



DIGITAL INDUSTRIES SOFTWARE

Opcenter Scheduling SMT

Optimizing productivity by minimizing machine setup time when manufacturing multiple products

Benefits

- Facilitates intelligent SMT line grouping to optimize productivity by minimizing machine setup when manufacturing multiple products
- Provides full SMT line coverage including SMT, test and manual
- Uses what-if simulation to enable immediate response to line-down scenarios
- Delivers long-term planning, capacity forecasting and assistance in new equipment investments
- Provides actual versus real-time performance analysis for a rapid response to bottlenecks

Summary

Opcenter™ Scheduling SMT software is a planning and scheduling tool for the electronics manufacturing industry that seamlessly connects the planner to the shop floor. Opcenter Scheduling SMT supports factory planners as they generate production schedules while adhering to a dynamic manufacturing environment and taking into account frequent, real-time changes that occur in the manufacturing stage, especially in high-mix, low-volume production or when introducing a new product.

Opcenter Scheduling SMT, which is part of the Siemens Xcelerator business platform of software, hardware and services, combines data from three sources: (1) machine, line configurations and resource availability from the shop floor, (2) work orders, schedules and work hours from the enterprise resource planning (ERP) system and (3) material availability and location from the supply chain. The combination of all three enables accurate short-term planning while creating a production plan that includes groups per line, static feeder settings, trolley usage, kanban/work-in-process (WIP) and resource allocation. Combining intuitive constraint definition with tight SAP integration makes Opcenter Scheduling SMT an efficient, easy-to-use, decision-supporting tool that dramatically improves manufacturing efficiency and supports compliance.

SIEMENS

[siemens.com/software](https://www.siemens.com/software)

Benefits *continued*

- Includes realistic SMT production scheduling based on actual factory capacity

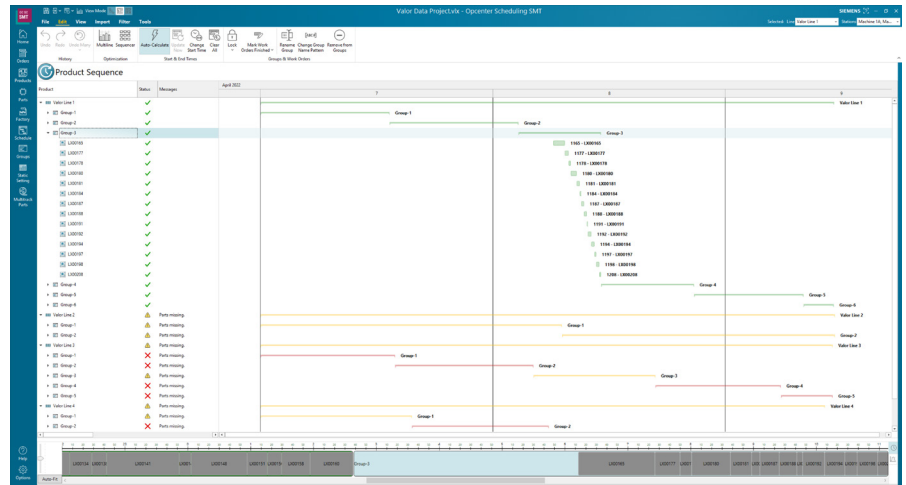


Figure 1. The Opcenter Scheduling SMT solution combines data from three sources: (1) machine, line configurations and resource availability from the shop floor, (2) work orders, schedules and work hours forecasting and from the ERP system and (3) material availability and location from the supply chain.

Opcenter Scheduling SMT can be integrated with Opcenter Advanced Planning and Scheduling (APS).

Intuitive, easy-to-use production planning

Set up your constraints using a simple yet comprehensive model that allows you to quickly set up all surface-mount technology (SMT) and manual stations in your factory as a basis for conducting simulation. You can easily control optimization parameters, such as due dates, production time and changeovers, and then compare different scenarios. You can then choose the schedule that best fits your needs.

Effective tool to help meet deadlines and avoid downtime

React to changes quickly using actual versus scheduled performance tracking, allowing you to detect potential bottlenecks and avoid downtime. You can also modify shift schedules or add additional lines to see how such changes affect your ability to meet deadlines. You can update schedules, for example, adding shifts or controlling the number of active lines to analyze their impact on due-date violations. Your schedule can then be shared with the factory by exporting a calendar file for monitoring and visibility.

