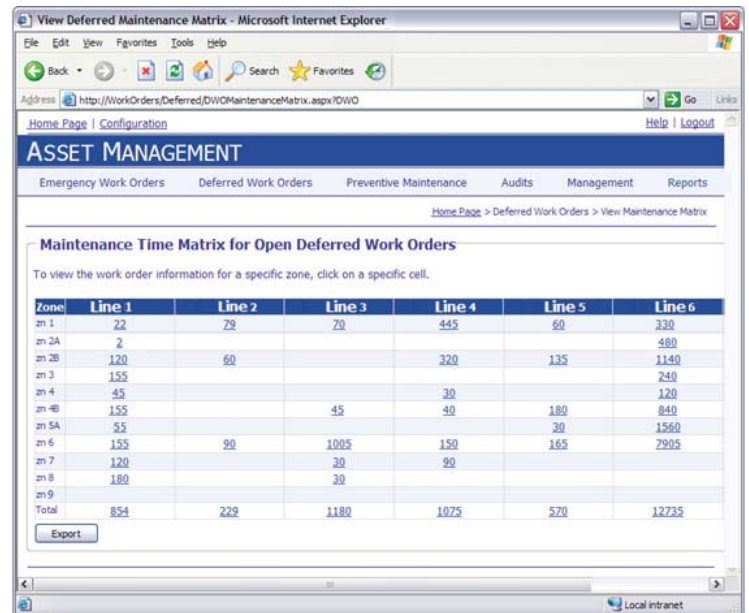


# PEERFactory® Asset Management

World-class manufacturers know that Enterprise Asset Management (EAM) strategies are critical in reducing operational costs, improving Return on Assets (ROA), and reducing risk from the failure of critical assets. PEERFactory Asset Management (AM) modules provide a proven software application that will:

- ▶ Standardize asset maintenance and equipment reliability practices across the enterprise.
- ▶ Maximize uptime and utilization of assets and improve Overall Equipment Effectiveness (OEE).
- ▶ Improve visibility into production and asset performance across the enterprise through the use of asset analytical tools and dashboards.
- ▶ Replace the traditional break-fix maintenance approach by gaining real-time visibility into equipment failures before they actually happen.
- ▶ Streamline spare parts replenishment and tool crib management.
- ▶ Capture best practices from experienced maintenance employees and transfer this knowledge to the overall workforce.



The screenshot displays a web browser window titled 'View Deferred Maintenance Matrix - Microsoft Internet Explorer'. The address bar shows the URL 'http://WorkOrders/Deferred/DWOMaintenanceMatrix.aspx?OWD'. The page content includes a navigation menu with 'ASSET MANAGEMENT' highlighted, and sub-menus for 'Emergency Work Orders', 'Deferred Work Orders', 'Preventive Maintenance', 'Audits', 'Management', and 'Reports'. Below the menu, there is a breadcrumb trail: 'Home Page > Deferred Work Orders > View Maintenance Matrix'. The main content area is titled 'Maintenance Time Matrix for Open Deferred Work Orders' and contains a table with the following data:

Zone	Line 1	Line 2	Line 3	Line 4	Line 5	Line 6
zn 1	22	79	70	445	60	330
zn 2A	2					480
zn 2B	120	60		320	135	1140
zn 3	155					240
zn 4	45			30		120
zn 4B	155		45	40	180	840
zn 5A	55				30	1560
zn 6	155	90	1005	150	165	2905
zn 7	120		20	90		
zn 8	180		20			
zn 9						
Total	854	229	1180	1075	570	12725

An 'Export' button is located at the bottom left of the table.

*Deferred Activity Tracking*

PEERFactory AM modules integrate seamlessly within the suite of other PEERFactory standard components, such as MES, DMF™, and Yield Management.

By leveraging the robust and scalable PEERFactory infrastructure, the Asset Management modules can collect equipment states and downtime directly from your factory automation to reduce data entry errors and increase your reaction time to maintenance-related issues.

