Calibrate™

ENTERPRISE-LEVEL CALIBRATION MANAGEMENT
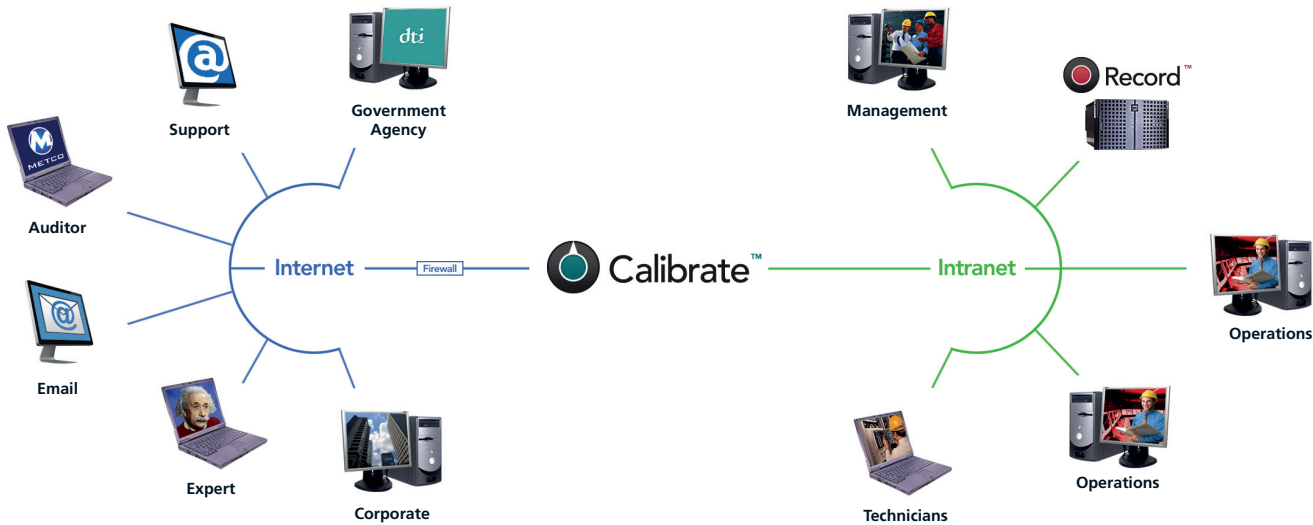
www.ambrit.com/calibrate

Calibrate™

Introduction

Historically, important calibration data has been recorded using individual, uncontrolled and unvalidated spreadsheets that are often randomly filed with no structure or traceability and locked away on the technician's own laptop. Ambrit Ltd., working with METCO, has developed the next generation of calibration management software, Calibrate™, which uses the latest web technology to manage the entire calibration process online, including scheduling, calculations and reporting.

With Calibrate™, up-to-the-minute calibration data from every aspect of the operation can be shared instantly and securely across the entire corporate intranet or securely over the Internet, providing technicians, auditors, operations and management with easy access regardless of their location.

METCO have applied their considerable metrology experience to build an extensive library of metering based calibration templates. These templates have been embedded directly into the Calibrate™ software. Every time a technician performs a calibration using Calibrate™, it is validated using calculations that have been rigorously tested and audited by METCO's team of metering experts.

Calibrate™ automatically schedules upcoming calibrations and maintains a detailed record of every calibration performed, providing an accurate and auditable trail; demonstrating best practise and improving the accuracy of the metering data to manage the uncertainty of the asset.

It's not just about the software. METCO expertise is on hand every step of the way - from the initial on-site equipment inspection, through to calibration template configuration and writing the calibration procedures - to help create the ideal calibration programme.

Calibrations

All calibration templates have been designed and approved by METCO engineers using strict quality assurance procedures to ensure compliance with the many and varied standards operated worldwide. Calculations, parameters, measurement units and conversions are strictly regulated within the templates.

Each Calibrate™ template has been clearly laid out on a single page form, presented to help guide the technician through the calibration process. To further simplify the operation, operating

procedures can be attached to a template to detail exactly how the calibration should be carried out.

Once all the calibration findings have been entered, they are submitted to the server for validation; the results are presented as a calibration certificate and automatically marked with the pass or fail status "As Found", "As Left" or "As Found/As Left".

Every calibration can be augmented with file attachments - including scanned documents, digital photographs, PDFs, spreadsheets, text, audio and video files - which can be retrieved and viewed through the browser interface.

Calibration Scheduling

Every piece of equipment on a metering system needs to be calibrated regularly to ensure optimal performance. Calibrate™ maintains a full schedule of calibrations and features an intuitive graphical calendar which can be filtered to show overdue, current and future calibration events for each metering station or just a single piece of instrumentation.

The calibration scheduling process can be managed exclusively by Calibrate™ or extended to integrate with external business systems such as SAP® or Maximo®.

The schedule can also be sent via email with automated email prompts informing designated personnel about upcoming events.

Calibration History

Calibration data for every piece of instrumentation is collected and stored in the database, providing a complete and auditable calibration history for the system.

This historical data can be analysed using integrated tools to assess performance; charted trends of tolerance errors can be used to determine long-term calibration scheduling requirements or highlight equipment that is problematic and needs to be serviced or replaced.

