



# ROB-EX Scheduler 7.0 from GE Digital

Achieve dynamic and efficient production schedules in real time to improve customer satisfaction and productivity

## Optimize with a graphical planning tool for finite capacity scheduling

*Fed up with rescheduling, bottlenecks, overtime, and delayed deliveries?*

ROB-EX Scheduler, part of the Proficy MES family, enables companies to create and maintain dynamic and efficient production orders in real time based on resources and asset capacity.

This modular production scheduling system can be used as a complete standalone planning solution or integrated easily with ERP and MES.

ROB-EX Scheduler tracks production orders and, as the orders execute, tracks actual measured production, consumption, waste, and yields, updating ERP and MES systems automatically. It also provides reports and analysis tools.

By offering an interactive graphical view of the production plan across the plant, ROB-EX Scheduler allows planners to easily schedule and execute production orders then monitor the progress to ensure more efficient production operations. It also combines local scheduling and central multi-site planning as well as enables multiple users to work simultaneously from the same plan. With ROB-EX Scheduler, you can achieve valid schedules checked against finite capacity and materials availability, improving capable-to-promise with reliable delivery dates.

### Outcomes

- Optimize and balance the production schedule with materials, energy, labor, equipment, and delivery times
- Reduce order lead time up to 40%, work in progress up to 15%, and overtime up to 35%
- Improve plant utilization of capacity up to 20%
- Increase production output on the same equipment up to 7%
- Decrease time spent on production planning by an average of 50%
- Achieve top- and bottom-line impact: improved customer satisfaction and operations productivity
- Increase inventory turns / turnover
- Achieve a noticeable reduction in costs related to: wages/salary, financing, penalty payments, subsuppliers, and materials

## 01 Better accommodate variations to improve production performance

Helping to improve both the top and bottom lines by shortening lead times, ROB-EX Scheduler minimizes the effects that result from accommodating variations and enables rescheduling based on capacity changes. ROB-EX Scheduler provides automated rules and easy-to-configure routes and resources to offer an integrated view of plant resources to efficiently respond to production changes.

## 02 Facilitate production routings

By offering both forward and backward planning, ROB-EX Scheduler facilitates the configuration of product routings and resources (staff, materials, equipment) for short-, mid-, and long-term planning.

ROB-EX Scheduler helps users execute scheduling changes quickly and accurately to avoid planning errors and long lead times. It obtains orders and bill of materials (BOM) from the ERP system then optimizes and balances production plans with available resources.

## 03 Prevent bottlenecks and material shortages

Avoid delays by having ROB-EX Scheduler adjust resources in advance. For fully integrated solutions, ROB-EX Scheduler can also alert the ERP system to make the necessary changes in resources and materials.

ROB-EX Scheduler provides actual production, consumption, and events information plus the impact on schedule adherence. By better forecasting order completion times, ROB-EX Scheduler easily maps current situations with production schedules to optimize and meet customers' expectations.

## 04 Simulate "What-If" scenarios to improve efficiency and save time

"What-if" simulations provide visualizations of the impact on load factors if certain activities change. ROB-EX Scheduler helps companies maintain work-in-progress (WIP) schedules by showing how raw materials will deplete during a production schedule and finished goods inventory levels at any given time in the production run.



*ROB-EX Scheduler optimizes production capacity with valid schedules checked against finite capacity and material availability.*

## 05 Improve collaboration across teams

For information where and when you need it, ROB-EX Scheduler allows access through several clients. In addition to the planner, ROB-EX Scheduler includes viewer read-only access. Viewers have the same access as the planner but without the ability to edit the plan.

Additionally, a Web browser application for tablets and smartphones allows the remote operator access to on-line job lists to monitor production progress, view the status of activities, and report on the status of each job, which updates the planner real time. This allows the planner to make on-the-spot adjustments and updates to the plan.

*"We have increased our capacity approximately 20% by using the GE software, especially the planning tool. We have less gaps between the process orders, which means decreased lead times for the customer."*

**Kajsa Lake, Supply Chain Manager, Nouryon**



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## Features

### New in Version 7.0

New BOM Analysis tool

- Addresses manufacturing challenge for companies with multi-level BOMs
- Answers questions such as how to:
  - Easily determine what semi-components and final SKUs are affected by a delay in earlier BOM levels
  - Discover production orders supplying a given semi-component or SKU
  - Discover what orders are consuming from a specific purchase order
- Analysis supported in both directions: Forward/Bottom Up – start with semi-component and determine supply chain) and Backward/Top Down – start with e.g. SKU and determine possible supplying orders
- Only looks at production order BOM – no master data needed – will work out of the box for all users with BOM imported
- New planners better understand BOM structure

New Viewer Gantt chart in Web browser

- Web-based Gantt chart available from anywhere on your company network
- Accessible from within the Dashboard App
- Configurable
  - What resource view to show
  - Resolution: days, weeks, months
  - Horizon to show
  - Color mode: order, operation status, route, material shortage
- Double click operation to view details (configurable)

