# Filtration Group application example – Power Plants & Energy

FG Backflush filter for the filtration of diesel in oil power plants

### **Initial situation**

The Sabiya power plant in Kuwait is located on a headland opposite Bubiyan Island. It consists of an oil-fired power plant with an installed capacity of 2.4 GW for base load and a gas-fired power plant with 300 MW to cover peak load. The longer, more reliable and low-maintenance large engines run in power plants, the higher the efficiency and profitability. Clean fuels and lubricating oils make a decisive contribution to maintaining and extending the service life of the engine and to low-emission operation. Filtration Group's unique know-how and outstanding development competence formed the basis for the large-scale project on 12 backflush filters to be used in the Sabiya power plant in Kuwait.



## **Solution statement**

- Filtration Group supplied 6 backflush filters of type R3-7, nominal diameter DN 300 with foreign medium backflushing as police filters to secure the centrifuge
- Additionally 6 backflushing filters type R3-4, nominal diameter DN 200 were used as pump protection filters
- Filtration Group supplied a solution to protect the diesel engines in this project



# Challenge

Fuel is not only the energy source of the engine, but also fulfils a number of important tasks such as cooling, lubrication and cleaning the engine. Impurities and deposits in diesel fuel are the biggest enemy of pumps and injection systems. They lead to filter blockages and increased wear and tear on the fuel system.

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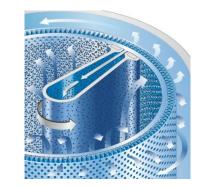
#### Technical data

- Connection: DN 200 to DN 500
- Filter element: screen basket with fabric (smooth or pleated), slotted screen insert
- Filter fineness: 25 1000 µm absolute
- Max. operating overpressure: 16 bar
- Max. operating temperature: 100 °C

#### **Customer value**

- Efficient filtration due to low backflush quantities with optimum cleaning of the filter element
- High cleaning efficiency due to the direct placement of the backwash nozzle on the filter element
- Support of the rational flow of production processes through continuous filtration
- Low space requirement due to compact design
- Sophisticated technology and robust construction







Filtration Group GmbH Schleifbachweg 45 74613 Öhringen Tel.: +49 7941 / 6466 - 0 Mail: industrial.sales@filtrationgroup.com industrial.filtrationgroup.com