



Petrotec and Rotork Successfully Installed IQ3 Actuators for major Energy Customer in Qatar

Petrotec, an Al Mahhar Holding subsidiary, has executed an agreement with a major Energy customer in Qatar to replace obsolete Electric actuators with the latest Rotork IQ3 design for their terminal and tank farm facilities. This involved the successful supply, automation, and commissioning of over 50 Electric actuators.

Industry: Oil Tank Farm & Terminal

Product: Rotork IQ3 and Petrotec Site Services



Overview: Petrotec solidified as a one-stop shop for valve actuation products

Petrotec has demonstrated its ability to be a one-stop shop for valve actuation products and services at site. Petrotec's responsibilities entailed the supply of new state-of-the-art Rotork intelligent electric actuators "IQ3", isolation valve adaptation, on-site retrofitting, and commissioning.

Challenge: Overcoming Critical Technical Constraints

On the Tank Farm/terminal area, existing legacy IQ2 and IQ1 Rotork actuators were installed along with other third-party actuators several years ago.

Petrotec was required to replace third-party brands and convert to Rotork IQ3 actuators with a significant challenge where existing installed isolation valve torques were unavailable. The significance was more critical and uncertain as the valves in question were in critical service and installed for over 25 years. The challenge was ensuring mounting kit designs and torque adaptation were accurate to avoid failure in service. With the support from Rotork, these actuators functioned correctly, and valve integrity was ensured for continued service.

Solution: Tailored Rotork IQ3 actuators and Local Specialized Service Support

Supported by its long-term principal Rotork, Petrotec was able to provide a bespoke solution and ensure actuation systems were upgraded successfully.

This was credited to the experience demonstrated at the site providing detailed engineering and practical site knowledge to ensure the upgrade was seamless with retrofitting to IQ3 actuators. Their new features are listed below:



- 1- Continuous Position tracking without power using Rotork's patented absolute encoder.
- 2- Increased protection by using independent torque and position sensing.
- 3- Real-time actuator and valve performance information available on Dual stacked screen display.
- 4- Control and commissioning via Bluetooth Setting tool or local control knobs.
- 5- Detailed trend analysis and diagnostic data available.
- 6- Rapid and secure commissioning /configuration (even) without power.
- 7- Torque switching that can be set from 40% to 100% of rated torque.