

Chevron Oronite Achieves 99% Availability with AMS[®] Suite: Intelligent Device Manager



RESULTS

- Availability of critical valves increased to 99%
- Turnaround time for valve maintenance reduced by 60%



APPLICATION

Development and manufacturing of additives for fuel and lubricants.

CUSTOMER

Chevron Oronite de Gonfreville l'Orcher in Le Havre is one of the Chevron Texaco companies and produces approximately 355,000 tons per annum of end product.

CHALLENGE

Chevron Oronite was experiencing an increase in maintenance costs due to the amount of reactive maintenance they did. With more than 20,000 instruments, this maintenance approach was no longer working. The plant wanted to make a change to a more predictive approach to dramatically change their maintenance practices. Since the move from using handheld tools for maintenance to a more online approach would be time-consuming and difficult, Chevron Oronite decided to focus on the critical valves in their H2S unit. However, their objective was to select a vendor that could potentially be applied to all the site's instruments in the long term.

SOLUTION

Chevron Oronite adopted AMS Device Manager because of its interoperability and comprehensive support of instruments and valves. After a successful implementation of a 150-tag AMS Device Manager system in the H2S unit in 2006, AMS Device Manager was extended to 5 units, covering 600 tags. The current architecture integrates a PC server, two client PCs, a third-party maintenance PC, and two portable PCs for the intermittent interventions from the technical room of each unit. Chevron Oronite also interfaces the 375 Field Communicator with AMS Device Manager for calibration management. An additional 300 tag expansion, including 50 new valves, to a new ALF2 unit is planned.

“Before, equipment would break down and then we would act. Since the installation of AMS Device Manager, no device issue has affected the production of the factory.”

Franck Floury,
Maintenance Supervisor

Chevron Oronite has experienced many benefits to the implementation of predictive maintenance, discovering over time the great potential for savings. Initially installed to help start the predictive maintenance program, the ability of AMS Device Manager to construct a central database of device information was invaluable. The plants' operators are also demanding that more and more devices be connected to AMS Device Manager to gain the benefits from configuration, calibration, and commissioning.

The valves in the H2S unit are the most critical to the plant's process. Through the management of valves with AMS Device Manager, the availability of the valves has increased from 94.4% to 99%, greatly increasing the plant's productivity.

Chevron Oronite was also able to reduce the turnaround time for valve maintenance by an estimated 60% through analysis of valve signature data in AMS Device Manager. Maintenance personnel could identify the valves that needed attention, so only those valves were pulled – eliminating unnecessary work. Chevron Oronite also added Fisher® DVC 6000 FIELDVUE® digital valve controllers to communicate valve diagnostics to AMS Device Manager and streamline calibration and configuration of the valves.

Chevron Oronite uses ProLink® II software for management of their Micro Motion® mass flow meters. These flow meters represent almost half of the instruments connected to AMS Device Manager. Using AMS Device Manager with the flow meters has allowed Chevron Oronite to manage alarms and identify anomalies before they impact the process or damage the meters. Among the issues already identified have been a torn actuator membrane and bad calibration.

The asset management architecture at Chevron Oronite is among the most advanced in France in terms of the number of units connected and the use of fiber optic network connections to decrease the latency of updates.

The plant is convinced of the value of the Emerson solution and plans to implement this architecture on other sites in Singapore and the United States.



“The ability to gain predictive diagnostics to determine asset health online was very important to Chevron Oronite.”

Franck Floury,
Maintenance Supervisor

**Emerson Process Management
Asset Optimization Division**
12001 Technology Drive
Eden Prairie, MN 55344 USA
T 1(952) 828-3206
F 1(952) 828-3006
www.assetweb.com

©2008, Emerson Process Management.

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. PlantWeb, AMS, Fisher, FIELDVUE, Micro Motion, and ProLink is a mark of one of the Emerson Process Management group of companies. The Emerson logo is a trademark and service mark of Emerson Electric Company. All other marks are the property of their respective owners.

