Rominserv Helps Rompetrol Petromidia Reduce Downtime and Save \$10.1M with Emerson's AMS Machinery Manager, CSI 2130 Analyzer, and CSI 5200 Oil Analyzer



RESULTS

- Saved an estimated \$10.1M by avoiding unnecessary downtime
- Reduced downtime by 35-45%
- Increased production capacity by 20-25%
- Saved 25-30% on equipment spending
- Greater than 10x ROI



Petrochemical production: polymers, polypropylene (PP) and polyethylene (PE). Crude oil refining: (51% internal / 49% export).

CUSTOMER

Rompetrol Petromidia Refining & Petrochemicals - Romania

CHALLENGE

Rompetrol Petromidia Refining & Petrochemicals is part of the Rompetrol Group NV, the largest private company in the Romanian energy field. The facility's maximum production capacity is 14,000 tons/day. Only producing 10,500 tons/day, the company set a goal to operate at full capacity by 2009. In addition to this increased production, Rompetrol Petromidia needed to reduce unnecessary maintenance work orders and costs. They also wanted to improve overall quality to meet the worldwide export regulation standards and increase Overall Equipment Efficiency (OEE). These goals became Rominserv's main tasks. Rominserv is the general contractor of the Rompetrol Group NV, providing industrial services and maintenance and technical support.



"The Emerson predictive maintenance solution is user-friendly, extremely fast, and provides very accurate information."

Paduraru Dumitru Chief Predictive Maintenance Department





SOLUTION

Rominserv decided to implement a predictive maintenance program, based on condition monitoring of critical machinery. They chose Emerson's CSI 2130 Machinery Health Analyzers and AMS™ Suite: Machinery Health Manager to support their program.

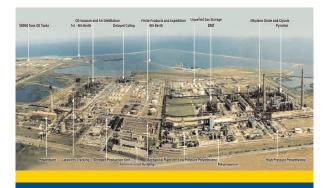
Rominserv monitored 1,200 pieces of rotating equipment with the CSI 2130 Analyzer, interfacing the handheld with AMS Machinery Manager to access a complete picture of the health of the mechanical assets. By analyzing the diagnostics, they could diagnose both critical and process equipment problems. Through vibration monitoring, they were able to detect the type of failure and the exact location of the damage.

Using the CSI 2130 Analyzer, Rominserv technicians detected an early break of the safety bolt for a pump rotor. If they had not detected this problem in time, the whole unit would have been shut down. The problem was fixed before this was necessary, saving the company approximately \$2.8M in lost production.

Rominserv recently began using Emerson's CSI 5200 Machinery Health Oil Analyzer to determine oil quality in the refinery equipment. Ensuring the quality of oil allows Rominserv to extend the life of monitored equipment. Through oil analysis, Rominserv detected a lubrication problem on a critical machine, avoiding a complete shutdown and saving an estimated \$7.3M.

The project continues as Rominserv and Emerson are working to integrate the data in AMS Machinery Manager to the facility's existing MAXIMO CMMS system.

By using predictive maintenance, Rominserv has reduced maintenance costs by 79% of total repair costs. In addition, they have experienced savings in manpower, estimated at 61 hours (42%). Rominserv's Predictive Maintenance Laboratory is capitalizing on the facility's success by expanding their oil and vibration analysis services to outside customers. By combining vibration analysis and oil analysis, Rominserv has an integrated solution to tackle a broad range of mechanical asset problems.



"Due to Emerson's CSI 2130 Machinery Health Analyzer, I was in demand after a few months in the plant. They often said, 'Let's call Paduraru with his wonder device."

Paduraru DumitruChief Predictive Maintenance Department

Emerson Process Management Asset Optimization Division

835 Innovation Drive Knoxville, TN 37932 T (865) 675-2400 F (865) 218-1401 www.assetweb.com/mhm ©2007, Emerson Process Management.

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