

Rotork declutch gearboxes support retrofit upgrade



Rotork Gears has supplied specialised declutch manual override gearboxes on swift delivery for a damper drive retrofit upgrade project at a large municipal power plant. Twelve ILG-D gearboxes were delivered within four weeks by the Rotork Gears Houston facility for attachment to K-Tork Type K pneumatic damper drives installed at an 1850MW coal-fired power plant in New Mexico. The applications mainly involve induced and forced fan combustion control. Installed in four groups of three, the gearbox design has enabled the handwheels to be suitably positioned through 90° quadrants to accommodate obstructions and for ease of operation. Rotork ILG-D gearboxes are specifically designed to provide a reliable means of manually overriding double-acting pneumatic valve actuators in power and process applications. Mounted between the actuator and the valve or damper, the gearboxes employ a declutch mechanism to disengage the handwheel drive during pneumatic operation. The full range of Rotork ILG gearboxes offer a rugged solution for spring-return or double-acting pneumatic actuation applications with output torques up to 32,000Nm (283,520lbf.in) in an ambient temperature range of -20 to +120°C (-4 to +250°F). Standard environmental enclosure ratings are IP65 and IP68. Rotork Gears and K-Tork are members of the Rotork group of flow control companies. This contract is can be noted as a good example of how group companies can combine to provide the best technical and commercial solutions for flow control applications.

Annual fuel cell system shipments will surpass 600,000 by 2017

Fuel cells have an important role to play within the emerging smart energy

paradigm. They represent one of a wave of commercially available technologies that are resilient, distributed, and efficient. Though the fuel cell industry has displayed some encouraging signs in the last three years, it still faces significant headwinds – including the high costs for fuel cell stacks compared those of incumbent technologies and a lack of customer awareness of the advantages of fuel cell technology. Nevertheless, according to a recent report from Pike Research, a part of Navigant's Energy Practice, annual shipments of fuel cell systems will grow rapidly over the next five years, from less than 29,000 in 2012 to more than 600,000 in 2017. "The period 2014-2015, when the first fuel cell vehicles are expected to be rolled out, remains critical in terms of transitioning from a niche industry to starting to move into the mainstream." The market value of the fuel cell industry, including all applications in the stationary, portable, and transport sectors, will reach USD 15.7B in 2017, the study concludes. The stationary fuel cell sector continues to provide the foundation for the entire industry in terms of shipments, success stories, and decreased costs. The stationary fuel cell sector broke 20,000 systems shipped in 2011, according to the report, a significant jump over 2010. The area that saw the largest jump was combined heat and power (CHP), with residential CHP taking the lion's share of the growth.

AS-Schneider receives fire safe approval

ISO FE Series Monoflanges from AS-Schneider are fire type tested and certified to guarantee protection for the plant and personnel in the event of fire. AS-Schneider's Monoflanges, VariAS-Blocks and K-Series Ball Valves are tested and approved for fire safety as standard. The test basis at AS-Schneider is ISO 10497 'testing of valves – fire-type testing requirements' and API 607 'fire test for quarter-turn valves and valves equipped with non-metallic seats'. The type test is monitored and certified at AS-Schneider by the Technical Inspection Authority TÜV SÜD. ISO 10497 defines the requirements and the process for evaluating the functionality of valves and fittings that are exposed to fire. For this, the valve to be tested is exposed to water under pressure and to fire for a

period of 30 minutes. The leakage from the valve seat and the external leakage are measured for the entire duration of the test. The valve is then tested again to ensure that it is operable. To guarantee the external tightness, only graphite or metallic seal rings are used for stem and body seals. Spring washers ensure guaranteed internal tightness for OS&Y needle valves that compensate the different length expansion of the individual parts, and therefore prevent the valve tip lifting off the valve seat. Concerning ball valves a secondary metal sealing guarantees the internal tightness. Under normal operating conditions, a polymeric seat provides a bubble tight sealing. In the event of fire, the secondary metal sealing will ensure the tightness instead of the burnt polymeric seat.

AUMA actuators support major Saudi water scheme



A major programme to increase Bahrain's potable water capacity has incorporated 294 AUMA electric actuators. The modular valve control devices have been installed in over 45 km of pipeline at the Hidd Potable Water Forwarding Station. Three new pumping stations have been built in Hidd, Salmabad and Bugawah. In addition, over 15 pumping stations have been upgraded. On completion, the potable water capacity for the region will be increased to 90 million g/d. The contractor, the Ahmed Mansoor Al A'ali company, selected AUMA's Modbus Redundant version actuators and SIMA Master Stations. AUMA responsibilities will include actuator installation, training during commission and support. AUMA has an established track record for Bahrain and Saudi actuation installations. The company's Indian subsidiary, established since 1986, is providing extensive support for local process control applications. Previous contracts include the supply of actuators and controls for the Al Dur sea water desalination project in Bahrain.