



# Terengganu Silica Consortium

Silica processing.

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The project involved metallurgical testing, process development, mechanical design, plant layout, and instrumentation and control design.

- Efficient design minimised space and power requirements.
- New MG12 spiral separators minimised footprint of the gravity circuit whilst ensuring a robust processing solution.



#### **Project Profile**

## **Terengganu Silica Consortium**

Client Terengganu Silica Consortium Location Malaysia Capability Groups Mineral Processing Commencement 2014

**Services Provided** 

Completion 2015

- Metallurgical testing
- Flowsheet development
- Detailed process and mechanical plant design
- Plant layout and preliminary structural design
- Instrumentation and control design
- Procurement and construction technical support
- Plant commissioning support and operator training

### Highlights

- Complete metallurgical solution from testwork through flowsheet development and support during commissioning
- Complete mechanical and process design, and support for the structural electrical design to allow efficient project delivery tailored to TSC's specific needs
- New MG12 spiral separators incorporated in the design to minimise footprint of the gravity circuit while ensuring a robust processing solution
- Plant design allows for efficient upgrade and duplication of the processing capacity
- Efficient design to minimise space and power requirements

### Flexible Design Methodology

Mineral Technologies (MT) worked closely with Terengganu Silica Consortium (TSC) to support a design methodology that allowed TSC to develop a high-quality processing solution for their ore body whilst reducing capital expenditure.

MT worked to allow efficient collaboration with local Malaysian engineering and construction companies such that aspects of the plant design that were not critical to the processing outcome, or items that required local statutory approvals, could be executed locally, saving cost and allowing TSC to leverage existing local partnerships.

MT undertook the complete metallurgical testing, process development, mechanical design, plant layout, and instrumentation and control design to ensure the necessary plant performance, product grades and availability.

Other aspects of the design, including the preliminary structural and electrical designs, were completed to a standard such that they could be completed by local Malaysian engineering companies. The use of 3D modelling and other advanced design tools made this collaboration efficient and effective and ensured a successful engineering, design and construction project for TSC.

MT also provided support and operator training during commissioning of the plant and has since continued to support the TSC operation.













