

CASE STUDY

Global Energy Producer Deploys Real-Time Intelligence to Promote Compliance



SITUATION

Flare stacks are commonly used in many industries to safely burn off harmful waste gases and byproducts as operators manage plant safety and efficiency. Flare stacks are most commonly used by oil and gas refineries and drilling operations, but are also used by chemical processing, gas distribution and waste disposal companies. These industries have the challenge of minimizing harmful emissions, complying with regulations and managing the high cost of manual flare stack monitoring and maintenance.

Oil and gas extraction are high-stakes, technology-driven operations that depend on real-time onsite intelligence to provide proactive monitoring and protection against equipment failure and environmental damage.

When an energy producer reached out to WESCO and Anixter in search of a solution to help promote regulatory and environmental compliance while reducing maintenance costs, the Anixter team knew an Industrial Internet of Things (IIoT) solution was needed to produce successful and useful results, both technically and financially. However, the reality of these outcomes was challenged by:

- Harsh and remote environments
- Various legacy siloed systems
- Proprietary communication protocols
- IT/OT institutional barriers
- Lack of scalable discovery data from sensors
- High-volume/velocity streaming of data analytics

SOLUTION

We worked with WESCO and Anixter's network of Technology Alliance Partners to engineer a real-time audio and video analysis solution comprised of sensors, gateways, a communications system and artificial intelligence (AI), which was deployed across hundreds of the customer's flare stacks around the globe.

RESULTS

With automated real-time audio and video analysis and predictive AI, the energy producer has increased automation in monitoring their many flare stacks, reducing labor costs and the chance for human error. They have also achieved greater compliance, while decreasing operational expenditure (OPEX) and maintenance costs.

This project was completed under the name of Anixter.