

Emerson's FlowScanner™ 6000 and Diagnostics Services Reduce Petrochemical Refinery's Scheduled Valve Removal by 73%

RESULTS

- Saved \$43,000 over trial-and-error method of valve replacement
- Improved maintenance effectiveness
- Reduced inventory of spare parts



APPLICATION

Refinery Crude Unit

CUSTOMER

Petrochemical complex — Canada

CHALLENGE

Healthy valves are crucial to maintaining 24 hours/day, 7 days/week operations for this complex that supplies 30 to 40 percent of Canada's total primary petrochemicals. Historically, during scheduled maintenance, valves with decreased efficiency were pulled from the line. Once the valves were removed, they were disassembled for testing and repaired or replaced as needed. This approach proved time-consuming and inefficient. The refinery needed a reliable valve diagnostic method to maximize the effectiveness of their planned outages.

“FlowScanning Diagnostics have helped us efficiently look after our valves. We are able to highlight valves that may have issues, and we are able to plan around those problem valves. Overall, we're very pleased with the results.”

Control Reliability Advisor
Petrochemical complex in Canada

SOLUTION

During their 2000 turnaround, Emerson Lifecycle Services provided both diagnostic services and experienced technicians to identify the inline condition of control valves for the refinery's crude unit. The combination of FlowScanner 6000 technology and diagnostic services enabled the refinery to diagnose the condition of the valves without removing or disassembling them for testing. Technicians simply hooked up the FlowScanner and ran the necessary tests to determine which valves required removal. For the initial project, 12 valves were scanned. The refinery was so pleased with the results, technicians went on to scan 48 valves (four times the initial number).

Technicians found that 19 out of 48 valves scanned required no action, resulting in a savings of \$43,000 over the refinery's former trial-and-error method.

Emerson technicians provided on-the-spot interpretation of scanned valves and were able to perform inline repairs on some of the valves requiring action, increasing efficiency in the maintenance process. Once repairs were completed, the valves were rescanned and the data was used for an updated graph of valve status.

Because the additional data provided by the FlowScanner enabled the refinery to plan more efficiently, it has also been able to reduce its inventory costs by decreasing the number of spare parts stocked.

Technicians found that 19 out of 48 valves scanned required no action, resulting in a savings of \$43,000 over the refinery's former trial-and-error method.

Emerson Automation Solutions

8000 West Florissant Avenue
St. Louis, Missouri, 63136
United States
T +1 314 553 2000
www.Emerson.com

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

All rights reserved. FlowScanner is a mark owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co.. The Emerson logo is a trademark and service mark of Emerson Electric Company. All other marks are the property of their respective owners.

For more information:
www.Emerson.com

