

CONNECTED PLANT – AL WAHA USE CASE

Customer Challenge

Al Waha Petrochemicals Company, a joint venture between Sahara and Basell Arabie Investissements S.A.S., operates a petrochemicals complex that produces 467.6 KTA of propylene as primary feedstock for the production of 450,000 KTA of polypropylene for domestic use and export.

To meet national and international demand, Al Waha needed to ensure its plants were operating at peak performance to deliver maximum output and efficient resource consumption.



Persona Problem

Ali Alwadie, Al Waha's Process Engineering and Quality Assurance Manager, was charged with maximizing on-stream reliability of its Oleflex™ unit while also optimizing propane consumption.



Previously, he was completing his own calculations using raw plant data to accomplish this goal. However, this process proved time consuming, numerous updates were constantly required and he had no way of evaluating multiple scenarios. Leveraging the refinery's long-standing relationship with Honeywell, Alwadie engaged Honeywell UOP technical services expert Divya Chowdhary for help.

Honeywell Solution

Working with the refinery since its inception, Divya was very familiar with the plant's original design. She was not, however, familiar with its current configuration. With that limitation in mind, Divya and her team turned to the Sentience-powered Honeywell UOP Process Insight Reliability Advisor. To configure this solution to meet the customer's specific needs, the team established



real-time data collection from over 2000 data points and updated UOP process and fault models to match the as-built conditions to create a digital twin of the unit's operations. As a result, the customer now has a solution that allows them to continuously evaluate the Oleflex unit's performance, identify process issues and act quickly to prevent production interruptions.

Business Results

After implementing Honeywell Process Reliability Advisor, Al Waha has noted the following outcomes:

- Uncovered an opportunity for savings of \$1M per year in first month alone
- Improved profitability from more informed operations decisions
- Developed a proactive process management program that:
 - Balances production vs. constraints
 - Identifies operational changes for greater process effectiveness
 - Flags potential operating concerns and recommends steps to resolve them
 - Supports improved knowledge transfer and insights