

FINITE SCHEDULER BY ROCKWELL AUTOMATION

An Adaptive Plex MES Integration Designed
To Create Resilient, Optimized Schedules.

CRITICAL FUNCTION. CHALLENGING ENVIRONMENT.

Manufacturing has become increasingly volatile. Fluctuating customer demands, workforce shortages, and supply chain disruptions make it difficult to schedule production operations that achieve a company's business objectives. The best laid plans can quickly become obsolete. As a critical function of every manufacturing operation, production scheduling acts as the glue between planning and execution. With a Finite Scheduler by Rockwell Automation integration, you can modernize your production cycle with reliable and responsive capacity scheduling capabilities to optimize production flow and maximize customer satisfaction.

WHY TRADITIONAL SCHEDULING TOOLS ARE INSUFFICIENT

The output of Material Requirements Planning (MRP) systems and their capacity planning applications do not provide the data needed to schedule production on the shop floor because:

- All production orders are backward scheduled from the due date.
- Each production order is scheduled independently from other orders.
- Lack of consideration on schedule feasibility, such as tooling, fixtures, specialized containers and racks, limited storage or holding space, and skilled operators.

Manufacturers may attempt to bridge gaps in their MRP systems by using spreadsheets or similar manual tools. However, these scheduling solutions combining MRP systems and spreadsheets are very limited in their capabilities in generating a feasible and optimized schedule.

SMARTER SCHEDULING, FROM THE SMART MANUFACTURING EXPERTS

Designed by the global leaders in digital transformation and industrial automation, Finite Scheduler goes beyond MRP systems and considers additional factors — tooling availability and equipment downtime, for example — that influence your production operations. Unlike with homegrown solutions and spreadsheets, Finite Scheduler can keep up with frequent changes, provide more accurate data than manual compilations, and put your planning to work on the plant floor.

TODAY'S TOOL FOR OPTIMIZING YOUR PRODUCTION FLOW

To meet manufacturers needs in a complex environment, production scheduling tools like Finite Scheduler by Rockwell Automation provide comprehensive capabilities.

REQUIRED CAPABILITY

- Modeling of all critical resource type constraints
 - Detailed and flexible modeling of production processes
 - Rapid generation of optimized production schedules
 - Interactive graphical user interface
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TOOL FUNCTIONALITY

- Generate production schedules based on available capacity of all critical production resources including: equipment, tooling, storage devices, pools of labor, and skilled/ certified employees
- Model different steps of operations (setup, cycle, teardown/ clean-down), capacity type, buffer type, and wait time constraints.
- Rapidly generate and regenerate optimized production schedules to meet varying business objectives.
- Review generated production schedules through an intuitive user interface that enables an interactive optimization process.

BENEFITS OF A FINITE CAPACITY SCHEDULING INTEGRATION

Implementation of finite capacity scheduling can result in more accurate, agile, and achievable production schedules with many benefits:

- Increased production schedule attainment and on-time customer delivery
- Increased conformance to short-term plans
- Increased manufacturing operations agility
- Improved utilization of production capacity with minimized changeover/setup times
- Reduced WIP inventory
- Reduced manufacturing lead time