



Customer : Nuclear power generator
 Product group : Valves and Instrumentation
 Market : Energy and water
 Application : Cooling system valves

ERIKS RE-ENGINEERS SUPERIOR REPLACEMENT FOR OBSOLETE VALVES

Re-engineered wedge gate valves save costs for Nuclear Power Generator



CHALLENGE

ERIKS Valves Core Competence Centre was asked to assist with the identification of large bore wedge gate valves on a seawater cooling system in a nuclear power station. The customer wanted replacement valves, or a suitable alternative if replacements were not available.

The valves were identified as 20" / 500 mm nb 'Ham Baker' Cast Iron Gate Valves, there were seven valves in total. The valves were operated via Rotork actuators and in some cases via extension stems. All were located in very tight spaces (pits, etc) as an additional plant had been added after the initial installation.

The OEM was no longer trading and the original valves were obsolete. The same situation occurs frequently at power stations across the UK due to the age of the original supplied equipment.

SOLUTION

ERIKS measured and recorded all relevant data and dimensions. The valves were re-engineered. The valves were improved to the exact dimensions.

The valves supplied were: 500mm Wedge Gate Valves. Bolted Bonnet, Outside Screw - Rising Stem. BS1400 LG2 Bronze Body, Bonnet & Wedge C/W Pedestals.

Flanged Ends PN16 FF & Drilled. Supplied with ISO 5210 F14 Top Mounting Flange. Max Test Pressure - Body: 23.25 bar Max Test Pressure - Seat: 11 bar. Operated via Rotork electric actuator 16A F1 with Base Flange ISO 5210 F14.

This permitted the Power Station to accept and order via an EVAL as opposed to undertaking a complete EC.

OTHER BENEFITS

- Technical know-how allowed for an obsolete product to be re-engineered
- Improved product supplied
- Cost reduction

FURTHER COMMENTS

Where and when possible we strive to offer direct replacements to meet with the Fit, Form and Function requirements of the industry. Where this is not possible or practical we look to improve via materials of construction or operation methods to reduce whole life costs.

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