IoT system to improve product stability and quality

Challenges

Maintaining an optimal temperature for a lubrication fluid is essential for product stability and quality. Wesco was asked to assist in the development of a control and monitoring system for glycol in the tanker rail cars housed in switching yards.

Inversion heaters have been used to optimize the temperature in each tank car but a system did not exist to remotely monitor and manage the cars. An IoT platform was envisioned to optimize control and allow remote management.

The Wesco engineering team, working closely with the integrator, needed to capture data from various sensors, present it in personalized dashboards and meet access requirements.

Summary

Customer

Integrator working with pipeline companies

Challenge

Remotely control and monitor a specialized glycol heating system to keep lubricant in rail tankers at a consistent temperature

Solution

Customized IoT solution and domain that allowed the integrator to grant secure access to various users

Results

Integrator's customer can more effectively transport specialized lubricant, which improves pipeline efficiency and eliminates need to dig new lines, saving time and money

wesco

Ingenuity delivered.

Wesco.ca

Wesco Builds IoT Solution to Improve Pipeline Efficiency

Solution

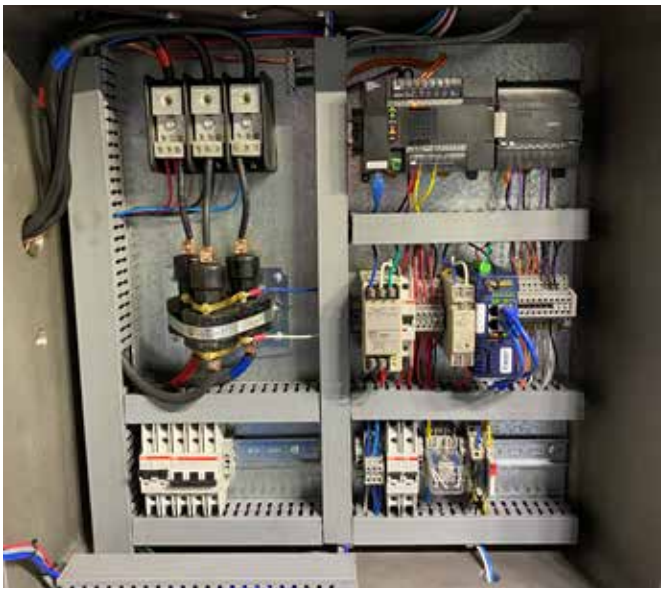
Wesco deployed its engineering expertise to build a robust and reliable IoT platform. Together with the integrator, we developed a strategy to send all the data to a centralized point of access for all the users, which included the integrator, oil company and rail car company. The IoT solution incorporated Exor IoT hardware and a SCADA/ dashboard interface with Exor Corvina cloud visualization software, a remote access network, and an Omron PLC interface to control the custom inversion heater.

Wesco set up the IoT domain to allow the integrator to grant access to the users, with the ability to set permissions, customize the graphics on the user's dashboard and create a secure site for each user to get the data they needed.

The integrator also had remote access to troubleshoot the system's specialized inversion heater, glycol tank circulation system and the 24 x 30 explosion-proof enclosure equipped with the Omron and Exor control units. By accessing the system remotely, the integrator gained increased visibility into events, efficiency logs and failures and could respond more quickly to issues that arose.

Results

An IoT solution that improves product stability and overall quality. The system proactively monitored the product and minimized overall costs, thus creating a competitive advantage for the transport company.



Learn how you can partner with us to drive ingenuity, Wesco.ca.

---

wesco

Ingenuity delivered.

Wesco.ca