# Honeywell | Connected Industrial

# Symphonite<sup>™</sup> Production Manager

Product Information Note

# Collect and transform production data into manageable, actionable information leading to insightful analysis

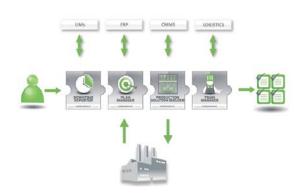
To make smart decisions and ensure regulatory compliance, personnel at all levels of the organization require accurate and timely information. Enterprise resource planning and asset management strategies depend on clear views of equipment health, production performance, inventory positions, order status, and production plans. Production and maintenance managers need data that lets them manage the production processes and help them easily identify under- performing processes.

However, the production data, equipment run hours, quality assays, batch tracking, and other key metrics they need are dispersed across the organization. Data from SCADA PLCs, and DCS Systems, as well as historians and other applications from a number of vendors are required to get the full picture. The enormous volume and wide variety of data sources make this data hard to collect, and even harder to derive meaningful information

The result is that and time is spent manually collecting data and key indicators are missed. The focus on analyzing and acting on information to improve the operation is diluted.

#### Solution

Symphonite Production Manager is a web-based Production Information Management System that helps plants effectively capture, share and display data to drive continuous improvement and production excellence. It simplifies compliance and improves plant performance through integration, automation and visualization by:



Production Manager includes the following integrated core modules:

- Downtime Reporter,
- · Production Solution Builder,
- Plan Manager
- · Train Manager

These modules work together to improve plant performance through robust data integration, improved business process automation and

### FEATURES & BENEFITS

- Configurable web forms for a variety of purposes such as recipe selection, managing consumables, and lab sample assays
- Effective movement and inventory management provides complete visibility of all material transactions
- An integrated train tracking system to reduce train loading turnaround time for bulk material industries (e.g. coal mines).
- Planned Targets enable progressive comparison against actual production
- Operational Equipment Effectiveness (OEE) may be calculated on equipment and processes
- Seamless integration with Downtime Reporter module helps correlate production and downtime information
- Production accounting automatically collects production data from real-time control systems at scheduled times or when events occur.

- Integrating data sources from across the organization using open standards such as OPC, ODBC and web services to connect to all control systems, historians and business applications, regardless of the manufacturer.
- Automating plant data capture to ensure timely and accurate records, leaving operations teams to identify opportunities for process improvement. Where manual entry is still required, customizable webforms streamline data capture.
- Visualizing data through in-built and userdefined dashboards and reports for plant performance information that drives process improvement.

#### **Features**

Secure and scalable, Symphonite Production Manager uses a simple web interface to give users role-based access across the enterprise while preserving data accountability and traceability for compliance requirements. Core Microsoft® components, such as Microsoft(R) SQL Server, .NET and Internet Explorer®, provide an architecture that is suitable for both small plants and enterprise solutions. Symphonite Production Manager provides the flexibility to adapt to changing operational and business needs. A combination of standard and custom web-based dashboards and reports enable both supervisory overview and detailed analysis of production data to support more effective operations.

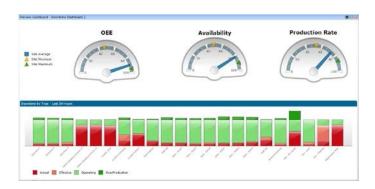
A wide range of tools and measurements streamline and enhance downtime reporting,

production planning, production accounting, batch tracking, and materials management:

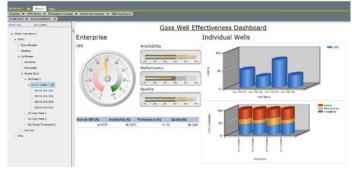
- Downtime events stoppages, slowdowns and over-production events are recorded along with their causes both automatically and manually. Standard reports help prioritize and analyze these events to reveal root causes and formulate improvement strategies that eliminate process bottlenecks. Repetitive identification and elimination of root causes help in continuous improvement.
- Production Metrics for both operations and maintenance are derived from site-based downtimes, equipment monitoring, and production events. These metrics may be used to compare performance of both equipment and processes across the enterprise.
- Operational Equipment Effectiveness (OEE)
  may be calculated on equipment and
  processes. The combination of Availability,
  Rate, and Quality as a percentage of target
  provides a generic performance indicator,
  displayed in real time. Analysis of trends and
  overlay with operational and maintenance
  events provides greater insight to the plant's
  performance.
- Configurable web forms support site specific data requirements and provide validation of entered data and custom workflows. Forms may be used for a variety of purposes such as logbooks, recipe selection, managing consumables and lab sample assays. A grid view of automatic and manually entered data supports custom filtering, drill-down, user-defined action icons for workflows and export-to-Excel.

