

PROFICY SMART FACTORY MES FROM GE VERNOVA



Increase efficiency and reduce costs with one seamless MES across process, discrete and mixed manufacturing

Modern Manufacturing Execution System (MES) software to maximize operational effectiveness

Proficy Plant Applications is a powerful operations management solution for process, discrete, and mixed manufacturers – spanning food and beverage and consumer packaged goods to aviation and automotive. Part of the Proficy Smart Factory suite, this MES solution collects and analyzes data, and helps manage highly automated, fast-moving processes as well as slower moving, labor-intensive jobs.

Proven and developed for 25+ years with thousands of implementations around the world, Proficy Plant Applications automates and integrates information-related activities for managing production execution and performance optimization. It helps balance competing priorities of production operations for maximized operational effectiveness and profitability. As a single, seamless MES solution across manufacturing environments, Proficy Plant Applications reduces costs and saves time.

The new version reduces time to solution, improves UX, and expands functionality including discrete manufacturing capabilities. New features include zero downtime web client updates, new and enhanced out-of-the-box web UI views, significant additions to non-conformance management, new BOM-related capabilities, and much more.

OUTCOMES

- Reduce costs and improve agility with one MES solution that uniquely serves your discrete, process, and mixed manufacturing requirements
- Boost operational effectiveness by understanding operations performance down to the individual asset
- Improve performance with capabilities designed to solve the toughest manufacturing challenges and support Continuous Improvement
- Drive precision with the ability to visualize, analyze, optimize, and execute with a closed-loop solution
- Ensure uncompromising quality and optimization with GE's renowned expertise in Lean, as one of the largest manufacturers in the world
- Leverage faster deployment with commercial off-the-shelf (COTS) software, accelerating implementation and ROI

01 Efficiency Management

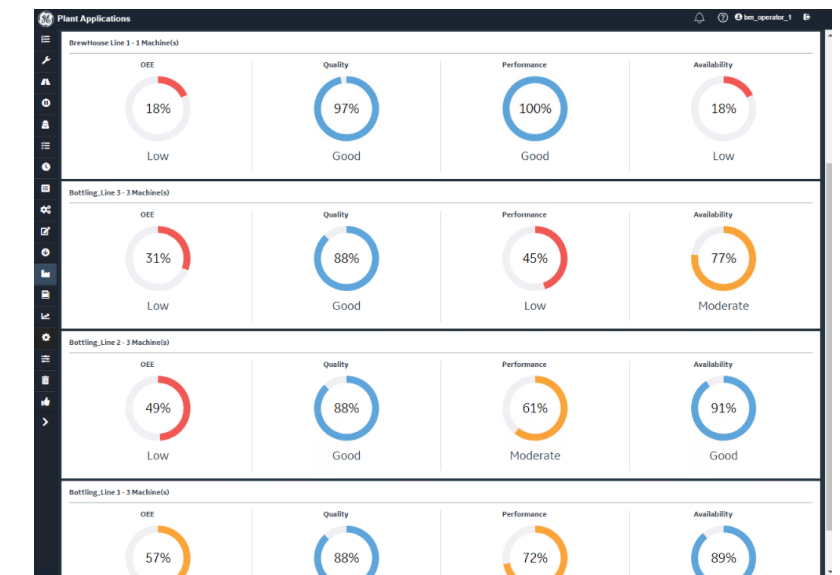
- The Efficiency Management module tracks and monitors overall equipment effectiveness (OEE) and other critical key performance indicators, downtime, waste, and production counts, MTBF, MTTR, and more.
- Automatically or manually associate events with causes and then analyze to identify root causes
- Summarize and analyze data by context
- Correlate events and reasons to actual production parameters. Utilize standard & ad-hoc reports, and dashboards for real-time decisions

02 Production Management and Tracking

Define and revision control the route and operations required to make a specific product on a specific line. The Production Management module oversees production operations, including functions to control product flow between equipment, develop product genealogy reports, and make schedule changes to reduce excess inventory. It supports production schedule execution and product tracking against scheduled completion times with adjustments to optimize efficiencies. Production management supports full traceability of individual products through every step of the manufacturing process allowing for auditable genealogy and production reporting.

03 Quality Management & Batch Analysis

The Quality Management module drives consistent quality in products, providing real-time trends, statistics, SPC, and notifications. It integrates process, inspection, and test data from both manual and automated sources, and houses this information in one, integrated place – including support for 21 CFR Part 11. Quality Management attaches operator comments, specifications, recipes, and procedure documents. The Batch Analysis module supports ISA-88 recipe analysis for products as formulation (BOM), procedures, and equipment; provides analysis of scheduled/completed recipes; and generates EBR.



Level-Up with Proficy Plant Applications

- Recognized as a Leader in MES by 4 major industry analyst firms
- Faster time to value: dozens of out-of-the-box screens for process, discrete, and mixed manufacturing environments
- Rich visualization: easily customize screens without writing code
- Manage large enterprises including mixed / diverse manufacturing, multi-sites, and global
- Run in private or public cloud and/or on-premises
- Proven MES, expert support, and real results

"We further developed our by-the-numbers approach by creating a downtime dashboard – which tracks each line by shift, downtime percentage, and cost of downtime – to create friendly competition amongst factory operators and encourage production efficiency improvements."

Don M. Cormier, Vice President, U.S. Information Systems and Quality Assurance, Toray Plastics (America), Inc.

GE VERNOVA IS RECOGNIZED.

