

Symphonite™ Downtime Reporter

Product Information Note

Identify and Eliminate Process Bottlenecks

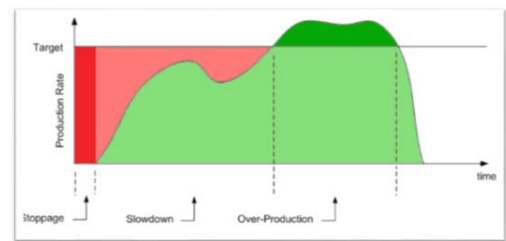
Organizations require accurate, reliable, and timely downtime information to identify areas of missed opportunity, improve critical asset availability, and utilization. The Symphonite Downtime Reporter automatically records and classifies downtime events by monitoring the plant controls system for reduced production rate. It also provides reports and analysis tools to help identify and prioritize plant bottlenecks.

This information is used to formulate targeted improvement strategies which eliminate bottlenecks and provide ongoing performance benchmarks to monitor the effectiveness of this continuous improvement process.

Symphonite Downtime Reporter is a core module of Production Manager, a web-based Plant Information Management System (PIMS).

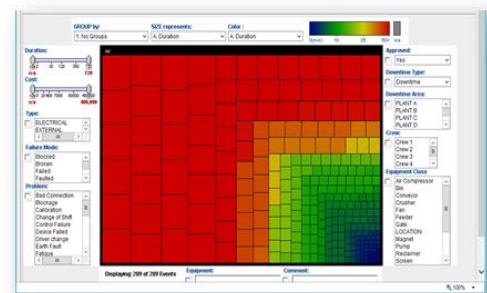
Maximize Profit through increased Performance

The Downtime Reporter automatically records both actual (stoppage) and effective (slowdown) downtime. This is done by connecting to the third party plant control system (PLC / SCADA / Historian) via OPC DA and HDA connectivity.



Symphonite Downtime Reporter helps improve plant operational performance by automatically identifying, categorizing, and prioritizing process bottlenecks.

Downtime Reporter helps drive a culture of continuous improvement and ensures that a heads up approach is taken to reducing unplanned downtime, and resolving causes of equipment and process failures.



FEATURES & BENEFITS

- Connects to multiple process systems to automatically record both actual (stoppage) and effective (slowdown) downtime.
- Auto classifies equipment and reason codes for Downtime events
- Generates work orders through integration to Maintenance management systems.
- Helps understand downtime patterns with Intuitive Tree Maps to
- Enables consistent Downtime reporting across enterprise
- Help with Overall Equipment Effectiveness (OEE) calculations
- Ensures accurate classification of downtime events with approval workflows
- Calculates costs associated with each Downtime event.
- Provides both Standard report sets as well as user defined reports.

Downtime may be classified with cause, equipment, and reason codes either manually through the web user interface or automatically using user-defined rules driven from downtime duration, process tag values, or process alarms.

Additionally, the heuristic self-learning Auto Classification Engine (ACE) is able to determine and apply the most appropriate downtime classification based on historical data and alarm patterns.

Integration with Maintenance Management Systems allows sharing of master equipment register and generation of work order requests from the downtime user interface.

Treemaps provide a dynamic web-based graphical analysis tool that allows users to easily 'slice and dice' historical downtimes in order to identify hidden patterns and downtime trends.

Site specific failure codes may be mapped to a corporate time usage model to provide standardized high level reporting across the entire corporate asset base. This provides the flexibility for both local reporting and process improvement initiatives as well as corporate reporting for asset performance benchmarking. Asset performance metrics are available for both historical data and real-time to enable early identification and notification of problems before they escalate.

Overall Equipment Effectiveness (OEE) calculations combines an asset's availability, production rate, and quality output providing a universal measure of the asset's performance. OEE calculations may be displayed in dashboards and utilized to compare asset performance across the entire enterprise.

Downtime may be split and un-split which means a single event can be classified with multiple failure codes.

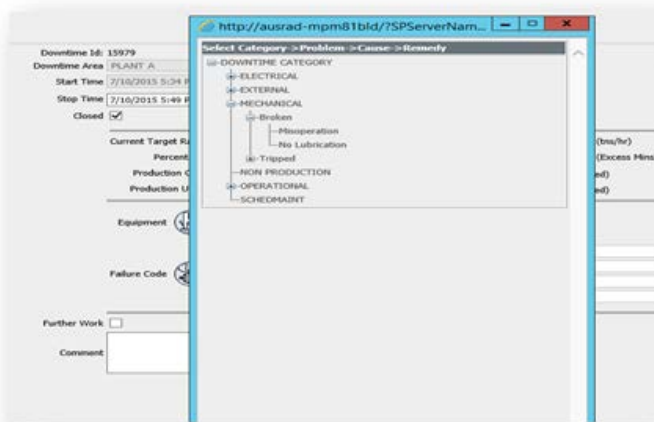
Downtime records may be approved and locked from further editing. Approvals enable a supervisor to ensure the downtime has been accurately classified at the end of the shift and locks the event from further editing by the operator to ensure reporting consistencies.

Reporting. A suite of standard reports are available out-of-the-box which may be complimented by additional user-defined reports.

Downtime Reporting For All Industries

Symphonite Downtime Reporter applies fundamental processes for identifying and eliminating process bottlenecks and improving operational performance. It can be applied across several industries including mineral processing, bulk materials handling, manufacturing, power generation, water treatment, and oil & gas production and processing.

With over 100 installations worldwide, Symphonite Downtime Reporter has been established as a corporate standard by many large organizations and provides a consistent user interface, standardized corporate reporting metrics and low cost of ownership



A System That Grows With Your Business

Symphonite Downtime Reporter is a thin-client server-based application that leverages Microsoft® common components such as Windows Server®, SharePoint®, .NET and Internet Explorer® to provide an integrated and scalable product with low cost of ownership that is easily supported.

Symphonite™ Supply Chain and Production Management Suite

Symphonite Downtime Reporter 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.

For More Information

Learn more about how Honeywell's Symphonite Downtime Reporter can reduce process bottlenecks visit <http://www.hwl.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

www.honeywellprocess.com

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 Production Manager
- Symphonite Port and Marine Manager

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