



**Mineral
Technologies**

A Downer Company

Southern Ionics Minerals

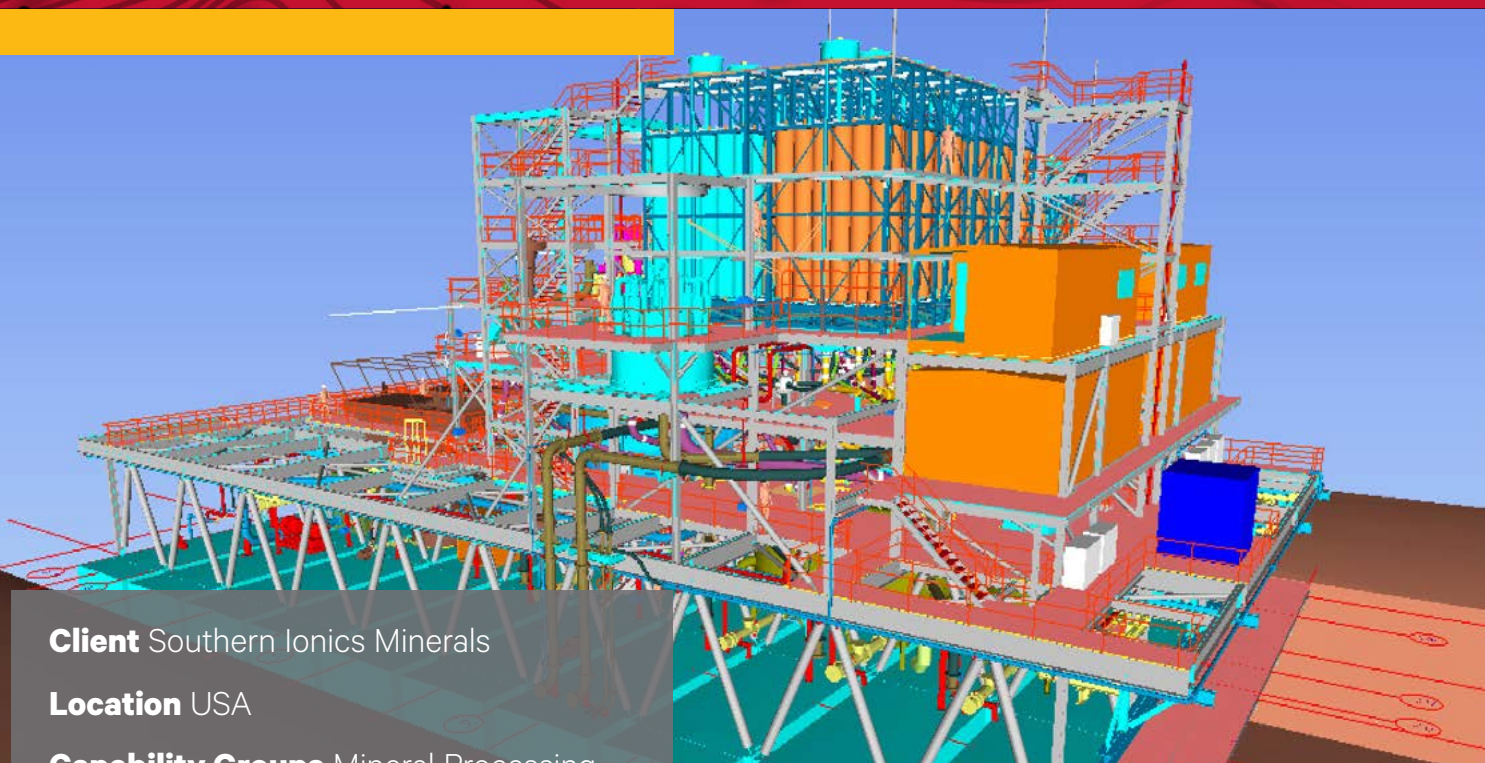
Mineral Sands Processing.

In 2014 Mineral Technologies delivered a WCP for Southern Ionics Minerals in the USA.

A dedicated design team of engineers and drafters from Mineral Technologies' Australian and US operations was assembled to prepare basic and detailed design for the WCP as well as critical separation equipment including an 8 metre diameter surge bin based on the innovative Lyons Feed Control Unit (LFCU) design.

- Successful 'scale up' from metallurgical testing to production.
- First large-scale use of new MG12 spiral technology.

Southern Ionics Minerals



Client Southern Ionics Minerals

Location USA

Capability Groups Mineral Processing

Commencement 2012

Completion 2014

Services Provided

- Metallurgical testing
- Flowsheet development
- WCP engineering design
- Procurement assistance
- Surge bin supply
- Process equipment supply
- Site support

Highlights

- First large-scale use of new MG12 spiral technology
- Successful 'scale up' from metallurgical testing to production
- Novel design of a floating WCP on remote greenfield site



Smart Engineering

In 2014, the Mission South WCP began operation right on schedule. Mineral Technologies' involvement spanned over two years starting with early confirmatory metallurgical testing to develop process flowsheets and preparation of early prefeasibility studies.

In 2012 Mineral Technologies was appointed to design the WCP. A dedicated design team of engineers and drafters from Mineral Technologies' Australian and US operations was assembled to prepare basic and detailed design for the WCP as well as critical separation equipment including an 8 metre diameter surge bin based on the innovative Lyons Feed Control Unit (LFCU) design.

During the construction phase, Mineral Technologies provided onsite process engineering support to assist with assembly and installation of equipment as well as site support during start-up of key process equipment

Latest Technology

The WCP incorporates state-of-the-art spiral technology specifically designed by Mineral Technologies for fine mineral separation. The MG12 spirals deliver high recoveries even with finer valuable heavy mineral sizes. The WCP also includes a fit for purpose, custom built Lyons Feed Control Unit to meet Southern Ionics Minerals' specific process needs.

Today Mission South is a leading example of excellence in Mineral Sand separation, and through smart design and innovative technology is expected to provide many years of high value service.