Proficy Smart Factory – Cloud MES from GE Digital

Increase throughput & quality with GE's managed service, hosted in the cloud – faster, easier & secure by design

Reduce manufacturing software costs by 30%* with GE's Cloud MES while accelerating time to value

Proficy® Smart Factory – Cloud MES from GE Digital is a powerful production and quality management solution that speeds production and increases consistency. This cloud-based solution manages both non-serialized and serialized production operations by providing insight into how products flow through the plant and integrating quality control.

Proven and developed for 25+ years with thousands of implementations around the world, GE's leading Proficy manufacturing solutions are now available as a managed service, hosted in the cloud. Choose cloud only or mix cloud and on-prem MES to meet your enterprise needs.

Cloud MES combines our proven Production Management and Quality Management modules, delivering capabilities developed in partnership with the world's largest manufacturers to support their best practices to increase throughput, reduce variability, and ease compliance.

- Reduce inventory costs, control the flow of product between equipment, and achieve product genealogy reports
- Increase quality while lowering waste, scrap, and recall costs
- Support Lean, Right First Time, Six Sigma, and other process improvement initiatives

Compared to on-premises MES solutions

Outcomes
- Decrease costs and accelerate production and quality improvements with a proven MES, hosted in the cloud – spanning your process, discrete and mixed manufacturing environment needs
- Increase operational efficiency with knowledge and control over real-time production operations
- 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
- Achieve fast ROI with an economical, cloud-based MES solution

## 01 Speed production & increase on-time delivery performance

Define and revision control the route and operations required to make a specific product on a specific line. Our 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.

02 Ensure consistency & quality

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.

03 Reduce costs, risk & downtime with SaaS

- Decrease total cost of ownership with a cloud-based solution, saving 30% compared to on-prem solutions & moving from CAPEX to OPEX
- Reduce risk with limited upfront cost and speed time to value
- Improve security and capabilities with automatic updates and patches
- Increase MES affordability regardless of company/plant size
- Boost MES deployment success and acceptance
- Improve visibility with global accessibility and ability to run 24/7 from any device
- Reduce on-prem infrastructure requirements
- Eliminate planned downtime for upgrades and costs for IT/OT management staff on-site to manage MES
- Achieve bidirectional scalability with superscalar cloud innovation
- Use just cloud or mix cloud and on-prem MES across your plants for flexibility across your enterprise
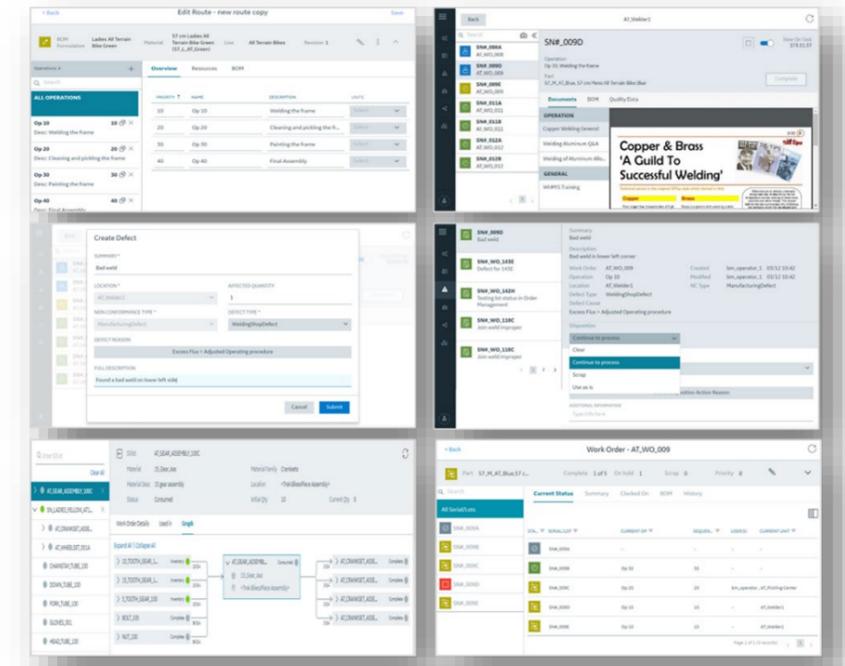
Improve your productivity and quality quickly and easily with GE Digital's proven MES solution, hosted in the cloud.