We are proud to announce that GE Vernova has been named a Representative Vendor in the 2025 Gartner® Market Guide for Manufacturing Execution Systems. We believe this is a powerful step forward in our work toward powering our customers' transition to digital with fully integrated industrial manufacturing and utilities software.



Features

New in Version 2025

New Plant & Material Models

- Optional Plant and Material Models for tighter control of configuration changes needed for regulated discrete deployments

Discrete Execution

- Ability to switch lot(s) on an active operation to a different equipment/work unit
- Use My Machines integration with operator applications to assign specific work units to users
- Update BOM for specific lot(s) on an in-progress work order
- Remove components on a work order to create negative BOM
- Consume materials with Risk Release flag to drive automatic NC generation

Quality & Non-Conformance

- Assign defects to individual users or groups. Quickly find all defects assigned to you in the NCM app.
- Re-designed look for Defect Viewer for easier summaries and performance improvement
- Added ability to specify the operation where a non-conformance occurred (what caused it)
- Added support for custom calls when submitting a disposition action

BOM Management

- Added support for custom calls when releasing a BOM

Route Management

- Organize operations into groups and sub-groups to create complex routes
- Updated design for tracking labor resource plans to allow more customizations

Engineering Change Order

- Administration of Engineering Change Order from selection of impacted items to executing actions
- Administration of ECO Managed flag on materials and routes
- Control ECO actions with security permissions and approval workflows
- Attach documents and leave comments on ECO
- Review ECO timeline

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Serial Number Formats & Lot Generation (Requires New Material Model)

- Apply standard formats (templates) to your serial/lot numbers

Tools

- Import the tools from the external systems using the ERP Import Interface
- Control which tools can be used to perform operation
- Notify personnel that tool is out of calibration
- Identify the products that are impacted when a tool is found to be out of calibration
- Notify third-party system when a tool was used the maximum allowed times and needs recalibration

Document Management

- Site level Document Management System (DMS) enables seamless storage, control, and retrieval of documents

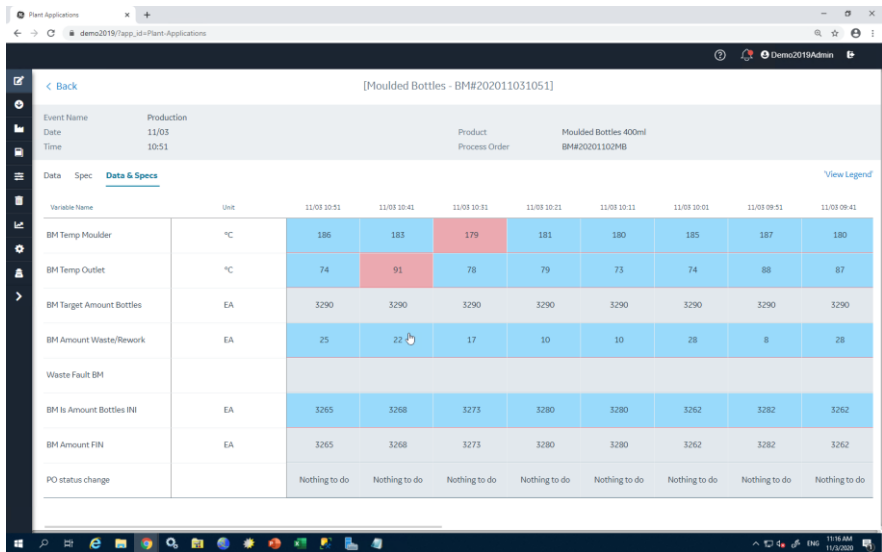
- Multi-Format Support: Supports various document types
- Version Control: Track and maintain multiple versions of documents
- Advanced Search Filters: Locate documents using multiple filter options
- Flexible Storage: Secure on-premise or cloud storage solutions
- Seamless Integration: Native deep integration with Plant Applications for easy linking to objects like Routes, Equipment, and Materials

New Operations Hub Widgets

- Activities widget
- Downtime widget

64-bit Excel Add-in

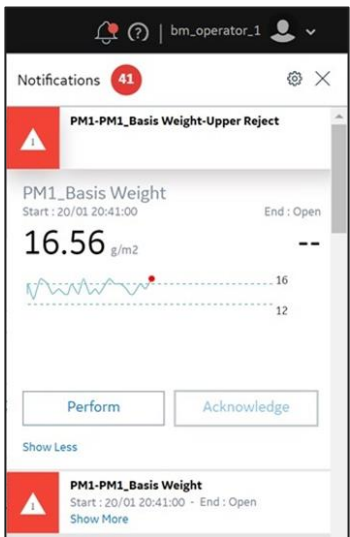
- Multi Browser support (Chrome, Edge, Chrome, Firefox, Safari)
- Proficy Authentication (UAA) integration
- Refreshed UI: Experience a refreshed new look and feel of the user interface for a modern and engaging user



Empower the modern Connected Worker and operating teams with easy, flexible access to their manufacturing data for better decision making.

To the left, see an example of a process order detail view.

To the right, see our real-time interaction on mobile devices.



Learn how Proficy Plant Applications helps you balance the tradeoffs between competing production priorities and maximize your operational effectiveness.

Consult [product documentation](#) for hardware/software requirements. Confirm standard vs optional features with GE Vernova representative. Specifications are subject to change without notice. Results and functionality vary, depending on existing hardware/software, applications, implementation, and other factors.

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