

Video MES Platform for Productivity

Your eyes deliver high quantities of information in the fastest, most efficient way. Video can show multiple variables – speed, distance, rate of change, limits, sequences – simultaneously and unambiguously.

Until now, video recordings were completely separate from other manufacturing data collected in the plant. Trying to correlate the richness of video with fundamental activities in manufacturing operations was tedious, if not impossible.

Longwatch has changed that with the Video Historian. The Video Historian *automatically integrates video* with various manufacturing databases, thus providing managers and operators with a wealth of timely, additional information for making better decisions that save time, money and effort.

With the Video Historian, users can automatically correlate recorded video with a variety of actions, events, plans and collected data – bringing new power and value to manufacturing execution system applications.

The Video Historian takes plant video collected by the Longwatch Video System and connects it to existing Process and Manufacturing data bases. These can include data historians, alarm and event management systems, workflow management systems, predictive or scheduled maintenance applications, and SQL databases.

Video can be retrieved with the context of your plant operations, such as: batch ID, line number, operator ID, plant area, in addition to time-of-day. Video can also be retrieved according to the times that alarms, events or messages occur in the SCADA/HMI system.

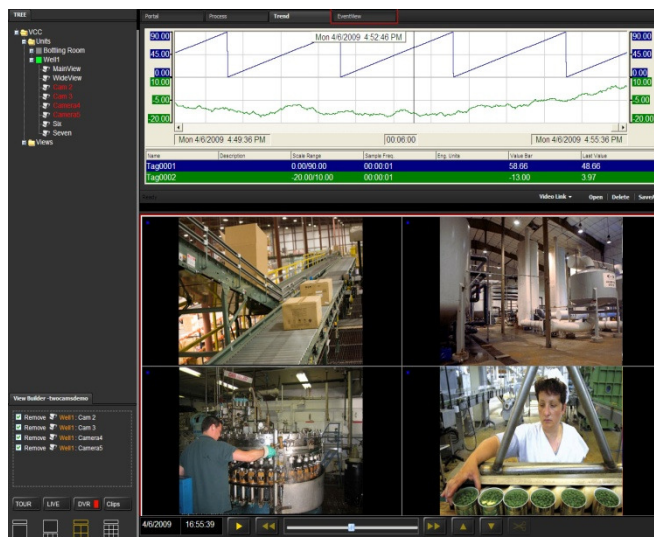
This supports cost-effective and efficient troubleshooting and preventive maintenance, simplifies operator training, supports quality control activities and provides video documentation of various steps in the process for record-keeping and regulatory compliance purposes.

CAPABILITIES

- Automatically associate stored video with automation system events and data. Retrieve video based on:
 - SCADA/HMI system alarm time
 - Embedded message text, including
 - plant area, batch ID, operator ID, type of activity or alarm
- Simultaneous viewing of video and data trend graphs, synchronized by time
- Built-in mapping of video to alarm messages, showing video before, during and after an alarm occurred
- Pre-tagging of video clips with SQL data. Associate video with operational information (e.g. batch ID, operator name, line ID, etc.)
- Post-view tagging of video clips:
 - Operator-defined tags to organize collections of videos
 - Operator-entered comments
- Easily interfaced with other database applications
 - SQL Stored Procedures Library
 - OPC Interface
 - FTP File Transfer
- Integrates easily with popular HMI and Process Historian software

APPLICATIONS

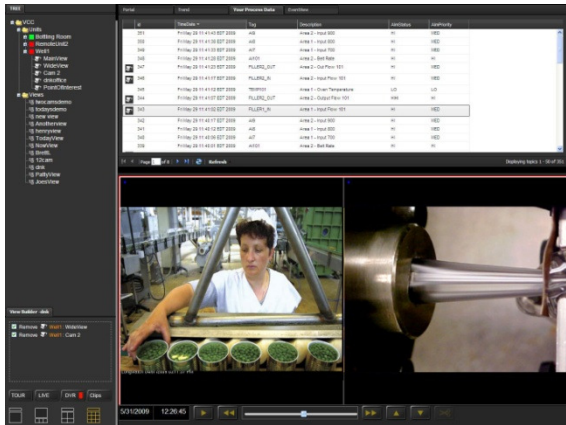
- Quality Control
- Process Validation
- Process Improvement
- Workflow Validation
- Troubleshooting



SYSTEM DESCRIPTION

The Longwatch Video Historian is a host-based, distributed application that provides comprehensive management and analysis capabilities for the video stored in the Longwatch Video Center and Longwatch Video Engines.

With the Video Historian, users can easily integrate video with their existing databases and automation applications. Examples include: plant video attached to control system alarms to aid in troubleshooting; a video “traveler” that tracks operations in a batch manufacturing system; adding video to quality control records to support good manufacturing practices; video archived with system events for regulatory compliance.



User data is easily linked to video and analyzed using a multi-tabbed data window in the Video Historian. The tabs can contain trend charts, tabular information, or links to HTML pages or Internet URLs. Tabbed data displays are automatically linked to video based on user-defined fields and time; the user has control over filtering, sorting and table format.

Data tabs that link custom databases to Longwatch Video can be created easily using an interactive wizard.

Unlike other video systems that require custom programming and its inherent high support costs, the Longwatch Video Historian *automatically* links video with process trend data and other data bases, without any programming. The result is fast and easy access to video that improves productivity and decision-making.

VIDEO MODES

LIVE Mode: Streaming from selected camera(s)

CLIP Mode: Pre-selected video clips from the Video Control Center

DVR Mode: Continuous video from the distributed Longwatch Video Engine local video recorders.

EVENT MANAGEMENT

Events can be triggered locally by hardware contacts or camera-based video analytics. Remote triggering through OPC commands.

HMI/SCADA INTEGRATION

Integration with popular SCADA/HMI systems through ActiveX, OPC or web server interfaces

DATA BASE MANAGEMENT

Built-in Microsoft SQL Server (Desktop Edition or Express). Integrates with external databases through stored procedures.

DATA DISPLAY

- Trend Chart,
- Longwatch Events
- HMI System Messages
- Web Portal
- Custom (using Tab Wizard)

About Longwatch

Longwatch was founded by a team of industry veterans with the goal of providing video over a variety of industrial communications networks. Advanced technology incorporated in the system enables automation system operators to utilize video to monitor and verify activities within the plant as well as at remote sites using the existing communications infrastructure. Longwatch delivers video for regulatory compliance, operating efficiency and security.

Longwatch, Inc.

520 Providence Highway Norwood, MA 02062
+1 781-255-7400 | 877-LONGWATCH
www.longwatch.com | info@longwatch.com