



COPPER

Independent Metallurgical Operations Pty Ltd (IMO) has extensive experience in the development of process flowsheets for a wide range of copper projects. Our team has significant expertise in the design and management of flotation and leaching testwork programs, project development and operation of copper plants.

Our scope of services ranges from sample selection, ore characterisation and mineralogy, through to management of metallurgical testwork, process aspects of scoping and feasibility studies and client representation onto plant commissioning, ramp up and process plant optimisation.



PROJECT	CLIENT	OUR WORK
T3 Project, A4 Dome Project, Botswana	Sandfire Resources (formerly MOD Resources)	T3 Project: Secondment of IMO director to MOD Resources board as Executive Technical Director for 3 years. Testwork management at Metallurgy Pty Ltd for the scoping study, PFS and DFS. On-going technical support following merger with Sandfire Resources A4 Dome Project: Feasibility study testwork program.
Boddington, Western Australia	Newmont Australia	Provision of commissioning personnel for the HPGR and flotation circuits
Cadia, New South Wales	Newcrest Mining Ltd	PFS Study management investigating a molybdenum flotation circuit to separate and recover Mo from the copper concentrate
Prominent Hill, Western Australia	Oz Minerals	Supply of fourteen (14) commissioning and ramp up personnel over 24 months; including metallurgists, metallurgical technicians and supervisor trainers.
Mt Isa, Queensland	Xstrata Copper	Technical support to Xstrata on strategic testwork programs. Project management and preparation of the metallurgical accounting program for the flotation circuit.
Telfer, Western Australia	Newcrest Mining Ltd	Commissioning support and process improvement projects .
Copper Projects, Worldwide	Sandfire Resources	Process input into DD and project review activities for multiple copper projects worldwide
Elizabeth Creek Project, South Australia	Coda Minerals	Study Manager for Coda Minerals Ltd.'s Elizabeth Creek Copper Project, responsible for planning, collating, preparing, tendering, scheduling, tracking, reporting, monitoring, assigning tasks and self-performance of project activities assuring that the project's ongoing feasibility study requirements and schedule are met in accordance with the project study's framework.

▶ Please contact us for more details on how we can provide you with assistance and support to your project.

www.indmetops.com.au

IMO Consulting & Operations

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COPPER continued (1)

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Productora Project, Chile	Hot Chili Ltd	Preliminary copper heap leach testwork (bottle rolls and column leach tests).
Hidden Valley, PNG	Newcrest Mining Ltd	Provision of commissioning and ramp-up personnel over 12 months
Kou Sai Project, Cambodia	Geopacific Resources	Completion of PFS level metallurgical testwork, providing inputs into a capital and operating cost estimate at $\pm 35\%$, conducted by IMO.
Doolgunna Copper Project, Western Australia	Sandfire Resources NL	Completion of the metallurgical component of the PFS and scoping studies. Delivered process flow diagrams and process design criteria. Study deliverables including capital and operating costs.
Dikulushi Copper Project, DRC	Sedgman Metals Engineering Services	Conducted a high-level technical review of the Dikulushi Copper Project.
Golden Grove, Western Australia	Minerals and Metals Group	Technical project in assessing multiple reagent vendors for flotation consumables to reduce operating costs whilst increasing recovery and grade.
Antapaccay Copper Operation, Peru	Glencore	Evaluation of the laboratory flotation concentration via testwork program to optimise native copper and azurite recovery along with the identification of the best dispersant to depress clays, enabling overall optimum copper recoveries.
Oman Copper Project, Oman	Savannah Resources PLC	Metallurgical study, including testwork, to assess the potential for copper recovery from a historical tailings dam.
Batu Hijau Elang Project, Indonesia	Amman Minerals	Peer review of the Batu Hijau Process Expansion Study. Assessment of the level of engineering completed in the Study and advise if work is sufficient to proceed directly to detailed design and tender for construction.
Thursdays Gossan Project, New South Wales	Stavely Minerals	Testwork program (comminution and flotation) and testwork management.
Mahumo Project, Botswana	MOD Resources	Testwork management of initial flotation testwork and further optimisation testwork of a copper / silver project. Concentrate with 59% Cu grade achieved.
Pahtohavare, Sweden	Hannans Reward	Testwork management of oxide ore characterisation and flotation response.
Schwabe Prospect/ Perrinvale Prospect, Western Australia	Cobre Ltd/Toucan Gold	Metallurgical testwork program to assess the characteristics of the Perrinvale Prospect's ore and its amenability to heap leach, ore sorting and flotation processing.

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