Floating Roof Tank Fire Detection

AP Sensing Provides Riyadh Power Company with Floating Roof Fire Detection Solution

The Riyadh Power Company in Saudi Arabia has 5 floating-roof oil tanks for which they wanted a state-of-the-art fire monitoring and fire detection system. Each tank is 30 m high and has a diameter of 30 m.

Working together with the local partner Tyco, AP Sensing was selected for their Linear Heat Series solution.

Floating-roof tanks in Riyadh

Foam extinguisher in foreground

The installation consists of 4 tanks in a cluster, with a 5th tank a few hundred meters away. The DTS unit and the fire alarm system are housed in between. A single fiber sensor cable is used to monitor the 3 km length of the monitoring system for all of the tanks.
A single DTS unit with 2 channels is used. Each tank is defined as a zone, with additional zones defined between the cluster, DTS housing, and the 5th tank.

*DTS (top) rack-mounted solution*

The alarm information is routed to the fire alarm system, and when the alarm conditions are met, they trigger an automatic foam extinguisher system.

*DTS fiber installation in and around the floating roof tanks*