Gartner Peer Insights Customers' Choice 2023

Real Results from Proficy
- $5M/yr quality savings
- >$10M energy savings
- $500K annual waste savings
- $200K/yr SKU cost reduction
- $0.01/case SKU formula savings
- $850K/yr efficiency savings
- 30% faster product introductions
- 39% decrease in downtime events

- 25% defect reduction
- 50% waste reduction
- 20% OEE improvement
- 90% waste reduction
- 10-15% energy savings
- 80% reduced emissions
- 3-month MES payback
- 90% decrease in holds

Gartner. We're a Leader

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Features

Cloud MES: Capabilities Overview

Proven production management and quality management capabilities used by thousands of companies around the world

Architectures

- Cloud only
- Mixed cloud and on-prem MES for the flexibility to meet the needs of your enterprise and plants

As a Service: Offering Description

- Fully hosted and managed: Proficy Smart Factory hosted in the cloud, managed by GE
- Concierge service – optionally available
- On-premises integration – optionally available: Hook up wiring and configure on-premises software to collect data

Production Management

- Track order completion status
- Production tolerances on non-serialized material and default record quantity
- Manage material delivery to the process
- Track true/actual resource consumption and feed back to ERP
- Drive label printing and identification
- Orders dispatch from schedule
- Oversees production operations, including functions to control product flow between equipment
- Monitors consumption of resources
- Supports traceability of individual products through manufacturing process steps allowing for auditable genealogy and production reporting
- Turns production data into performance metrics – monitors automatically & manages consistently
- Send COAs to customers automatically
- Support regulatory and internal compliance (energy, environmental, food safety, costs, etc.) – including eSignature capabilities and 21 CFR Part 11 support

Quality Management

- Real-time trends, statistics, SPC and notifications to control quality without slowing manufacturing speed
- Integrated process, inspection, and test data from both manual and automated sources
- Related information stored, including operators' comments, specifications, recipes and procedure documents – supporting 21 CFR Part 11 and eSignature
- Define the product specifications and recipes that are required for quality production
- Capture reasons for out-of-spec conditions
- Integrate process and laboratory data
- Trend and analyze quality data across shifts, work cells and products to identify root cause in problem areas
- Integrate log-sheet information for real-time performance and quality management
- Improve consistency, drive out variability with simple SPC/SQC

Additional Cloud-Based Modules Available

- OEE / Efficiency
- Batch Analysis
- Proficy Historian
- Proficy Manufacturing Data Cloud
- Proficy Operations Analytics
- Proficy CSense – industrial analytics
- iFIX and CIMPLICITY HMI/SCADA

Level-Up with Proficy Smart Factory

- 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
- Rich visualization: easily customize screens without writing code
- Manage large enterprises including mixed / diverse manufacturing, multi-sites, and global
- Proven MES, expert support, and real results

