

APPLICATION: CONSTRUCTION

CUSTOMER: QDVC

POWER PLANT: 6 X 2500 kVA

LOCATION: QATAR



SUPPLYING THE CONSTRUCTION SITE FOR THE BRAND NEW DOHA METRO

Five generating sets installed in a dedicated building supplying continuous electrical power to the Doha Metro construction site



A total output of 15,000 kVA at 11,000 V

Large-scale development projects have been launched in Qatar's capital, Doha, in preparation for hosting the football World Cup in 2022. The new infrastructure includes an automatic (driverless) metro comprising 3 lines, 37 stations, 75 km of track and 75 three-car trainsets. 5000 people were employed to build the metro and a camp constructed to accommodate them. This required a continuous supply from generating sets since the site was not on the national power grid.

QDVC, a construction company and subsidiary of Vinci, launched a call for tenders to supply and install the production power plant. Qatar Site and Power, our long-standing partner in Qatar, approached the KOHLER-SDMO design office for assistance in proposing a complete pre-study with a layout plan.

More than the products themselves, it was the quality of the proposed engineering solution that won QSP the contract in the face of Chinese competition.

The power station comprises 6 synchronized generating sets each with a unit output of 2500 kVA. They are sized for an ambient temperature of 50 °C. Step-up transformers are used to deliver an output voltage of 11,000 V. Each generating set is supplied with fuel by a 500-liter daily service tank. In addition, silencers and sound traps reduce the operating sound level.



Total compliance with regulations

This project was designed in compliance with QCS (Qatar Construction Standards) in terms of both the product and the installation. At the customer's request, in-depth tests were carried out at the KOHLER-SDMO factory in Brest before the generating sets were shipped (Factory Acceptance Tests).

This is the largest production power plant installed by QSP and KOHLER-SDMO in Qatar

The production power plant was in place for 6 months, after which the site was connected to the power grid. The generating sets were then redeployed.

The first Doha Metro line opened in May 2019, and the next two lines are due to open in 2020. Another line will be added by 2026.