New server technology

Improved login and data loading time

History based workload graphs in Dashboard

New user security layer

New Installer

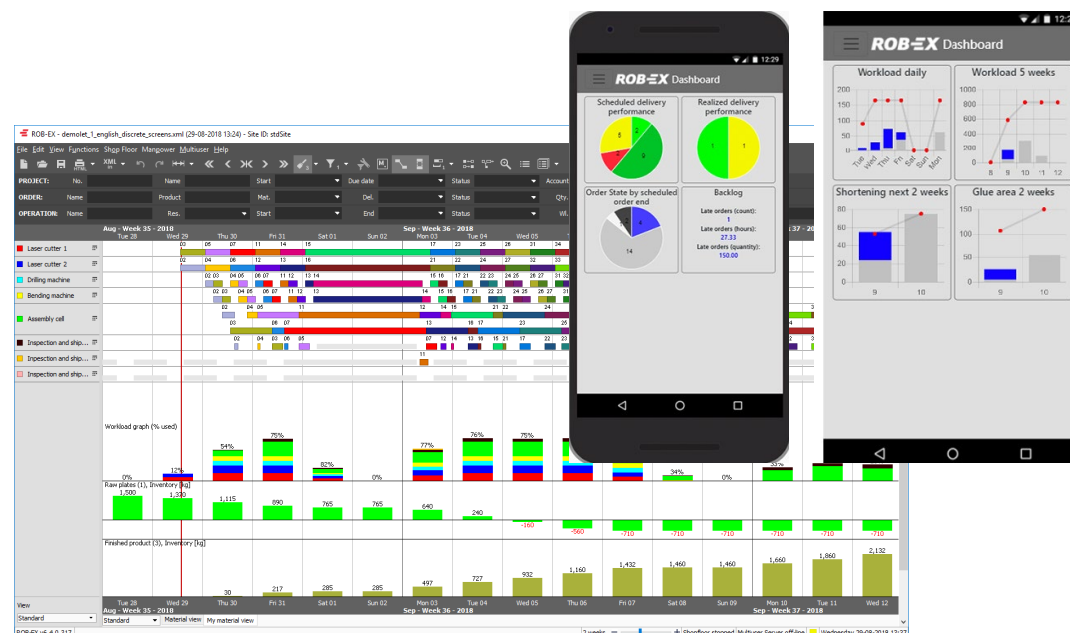
### Proven Finite Capacity Scheduling

- Optimizes production with better planning and capacity utilization, delivering complete visibility for scheduling
- Determines resources needed, scheduling down to minutes in a leaner operation
- Easily accommodates variation
- Decreases manual work through automation
- Reduces production control firefighting
- Minimizes the impact of production changes
- Improves order completion forecasting
- Easy integration with ERP and MES systems
- Integrated real-time tracking
- Avoids use of spreadsheets and manual expedition of production order flow
- Valid schedules checked against finite capacity and material availability, improving capable-to-promise by giving reliable delivery dates
- Modules include: Planner, Viewer, Operator, Project, Materials, Batch, Advanced Scheduling, Integration, API

### Other Capabilities and Features

- Easy to use, visual and intuitive
- Web browser application for tablets and smartphones
- Automated tool for “what if” scenarios and impact on future orders, improving and accelerating decisions
- Reschedule based on capacity changes, leveraging automated rules
- Combine local scheduling and central multi-site planning, allowing users to work simultaneously from the same plan
- Keeps schedule up to date with a single view for all
- Viewer users can: view the latest plan, search the order list, zoom into operations, view and color code activities, and leverage Gantt chart viewer (workload graphs, color coding, order lists, and standard reports)
- Open interface for import and export of data (XML, SQL, CSV or Web service)
- Exchange of data: resources, calendars, operations, orders, projects, series, materials, parts lists, storage, planned and actual material usage, status, and more

Execute scheduling changes quickly and accurately to avoid planning errors and long lead times with ROB-EX Scheduler.



For detailed Hardware and Software Requirements, please consult the [product documentation](#).

Create and maintain dynamic and efficient production orders in real time based on resources and asset capacity with ROB-EX Scheduler.

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.

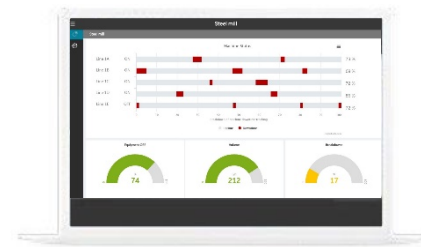
**Education Services** We specialize in education services to ensure that you're leveraging our solutions to the fullest extent with our training and certificate programs.

**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.

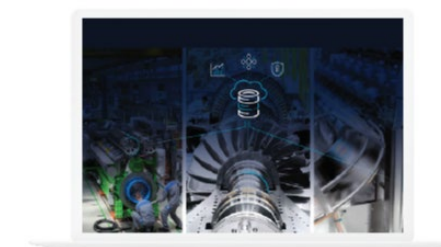
## Related Products for Your Digital Transformation Journey

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.



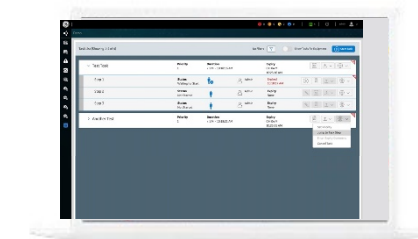
### Proficy Historian

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

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

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#### Contact

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