



Reformer Area Linear Heat Detection

Sohar Port, Sultanat of Oman

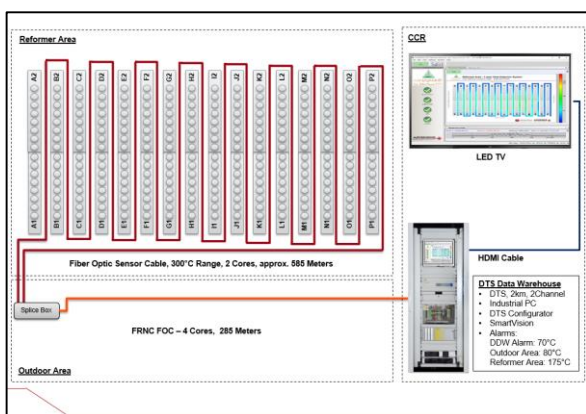
An AP Sensing solution was deployed in a reformer area for one of the leading producers of methanol in the GCC region. Our N4386B Distributed Temperature Sensing (DTS) technology is used to continuously monitor the temperature between the burner rows in the plant reformer area and to detect potential fires.

A large methanol company operates a plant that currently produces more than 3000 tons of refined methanol per day. The methanol plant is located close to the well-known Sohar Port in the Gulf of Oman; the company turned to AP Sensing's solution when required to monitor the high temperature reformer area, as this is perfectly adapted to its needs.

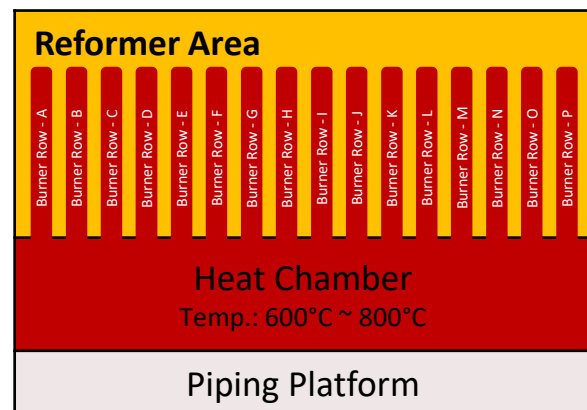
The project specifics involve monitoring temperature variations and detecting potential fires in a high temperature environment, utilizing a project-specific sensor cable for operation up to +300°C. The sensor cable has been deployed between two consecutive burner rows by attaching it to threaded rods at every meter. A transit cable is used as a carrier to reach the reformer area piping platform.

The DTS is configured to measure the sensor cable in real dual-ended mode to ensure reliable operation even when the cable breaks. With an update time of 20 s, every hot spot is detected in real-time. A maximum temperature threshold is utilized with a pre-alarm setting of 150°C and the main alarm at 175°C. In addition, AP Sensing's SmartVision™ asset visualization software is utilized to display at-a-glance temperature data over a monitoring screen in the control room.

AP Sensing's solution became operational on-site on December 27, 2017 and the entire system has performed to the satisfaction of the end customer since then.



Project Architecture



Site Overview