North American Refinery Saves Valuable Maintenance Time with AMS Trex

RESULTS

- Reduced maintenance costs by approximately \$90,000 per year
- Eliminated approximately \$11,000 per year in field work costs
- Reduced risk to personnel safety
- Avoided unplanned downtime

APPLICATION

Configuration and troubleshooting of field devices is safer and more efficient by using the AMS Trex Device Communicator.

CUSTOMER

North American oil refinery that is a key supplier of diesel fuel.

CHALLENGE

A vital North American oil refinery has limited number of field technicians to maintain field instruments for the entire facility and needs a mobile device communication solution that will last a full shift and survive the harsh conditions of a refinery.

Technicians need to verify every field device before they get installed and troubleshoot device issues located in hazardous gas areas.

Using traditional asset management and diagnostic software running on a laptop or tablet is cumbersome and requires significantly more time to set up and maintain. In most cases, the technician needs to run back to the DSC room to get a laptop with the right software and pull a "hot" work permit if working on devices out in the field. If they need to verify device configurations in the maintenance shop, they need to find and set up a power supply, communications modem and loop resistor.

In addition, using an off-the-shelf laptop or tablet is not a reliable solution given their high annual average failure rate (12%) due to damage from everyday field use, and not a safe choice for hazardous gas locations. Either the laptop/tablet or the connection (via a modem) to the field instrument is prohibited in these areas.



"AMS Trex is a very valuable tool that is used about ten times a day."

Instrument and electrical reliability engineer



SOLUTION

To safely and efficiently configure and troubleshoot devices out in the field, refinery maintenance relies heavily on AMS Trex Device Communicators. AMS Trex provides technicians with a tool equipped with both advanced diagnostic apps and built-in device communications integrated into a single mobile device. Refinery technicians use their AMS Trex units approximately ten times per day to help complete tasks, saving valuable maintenance time.

With a rugged, intrinsically safe device communicator in hand, technicians avoid extra trips back to the DSC room and the need to pull a "hot" work permit, saving them at least one hour of maintenance time and an estimated \$90,000 per year. Specifically, technicians use the AMS Trex Radar Master App about three times per week to diagnose level radar gauges using the graphical echo curve capabilities to adjust radar gauges directly out in the field, saving an estimated \$11K per year.

When working with offline devices in the maintenance shop, technicians regularly use the AMS Trex to power the device functionality. They can quickly verify device configurations with the Field Communicator App or run a baseline valve signature test using ValveLink Mobile. This eliminates the time needed to set up and connect the device to a power supply and loop resistor.



©2021, Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. The AMS logo is a mark of one of the Emerson family of companies. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while diligent efforts were made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

Contact Us www.emerson.com/contactus

