

# CASE STUDY

## TASIAST GOLD MINE OPTIMISATION PROJECT

### PROJECT PROFILE

SGC Australia were awarded the plant wide design and commissioning of the Electrical switchboards, PLC and SCADA systems on Phase 1 of the Tasiast Expansion Project in Mauritania.

The project involved the design, fabrication, shipping, installation and commissioning of 10 switch-rooms, 30+ control panels requiring 200+ drawings for both the process plant and three power stations.

Phase 1 expansion of gold process:

- Increase mill throughput from 8k to 12k t/day
- Install a new Primary Crushing Facility
- Install new SAG Mill and upgrade the Electrical systems to cope with the increased demand
- Upgrade existing Ball Mills CIL and Floatation circuits
- Increasing crushing and grinding facilities

### PRODUCTS HANDLED

- Gold

### PRODUCTS USED

- New Schneider M580 PLCs
- New Schneider Altivar VSD controllers
- New Schneider SCADA Wonderware
- New Siemens Ruggedcom Network switches RS2100
- New Siemens Ruggedcom Network switches i800
- New Cisco Catalyst 2960-X Series Switches
- New HV and LV switchboards
- Co-ordination of 3 independent power stations on islanded grid



### OUR INVOLVEMENT

E,I&C design, drafting, fabrication, installation and commissioning including:

- Supervision of electrical switchboards, VSD and switchroom construction
- (33kV down to 415V) in Jakarta – Indonesia
- Programming/Configuration of HV protection relays, MV VSDs, LV VSDs, LV DOL Protection Relays
- Factory Acceptance testing of switchboards, VSDs and switchrooms
- As Building of drawings, QA/QC for all electrical equipment
- Plant wide PLC and SCADA System:
  - Control paneling
  - Power Station Controls system
  - Perth based design and FAT
  - Site installation and commissioning
  - Control panels design and construction
  - Process control network and architecture design