



# IHC Mining Advisory Services

## IMAS



IHC Mining Advisory Services (IMAS) recognises the importance of clear and sound advice during the development of any mining project. Its aim is to support customers in realising the true potential value of their wet-mining operation by providing efficient solutions throughout the life cycle of the project.

With an extensive track record, IMAS is able to provide advisory services throughout the entire mining operation. These are tailored to the exploration and mining of specific commodities, including:

- heavy mineral sands
- gold
- tin
- diamonds
- iron sands.

In addition to these, IMAS customers also mine coal, evaporites, phosphates and various other commodities. They benefit from the knowledge and expertise IMAS has gained from over 70 years of experience in wet mining and mineral processing.

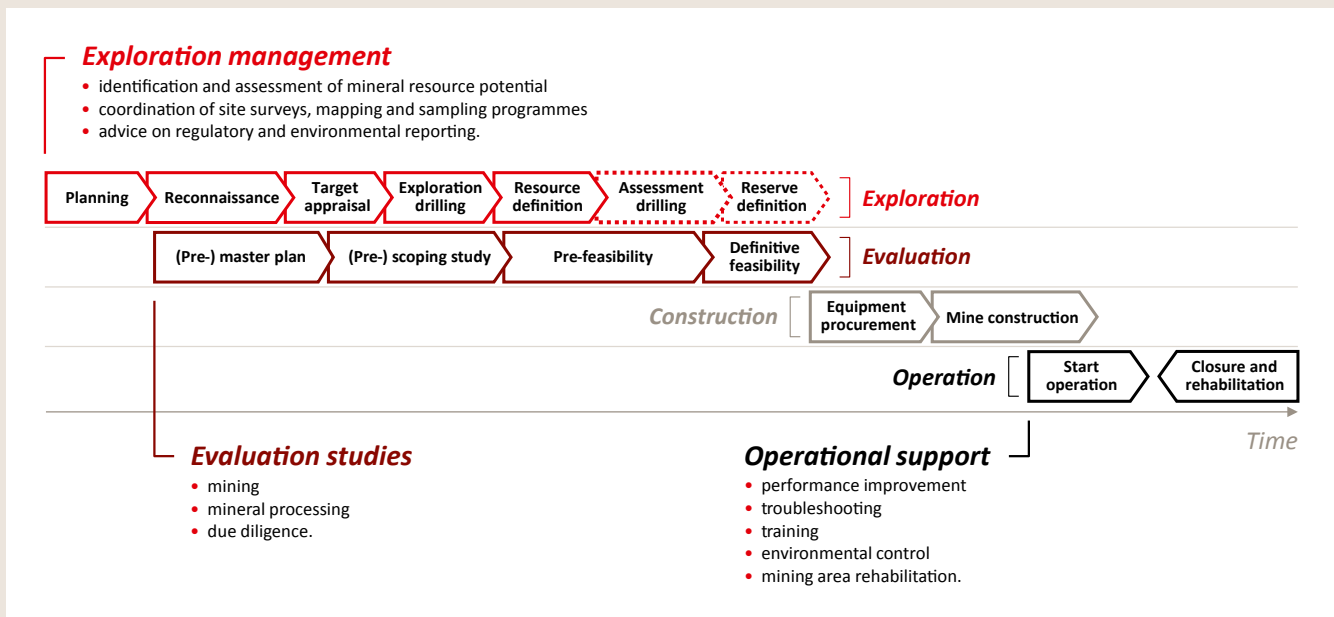
### **Invaluable expertise to evaluate your mining project**

IMAS delivers in-depth studies, ranging from scoping level to bankable feasibility studies for the relevant commodities, whether the deposit lies onshore, nearshore or in deep-sea locations. It has a proven track record of increasing customers' profits by assisting them in converting their dry truck and shovel operations into wet mining dredger operations.

IMAS mining services include:

- mine method analysis and selection of equipment
- interpretation of soil characteristics and geotechnical deposit properties
- estimation of production capacities, pump output and suction performance
- wave and workability analysis
- setting up mining plan and sequence
- determination of CAPEX and OPEX
- concept design of equipment
- logistics capability
- risk analysis
- plant layout
- tailings handling.

**The technology innovator.**



### Leading the way in offshore mineral exploration

IMAS has developed extensive know-how and expertise in offshore mineral exploration. It offers customers a range of services focused on the management of efficient and effective exploration programmes.

Its exploration services include:

- identification and assessment of mineral resource potential
- coordination of site surveys, mapping and sampling programmes
- advice on regulatory and environmental reporting.

### Mineral processing services

Key to efficient wet mining systems is the optimal combination of the excavation tool and the mineral processing plant. Matching these so-called 'games of capacity' is a crucial design feature of our mineral processing advisory services:

- analysis of wet separation techniques
- process flow diagram development
- mass balance calculations
- capacity optimisation between extraction tool and plant
- design envelope of processing plant.

### Operational support

IMAS provides operational support to help customers deal with the challenges that arise after the start-up of their dredge-mining programme. Its team of experts can assist with achieving industry best practices and offer the following:

- performance improvement by optimising work methods, adjusting settings and streamlining of processes and equipment
- troubleshooting on excavating and processing equipment by root-cause analysis and providing practical solutions
- competence training of operating personnel and staff to improve their knowledge and skills to efficiently run their wet-mining project.

### Due diligence

IMAS can also provide customers with technical and financial due diligence reviews for their wet-mining projects to identify important risks and critical project constraints.