

CASE STUDY

SUKARI GOLD MINE PROJECT

PROJECT PROFILE

Sukari Gold Mine in the Eastern Desert of Egypt some 700km from Cairo and 25km from the Red Sea.

First gold was poured at Sukari in June 2009 and commercial production began on 1 April 2010, making Sukari the first modern gold mine in Egypt, a country which in ancient times was a prolific producer of the precious metal.

In 2010, Sukari produced over 150,000 ounces of gold and in 2011 it produced over 200,000 ounces.

CAPACITY

- 12 MTPA dry ore

PRODUCTS HANDLED

- Gold ore

PRODUCTS USED

- Siemens S7 300 and 400 PLCs
- WinCC SCADA
- All instrumentation on PROFIBUS PA
- Simocode motor starters on PROFIBUS DP
- Siemens VSDs



SCOPE OF WORKS

The process plant consisted of the following items:

- Raw water supply from the Red Sea including five pump stations and RO Plant
- Primary, secondary and tertiary ore crushing and conveying
- SAG and Ball Mills
- High gravity circuit
- Carbon in Leach extraction tanks
- Elution circuit
- Cyanide detoxification
- Electrowinning
- Tailings line including variable choke station and leak monitoring system

OUR INVOLVEMENT

Electrical and controls design, development, construction, commissioning, and project management of the entire process plant involving:

- Electrical and controls equipment selection
- LV and HV reticulation
- All network and fibre cabling
- All switch rooms including all MCCs, Motor Starters and VSDs
- Crushers and Mills
- Control system inclusive of 18 PLCs and 8 SCADA terminals
- Instrumentation installation and calibration
- Electrical design modifications as required
- Quality assurance inclusive of all testing and verifications
- Electrical and instrumentation as-built drawings