

CASE

STUDY

STATCOM for Gold Mine
AUSENCO for KinrossTasiast project (Mauritania)



Applications:

Metals: Mill stands, winders, pumps, fans.

Marine: Main propulsions, thrusters, pumps and compressors, dredgers.

Chemical, Oil & Gas: Pumps, compressors, blowers, mixers, extruders.

Wastewater and Power Generation: Fans and pumps.

Cement, Mining and Minerals: Mine hoists, grinding mills (SAG mills, ball mills, etc.), conveyors, process fans.

In the last quarter of 2016, Ingeteam received an order from Tasiast Mauritanie for the supply of a STATCOM System to be installed in the mine that Kinross Gold owns in Tasiast, located northwestern Mauritania, approximately 300 km north of the capital Nouakchott.

Ausenco Canada is executing the EPCM contract for this project.

The mine has been in operation since 2008, and it's now undergoing the optimization phase one, where mill throughput will be increased from 8 kt/d to 12 kt/d.

Phase Two will increase the mill throughput from 12 kt/d to 30 kt/d with the installation of additional milling, leaching, thickening and refinery capacity.

The STATCOM system shall be connected to the 33kV grid, and shall be fully operational during operation of the plant, especially when the grinding mills are starting up, stopping and tripping. The STATCOM will react instantaneously to any voltage fluctuations in order to maintain the voltage inside the specified boundaries.

We keep your mine under control



Supplied equipment

Converter type

Power

Overload

Inverter

DC-Bus system

Cooling method

Scope of Supply

Project management
Basic and detailed engineering
Equipment supply:
• Rectifier transformers
• MV switchgear at 5.5 kV
• INGEGRID SH MV700 STATCOM
• Containerized Electrical Room
Commissioning
After sales services (360°CRS)

Technical Features

INGEGRID SH MV700 STATCOM

2x 5000 kVAr

250% during 3 sec.

Five level voltage source inverter with HV-IGBT power semiconductors, using PWM modulation techniques based on voltage vectors

Consisting of high-capacity long-life polypropylene capacitors

Forced air cooled

Other Features

INGEGRID™ STATCOM is a comprehensive range of low and medium voltage converters for reactive power control applications (STATCOM) and voltage stabilization.

INGEGRID™ STATCOM provides a fast and precise exchange of reactive power at the common point of coupling during stable grid functioning, in anomalies and voltage dips. Its modular design allows it to be used with a wide range of powers and voltages.

