



***...the solution to web-enabled
metrology logbooks***

www.ambrit.com/record

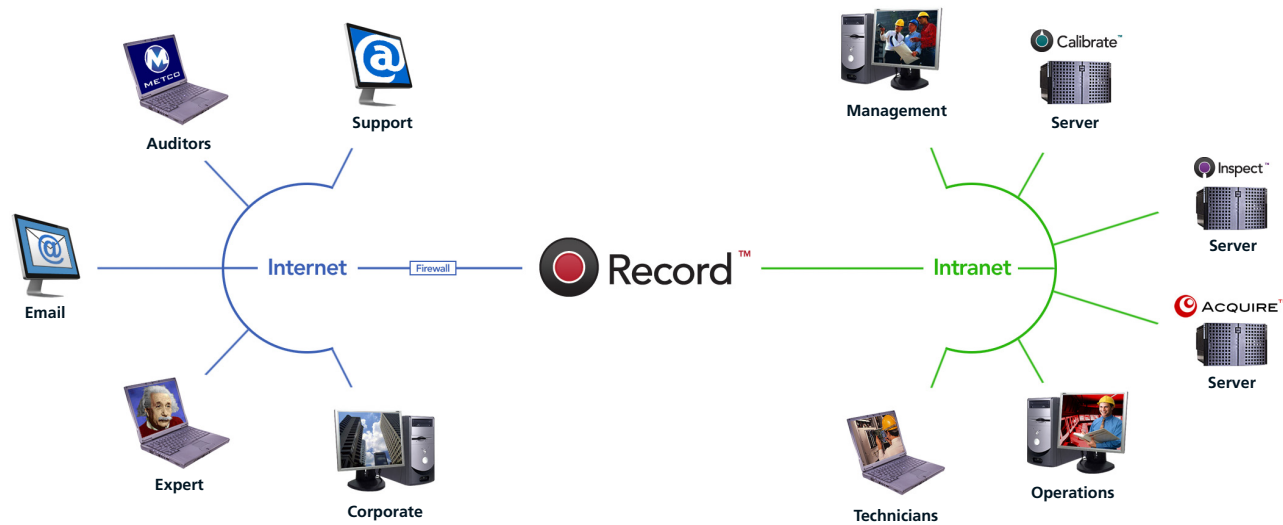


....the solution to web enabled metrology logbooks

Introduction

Metering logbooks are required to record key events relating to flow measurement and control systems. Historically, the events have been recorded as handwritten, single line entries in paper-based logbooks which reside in the control room, creating problems with accessibility, consistency and legibility. Where electronic versions do exist they are most often just digital copies of a paper version and suffer from similar problems. Ambrint Ltd., has developed the next generation of logbook software, Record™, which uses the latest web technology to manage logbooks online.

Record™ replaces conventional logbooks with a centralized web based system that can be used to manage logbooks for multiple metering stations on different assets. Record™ keeps a record of every event for every piece of equipment on the measurement system, providing a complete timeline and audit history for the process.



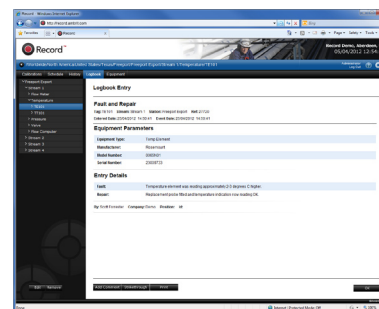
Using Record™, the logbook is no longer confined to the control room. Logbook data entered by operations, technicians and other Metrology™ applications can now be shared in real-time across an entire corporate intranet or securely over the Internet, with benefits for all areas of the organization: engineers can analyze the audit trail to determine equipment performance; auditors can access data during site visits; managers can keep track of the whole process from their desk.

Event Recording

Record™ logbook templates, specifically designed for the metering industry, enable operators and technicians to record all pertinent metering events as they occur. All entries are automatically stamped with the date, time and auditor's name to create a complete audit history at every stage of the process.

Logbook entries can be supplemented with file attachments, including documents, PDFs, photos and video files. The file attachments are stored with the event record and can be displayed alongside the event in the web browser.

The standard data entry templates cover a wide range of process and equipment related events. Custom templates can be added, if required, to meet the requirements of specialized situations.



▲ Logbook Entry

Logbook

The logbook opens to show a chronological list of all the events for the whole system. Selecting an entry opens the full detail for that event or the list can be filtered to create subsets of logbook entries for individual stations, meter runs, tags or equipment. A hierarchical menu provides a toggle between the process and equipment views: i.e. clicking on a station, meter run or tag will show process related events; whereas clicking on a piece of equipment will show its entire history, regardless of where it has been installed during its lifetime.

Once an event is entered into the logbook it cannot be altered or deleted but may be supplemented with additional comments to provide more detail about the event. Events entered erroneously can be struck through to hide them from day to day view but still reside in the database to maintain a full audit trail.

