# PROFICY PLANT APPLICATIONS 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

### Efficiency Management

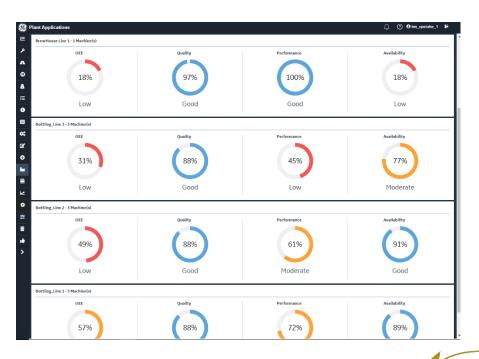
- The Efficiency Management module tracks and monitors overall equipment effectiveness (OEE) and other critical key performance indicators, downtime, waste, and production counts, MTBF, MTTR, and more.
- Automatically or manually associate events with causes and then analyze to identify root causes
- 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

## 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.

# 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 Gartner

 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-prem
- · 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.

**Gartner**We're a Leader



Peer Insights

Choice 2023

**Customers'** 

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#### **Features**

#### **New in Version 2023**

Faster time to solution

- Even smoother installs and upgrades with faster installer startup, fewer inputs, and splitting up Tomcat into multiple instances
- · Zero downtime web client updates

Better user experience & expanded functionality

- · New and enhanced out-of-the-box web UI views
- Other updates: custom tabs in Activities, Work Order Manager and Genealogy; Autolog – multi-column event editing; support for Web Report Server on Chrome, Safari, Edge and Firefox; and smaller overall system memory requirements and disk footprint

Expanded discrete manufacturing capabilities

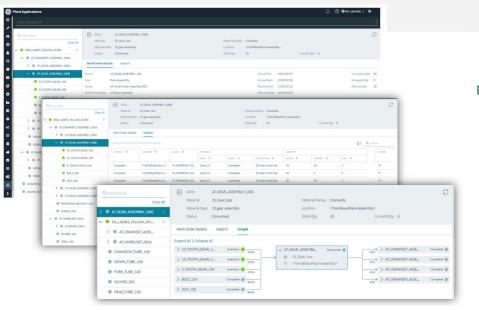
- Non-conformance management additions: custom dispositions, capturing out of reject quality variables on non-conformance creation, dispositioning integrated into Approval Cockpit, and templated groups of operations for rework
- New BOM-related capabilities: substitutions, BOM quality splits & mandatory BOM items for mutually exclusive sets
- Limited availability of product variables

## Proficy Plant Applications: Improve efficiency, quality and performance with proven MES

- Scalable MES platform for all manufacturing environments – process, discrete and mixed
- Single pane of glass: use out-of-the-box apps and nocode / low-code Rapid Application Development (RAD) environment to customize operator and supervisor views
- Contemporary Web UI with widgets improves operator response and collaboration
- Built-in ERP integration includes Material Receipt Download, Inbound Work Order, BOM Consumption, and ~20 other messages
- Clearly shows areas/causes of productivity losses such as defects, waste, and downtime
- Turns production data into performance metrics monitors automatically & manages consistently
- Operations performance management best practices from the world's leading companies
- Standards-based (S95) unified manufacturing database
- Frees operators from collecting, logging, and interpreting information manually

- Browser-based apps & functionality: Alarm View, Order Management, Non-Conformance, Genealogy (displays BOM consumption, source, used-in), Receiving Inspection, Time Booking, Waste Management, Process Order Execution, Approval Cockpit, Bill of Materials (BOM) Editor, In-Progress Work Order Editor
- Designed for mobile: support for Apple/iPads, Android and Windows tablets
- Attach files/videos/images to work orders, lots, downtime, Activities, and more
- Standard and highly scalable Enterprise Editions to support large and small plants / enterprises; support for up to 500 concurrent users
- Run on-prem and/or private or public cloud. Hosted Efficiency Management, Production Management and Quality Management modules available
- Support for Azure SQL Database Managed Instance and AWS RDS (Relational Database Services)
- Service-oriented architecture for easier enterprise connectivity and fast deployment
- Extensive reporting and analysis tools find problems and drive activities for improvements
- Track order completion status

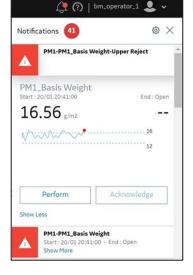
- Support regulatory and internal compliance (energy, environmental, food safety, costs, etc.) – including eSignature capabilities and 21 CFR Part 11 support
- Assure product genealogy/traceability
- Track and analyze batch processing information
- Support for optional, parallel and mutually exclusive operations
- Integrate log-sheet information for real-time performance and quality management
- Improve consistency, drive out variability with simple SPC/SQC
- Support for multiple labor types on operations
- Drive label printing and identification
- Secure by design including enhanced authorization capabilities
- Support for Unicode database and Web displays
- Support for 20+ languages, additional languages can be added with ~3 months notice
- Global systems integrator ecosystem and GE Digital's Professional Services for cost-effective implementations and maintenance
- Extensive online and in-person training options



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

To the left, see our newly enhanced Genealogy app.

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 <u>product documentation</u> 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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