Hemlock Semiconductor Streamlines Plant Maintenance System and Increases Work Capacity Utilization

HSC ® HEMLOCK SEMICONDUCTOR

PROMETHEUS GROUP

Company

🏢 Hemlock Semiconductor

📍 Hemlock, Michigan

🏭 Polycristalline Silicon & Semiconductor Chemicals

Challenges

- Importing dta in and out of ERP system led to corruption
- HR and maintenance data were separate, leading to difficulties in planning and scheduling
- Need to improve process efficiency and reduce operational costs

Results

- Increased productivity by 30%
- Allowed for 20 hours of weekly preventative maintenance
- Achieved 80% maintenance capacity across all work centers
- 30% decrease in non-value added activities

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ABOUT HEMLOCK SEMICONDUCTOR

Hemlock Semiconductor is a joint venture of Dow Corning Corporation, Shin-Etsu Handotai, and Mitsubishi Material Corporation. Hemlock Semiconductor is a leading provider of polycrystalline silicon and other silicon-based products used in the manufacturing of semiconductor devices and solar cells and modules. The company began its Michigan operations in 1961 and broke ground at its Tennessee location in 2009. Hemlock Semiconductor has more than 1,000 employees across five different locations.

Hemlock Semiconductor faced many challenges coordinating its plant maintenance work at its Michigan site due to archaic HR reporting and a complicated SAP system. Little to no time was available to schedule preventative maintenance because planners were overwhelmed with corrective maintenance scheduling and rescheduling.

The company purchased the Prometheus ERP Advanced software solution to consolidate its plant maintenance systems and processes. Upon implementation, Hemlock Semiconductor integrated its HR and PM modules for all maintenance planning and scheduling. By consolidating their maintenance processes into one platform, they were able to dramatically improve process efficiency and reduce operational costs. In addition, the software solution has enabled Hemlock Semiconductor to respond rapidly

to break-in maintenance work and allowed for an unparalleled 20 hours of preventative maintenance to be scheduled.

Hemlock Semiconductor saved thousands of dollars by increasing plant maintenance efficiency and reducing its daily maintenance scheduling burden. By simplifying its complex SAP system, Hemlock Semiconductor dramatically decreased the time plant maintenance processes took and achieved its goal of 80% capacity planning, allocating an unprecedented 20% of its resources to immediate and disruptive work.

This was ground-breaking, as little to no preventative maintenance was scheduled previously. By maintaining all data within SAP, Hemlock is able to trust the information in SAP and eliminate the "silo effect" that once existed in the Plant Maintenance module. SAP users outside of the PM module can now track work orders and executives can analyze and forecast costs, all within SAP.

SOLUTIONS

Hemlock Semiconductor needed its SAP system to be user friendly and to eliminate planning and scheduling process inefficiencies.

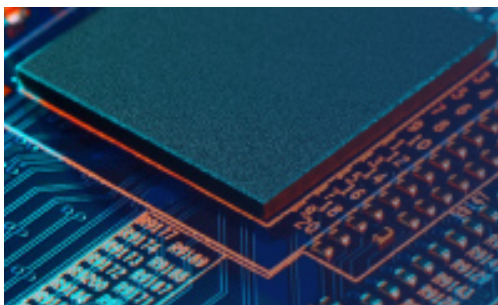Integrate the HR module across the plant maintenance work centers.

Centralize access to key plant maintenance data and trend information at the corporate level to give executives greater insight into the company's overall operations.

