

Herculano – 3.5MTPA Beneficiation Plant



Client: Herculano
Location: Brasil
Commencement: 2005

Capability Groups: Mineral Processing
Completion: 2006

Services Provided

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

Highlights

- In field pilot scale spiral testing
- Fully integrated processing solution
- Plant design including feed hopper, trommel screens, tailing and concentrate stacking
- Process flexibility to treat blends of up to three feed streams

Superior Technology

The scope of the project required Mineral Technologies to conduct initial on-site testwork to evaluate the capability of spirals to beneficiate the fine Iron Ore fraction - 1.2mm to 0.075 micron.

Mineral Technologies was selected to provide a technology package including process engineering design and process equipment supply. The package included:

- Beneficiation process flowsheet design for up to three feed streams
- Beneficiation process flowsheet
- Process engineer with process guarantee
- Mechanical, structural and civil design for the process plant including, feed hopper, trommel screen, tailings and concentrating stacking
- Preparation of equipment specifications for tender purposes and analysis
- Plant commissioning to prove plant production and performance
- Operator training
- Electrical and automation design

Mineral Technologies' work totalled 8,000 man hours across various disciplines for design and construction support.

Successful commissioning of a two-stage spiral circuit totalling 216 twin-start spiral separators was completed in 2006 achieving both concentrate grade and production capacity.

