OPERATIONS LOGBOOKS

To operate a facility safely, efficiently and reliably, an operator requires access to a multitude of information. While Control and Process Information Systems provide real-time data, logbooks in the form of running logs, outage logs, craft discipline logs and environmental compliance logs provide narrative context detailing the health of the facility.

PlantView® Logbooks replace traditional paper logs, text documents, spreadsheets and home-grown portal solutions with a dedicated operator logs system. By integrating information from many different sources into a single on-line searchable database, PlantView Logbooks become the central repository of operating information and is a requisite tool to help ensure that a facility is operated at maximum efficiency. When responsibility is transferred to a new operating shift, PlantView Logbooks define and convey the most current information to minimize shift turnover risks.

Benefits

- Makes data accessible across the enterprise.
- Replaces paper logs, spreadsheets and custom portal solutions with a database supporting dashboards and reports.
- Facilitates and speeds the data entry process to ensure that value-added information and insights are recorded. Each entry is typically more complete and easier to read.
- Improves transparency and facilitates historical analysis and data mining.
- Provides a mechanism for the incoming operator to acknowledge previous entries to ensure they are aware of open safety and environmental issues, minimizing shift turnover risk.
- Shift Reports are automatically e-mailed in PDF format to production management using predefined distribution lists.

The goal of PlantView® Logbooks is to create self-contained packages of information. When a Shift Note, Operating Concern or General Log Entry is viewed years in the future, it will contain all the necessary information to understand the current state of the facility and the decisions that were made at the time.

Features

- Web-based platform simplifies the capture of notes and comments from the operations and maintenance teams during the shift.
- Automatically starts shifts at a scheduled frequency.
- Shift Notes can be sent directly between logs to improve communication of equipment condition issues.
- Shift Summary Reports combine manually and programmatically entered information to provide a complete picture of operating conditions during a shift.
- Search function enables query of historical information to aid technical staff with troubleshooting and operational analysis.
- Automatically records the name of the user who entered or last edited the log entry and the time of the change.
- Programmatically creates log entries based on process events.
- Configuration tools enable customizing shift log formats to meet the specific needs of operations and maintenance teams.
- Drop-down menus provide easy selection of frequently used phrases and popup forms allow easy equipment identifications.

Security

- Comprehensive security model for both configuration and run-time operation.
- Controlled access for read and/or write to each component of the Shift Log.
- Shift Logs are locked to changes after the shift is over. This can occur immediately or after a brief delay.
- Shift Reports can be archived as PDFs for long term storage or regenerated on demand.
- All data is stored in an Oracle database for reliable and secure access.

Configuration Details

PlantView Logbooks is a configurable solution to document specific events that occur during a shift. Logbooks consist of Shift Logs which are assembled from Shift Notes, Operating Concerns, General Logs and Operating Numbers.

Shift Notes document what happened during the shift. They typically capture Date/Time and Text. As each shift ends, the notes from the current shift are archived and the slate is cleared in preparation for a new shift. Additional attributes allow a Shift Note to be assigned a Priority and a Category. When a Shift Note might be relevant to the next shift, such as for standing orders or to document on-going conditions, a Carry Forward attribute allows the entry to be automatically copied forward into the new shift, for standing orders to document on-going conditions.

Shift Notes contain detail items such as Action Taken Sequence, E-Mail, Notes and Attachments. An Action Taken Sequence is a chronology of actions that were taken because of the Shift Note. By capturing them within the Shift Note, they clearly link the cause and effect of the incident. E-Mail allows the operator to notify an individual and to include a URL link to view the Shift Note. Notes allow the operator to provide additional comments. Attachments allow files such as pictures, documents or spreadsheets to be uploaded providing additional information or documentation.

Operating Concerns document what you are concerned about on an on-going basis. They are intended for long-term issues. They are grouped by user defined categories such as Safety Issues or Environmental Issues and are automatically carried forward to each new shift until their status is changed to Closed and a resolution has been determined. In addition to standard detail items, Operating Concerns support a chronology feature where the discussion associated with a specific operating concern can change as the issue evolves over time.
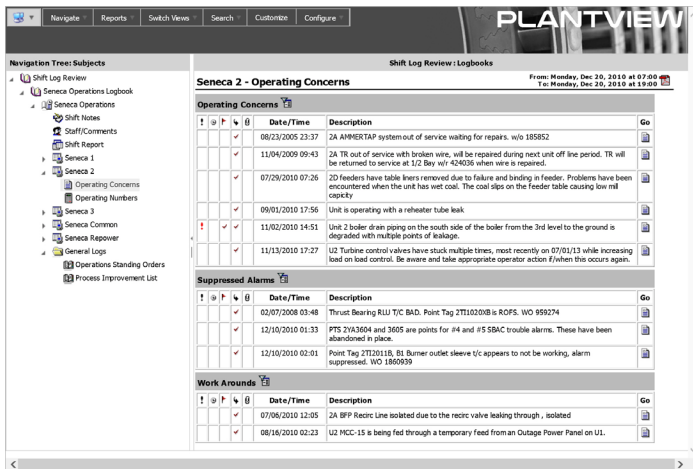
General Logs represent the clipboards and other to-do lists found in the control room. There are three types of General Logs: Standard, SQL and User Configurable.

