Syncrude Implement Honeywell’s Connected Plant Operations Management Suite to Formalize Work Processes

Case Study

“We are expecting a significant amount of return on investment over the long term, especially when we get more into the energy efficiency and optimization targets.”

- Derek Hachey, Syncrude

Benefits

Syncrude’s implementation of Honeywell’s DynAMo® Operations Management, a software suite that includes Operations Monitoring (OM), provided help in formalizing work processes and work flows. One of the first benefits of utilizing OM, a core product within DynAMo®, was the realization and understanding of where Syncrude were not achieving critical targets.

With OM, Syncrude has a consistent application of processing targets across the site and is now able to focus on moving forward with more of the energy optimization targets and building a standardized stewardship process around them.

Background

Syncrude is one of the largest producers of crude oil from Canada’s oil sands. The company operates a large oil sand mine, utilities plant, bitumen extraction plant and upgrading facility that processes bitumen and produces value-added light, sweet crude oil called Syncrude Crude Oil (SCO) for domestic consumption and export. The corporate headquarters are located in the city of Fort McMurray, 440 kilometers northeast of Edmonton, Alberta.

In 2008, Syncrude was the first company in the Canadian oil sands industry to receive certification from the Alberta Government for a reclaimed area. Called Gateway Hill, the area was planted in the early 1980s and is now a healthy forest of broad leaf and needle leaf trees interspersed by several wetlands.

Challenge

Prior to the introduction of Operations Management, Syncrude was attempting to manage the situation using Microsoft Excel spreadsheets, with varying inconsistent application of the information between the extraction organization and the conversion/hydro-processing organization. Syncrude needed a standardized way to monitor operating targets. The use of new solutions presented challenges in selecting the best solution for Syncrude’s environment, plus the issues arising from changing existing manual processes.

Solution

Syncrude performed early high level product selection analysis; however, they did have the advantage of access to the parent company’s (ExxonMobil) experience with the Honeywell’s solution. Observing ExxonMobil’s successes and track record with Honeywell contributed significantly to the decision to implement the same solution at Syncrude.
Results

The solution included more than just software. “The relationships with Honeywell’s product team and project team have been instrumental in a successful implementation,” stated Derek Hachey. The Honeywell product team worked with Syncrude to scope and deliver requested functionality, especially in the shift log area of Operations Logbook (OL), another core product within the Honeywell solution. “We have had an on-going relationship with the product team ever since we moved forward with this product at Syncrude,” Derek continued.

A few of the specifics of the Syncrude implementation include:

• Secure shift log implementation across the site, a valued aspect of the solution, provides operator comments on the logs in an easy to use and easy to read format.

• Operations Monitoring is enabling Syncrude to formalize formerly manually managed data.

• With DynAMo®, Syncrude has a consistent application of targets across the site, with a standardized stewardship, providing for future implementation of energy efficiency optimization targets and standards.

“We are expecting a significant amount of return on investment over the long term with this solution, especially when we get more into the energy efficiency and optimization targets. In the short term, we are focusing on reducing incidents and ensuring that we comply with the critical operating targets,” Derek concluded.

About DynAMo® Operations Management

Honeywell’s DynAMo® Operations Management, provides comprehensive limit and shift management for process plants.

High level features include:

• The ability to manage a master set of limits

• The application of applicable limits to alarm enforcement

• Setting economic and other targets that lie within the master limits

• Monitoring violations of limits

• Reporting on alarm metrics

• Summarizing shift handover information into an archived report often used to facilitate an effective shift handover

• Comments facility for operators to communicate observations throughout a shift

• Set and run operating instructions that are monitored to assist the operator to run to plan