Emerson Connected Services



Gas Chromatograph Connected Services Ensure Critical Measurement Performance is Maintained



Increase your productivity with remote connectivity!



With Connected Services you can:

Routine Maintenance

- Avoid unnecessary visits to remote locations
- Utilize On-Board
 Diagnostics to eliminate
 manual interventions
- Potential critical failures are identified before they happen
- Removes your dependence on internal Analytical Specialists on site

Unplanned Downtime

- Connected service = Preventive Maintenance
- Understand the impact a GC failure might have on your measurement before it occurs

Measurement Uncertainty

- Maximize performance of your Energy measurement systems
- Reduce risk of shrinkage/ lost and unaccounted for gas



Increase your productivity with remote connectivity!

Your first step to managing your installed base more effectively!

- Scale it Start small, focus on critical installations
- Can help you realize your investment in Emerson technology
- ▶ Helps **optimize maintenance spend** on by ensuring that the right chromatographs get attention when they need it
- ▶ **Identifies critical failure conditions** early, leaving you sufficient time to repair
- Provides an Emerson expert to help you with your issue
- Positively impacts your company metrics



Customer Success: Power - Gas Turbine Fuel

▶ GC measuring the energy on a fuel gas line to a power station



Allow uninterrupted operations while maintaining accurate and traceable measurement.



Issue Identified

Auto-Calibration Alert. Reduction in heavier hydrocarbon components analyzed by the GC.



Corrective Action

Using onboard diagnostics, issue was traced to failure of heater in calibration gas storage. Resulting mixture below minimum storage temperature resulting in hydrocarbon drop out.



- Issue identified promptly, eliminating need for specialist on site
- No loss of Fuel Gas Measurement
- Allowed electrical technician to repair GC foul

Increase your productivity with remote connectivity!

Customer Success: Industrial – Engine Supplier

A GC used to provide Energy (CV) & Wobbe parameters to tune Dual Fuel Engines



Maintain gas property and compositional data to plant production system for product testing.



▲ Issue Identified

Customer raised concern the GC was not analyzing correctly as no components above Ethane present on results.



Corrective Action

Using remote connectivity we were able to establish the GC was measuring correctly and that the plant was receiving ING from the network and not the assumed "normal" natural gas.



Results

- Customer avoided production issues with incorrect tuning of their product
- Changed process alarm configuration to catch the fuel change to allow actions

Customer Success: Gas Distribution

A GC used to provide Energy Value (CV) for consumer billing



Allow uninterrupted operation while maintaining accurate and traceable Calorific Value measurement



Issue Identified

Requested to carry out remote inspection and validation prior to 3rd party ISO10723 Performance Evaluation



Corrective Action

Using Connected Services our specialist was able to check the operation and condition prior to the performance evaluation test



Results

- Provide customer confidence the unit is operating to specification
- Remove the risk of an aborted test, wasted costs & site visit with a saving of \$5-6k



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