

The Complete Calibration & Configuration Management Solution

Calibration Management

Calibration Alerts

Alert settings based on, for instance, calibration due date are assigned to devices and calibration equipment. When the criteria for the settings are met, the associated device is reported to an Alerts Log for easy access and disposition.

Calibration Procedures

Calibration procedure details, such as methods for error calculation, number of test points, transposition equations, and pass/fail criteria can be developed and applied to devices individually or in groups. These procedures are maintained in a library for future use and editing.

Scheduling/Planning

Calibration due dates can be assigned to devices, optimizing productivity through planning of calibration activities. Due dates can be assigned according to quality control, Safety Instrumented System ratings, or any other critical requirements. User definable pre-notices can be applied to alert users.

Action Lists

An Action List is the tool that DMS uses to group multiple activities, which can be assigned to calibration and maintenance technicians. The Action List is downloaded to the MFT and acts as a "To-Do List" of activities. The Action List activities are tracked by DMS to ensure completion of assigned activities.

Preventative Maintenance

Utilization of the Action Lists and scheduling features enable the development of a preventive maintenance plan based on manufacturer's recommended calibration cycles, plant standard practices, or historical activity for a device.

Device History (Audit Trail)

Any action performed on a device is electronically stamped with date, time, user, description of activity, user ID and notes. Each device has its own log of associated activities. Trending of calibration results over the history of the device can be reviewed for predictive maintenance.

21 CFR Part 11 Compliance

The entire DMS Solution; DMS Software, MFT Calibrator, and the MFC HART Communicator have the Option of being 21 CFR Part 11 Enabled. Customers that are regulated by this standard can utilize the 21 CFR Part 11 related features to assist in meeting compliance requirements. This option can be added as an option upon original purchase or at a later date.



DMS

3rd Party Software Integration

DMS has a provision for the Integration of original manufacturers' software for devices like control valves, radar level devices, and flowmeters.

This enables management of device diagnostic and configuration information by DMS without requiring revisions to DMS every time a revision is made to the 3rd Party Application.

Configuration Management

Meriam is the only single source manufacturer of a calibrator, communicator, and software that uses the same base technology for documenting changes to device configuration parameters. Smart field devices have parameters and values that make up the device configuration. Configuration changes can be made by direct communications from DMS to the Device via HART Modem, from the MFC (HART Communicator), or the MFT (Calibrator/Communicator). The integration of DMS with the MFT and MFC provide an advanced approach to device configuration management that is unmatched in the industry.

Device Specific Cloning

New devices can be configured and installed by copying similar existing devices. The user can clone the device information from multiple sources; an off the shelf device, the DMS database, or the DMS library of standard devices.

System Cloning

Copying of device information can be performed on a system basis as well. A system can be copied and used as a baseline for developing a similar system for a new division.

Documenting Process Calibrator (DPC) And Communicator Interface (MFT-4000 or MFC-4100)

Calibration Equipment Tracking

The MFT, modules, and MFC are electronically registered with DMS via the DPC Interface. Every action performed is associated with the unique ID of the equipment used.

Documenting Calibration and Configuration Data

The Documenting Process Calibrator/communicator (DPC) reads and stores calibration test points/results (As-Found/As-Left), and device configuration changes.

Upload/Download Functions

Calibration Schedules (Action Lists) are generated by DMS and downloaded to the DPC for processing. Once the activities of the action list are completed and documented by the DPC, the information is uploaded from the DPC to the DMS database. DMS tracks work-in-progress, planned calibration, and planned configuration activities.

Device Management System (DMS) Software

MS SQL Data Server

Powerful Microsoft SQL data server provides network access via the DMS client application. This widely used database platform enables connectivity to other plant solutions.

Import/Export Utilities

Device data can be imported via DMS generated templates for the initial population of the DMS database and for exchanging data with other applications. Data that is imported can be mapped to the device's HART configuration parameters. This also provides non-HART applications a "portal" to the device configurations.

Activity Logging

Logging of activities related to a device such as alerts, configuration, calibration or any other action that impacts a device.

Reporting/Queries

Standard reports, such as calibration certificates, activity log, and scheduled activities. The user can generate custom queries that can be printed or exported for use in other applications.

Associated Docs.

Provides links to relevant documents such as technical specifications, calibration certificates, standard operating procedures, and CAD documents. When selected, the documents open in their native application.

Industry Standard Compliance

Field Calibrator Interface Support

DMS uses an open standard for communicating between Documenting Process Calibrators (DPC's) and DMS.

OPC Compliance

DMS will comply with OLE for Process Control (OPC) which will enable interface with Plant DCS software and other Enterprise applications. Consult factory for availability.

Non-Proprietary

The DMS and MFT utilize a Device Object File (DOF) to communicate with smart devices. Although the DOF technology is protected, full access to the technology is available through the Device Management Solution's open interface architecture.

Software Development Kit (SDK)

DMS will offer a tool kit of function calls and defined parameters that will enable software developers to integrate their applications to our solution. Consult factory for availability.

Plant Application Compatibility

The DMS application was developed using SQL server database, which has features that lend itself to supporting ODBC data exchange and functionality with other plant applications. The DMS has export/import capabilities to support manual data exchange including features to map data from/to other popular device databases.

Ordering Information

DMS Client & Server Software

DMSBASXX-11-1 Calibration & configuration management where "xx" is 01, 05, 10, or 15 for number of clients.

DMSCFG01-11-1 Configuration management only

DMSCAL01-11-1 Calibration management only

DMS Documenting Process Calibrator or Communicator Interface to DMS

DMSDP01-CFG HART Field device configuration data interface

DMSDP01-CAL Calibration procedures / results data interface

DMSDP01-ALL Calibration & Configuration data interface

To place an order, or request additional information, please contact us at 800-817-7849. For a full list of Meriam's Representatives worldwide, visit us at www.meriam.com.

