

CASE STUDY

OBUASI GOLD MINE UPGRADE

PROJECT PROFILE

The Obuasi Gold Mine is an open pit and underground mine situated in the Ashanti Region of Ghana, near Obuasi.

Owned and operated by Anglo Gold Ashanti. Recent upgrades to the site processing plant have been undertaken to improve efficiency and reduce operating costs.

These upgrades included PLC and SCADA redesign, flotation system upgrades and plant equipment repair and replacement.

CAPACITY

- Output of approximately 11 tonnes of Gold per annum
- Average grade of 5.1 grams per tonne of unrefined ore
- Throughput of 2.2 MTPA of gold ore

PRODUCTS HANDLED

- Gold

PRODUCTS USED

- Schneider/Modicon
- Wonderware System Platform
- Cisco
- TeSys T Smart Motor Protection Relays
- Schneider VSD



SCOPE OF WORKS

Recent upgrades to the site processing plant have been undertaken to improve efficiency and reduce operating costs. These upgrades included PLC and SCADA redesign, flotation system upgrades and plant equipment repair and replacement.

The redesigned plant required construction and commissioning of:

- Complete PCS system and infrastructure for new Bi-Ox process plant (CIL/Flotation)
- Complete new Flotation circuit
- Complete new CIL Circuit
- Integration with existing plant DCS and process systems
- Ongoing development and completion of PCS and SCADA

OUR INVOLVEMENT

- Pre commission all instrumentation
- Pre commission all electrical equipment (HV Transformers, HV/LV Switch boards and all electrical equipment on site, UPS, pumps, drives, and more)
- Configuration of all drives, protection relays, smart instrumentation, analysers, and more
- Integration testing for all new process plant into existing process systems
- QA/QC & Completions
- Hazardous Areas classification and design for Reagents
- Startup and wet commissioning of whole process plant on water, then moth balled