

Diagnostics Detect Valve Leakage and Help Oil Refinery Save \$36,000 in Outage Costs

OIL & GAS

Challenge

A local refinery's operations, maintenance, and engineering personnel approached Control Southern regarding 8 valves in the hydrocracker process area that had been identified as leaking excessively (i.e. not shutting off per specific requirements). They requested that Control Southern open and inspect each valve in order to confirm that the valves were in fact leaking and to suggest options for repairing and improving valve shutoff.

Solution

Each of the 8 valves identified were outfitted with FIELDVUE™ digital valve controllers. Control Southern, therefore, suggested that ValveLink™ diagnostics be run on each valve prior to opening and inspection. This diagnostics test would allow for a baseline assessment of the valve condition, and would also identify any instrument issues or major valve trim issues that could cause poor valve shutoff. The diagnostics test would also allow for better pre-planning of any required valve adjustment procedures.

Results

After making these corrections, 6 valves were brought up to specified shutoff without having to physically open and inspect the valve bodies and trim. Due to the size and complexity of these valves, the open and inspect cost is approximately \$5,000 per valve (including soft parts that must be replaced during an open and inspect procedure). In comparison, the cost to run a standard valve diagnostics test is approximately \$500 per valve.

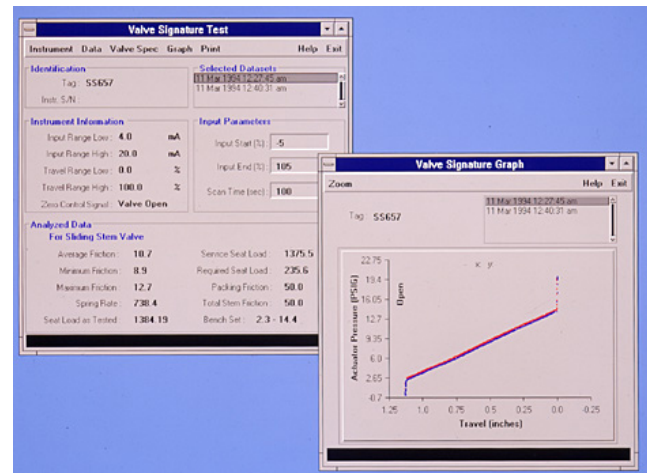
Open and Inspect (This is what it would have cost for 8 valves): \$40,000

One-Time Savings: \$36,000

Total Investment (Diagnostics for 8 valves): \$4,000



Fisher® FIELDVUE™ DVC6200
Digital Valve Controller



Example of ValveLink Diagnostics
Valve Signature Test

