



For **Severe Service** Control Solutions, Turn to Fisher Technology and Innovation

## FB, SPEC E VALVE RESISTS EROSIIVE CCU HYDROCARBON SLURRY

The Cat Cracking Unit (CCU) is the “cash cow” in an oil refinery. It is where light-end hydrocarbons are extracted and used to produce gasoline, jet fuel, and diesel. Many refinery managers consider the valves that control the flow of cat slurry a constant maintenance problem. Hot hydrocarbon slurry is what’s left over after the crude oil runs through the CCU. Reaching temperatures of 570 degrees Fahrenheit and resembling liquid asphalt, this slurry takes a toll on control valves.

In 1993, Fisher's Engineered Products team designed two 12-inch Fabricated-Body (FB), Spec E valves for a refinery in Louisiana. The pair required no maintenance during eight years in this challenging, erosive service.

In 2001, the end-user and its engineering contractor returned to Fisher for an upgrade. Though happy with the performance of the 12-inch FB valves, they wanted more capacity. Thus, Fisher engineers modified the design and Governor Road manufacturing employees custom-built two 24 X 24-inch FB, Spec E valves.

With a body made of 316 stainless steel, a contoured plug design, and trim hard-faced with Alloy 6, these valves were tailored for severe-service hydrocarbon slurry. One of the valves had a ten-inch port and the other a 14-inch port.

Both valve assemblies included FIELDVUE® Digital Valve Controllers (Fisher instruments designed to digitally and remotely monitor valve performance) and ultra-low friction graphite (ENVIRO-SEAL®) packing.

The FB, Spec E valves shipped from Fisher-Marshalltown in November 2002 to the refinery's CCU, and they are still helping the customer increase the unit's run time to 6 to 8 years.

For more severe service solutions see us at [www.fishersevereservice.com](http://www.fishersevereservice.com).

