CALIBRATE™

....the solution to web enabled metrology asset calibration

METCO Services Ltd. has been a world leader in metrology asset management for more than 30 years. This expertise, along with Ambrit Ltd.'s leading edge database and communications technologies, are reflected in a new suite of web enabled metrology asset management applications.

The suite includes software tools designed to streamline the operations involved with event logbooks, calibration and scheduling, auditing and data archiving. The four software tools can be implemented as stand alone solutions or combined using Inventory™ to provide a unique platform for collection, analysis and reporting of metering data.

Calibrate™ is one element of the suite, a QA controlled application designed to streamline the calibration process.

All data is archived to create a complete calibration history for every piece of instrumentation in a system. The archived data forms an invaluable resource for conducting a wide range of performance analysis.

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

METCO provide an online, comprehensive configuration and template development service to meet the changes in measurement control technologies, procedures and philosophies.

In the 21st Century people and systems will work together to share information smarter and faster than ever before. METCO are committed to evolving the web-enabled metrology suite to meet the challenges of the future. New features, enhanced performance and increased interactivity will keep pace with technology as it changes.

Webspring™

METCO's metrology asset management suite builds on Ambrit's foundation technology Webspring™, providing a robust, secure, real time, web enabled database and communications environment. Webspring's innovative features enable engineers to interact with systems in dynamic new ways, allowing them to share data and work remotely with ease.

The low bandwidth communication requirements of Webspring™ applications enable integration with the latest data carrier technologies including GPRS and Satellite, pushing the boundaries of web enabled data acquisition to provide secure access to instrumentation in remote corners of the world.

Support

Calibrate benefits from system support through the Internet. METCO and Ambrit can now fully support systems remotely, effectively reducing support costs to a minimum.

These and many other features make Calibrate™ a truly integrated web enabled technology, enabling high integrity browser-driven communication using private Intranet networks or world wide via the Internet. International metrology asset management is now an economic reality.

Calibrate™ Features

- METCO's suite of ISO and AGA calibration templates
- Calendar driven schedule
- Link to Inventory™, Record™, Inspect™, Archive™, Acquire™
- Custom calibration templates
- Custom test equipment templates
- Metrology asset performance monitoring
- Intelligent data filtering
- Powerful search facilities
- Built in calibration analysis tools
- File attachments including scanned document, digital photo, video, sound etc.
- Audit Trail meeting regulatory requirements
- METCO configuration service
- Third Party application integration interface

Web Based

- Fully HTTP 1.1 standard compliant
- Browser access using Internet Explorer® 6.0
- Secure access via private networks (Intranet)
- Secure access via World Wide Web (Internet)
- World-wide integration via Inventory™
- Multi-language support
- Low bandwidth communication

Secure

- Integrated 128 Bit SSL Encryption
- Digest Authentication for secure password control
- Multi level user access

Graphic Rich Interface

- State of the art HMI
- Intuitive navigation
- Prompted response handling
- Context specific input fields and pull down menus

Reports

- Custom reports
- Printer friendly reports
- Auto e-mail with attachements
- MPEG Video events

METCO - Metrology Asset Management

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

Inventory™
Equipment and location database

Inspect™
Audit management and reporting

Record™
Inventory and event logbook

Archive™
Documentation management

All components are interactive and web enabled, sharing data and events to provide a complete solution to metrology asset management. Further information on Calibrate™ is available from METCO's web site:

www.emersonprocess.com/metco/calibrate

CALIBRATE™

METCO

Introduction

For several years custody transfer metrology has relied on computers to schedule and support the calibration of key instrumentation.

METCO Services Ltd., working with Ambrit Ltd., has now developed the next generation of calibration management software. Calibrate™ leverages the complimentary skills of both companies, blending METCO's metrology science with Ambrit's leading edge database and communications technology.

Designed to streamline the calibration process offshore and onshore, Calibrate™ has many unique and innovative features that support its next generation status.

Calibrate™ can be used as a local, stand-alone package or integrated with one or more of the applications in METCO's "Web Enabled Metrology Asset Management" suite.

Data can be disseminated securely and in real time through local private networks and worldwide through the Internet, enabling technicians, auditors, operations and management to access and interact with calibration records regardless of location. International communication is enhanced by a multi-lingual interface that enables Calibrate™ to be viewed in many languages.
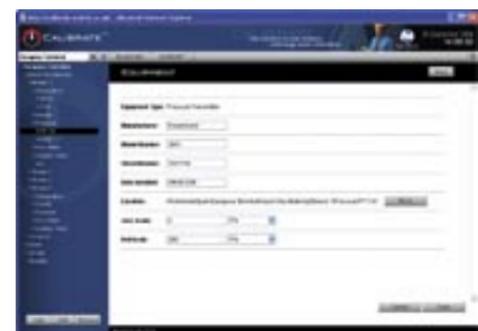
The ability to access and share information worldwide contributes to reduced systems uncertainty, leading to greater effeciency, safer operations and improved financial returns from the asset.

