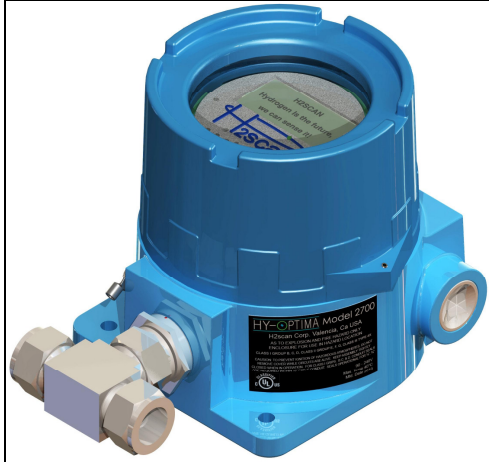


REFINERY APPLICATION

Hydrogen Measurement in Isomerization Unit



HY OPTIMA Model 2700

“Our first H2scan HY-OPTIMA™ Model 2700 has added significant efficiency to the process by providing real time and accurate H2 measurements.” –Supervisor Maintenance / Instrumentation

TECHNICAL BACKGROUND

At a refinery in California, the thermal conductivity analyzer previously used for measuring recycle hydrogen on the isomerization unit was obsolete and had been out of service for over 15 years. The site engineers were tasked with finding the most efficient, state of the art means for hydrogen measurement to replace the out-dated analyzer.

THE H2SCAN SOLUTION

Instead of replacing a thermal conductivity analyzer with the same technology, H2scan’s HY-OPTIMA™ Model 2700 in-line hydrogen analyzer was selected. The analyzer has been in operation for over 4 months and has resulted in a much simpler installation, better functionality and significantly less maintenance in comparison to a typical thermal conductivity analyzer.

PROJECT BENEFITS

H2scan’s HY-OPTIMA™ Model 2700 provides crucial information on the partial pressure of hydrogen across the catalyst. If the partial pressure drops below 125 psia, rapid coking of the isomerization catalyst occurs. This makes the H2scan analyzer a vital tool for confirming the condition of the catalyst and any potential upsets, ensuring the proper operation of the isomerization reactors.

H2scan’s analyzers do not require a reference gas for operation and provide a much smaller, simpler form factor than most alternatives. This results in simplified, less costly installation. An additional benefit is minimal maintenance required, providing significant cost savings over time.