Total Care Field Instrumentation Services
Protecting Your Gas Metering Investments

Article

Background
As the gas industry environment becomes increasingly automated and complex, operating companies often focus their investments on improving their skills in the use of new technologies. However, the importance of asset health monitoring and maintenance should not be overlooked.

Honeywell’s Total Care Field Instrumentation Services for Elster products addresses the operational and business demands that gas firms face every day. Maintenance outsourcing and preventive maintenance strategies can provide relief from these challenges and improve bottom line by optimizing safety, efficiency, reliability, and uptime. They can also ensure continuity in gas measuring processes.

Now, more than ever, there is a need to leverage investments in control systems, field devices and data infrastructures. Changing markets, regulatory issues and complex supply chains require accurate, reliable measurements across operations.

Measurement and control equipment is central to a safe and profitable business, and is a potential critical point of failure. As the burden on these systems grows, so does the strain on people and processes supporting them.

Gas industry firms must address their entire operations from a business perspective to maximize return on capital expenditures. Undetected errors in measurement resulting in lost or unaccounted for gas can quickly erode profits, and the same goes for unplanned downtime.

Optimizing Asset Performance
As a leading global supplier of controls and instrumentation, Honeywell Process Solutions offers its Total Care Field Instrumentation Services for Elster products to help customers streamline start-ups and optimize their control system and instrumentation infrastructure. Honeywell’s solution provides personalized service and assistance throughout the life of automation assets.

Total Care Field Instrumentation Services for Elster products is backed by deep experience to support a wide range of metering equipment. Elster’s advanced gas meters, software and data analytics solutions for commercial, industrial, and residential applications are recognized for their reliability, safety, and accuracy. In the gas, electricity and water industries, they provide the capabilities and confidence needed for successful operations.

The goal of our Total Care Field Services is to stop operational problems from evolving into serious incidents or disasters. There is never a good time for vital equipment or instruments to fail. But with aging systems, increased complexity and regulatory pressures, failure to get the right support can mean a fault is just the start of the problem.

Total Care Field Services addresses the primary threats to a facility’s day-to-day safety, availability and productivity. The comprehensive services portfolio is intended to reduce the likelihood of failures, shorten recovery times, and eliminate skills and knowledge gaps.

The full scope of Total Care Field Instrumentation Services for Elster products works together to reduce problems that keep operations from performing at peak levels:

- **Reduce the probability of trouble** with regular maintenance; managed software updates and security; and planned, structured migrations
- **Minimize downtime when problems occur** through access to readily available parts, on-call service, and remote connectivity for troubleshooting and repairs
• **Close gaps in internal expertise** with 24/7 assistance, access to safety and regulatory compliance experts, and tailored training programs.

Total Care Field Instrumentation Services for Elster products offers a global, common, and simple framework that helps operating sites transition from reactive maintenance to a more effective, planned and profitable solution – avoiding surprises and unexpected expenditures. In particular, the services eliminate costs of repair and replacement which are inevitable when applying a run-to-failure approach.

**Specific service deliverables include:**

**Site Survey.** A comprehensive site survey provides an inventory of existing equipment, recommended instrumentation, and an evaluation of technical problems as well as external observations. It can also determine whether additional maintenance or repair will be necessary to help establish a preventative maintenance budget.

**Product and System Integration.** Service professionals provide integration and communication between other products and systems. They utilize the customer’s scope of work definition and a detailed explanation of their desired operation.

**Remote Monitoring:** Instead of waiting for problems to occur, why not rely on experts and/or advanced software tools to continuously monitor the condition of equipment, and collect accurate and reliable information? This helps to minimize support calls, reduces the number of unscheduled or unnecessary service visits, and increases uptime to further enhance productivity.

**Device Diagnostics:** In-situ flowmeter verification determines actual meter performance in operation. Data collected on-site and analyzed at the factory determines meter and installation conditions. The analyses can detect misreading due to installation effects, equipment damage and it can be used to forecast metering accuracy over the meter’s range.

**Verification and Validation:** Services are offered to keep gas measurement devices in the best working order. Checking all equipment against required accuracy protects businesses from costly measurement errors. Verification tests are tailored to specified tolerances to meet all necessary industry standards and contractual agreements.