Empower the modern Connected Worker and operations teams with easy, flexible access to their manufacturing data for better decision making – including real-time interaction on mobile devices.
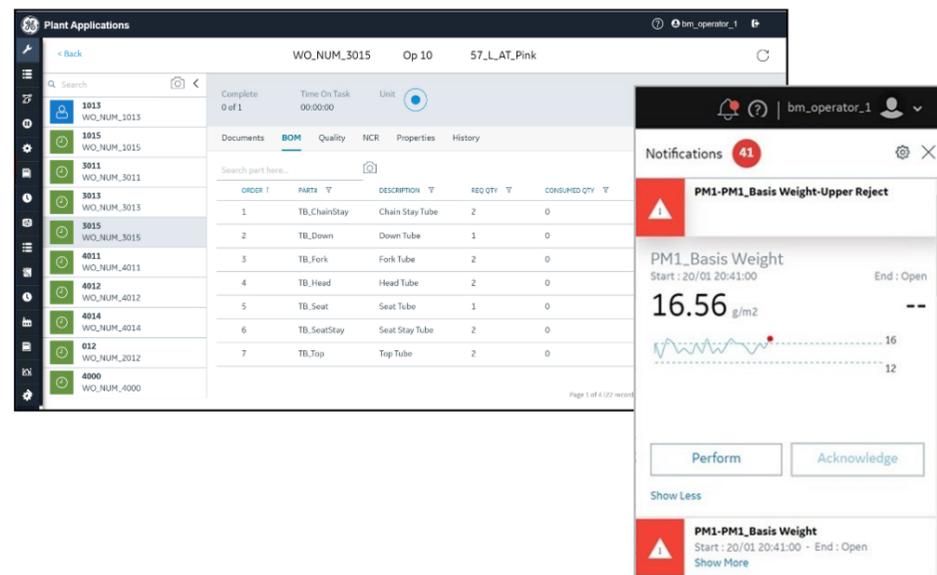
Please consult product documentation for hardware & software requirements.

Confirm standard vs optional features with your GE Digital sales representative.

Learn how Proficy Smart Factory – Cloud MES helps you manage production and quality with the speed, ease, cost effectiveness, and security of the cloud.

LEARN MORE

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Services

In the world of Industrial Internet of Things (IIoT), organizations are able to optimize productivity, reduce costs, and achieve Operational Excellence. While this is an exciting time for opportunity and growth, it can also bring on new challenges, questions, and uncertainty. No matter where you are on your IIoT journey, GE Digital has the right services offering for you.

Advisory Services We can help you plan and start your IIoT journey in a way that aligns to your specific business outcomes.

Managed Services We can help you maintain your critical machines from one of our remote locations around the world using model-based predictive analytic technology.

Implementation Services Our experienced global Automation partners can implement a collaborative, multi-generational program that marries your existing investments to the right enhancements and technology.

Education Services We specialize in education services to ensure that you're leveraging our solutions to the fullest extent with our training and certificate programs.

Acceleration Plans Let us help by ensuring that your business continues to operate at its highest efficiency, all while mitigating risks to your investments.

Security Services Our solutions provide industrial-grade security for a wide range of OT network and application topologies.

Related Products for Your Digital Transformation Journey

GE Digital's Proficy suite helps you precisely monitor, control, and visualize every aspect of your operations, enabling operators to make the best decisions faster. Transforming your business requires foundational innovations that lay the groundwork for future success.

Proficy Operations Hub

Aggregate and visualize contextual and situational information for industrial applications – supporting rapid application development and rich displays for faster operational response & better decision making
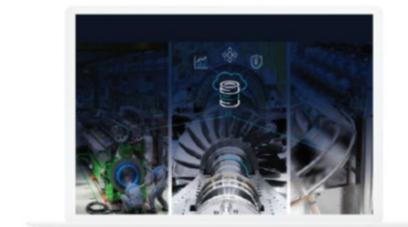
Proficy Manufacturing Data Cloud

Achieve an unprecedented ability to create connected factories that provide a cloud-hosted enterprise manufacturing system of record while optimizing your on-prem MES data footprint and performance

iFIX

Gain visibility into your operations and secure agility for smarter decision making that drives results with industry-leading HMI/SCADA used around the world.

Proficy Historian

Optimize asset and plant performance through time-series and A&E industrial data collection and aggregation. Improve decision-making with advanced trend analysis.

CIMPLICITY

Drive real-time visibility for smart operators with true client-server based visualization and control with proven HMI/SCADA used by the largest industrial organizations
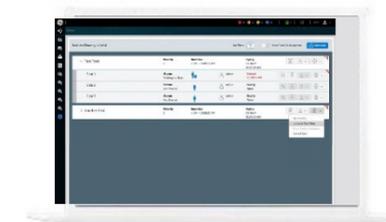
Proficy Workflow

Guide operators with dynamic, interactive electronic work instructions and eSOPs for more consistent operations and optimized processes.

About GE

Contact

www.ge.com/digital