World’s Largest Independent Petroleum Refiner Upgraded Terminal with Honeywell Tank Gauging System

Success Story

Obsolete tank gauges and inventory systems are a common challenge. When the world’s largest independent petroleum refiner identified the need to replace legacy radar gauges and obsolete mechanical tank gauges with all tanks at its Dublin terminal, Honeywell provided an end-to-end solution for its challenges.

Challenge
After struggling with a mix of radar and mechanical level gauges connected to an outdated SCADA system at its Dublin terminal, the refiner was eager to improve accuracy and reliability of tank stock reporting and tank movement monitoring.

In 2020 the company requested Honeywell’s North European tank gauging team to conduct a site survey to identify the correct tank gauging technology to maximize the company’s accuracy in line with its reliability needs.

The team conducted a full site survey and report for the customer, detailing the existing system and making recommendations for improvements.

Solution
The Honeywell site survey recommended that the existing tank gauge system should be replaced with:

- Honeywell Enraf Servo Gauge 954
- Vito 767 LT Temperature Probe
- 948 HART SmartView tank side indicator
- CIU 888 communication interface to provide accurate and reliable tank inventory measurement.

The resulting survey outlined a proposal for replacing the level and temperature instrumentation for all tanks with minimal mechanical tank modifications.

After careful consideration and inquiry, the customer recognized that Honeywell’s tank gauging solutions matched its expectations when it came to reliability, performance and serviceability.

They chose Honeywell products and solutions over two competing proposals.

Benefits
The gauges and temperature probes were installed on the existing tank roof nozzles, making use of existing cabling for power and transmission. Mechanical modifications on the tank roofs were not required, further keeping costs down.
During the replacement works, the maximum downtime per tank was less than two hours, meaning that operations resumed full control over each tank within the same day.

The replacement of existing equipment, including installation and commissioning of the new Enraf gauges and Vito temperature probes, was completed in just a week and a half for all tanks at the site.

**CUSTOMER FEEDBACK**

After the first week of commissioning, the feedback from the operations team was very positive.

They were impressed by the accuracy and stability of the Enraf Servo Gauge 954 measurement, as compared to the old equipment.

By providing accurate reconciliation of inventories, enhanced safety and lower maintenance spending, the Honeywell tank gauge system for this refinery customer enabled its operations team to cut costs, raise efficiency and extend asset life.