

Cristal Mining – Ginkgo

Client: Cristal Mining
Location: Australia
Commencement: 2005

Capability Groups: Mineral Processing
Completion: 2005

Services Provided

- Metallurgical testing
- Flowsheet development
- Basic and detailed plant design
- Process equipment supply
- Plant commissioning
- Operator training
- EPC contract

Highlights

- Mineral Technologies delivered fully integrated solution
- 1st floating mineral processing plant in Murray Basin
- Converted an 850 t/h concentrator to 1750 t/h wet concentrator
- Scale up design from pilot plant testwork to full scale operating plant
- 1st large-scale use of HC1 and HC1RS high capacity spiral technology
- EPC project completed on budget

Smart Engineering

Located 220km from Broken Hill, the Ginkgo Mine was the first commercial mining operation in the Murray

Basin. It contains 5.8Mt of heavy mineral, with an excellent suite of products including Zircon.

Mineral Technologies delivered a fully integrated solution starting with initial testing of the deposit to determine optimum processing methods and flowsheet design through to design of the wet processing plant, plant construction, supply of processing equipment, commissioning and operator training of the site team.

A key feature of the project was the conversion of an 850 t/h floating concentrator into a 1750 t/h plant. This was facilitated by innovative re-design and utilisation of MD high capacity spirals and Reading magnetic separators. This technology was selected based on extensive metallurgical testing and resulted in a reduction of plant capex by 25%, significantly improving the project's viability.

Design of the plant was fully modelled to allow online adjustment of operation for varying feed conditions.