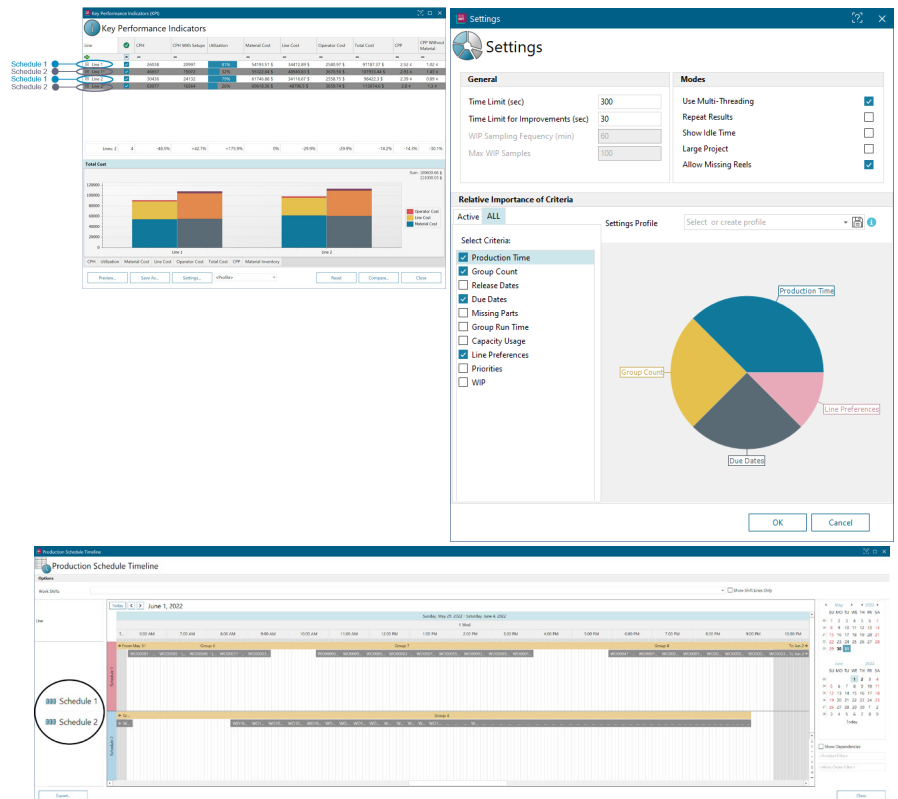


Figure 2. You can easily control optimization parameters such as due dates, production time and changeovers and then compare scenarios.



Figure 3. Use Opcenter Scheduling SMT to easily generate optimal product groups and maximize efficiency.

What-if scenarios to optimize schedules

You can easily make on-the-fly optimizations based on different scenarios (for example, adding unscheduled work orders, missing resources such as feeders or late material arrival) to support the planner’s decision-making process. Additional what-if scenarios can be made based on scheduled material arrival and material location data, which can be imported via integration with SAP and Valor Material Management software.

Multi-line work order and product grouping

Opcenter Scheduling SMT can be used to generate the optimal product groups (family setups or clusters), taking into consideration machine capacity, feeder availability, work-order priority and component range.

Quick to get started

Opcenter Scheduling SMT offers a built-in connectivity to a range of SMT production solutions as well as Valor™ Process Preparation software. This gets you started quickly and allows simple daily workflows.

Seamless integration with SAP

Unlike generic manufacturing-planning solutions, Opcenter Scheduling SMT enables you to save the time and effort typically required to coordinate between SAP and your scheduling process. You can extract work orders, required delivery dates, release data and material stock levels from SAP ERP by simply configuring the location and parameters of your SAP Process Integration (PI) module. You can also update the part reel quantities from SAP by selecting what to import and from where. Required quantity levels for each part in the work order can be displayed, along with inventory levels and the quantity remaining after the work orders are executed.

Minimize material shortage

To avoid downtime due to material shortage, Opcenter Scheduling SMT can be used to generate an optimal SMT production schedule that provides more time to get required material.

Material availability and scheduled material deliveries can be managed easily for an accurate optimized schedule. Detailed information is provided to resolve issues in time.

You can also easily identify large consumers of specific material and define alternative material for production.

