

#### KOHLER. | SDMO.

**APPLICATION:** WATER TREATMENT

**CUSTOMER:** GOVERNMENT

POWER PLANT: 6 X 1600 kVA

**LOCATION: QATAR** 



#### A KOHLER-SDMO POWER PLANT SUPPLYING A WATER-PUMPING STATION IN OATAR

The Arabian peninsular is one of the driest places in the world. In Qatar, in particular, the annual rainfall is less than 100 mm.

High population growth and the explosion in demand from industry and agriculture continue to put increasing pressure on diminishing water reserves. As a result, water consumption in Qatar has increased by 70% in just seven years.

Currently, 99% of water consumed in Qatar comes from seawater desalination. These operations are very expensive and depend on the quality of the seawater. The slightest marine pollution could have serious consequences, given that the country has a water autonomy of 60 to 72 hours at most.

Moreover, Qatar has no rivers or lakes. Groundwater is, therefore, the country's only source of fresh water. The fact that water resources are so precious in Qatar has led the authorities to build and optimize water purification and treatment plants to maximize wastewater recycling.



## Construction of a new water pumping station

To increase the country's capacity to recycle wastewater, the authorities in Qatar have decided to build a new pumping station. The government commissioned Six Construct, a private construction company, to work on this project. Six Construct is the largest Belgian construction company operating in the Middle East.

The project consisted of building a new water pumping station, powered by electrical generating sets installed in a building.



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CASE STUDY WATER TREATMENT

### A close partnership between Qatar Site and Power and KOHLER-SDMO

After several months of negotiation, our local partner, Qatar Site and Power (QSP), successfully won this contract thanks to its excellent interpersonal skills and expertise.

Some of the deciding factors in QSP having the competitive edge in this bid included the fact that the customer trusts the reliability of KOHLER-SDMO electrical generating sets, our partner QSP has a strong base in Qatar and its teams are fully available to offer excellent support throughout the project.

The teams of engineers at KOHLER-SDMO shared all their expertise with QSP by proposing a variety of technical adjustments to fine-tune the project and adapt the energy solution to meet the customer's needs as closely as possible:

- motorization of electrical generating sets,
- control-and-command equipped with special features,
- technical documentation supplied before delivery.

# A power plant with six 1600-kVA electrical generating sets

Six electrical generating sets were installed on the site delivering a continuous unit power of 1600 kVA at 50°C to power the water-pumping process. The electrical generating sets and the installation had to meet the requirements of Qatar Construction Standards (QCS).

The project also involved performing Factory Acceptance Tests (FAT), on the customer's request.

Other projects are currently underway with this same customer, which speaks volumes of their level of trust and satisfaction with QSP and KOHLER-SDMO.

