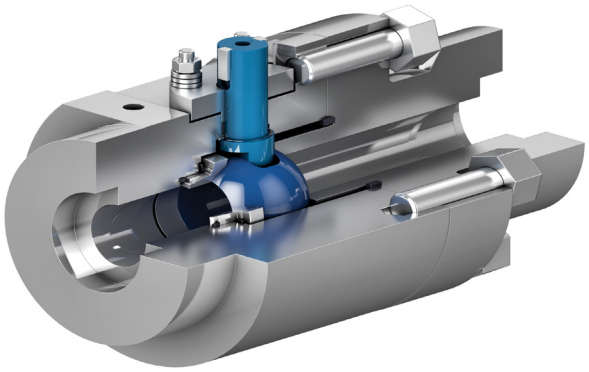

VALVTECHNOLOGIES

V Series Metal Seated Valves

Zero-leakage guaranteed

Location: Poland
Plant type: Lignite UNIT 470 MW - Supercritical
Industry: Power
Application: Spray water control

Four-year, zero-leakage guarantee in power industry applications

Background: Power plants around the world commonly use ball valves to control high-pressure spray water in their cooling towers. In these towers, water is sprayed through pressurized nozzles for cooling and reuse. A power plant in Poland was utilizing globe valves instead of ball valves for their spray water control. Their particular application required the valves to open and close at rapid speed. For this application, the globe valves were failing continuously, resulting in control loss of the spray water and decrease in plant efficiency. Additionally, the globe valves' stem packing was tearing, causing high-pressure, high-temperature water to be sprayed around the malfunctioning valves, creating a dangerous environment for operating staff.

Requirement: The customer requested ValvTechnologies review their spray water application and recommend an alternative solution that would replace their bare stem valves but keep the existing actuators and positioners. They also required each gearbox be replaced and changed to rotating movement from linear movement. Additionally, all valves provided were required to be in accordance with FED and CE requirements. Most importantly, the plant required each valve to function without issue and without the replacement of any stem packing for a period of one year from the date of install.

Solution: The ValvTechnologies' high-performance V Series ball valve was identified as the best solution for this application. Per the customer's specification, eight V1-1 valves were installed to replace the existing globe valves. After one year of operation, ValvTechnologies inspected the eight valves using an endoscope and found no sign of erosion or stem-packing problems. See photos 1 and 2 below. Plant management has approved the replacement of all globe valves used for spray water control to ValvTechnologies' V Series ball valves. ValvTechnologies' provided this customer with the best total cost of ownership solution available. ValvTechnologies was able to eliminate an unsafe environment, increase the quality of the spray system and improve plant efficiency.

For more information, contact Marek Dobiesz mdobiesz@valv.com

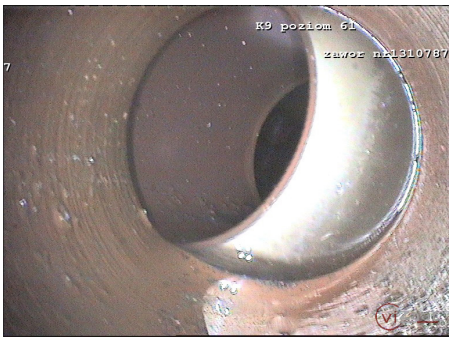

Photo 1: Cycling 45°, no signs of erosion

Photo 2: Fully open, no signs of erosion

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819_Case Study: V Series for spray water control_June 2015.