Increase reliability of equipment and ensure a safe plant environment by allowing planners and schedulers to focus on the science of planning and scheduling.
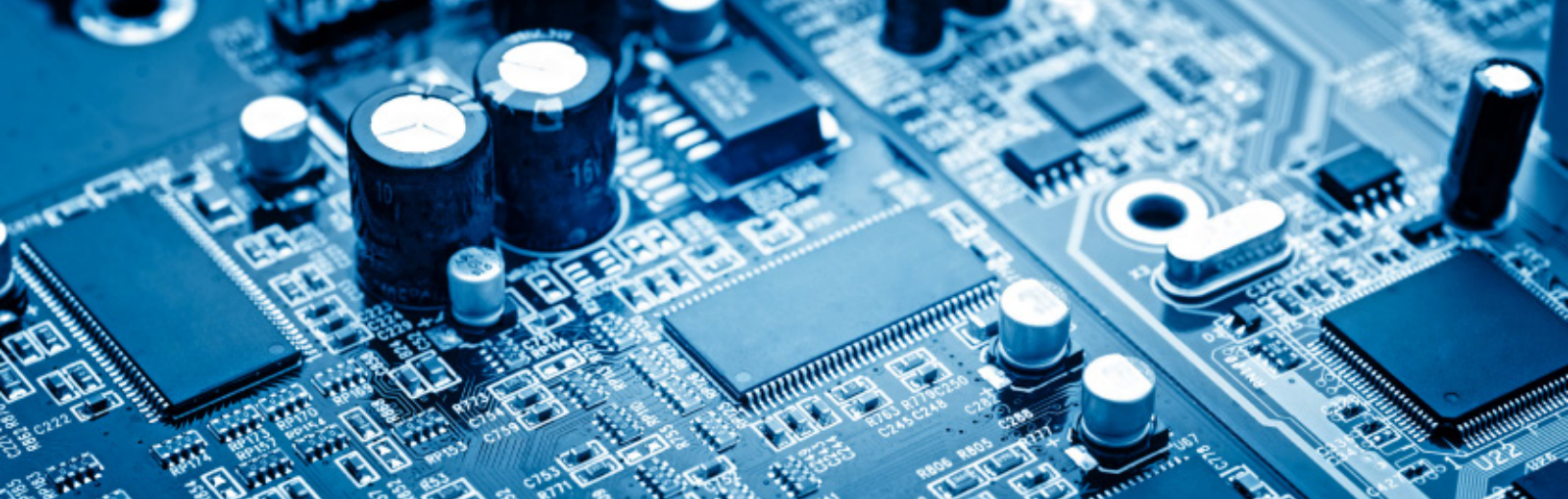
Achieve plant maintenance initiatives such as fully utilizing capacity, improving data integrity, and eliminating sources of user error.

Prometheus Group worked closely with Hemlock Semiconductor to implement ERP Advance in record time. One day was required for implementation and only three days were required to successfully train all users.

- Implementing Prometheus ERP Advanced has improved visibility and operational efficiency while ensuring process consistency.

- Prometheus ERP Advanced allows planners and schedulers to access personnel work availability directl y from the HR module. This eliminated a separate manual worksheet that was often inaccurate, and it places an importance on updating vacation time within the ERP system.

- End-user productivity increased by 30% due to Prometheus ERP Advanced's automated and streamlined PM processes.

- Proper planning and scheduling led to a 30% decrease in non-value added activities.

- IT management costs were reduced by eliminating external programs. Data integrity was greatly augmented by terminating the need to export and import data between spreadsheets.

- New, streamlined process increased planner communication and enabled two schedulers to work in tandem without requiring detailed notes.

- Achieved 80% maintenance capacity across all work centers, thus reaching Hemlock's goal and allowing remaining capacity for break-in maintenance without disrupting schedules.

- Provided senior administrators with enhanced insight into plant maintenance data and trends through KPI reports, which improved the company's ability to forecast costs.

- Improved planning and scheduling enhanced employee morale by enabling planners and schedulers to plan work weeks in advance.

Learn more about how Prometheus Group can help your organization today.

CONTACT US

About Prometheus Group

Prometheus Group is a leading global provider of comprehensive and intuitive enterprise asset management software solutions that work within ERP systems and span the full work management life cycle for both maintenance and operations. Developed jointly with end users, Prometheus software enhances the customer experience for planning, scheduling, and executing work for both routine maintenance and shutdowns and turnarounds, all while protecting the workforce with safety solutions and electronic permit to work. Our straight-forward functionality, graphical visualization, and simple processes enable customers to increase productivity, reduce costs, and improve reporting. For more information, please visit www.prometheusgroup.com.