**Commissioning:** Technicians provide the assurance that equipment installation is done correctly and perform a final inspectional to mitigate risk of any potential problems.

**Calibration:** End users in Belgium and The Netherlands can minimize process shutdowns with on-site check-up and calibration of rotary and turbine meters. Eliminating the need to send equipment back to the factory, our mobile test bench can help reduce the costs of checking, calibrating and, where appropriate, repairing equipment.

For other countries, calibrations can be done at our onsite certified calibration labs.

**Training:** Results-driven training – whether in-house or on-site – improves productivity, with instruction tailored to cover operation, commissioning and maintenance.

**Enhancing Maintenance Strategies**

Honeywell’s Total Care Field Instrumentation Services for Elster products looks at the entire gas metering equipment lifecycle from a service perspective. The services employ the versatile Meascon™ system to optimize condition-based maintenance (CBM) to avoid any misreadings or asset failures, and identify potential problems in advance.

Gas industry companies can use Meascon to evaluate the health and performance of critical metering equipment, and then take appropriate steps to optimize its service longevity and overall lifecycle results. Users are able to implement effective preventive maintenance strategies and minimize instrument calibration requirements in order to reduce operating expenses.

Thanks to the Meascon solution, the condition of gas metering systems can now be monitored...
continuously by gathering relevant data that is available at the primary and secondary measuring devices in the field. The system automates condition-based monitoring 24/7, detects problems before they occur, and helps to keep measurement uncertainty as low as possible.

Meascon allows for easy health monitoring of a complete metering system. Its powerful condition-based monitoring capabilities detect any significant change either in the flow meter itself, or in the process and environment in which it is operating.

When traditional time-based maintenance (TBM) is used, measuring instruments are calibrated at regular intervals, whether they need it or not. If a risk-based maintenance (RBM) method is applied, the calibration frequency is reduced after a satisfactory level of stability has been demonstrated.

extend the periods between calibration intervals specified by regulatory authorities. This, in turn, may result in a shift from a regime of “calendar-based” off-site calibration to off-site calibration “as required.”

**Value to Gas Industry Customers**

Honeywell’s Total Care Field Instrumentation Services for Elster products can help gas industry organizations of all types and sizes achieve their business objectives, reduce or contain operating and service costs, and keep metering assets running at peak levels of performance.

Knowledgeable and well-equipped support teams deliver proven, in-depth domain and product expertise. They provide the right solution for faster resolution of critical issues.

**Key benefits include:**

**Improved safety.** Total Care Field Instrumentation Services for Elster products helps customers work with dangerous processes or environments. Safeguarding essential measurements, readings, and control functions, the services make safe operations possible. Dependable 24/7 remote support is not only for technical and operational issues, but also for safe operations.

**Increased reliability:** Honeywell’s services optimize the health of equipment assets to reduce incidents. They help prevent unexpected downtime and get equipment back up and running quicker when faults occur. Ensuring the right working conditions for a profitable business, this solution helps maximize uptime and minimize the cost of failures.

**Greater efficiency:** The Total Care Field Services offering safeguards the precision, traceability, and quality control that determine business success. Thanks to their expertise in custody transfer applications where small errors can have a big impact, Honeywell service specialists can keep operations running efficiently, while keeping maintenance costs controlled.

With Honeywell’s Elster products, customers have access to advanced technology for high-accuracy custody transfer and high-reliability gas regulation. These solutions not only set the standard for accuracy and reliability, but thanks to a world-class organization delivering superior Total Care Field Instrumentation Services, they also provide an excellent lifecycle experience.

Key to an effective service solution is Honeywell’s CBM system, Meascon™, which fully integrates Honeywell’s high-pressure products (such as ultrasonic meters, flow computers and gas chromatographs) and takes performance to the next level. Meascon enables gas operators to implement effective preventive maintenance strategies and minimize instrument calibration requirements in order to reduce their operating expenses.

With TBM and RBM, meters are calibrated even when nothing is wrong. Meascon’s historical diagnostic information can be used as a basis to
For More Information
Visit Honeywell Elster Precision Solutions or contact your Honeywell Account Manager, Distributor or System Integrator.

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