Metrology

Calibrations on their own don't give a complete picture of how metering instrumentation is performing; metering data from many other sources must be taken into account. Calibrate™ is part of the Metrology suite which also includes applications for data collection, meter performance management, calibrating equipment and recording logbook events:
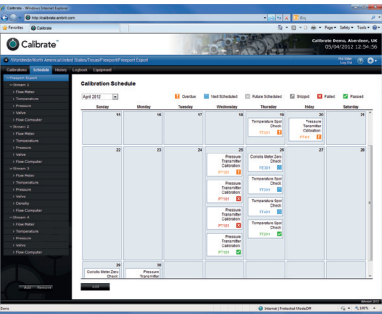
Profile™	Data collection and reporting
Approve™	Meter performance management
Calibrate™	Calibration management
Inspect™	Audit management and reporting
Record™	Inventory and event logbook

The applications can be deployed as stand alone solutions or linked together to provide a unique platform for collection, analysis and reporting of metering data.
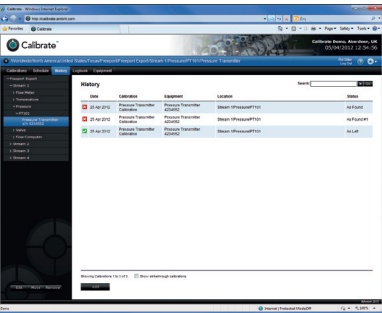
Inventory™

At the heart of Metrology is Inventory™, an equipment register which maintains a record of all the equipment in service on every asset, including location, model number, manufacturer, serial numbers and service status.

Once the equipment has been defined in Inventory, it can be shared with any of the other products in the Metrology suite and integrated with Acquire™, Ambrit's data acquisition and control system.
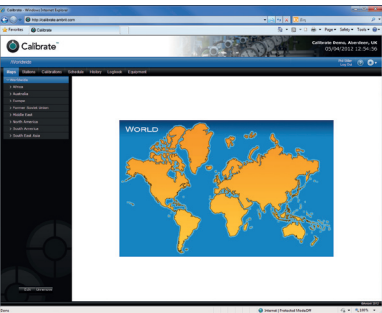
▲ Calendar

▲ History

▲ Trend Chart

▲ Equipment List

▲ Map
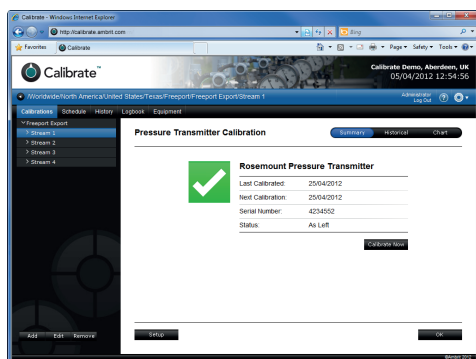
▲ Calibration Certificate

▲ Calibration Entry

Calibrate™

Ambrit Ltd.'s leading edge web technology is reflected in the new Metrology suite of web enabled metrology asset management applications, created to streamline the collection and management of metering data.

Calibrate™, developed in conjunction with leading metrology experts METCO, is a web enabled application designed to manage the entire calibration process online, including scheduling, calculations and reporting.

Calibration data for every piece of instrumentation is archived in the Calibrate™ database to create a complete calibration history for multiple stations. The archived data forms an invaluable resource for conducting a wide range of performance analysis.

Calibrate™ also streamlines calibration scheduling; maintaining a calendar of events and emailing notifications to key personnel.

A unique feature of Calibrate™ is its ability to share data with any of the other applications in the Metrology suite. For example, data can be transferred automatically from Calibrate™ to a Record™ logbook to record key calibration events. The calibration data is interlaced chronologically with the logbook data to provide a comprehensive audit trail.

Calibrate™ features an extensive library of metering based calibration templates which have been tested and audited by METCO's team of metering experts. In addition, a bespoke template development service is available to meet the individual requirements of end users.

Ambrit Ltd
Castle House, 102 High Street, Northchurch, Herts, HP4 3QN, UK
UK Tel   +44 (0) 1442 866294
US Tel   +1 713 489 1570
E-mail   sales@ambrit.com
Web   www.ambrit.com

Calibrations

- Multiple installations / multiple stations
- METCO's library of approved ISO and AGA calibration templates
- Single page calibration entry forms
- Operational procedures
- File attachments
- Server validated calculations
- "As Found", "As Left" or "As Found/As Left"
- Calibration certificates
- Online / offline calibrations
- Template change history tracking
- Bespoke template configuration service

Schedule / History

- Calendar driven schedule
- Automated e-mail notifications
- Complete calibration history
- Built in calibration analysis tools
- Historical trending

Web Interface

- State of the art web-based HMI
- Intuitive navigation
- Powerful search
- Multi-user access
- Multi-language support
- Browser access using Internet Explorer® 7 or greater
- Secure access via private networks (Intranet)
- Secure access via World Wide Web (Internet)
- World-wide overview via Inventory™
- Low bandwidth communication

Secure

- Integrated 256 bit SSL encryption
- Digest authentication for secure password control
- Individual user access privileges

Integration

- Link to Record™, Inspect™ and Profile™
- Interface with SAP® or Maximo®

Metrology™

Calibrate™ is one of the components in a suite of web enabled metrology asset management applications:

Inventory™
Equipment and location database

Profile™
Data collection and reporting

Approve™
Meter performance management

Inspect™
Audit management and reporting

Record™
Inventory and event logbook

Further information on Calibrate™ is available from Ambrit's website:

www.ambrit.com/calibrate