

# Mineração Taboca - Pitinga



**Client:** Mineração Taboca  
**Location:** Brasil  
**Commencement:** 2009

**Capability Groups:** Mineral Processing  
**Completion:** 2010

## Services Provided

- Audit of existing plant and operations
- Metallurgical testing
- Flowsheet development
- Plant engineering
- Process equipment supply
- Procurement coordination and support
- Construction assistance
- Plant commissioning
- Operator training

## Highlights

- 33% increase in capacity with same footprint
- New spiral technology assembled in Brasil
- Design of control system for world class automated system
- Complete solution from testwork to design and commissioning
- Significantly improved reliability and performance

## Superior Engineering

Utilising innovative plant design and new advances in spiral technology, Mineral Technologies delivered a design solution that upgraded the 1200 t/h plant to a 1600 t/h plant using the same footprint.

Adding to the significance of this achievement, the solution also included the design and installation of a sophisticated control system, which replaced the laborious manual operation with a world class automated system. Other important aspects included on-site metallurgical testwork, analysis and strengthening of the building, complete redesign of the slurry distribution system, maximum utilisation of existing equipment and complete redesign of slurry piping.

As well as upgrades to the spiral plant, Mineral Technologies designed an upgrade to the plant stockpiling and feeding system. This involved the expansion and strengthening of an underground concrete tunnel for the stockpile reclaim conveyor, along with upgrades to the existing mill feed conveyors and feeders. This plant feed system was fully integrated into the new control system to provide a reliable steady feed to the plant.

These innovative design solutions significantly improved plant reliability and process performance, thereby directly improving overall plant production. In addition to the detailed design, Mineral Technologies located a team on-site to provide coordination and technical support for the procurement, construction and commissioning of the plant upgrades. Our teams worked closely with local contractors and Mineração Taboca to ensure the plant was delivered as designed.

New spiral technology included Mineral Technologies high capacity HC1 R/S spirals and HC1 spirals which were assembled in Brasil.