Automated Events

Record™ makes creating manual logbook entries very simple, but comes into its own when linked to other applications in the Metrology suite - key events from other applications in the Metrology suite are automatically recorded as soon as they occur.

This includes: installing, moving or decommissioning equipment in Inventory; calibrating equipment in Calibrate; publishing audits and closing findings in Inspect.

Record™ can also be integrated with Acquire™, Ambrint's web enabled data acquisition and control system, to supplement the manual entry of real-time process data. Acquire™ can write events directly into Record™, including alarms, set point changes or meter runs coming online and going offline.

All automated events are authenticated with date, time and meter readings and interlaced chronologically with the manually entered events.

Metrology

Logbook entries 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.

Record™ is part of the Metrology suite which includes applications for calibrating equipment, audit management and data collection:

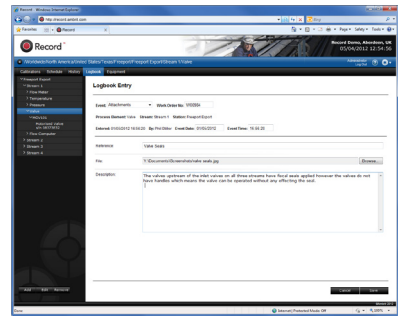
- Calibrate™** Calibration management
- Record™** Inventory and event logbook
- Inspect™** Audit management and reporting
- Profile™** Data collection and reporting

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.

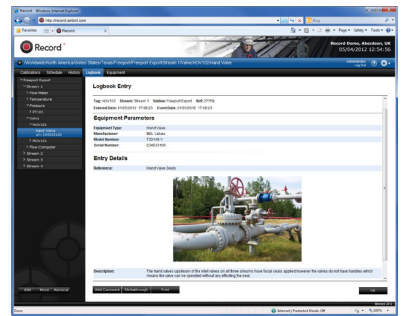
Inventory

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.

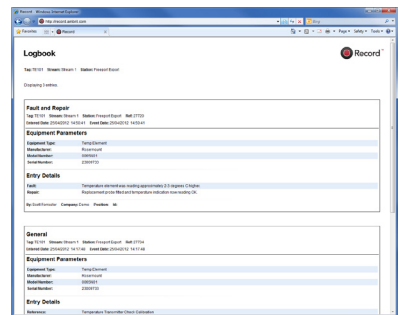
Once the equipment has been defined in Inventory, it can be shared with any of the other products in the Metrology suite and integrated with Acquire™.



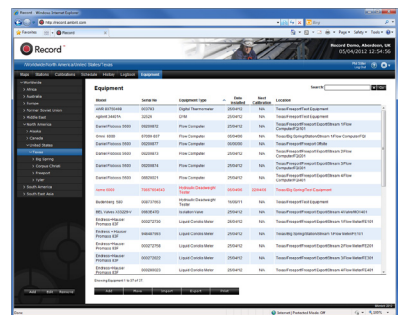
▲ Logbook Entry



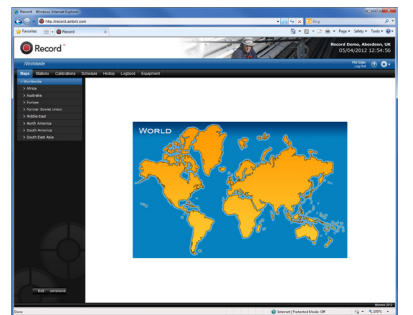
▲ Attachments



▲ Print Report



▲ Equipment



▲ Map



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Ambrt 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.

Record™, one of the elements of the Metrology suite, is a web enabled application designed to manage a metering logbook online.

Record™ creates an interactive environment where management, operations and technicians can collect and share key information regardless of location.

Every event for every piece of equipment on the measurement system is chronologically recorded to create a complete audit history for the entire process.

A unique feature of Record™ is its ability to collect data from any of the other applications in the Metrology suite. For example, data can be transferred automatically from Calibrate™ to record key calibration events in the logbook.

The Record™ system inventory is powered by Inventory™, a generic database of locations and equipment that can be shared with the other products in the Metrology™ suite to extend event data to other aspects of metrology asset management.

Record™ features an extensive library of metering based logbook 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.

It's not just about the software. Ambrt expertise is on hand every step of the way – from the initial on-site equipment inspection through to logbook template configuration – to help create the ideal logbook solution.

Logbook Features

- Multiple installations / multiple stations
- Manual event recording
- Automatic event recording
- Date, time and process data stamping
- Entry strike-out
- Intelligent data filtering
- Powerful search facilities
- File or scanned document attachments
- Audio / video event attachments
- Printer friendly reports

Web Interface

- State of the art web-based HMI
- Intuitive navigation
- 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 Calibrate™, Inspect™ and Acquire™
- Interface with SAP® or Maximo®



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Metrology

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

Inventory™

Equipment and location database

Calibrate™

Calibration management

Inspect™

Audit management and reporting

Profile™

Data collection and reporting



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

www.ambrt.com/record