The comprehensive integration capability allows manufacturers to reduce IT hardware cost and support requirements by leveraging the same PEERFactory infrastructure for data storage, data visualization, and reporting management.

## The Challenge

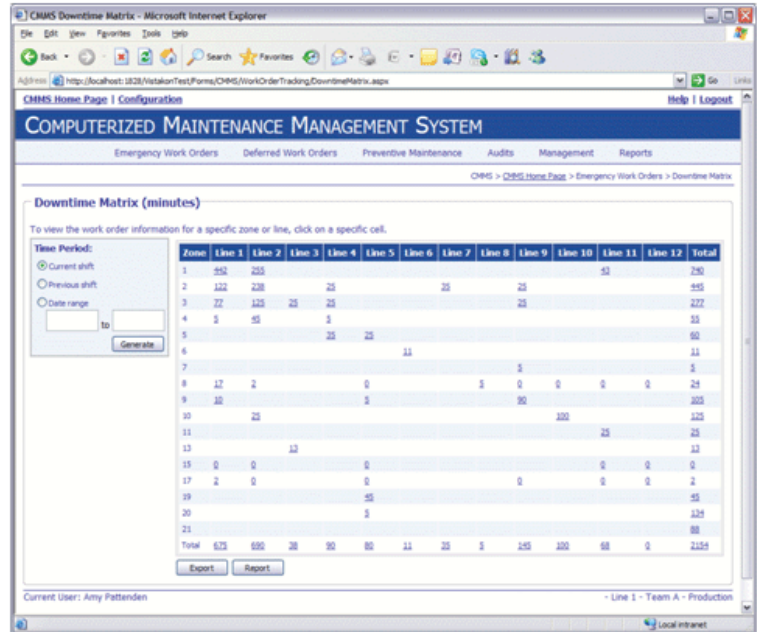
A modern maintenance organization must be built on knowledge. A large amount of information needs to be maintained and made easily available to operational personnel. This visibility allows manufacturers to monitor asset conditions in real time, deliver data to decision makers as actionable business intelligence, and use the data to analyze, predict, plan, and schedule maintenance activities across different assets.

## The Solution

PEERFactory Asset Management modules provide a comprehensive EAM solution and a robust and reliable foundation to build your equipment maintenance organization upon. Along with capturing all emergency maintenance tasks as they occur, PEERFactory AM modules allow manufacturing operations to:

- ▶ Plan preventive and scheduled maintenance
- ▶ Schedule audit tasks
- ▶ Control spare parts replenishment

PEERFactory AM modules support automated manufacturing by providing planning and reporting tools that allow operations managers to have the ability to schedule work, accurately staff teams, and provide standardized work instructions to maintenance technicians. The visualization tools and dashboards provide alarms and escalation features that allow managers and supervisors to view line status in real time to detect patterns that lead to equipment failure. The analytical tools support continuous improvement teams and root cause analysis and facilitate moving from a break-fix maintenance approach to a more predictive approach and Reliability Centered Maintenance (RCM).



Downtime Tracking Matrix

## PEERFactory Asset Management Benefits

FEATURES	BENEFITS
<i>Provides traceability</i>	<ul style="list-style-type: none"> <li>▶ Assignment and closure of tasks</li> <li>▶ Defined escalation path for timely completion of tasks</li> <li>▶ Standardized work instructions</li> <li>▶ Track the duration of tasks</li> <li>▶ eSignaure audit trails</li> </ul>
<i>Maximizes capital investments</i>	<ul style="list-style-type: none"> <li>▶ Prolong capital equipment lifespan</li> <li>▶ Introduce new technologies and automation faster</li> <li>▶ Reduce insurance costs</li> </ul>
<i>Increases throughput and yield</i>	<ul style="list-style-type: none"> <li>▶ Reduce unplanned downtime</li> <li>▶ Achieve higher run rates</li> <li>▶ Increase yield by reducing maintenance-related defects</li> </ul>
<i>Reduces costs</i>	<ul style="list-style-type: none"> <li>▶ Reduce capital expenditures</li> <li>▶ Reduce direct and indirect labor</li> <li>▶ Less overtime</li> <li>▶ Reduce maintenance staff</li> <li>▶ Track the true cost of maintenance</li> </ul>

