

The Quality Certified Safety Solution

ValvTechnologies' Coker Valve Safety Interlock System

Industry: Hydrocarbon
Plant type: Refinery
Application: Coker isolation valve
Location: Southern California
Product: V1-2

Overview: The refining industry confronts some of the most difficult valve application challenges in various process units. Companies are more and more focused on safety of the plant, their people and meeting production goals. As a means to provide worker safety in a delayed coker unit, one refinery in Southern California looked to install a safety process interlock system.

Requirement: These systems are designed to ensure that valves follow a pre-determined sequence of operation for startup and maintenance in their delayed coking units. In addition to the safety process interlock system, a motor operated valve package required to conduct the operational sequencing, thereby seeking to avoid any workplace injury or process upsets. Safety, preventing personal injury and limiting operating errors were the driving forces behind the customers' desire to change.

Solution: Based on the customers' knowledge of ValvTechnologies' zero-leakage isolation valve and purging technology, the refinery chose ValvTechnologies' custom-designed engineered solution. ValvTechnologies provided 18 severe service 20" 300 ANSI class C12 uni- and bi-directional ball valves. ValvTechnologies' metal seated ball valves were a more efficient solution for automation due to the simple mechanical connection between the stem and MOV gear. The original valves to be replaced had an operating mechanism with many moving parts, requiring significant maintenance; ValvTechnologies' solution provided the plant with improved safety, reduced maintenance costs and increased reliability.



Result: The ValvTechnologies' valves were installed in 2007: based on a reliability factor of 95% on a 10 year run time, the ValvTechnologies' solution continues to provide the plant with lower costs of maintenance repair and operation savings on steam costs. To this day, the valves remain in service affording the plant exceptional safety, reliability and performance, exceeding the customers' expectations.