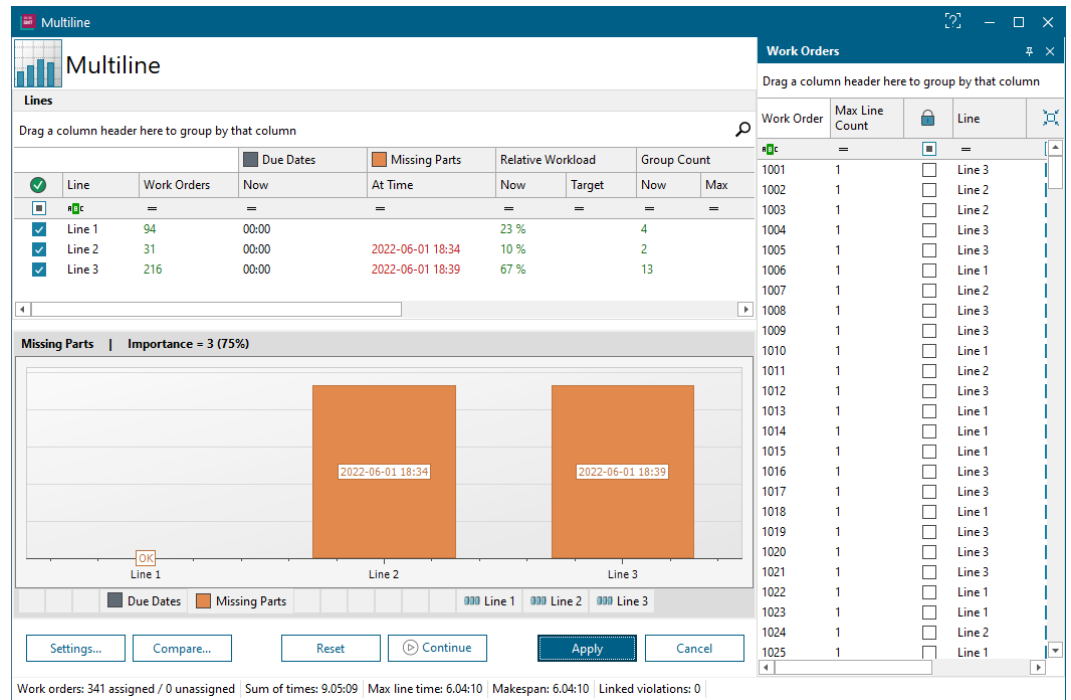


Figure 4. You can make sure you are not missing materials by generating an optimal schedule to provide additional time to get required material deliveries.

System Requirements

- Seventh generation Intel Corei5 processor
- Sixteen gigabytes (16GB) random access memory (RAM)
- Double the amount of RAM for virtual memory (paging file size)
- Fifty GB disk space
- Windows 10/11

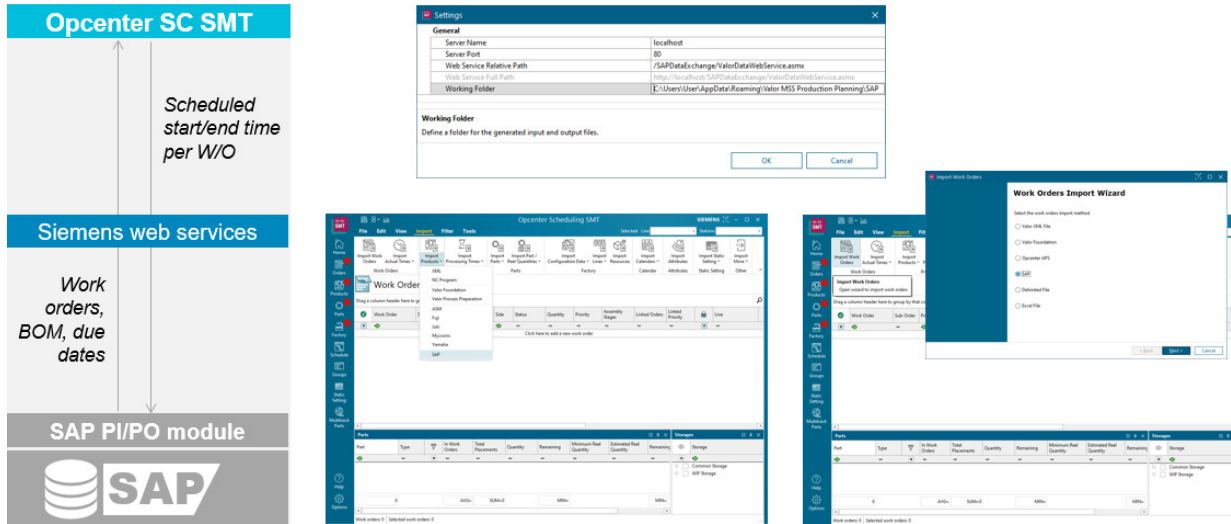


Figure 5. When integrated with SAP, Opcenter Scheduling SMT saves the time and effort typically required to develop a custom interface.

Siemens Digital
Industries Software
siemens.com/software

Americas
1 800 498 5351

Europe
00 800 70002222

Asia-Pacific
001 800 03061910

For additional numbers,
click [here](#).