Each production facility is unique. Production Manager has ability to rapidly create targeted formbased solutions tailored to each customer's specific business process, resulting in improved production excellence.

Typical examples of Production
Manager based solutions deployed in various sites include Batch Tracking, Stockpile Management, Transport Management, Environmental Reporting and Material Sample



Downtime Dashboard



OEE Well Field

A single version of the truth

A centralized information system ensures all work from the same page, eliminating delays and versioning issues common with spreadsheet applications.

- Planned Targets enable progressive comparison against actual production. Plans may be established for different plant areas and target types. Yearly targets are automatically pro-rated to daily targets according to the planned daily activities. Backups of an active plan can be saved as snapshots, which can then be used as historical reference for comparison or to restore as the active plan.
- Effective movement and inventory management provides complete visibility of all material transactions, material qualities, and inventories across the entire supply chain. Access to validated coordinated information is captured from all real-time and transactional plant systems.
- Production accounting automatically collects production data from real-time control systems at scheduled times or when events occur. Production data may be edited where necessary and approved by users with appropriate security privilege. All edits are logged for auditing.
- Train Manager enables rapid integration of train schedules and reporting system for bulk material train load out facilities. Train schedules are received from service providers through electronic data interchange or can be maintained manually through the web interface. Train consignment details are automatically downloaded to the load out automation system for accurate wagon batching targets. Recorded wagon weights, load times and bulk material sample quality provide the basis for train load performance reporting. Downtime can be recorded for train loading delays and slow loading periods when integrated with the Downtime Reporter module.
- Enable ISA 95 based execution by supporting translation of ERP production orders to control level instructions. This information is used to support order tracking, genealogy, and related business processes.

#### **Benefits**

Accurate downtime and production information for analysis and reporting brings a range of benefits at the plant and corporate level.

#### Decisions based on reliable production data

Automatic data collection improves accuracy and timeliness of data, while freeing staff from filling in log sheets. Dashboards help production staff quickly identity priority areas, while corporate dashboards give at-a-glance performance comparisons between distributed operational assets.

#### Improve bottom line by reducing costs

Increased production output from existing assets enables deferment of capital expenditure required for plant expansions.

Total Cost of Ownership is reduced through reduced deployment costs using a web user interface and centralized management of servers. Standardization across the enterprise enables greater mobility of staff between operations, lower training costs, and use of centralized help centers and support protocols.

#### **Enhanced Productivity**

The web-based user interface for data entry and reporting provides on-the-go access to plant information and reports. Alert notification of plant events through email and SMS text messaging improves visibility and resolution time of important operational issues. Also a centralized information system ensures all work from the same page, eliminating delays and versioning issues common with spreadsheet applications

#### Simpler reporting

Symphonite Production Manager utilizes
Microsoft SQL Server® Reporting Services to
provide a suite of standard out-of-the-box webbased reports and dashboards which may be
easily modified and extended. Reports may be
scheduled or initiated by the user on-demand.
Reports and dashboards provide parameter input
(filtering) and support charting, drill-down, and
data summarization.

## Symphonite™ Supply Chain and Production Management Suite

Symphonite Production Manager is part of Symphonite portfolio of software and services, which provides end-to-end solution for the supply chain and production management (SCPM) processes. From integrated planning to post-execution reconciliation and analysis, we offer comprehensive, scalable answers to your challenges. Built on deep domain knowledge, our tools help you make better business decisions and drive continuous improvement helping you achieve supply chain and production management excellence.

#### Other SCPM Tools

- Symphonite Capacity and Distribution Planner (CDP)
- Symphonite Refining and Petrochemical Modeling System (RPMS)
- Symphonite BLEND
- Symphonite ASSAY2
- Symphonite SAND
- Symphonite Production Accounting and Reconciliation (PAR)
- Symphonite Port and Marine Manager
- Symphonite Downtime Reporter

### Symphonite™ SCPM Support Services

This product comes with worldwide, premium support services through our Benefits Guardianship Program (BGP). BGP is designed to help our customers improve and extend the usage of their applications and the benefits they deliver, ultimately maintaining and safeguarding their advanced applications.

Honeywell provides a complete portfolio of service offerings to extend the life of your plant and provide a cost-effective path forward to the latest application technology. Honeywell services include:

- Software installation services
- On-site engineering services
- Migration services
- Scope expansion services
- Assessment services
- Performance baseline and tuning services
- Customized training

#### For More Information

Learn more about how Honeywell's Symphonite PAR and how it can improve your facility's performance visit

http://www.hwll.co/Symphonite or contact your Honeywell Account Manager.

#### Honeywell Process Solutions

1250 West Sam Houston Parkway South Houston, TX 77042

Honeywell House, Arlington Business Park Bracknell, Berkshire, England RG12 1EB UK

Shanghai City Centre, 100 Zunyi Road Shanghai, China 200051

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