects

Assist companies with resources and expertise to carry out important metallurgical investigations e.g. poor recovery, equipment optimisation, evaluation and selection of new equipment, debottlenecking, and increased throughput.

Initial Site Visit

To define problem, inspect process and sample collection points, and collect available information (reports, log sheets, assays).

Preparation of Scope of Work

Review available data, identify appropriate resources, and prepare detailed scope of work and costing for client approval.

Data Collection from Site

Plan logistics of sample collection with site personnel, collect and prepare samples, and perform required testing. Document key process variables.

Data Evaluation and Modelling

Process data, set up mass balances and process model. Interpret and evaluate results.

Report and Recommendations

Prepare draft report and discuss with client prior to submission of final report.

POTENTIAL BENEFITS FOR CLIENTS

- Impartial, unbiased investigation.
- Utilisation of expertise and resources unavailable within company.
- High-level expertise in fields such as chemistry, mineralogy, environmental issues, and process metallurgy available under one roof at SGS – offering efficiency and continuity and the best advice.

For more information, please contact us:

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