Case Study

Get outstanding flexibility and reliability in the lower pressure class range.

Location: USA

Background: A major global power company entrusted ValvTechnologies to help them identify the best possible solution to replace their existing triple offset butterfly valves in their nitrogen purge/vent valve application. Hundreds of thousands of dollars per day of lost revenue were at risk if the customer’s requirements, quick construction schedule and high performance expectations weren’t met.

Requirement: The customer required a nitrogen purge/vent valve system with integrated gasification combined-cycle power generation IGCC units. This IGCC process recycles blast furnace coke, pulverizing and gasifying it to be burned in a heavy duty gas turbine. The power it generates can be used in the plant, and any excess can be sold to the public power grid.

An engineered valve solution was needed that could accommodate the process fluid of nitrogen with the interfacing fluids of syngas and air, as well as meet Class VI shutoff per the FCI 70–2 requirement. This would allow the customer to accomplish repeatable and reliable valve performance with on-time delivery.

Solution: The ValvTechnologies’ V1–2 metal–sealed ball valve with bi-directional capability was identified as the best solution because it met the customer’s needs, including:

- Proven track record
- Superior performance
- Lower overall cost of ownership
- Fast delivery: 22 weeks as opposed to the competitor’s solution of 52 weeks

ValvTechnologies’ superior solution allowed the customer to meet their commitment to the end-user of increased plant efficiency and reduced emission rates compared to traditional integrated gasification combined-cycle power generation systems.