

Italian waste-to-energy plant operator engages ABB to clear the air



This long-time ABB customer went all-in with ABB to simplify maintenance, improve performance and reduce costs. Now, ABB monitors and manages all emissions monitoring equipment for the operator on an enterprise level.

Too many contracts, too much management

Meeting emissions targets is a serious matter. Regulators can impose large fines up to and including plant shutdown for producers that fail to meet targets. When a southern European waste-to-energy plant operator needed help meeting clean air regulations, they turned to ABB.

The operator was a longstanding ABB customer, but had separate service agreements for each of its 13 facilities. Even though these agreements were effective in providing what they desired, such as 97.5 percent air emission monitoring uptime, managing all these contracts was complex and time-consuming. It was also difficult to track which ABB services were provided at each site. Therefore, the operator sought a way to optimize their contract management, remove as many inefficiencies as possible and find cost-savings opportunities related to on-site labor and corrective maintenance visits.

Additionally, the customer was tired of managing multiple service providers. They desired a single supplier that could take care of all equipment regardless of vendor and manage the reporting requirements needed to remain compliant. The customer didn't want to continue managing technical, time-consuming tasks, such as gas cylinders supply, spare stock management, and backup analyzer maintenance, as these tasks require a more advanced technical knowledge and ownership by a specialized crew member in each plant.



To address all of these needs, they asked ABB to construct a comprehensive service agreement that would cover all of their operations with the same set of services.



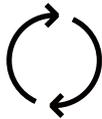
Solution

To keep the operator's sites running without issue, in August of 2018, ABB combined all of their separate service agreements into a comprehensive ABB Measurement Care agreement. The Care agreement identified three basic levels of service, and ensured services the customer routinely needed were included under one of these levels.



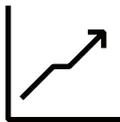
Rapid Response:

- 24/7 telephone and remote assistance support
- 24/7 spare parts management availability
- 24/7 service engineer mobilization
- 24/7 ready-to-operate spectrometer exchange unit



Lifecycle Management:

- On-site preventive maintenance
- Spare parts supply and inventory management
- Supply and management of gas cylinders (including consignment stock at local ABB offices)
- Calibration of production and back-up gas analyzers



Performance Improvement:

- Remote condition monitoring
- Predictive service recommendations

Beyond just conducting current operations more efficiently, this long-time ABB customer wanted to boost the outcome of a traditional preventive maintenance approach. By implementing the predictive maintenance approach of ABB Ability™ Condition Monitoring for measurement devices, equipment can be actively monitored and managed to prevent problems from arising in the first place. It also allowed the customer to move to a planned upgrade cycle for assets, resulting in product lifecycle extension and an increase in return on investment.



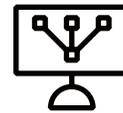
Analyzer



MicroPC

Step 1

Connect gas analyzer to industrial microPC



Health data

Step 2

Analyzer's health data is relayed to ABB service engineers for further analysis



Remote service center

Step 3

Analyzer's health data is used to provide service recommendations

Results

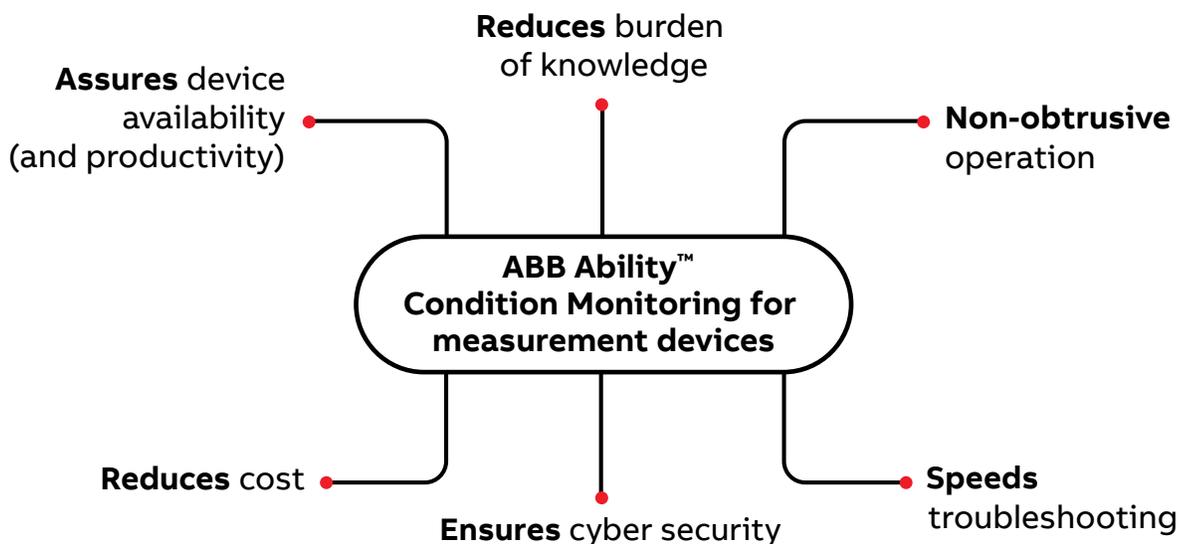
The customer now has a comprehensive service agreement that eliminates redundant administrative costs. The ABB Ability™ Condition Monitoring for measurement devices component of the Care agreement improves its overall maintenance approach, reduces emergency repairs, and increases the availability and accuracy of measurement data the customer uses to show compliance with environmental regulators. In addition, this approach increases the efficiency of the existing workforce, and identifies and addresses equipment problems before they can slow or halt operations.

Benefits

ABB Ability™ Condition Monitoring for measurement devices ensures the highest level of availability and reliability of equipment, as well as prevents unplanned

outages and downtime. This helps the operator avoid serious potential costs and risks, gives them peace of mind since equipment is kept in peak operating condition, and provides a streamlined process since one supplier is responsible for all equipment management and maintenance.

Further, the solution allows ABB to optimize maintenance and enables immediate troubleshooting, which reduces travel expenses and on-site hours for ABB engineers, with savings passed on to the customer. Detailed remote health checks increase the data quality of the analytical systems. These improvements enhance overall maintenance efficiency conditions and can extend the lifecycle of equipment.



Features	Benefits
Non-obtrusive continuous remote condition monitoring featuring remote assistance with agreed response time	Assures emissions measurement compliance and ensures continuous production
Scheduled remote access to ABB local service personnel, factory support with agreed frequency, and dedicated support number	Reduces burden of knowledge (expertise) on your personnel
Schedules remote product health checks and generates reliable early warnings that recommend maintenance actions	Speeds troubleshooting and avoids interruptions to daily operations — diagnostic data and history are immediately available to remote ABB experts
Monitors for critical aspects of equipment condition	Reduces costs and risks to production
All connections and communications are end-to-end encrypted (Connected and On-premise variant available)	Ensures cyber security — Fully compliant with ABB's stringent cyber security guidelines and requirements

To find your local ABB contact visit:
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