PROJECT PROFILE



Commodity:	Gold
Client:	AuPlata
Location:	French Guiana
Project Type:	EP
Scope:	Engineering design & supply of a 14 tph modularised gold plant
Duration:	13 months
Completed:	2019
Value:	USD 8 million

AUPLATA MODULARISED GOLD PLANT

Metallurgical development was conducted by SGS Chile using samples supplied by Auplata. Progressive results were provided to SGS Bateman who designed the plant.

From the test work results, it was apparent that the most suitable flowsheet would comprise screening, thickening, milling, pre-leach, CIL, carbon recovery and elution, electrowinning, cyanide detox and all reagents and utilities required.

The client opted to remove the milling circuit from the initial construction phase and also defer construction of the elution, electrowinning and the smelting circuits by transferring loaded carbon elsewhere for toll treatment.

The plant is designed for a throughput of 14 t/h dry solids (approximately 300 t/day at 90% overall utilisation), at an average head grade of 1.8 g/t.

The engineering design of the plant was adapted to accommodate the constraints imposed by the remote nature of the plant site and consequently incorporated some interesting features:

- The entire plant was designed to fit on a rectangular, flat concrete slab of 90 m by 40 m, and suitable to be easily constructed by local contractors.
- Structural steelwork was designed in sections suitable for transportation in standard shipping containers and to minimise on site welding.
- All vessels too large to be transported in a standard shipping container were designed with sections that can be bolted together on site.
- All construction and mechanical installation was designed to be accomplished using a single 45 t crane, which was the biggest crane available locally.
- The plant is automated to alleviate manual operational risks.
- The total installed power is 584 kW.

All the steel sections were manufactured in South Africa and, along with the bulk of the equipment also procured in South Africa, packed into containers and shipped to site. A French company was contracted to perform the construction.