Inventory™

At the heart of Calibrate™ is Inventory™, an asset register which maintains a record of all the equipment in the system, including equipment location, service status and calibration history.
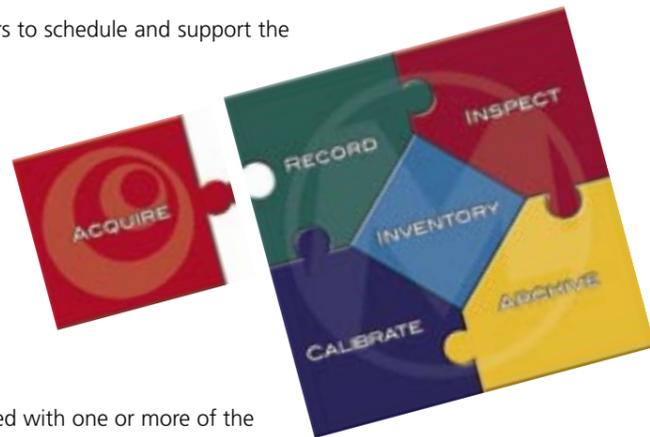
Inventory's™ index can also be shared with the other products in the suite, (Record™, Inspect™, and Archive™) and integrated with Acquire™, Ambrit's data acquisition and control system. Data from third party systems can be linked with the Inventory™ portal to provide a single world wide window into the metrology data.

Inventory's™ intuitive graphical interface guides the user through the database to pinpoint a specific item of equipment. Once the equipment is selected it is possible to view source data from any associated products in the metrology suite.

Inventory™ enables the index function to be extended to servers in other geographical locations via local intranet networks or world wide through the Internet.

▲ **Equipment List**

▲ **Equipment Detail**

Calibration Management

High integrity measurement and control systems require that the calibration of instrumentation must be regulated and recorded accurately. To assist this process Calibrate™ maintains a calendar of calibration requirements, providing technical managers with a list of overdue, current and future calibration events. The calendar can be accessed and updated from any point on the network.

The calibration schedule for individual equipment is assigned during the calibration set up process and is automatically added to the calendar. Calendar data can be filtered using a wide range of search criteria to generate calibration schedules that can be viewed on screen or output to a printer. Automated email prompts are sent by the system, informing designated personnel about events in the calibration schedule.
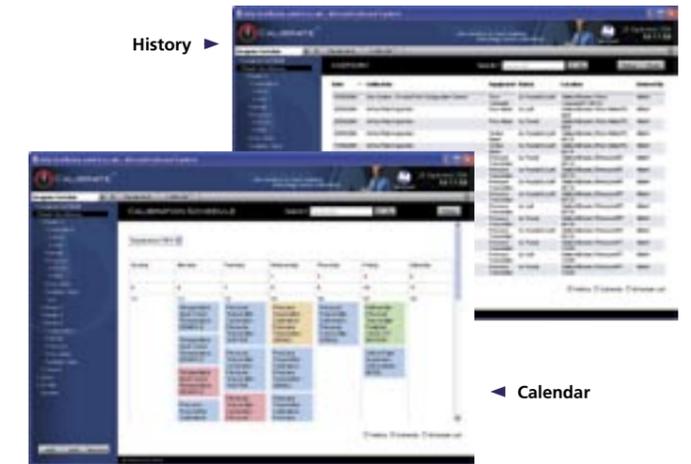
All calibration templates have been designed and approved by METCO engineers using strict Quality Assurance procedures to ensure compliance with the many and varied standards operated world wide. Assignment of calculations, measurement units and conversions are strictly maintained within the templates.

The functional calibration procedures and calculations used to certify the calibration are presented using high quality, graphical pages with pull down menus and automated prompts, logically laid out to aid the technician through the calibration process. Operational procedures can be attached to the calibration templates detailing how a calibration should be carried out. The results are presented and stored showing their pass or fail status.

Calibration data and procedures can be augmented with file attachments including scanned documents, digital photographs, PDFs, spreadsheets, text files and video. File attachments can be retrieved and viewed with the calibration record though the browser interface.

Data archived by Calibrate™ can be analyzed using integrated tools to provide statistical data on performance of instrumentation. Charted trends of tolerance errors can be used to determine long-term calibration scheduling requirements for equipment.

Calibrate™ provides a unique platform for sharing data relating to the calibration of key instrumentation used in measurement and control systems, ensuring that those responsible for maintenance and auditing have immediate access to critical information.

History ►

◄ Calendar

▲ Setup

▲ Calibration

▲ Chart

Video Attachment ►

Calibrate™ Topology

Auditors · Support · Email · Government Agency · Expert · Corporate · INTERNET · FIREWALL · Management · Server · Technicians · Operations