# PEERFactory Asset Management Functional Overview

## Planning

- ▶ Advanced planning of work orders and audits
- ▶ Allows for the deferment of tasks to future dates
- ▶ Supports auditing procedures at prescribed time intervals
- ▶ Tracks technicians, team assignments, and total labor input

## Execution

- ▶ Standardized maintenance and audit work instructions
- ▶ Incorporates third-party knowledge bases into a centralized and accessible location
- ▶ Emergency work order tracking
- ▶ Tracks the duration of tasks
- ▶ Escalates maintenance tasks or audits that are not opened and completed on time
- ▶ Downtime incident tracking, cause and duration

## Reporting/Visualization

- ▶ All open work orders
- ▶ All pending work orders
- ▶ Downtime incident tracking
- ▶ Labor tracking

## Compliance

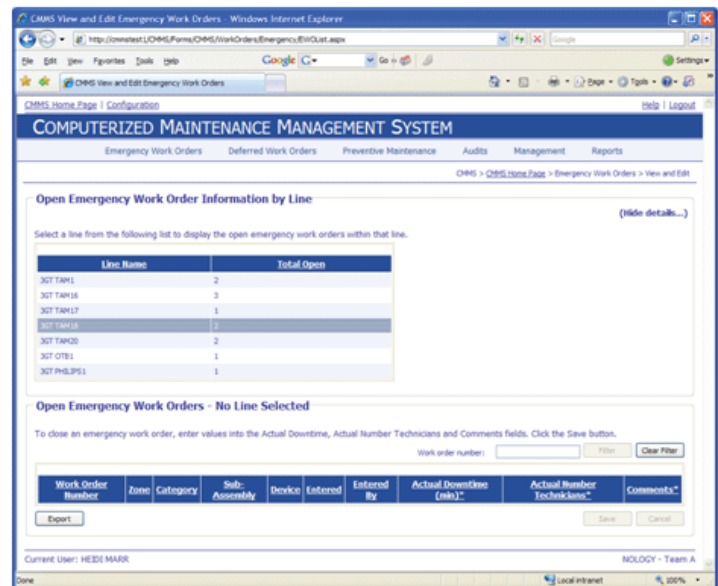
- ▶ eSignature capabilities
- ▶ Comprehensive audit trails
- ▶ Complete traceability from the planner to technician to task and date

## Tool Crib Inventory System

- ▶ Configure critical components to track
- ▶ Capture consumption of components at the point of usage
- ▶ Configurable max/min stock levels to trigger reorder points

## Real-time Performance Monitoring

- ▶ Utilize PEER Group's scalable, flexible Data Management Framework (DMF) for data acquisition and storage
- ▶ Connect to a wide variety of shop floor equipment and work cells to collect downtime incidents and duration
- ▶ Provides an easy-to-use reporting mechanism to provide insight OEE, system uptime and quality metrics



Emergency Task Tracking

## About PEERFactory

PEER Group's PEERFactory is a toolkit of comprehensive integrated software modules that provides tailored, high-performance manufacturing operation solutions proven to meet specific customer needs for plant visibility, data collection, and line monitoring and control. PEERFactory combines the strengths of both enterprise and SCADA/HMI MES products while minimizing associated risks and costs. PEERFactory's Data Collection, MES, Asset Management, and APC modules feature high-performance storage and retrieval, flexible and scalable deployment, interoperability, and visualization.

## About PEER Group

PEER Group provides innovative factory automation software solutions and consulting services to the semiconductor, photovoltaic, and electronics industries. The world's best manufacturing companies turn to PEER Group to solve their most challenging equipment automation, data management, and process control problems. With more than 100,000 licenses shipped, we are the world's leading supplier of equipment connectivity and testing products to automated factories around the globe. Our innovative and reliable products and services help lower the cost of automation for high-volume manufacturers and their equipment suppliers.

[www.peergroup.com](http://www.peergroup.com)

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