- **Standard General Logs** combine the concepts of Shift Notes and Operating Concerns. They can either be shift based, archiving and starting clean with each new shift, or non-shift based, where the notes carry forward until they are completed.
- **SQL General Logs** allow information to be extracted from a SQL database and included in the shift report. For example, a general log might contain the Work Order, Work Requested and Work Performed for all work orders closed during a shift or it could be a snapshot query of process data from a data acquisition system. This serves the dual purpose of archiving the information as it was defined at the end of the shift and including the information in the distributed shift reports.
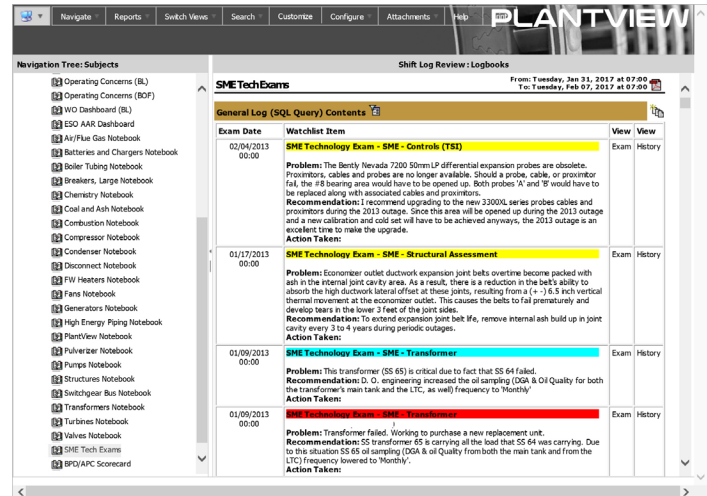
- **User Configurable General Logs** are the "Swiss Army knife" of general logs. They provide the capability to create an on-line version of currently utilized custom forms. Any number of fields represented by text, checkbox, date/time, single-select, multi-select and read only can be arranged on a form to collect the required information. The general log can be shift based or non-shift based, supports full search capabilities and is JavaScript enabled to implement challenging business rules. Logs can be configured for two person "Certify & Lock" from future changes.
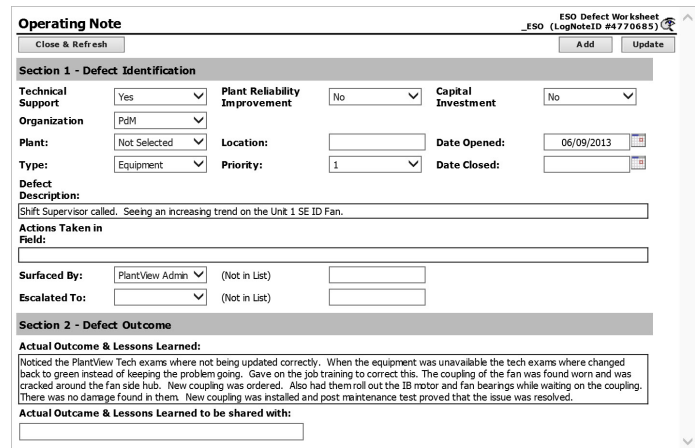
Operating Numbers capture multiple indicators/values normally collected on a periodic basis. They are user defined as text, date/time, drop-downs and checkboxes and can be collected on a Shift, Daily, Weekly or Monthly basis.

The PlantView® Suite

PlantView Logbooks is a part of a suite of integrated modules supporting the maintenance, operation, training and performance knowledge management processes that help facilities sustain optimal reliability, efficiency and safety. Each module automates information entry, storage, management and reporting for numerous facility functions. The software transforms internal work processes, enabling users to move efficiently from managing information to understanding the implications of that information, and ultimately to action. The PlantView Suite is divided into four disciplines: Maintenance, Operations, Continuous Improvement and Training. It consists of the following modules:

Maintenance	
Predictive Maintenance	Facilitates condition-based maintenance by collecting and storing diagnostic technology results, and facilitating the analysis of multiple technologies into an overall assessment of the equipment.
Maintenance Basis Optimization	By combining rigorous Reliability Centered Maintenance (RCM) analysis with pre-defined templates and a flexible approach to determining criticality, MBO helps develop a sound maintenance basis that balances maintenance tasks and equipment reliability.
Reports Library	Serves as a basic document repository targeted for major equipment maintained on an annual basis. As reports are received from engineering teams, they are assigned a status and uploaded to PlantView.
Engineering Inspections	Standardizes the inspection of components and their associated evaluation criteria. Information is summarized in a grid representing the most recent evaluation that has been performed.

Operations	
Operations Logbooks	Replaces traditional paper logs, text documents, spreadsheets and home-grown portal solutions with a dedicated operator logs system. Assists in tracking and managing any problem from initial diagnosis all the way through remediation.
Risk Assessment	Supports Risk Informed Decision Making by using a 5x5 Risk Matrix that can be viewed across the enterprise to assess and prioritize risks.
Reliability Index Module	Replaces manual spreadsheets and monthly reports with a continuously updating Equipment Reliability Index that can provide a snapshot on a daily, weekly or monthly basis.
System Health	Keeps a running log of issues and concerns for a System or Program. Within a particular instance of a report, the responsible individual identifies issues, snapshots metrics and assigns action items.

Continuous Improvement	
Event Reports	When an event occurs at Site "A," other sites are notified through an event assessment providing a mechanism where the event is reviewed and it is determined if a similar event could happen at their site.
Corrective Actions	Documents how a particular problem/issue is corrected at a site. Once a Corrective Action Report (CAR) is created, it is assigned to a Champion and Team Leader until a solution is determined.
Self-Assessments	An Excellence Grid divides business objectives into categories, elements and sub-elements. Questions are defined with each, and an assessment is completed by multiple users. Management can use the results to focus on areas requiring improvement.
Observations	Observes activities to identify trends in safety, human performance and plant operations to prevent injuries and improve reliability.

Training	
Automated Training Manager	Creates training courses consisting of Lessons and Elements; each element has associated content, questions and skills. Profiles provide trainees with a cross-section of content focused on their job description.

The PlantView® Suite can be installed in your own IT environment or externally hosted.
For additional information, please e-mail info@power-vision.com.