# Calibration Excellence with AMS Device Manager and Beamex's CMX

- Streamline work processes to reduce time spent on calibrations
- Eliminate calculation and transcription errors with electronic workflows
- Automate documentation for regulatory compliance
- Extend calibration intervals based on historical sensor drift trends
- View overall asset health combined with calibration history



Use the Calibration Excellence solution from Emerson and Beamex to simplify calibration activities and ensure regulatory compliance.

# **Calibration Excellence Overview**

Beamex and Emerson have partnered to offer Calibration Excellence, a best-in-class solution for managing calibrations. This solution delivers the benefits of a complete automation asset management and premier calibration management functionality in an integrated solution.

Calibration Excellence enables you to streamline calibration work processes and eliminate up to 50% of time spent on each calibration. Electronic workflows provide a paperless system where calculation errors and transcription mistakes are eliminated. In addition, all calibration information is automatically recorded to ensure the accuracy and validity of as found/as left records. Automated records make compliance audits easier and also can provide the data needed to justify extending the period between calibrations.

The Calibration Excellence solution includes Emerson's AMS Device Manager, Beamex's CMX calibration software, and the AMS Device Manager Calibration Connector – which provides a communication link between AMS Device Manager and CMX.

## Why Calibrate?

Environmental conditions, elapsed time, and type of application can all affect the stability of an instrument, and instruments from different manufacturers can show varying performance.

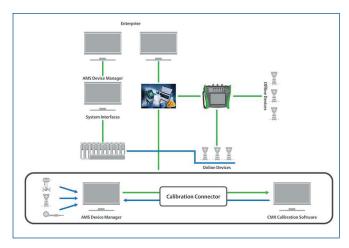
Regular calibration of instruments helps maintain a high level of performance and safety in processes, as well as controlling emissions or maintaining other environmental regulations.

Regular calibration will maintain the credibility of measurements and the quality of process measurements at a good-as-new level, enabling you to run your process with finer control.

Some industries are more regulated than others, and often, rigid calibration schedules are necessary to maintain compliance. Mistakes in calibration records or missed calibration tests are especially costly, as they can result in lost batches, fines, or other sanctions.







Data transfer between AMS Device Manager and CMX is seamless and can be scheduled to run automatically.

#### **Improving Calibration Practices**

For process manufacturers, regular calibration of instruments is common practice. In areas where instrument accuracy is critical to product quality or safety, calibration every six months – or even more frequently – is not unusual. However, the critical final step in any calibration process, documentation, is often neglected or overlooked because of a lack of resources, time constraints, or the pressure of everyday activities. Many manufacturers outsource some (or all) of their maintenance activities, meaning that the contractor needs to calibrate plant instruments quickly and accurately, while ensuring that results are then documented for quality assurance purposes and full traceability.

By using a documenting calibrator, results are automatically stored in the calibrator's memory during the calibration process. The calibration results are then transferred automatically from the calibrator's memory to a database. Users do not have to manually record the results, making the entire process much faster and less costly. Quality and accuracy of calibration results also improve, as there are fewer mistakes due to human error. Calibration Excellence combines the best of online instrument asset management with best-in-class calibration management software. Fully configurable reports, calibration certificates, and an increased number of supported documenting calibrators are available in a paperless electronic signature environment, compliant with the FDA's 21 CFR Part 11.

### **An Integrated Solution**

Using the Calibration Excellence solution integrates your asset management and calibration management software environments. The AMS Device Manager Calibration Connector links the two platforms to create a single database for calibration records. With the Calibration Connector, it is easy to transfer data between AMS Device Manager and CMX. Since all the device information pre-exists in AMS Device Manager, there is no need to manually re-enter it in CMX. Even if a device is replaced or reconfigured in AMS Device Manager, the new information is automatically transferred to CMX. Through the integrated connection, device information is always synchronized, making it easier to manage calibrations and ensuring that you are always looking at the most updated information.

In addition to reducing the time taken to set up the CMX system, this integration ensures that the calibration test procedure details match the actual transmitter under test. The use of documenting calibrators to execute test procedures further reduces the risk of human error, saving time and improving calibration consistency.

#### **AMS Device Manager**

Calibration is just one aspect of asset health. Having calibration data integrated within an overall asset management system provides you the full view of factors affecting a given asset's health, enabling you to make smart decisions on maintaining all of your assets.

AMS Device Manager can also reduce commissioning and maintenance expenses while improving plant availability and product quality. In process industries where lost production from slower startups and longer downtimes can cause millions of dollars in lost revenue, plant personnel need accurate, real- time information. AMS Device Manager saves time and money by delivering valuable diagnostics information already contained within a plant in a clear, meaningful way. This means plants can act before the process is affected by poor quality, or worse, a costly shutdown.

For more information on the Calibration Excellence solution, please contact your Emerson or Beamex sales representative.

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