



Fewer setups, higher yields

Planning efficiency for high-mix production



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The challenge

Zollner Elektronik AG, a leading EMS and mechatronics service provider in Europe, was confronted with growing complexity in its production planning and scheduling. The increasing demands of a heterogeneous customer base, the need to adhere to strict deadlines and the large number of different products with small batch sizes made manual planning increasingly inefficient. The goal was therefore to automate the planning process (150–200 orders per week) in order to increase the company's flexibility and efficiency and to reduce its dependence on the know-how of individual employees.



“We fully reconfigure almost every line five to six times a day. With the new solution, we have reduced the number of setups per week from 50 to between 40 and 35 per week by intelligently combining orders.”

Stefan Reichhart
Engineering Strategist
at Zollner Elektronik AG

- ↓ Reduced planning effort
- ↑ More efficiency and flexibility
- ↑ Improved adherence to deadline
- ↓ Less dependency on individual employees
- ↓ Reduced downtime
- ↑ Quick onboarding of newcomers



The solution

Zollner opted to implement the [WORKS Planning](#) application from ASMPT's [WORKS Software Suite](#). It enables automated, flexible and effective planning in two steps. In the initial customer-oriented rough planning stage, the system imports and prioritizes order data from the ERP system based on the promised delivery date. If all resources are occupied, the system finds and forward-schedules alternative free resources under the premise of maximum setup efficiency. Next, the fine-planning stage ensures that the production orders are optimally assigned to the SMT lines by efficiently combining production and scheduling specifications.

The success story

The variety of products and the related spectrum of demands on the line make production planning a complex puzzle. For example, some products require an X-ray inspection of their ball grid arrays while others require lead-free solder or placements with the TWIN Very High Force head. Others in turn are ideal for family setups or are particularly dead-line-critical.

With the introduction of WORKS Planning, Zollner was able to significantly reduce its planning effort. Setup operations declined from 50 to 40-35 per week, resulting in significant time savings and increased efficiency. More precise planning and the optimized utilization of the production lines improved the company's adherence to deadlines and increased its yields. Even newcomers can now quickly familiarize themselves with the user-friendly software. Based on this positive experience, Zollner plans to deploy the system at other locations and also optimize its material flow with software from ASMPT.

Your benefits at a glance:

- **Reduced planning effort:** Automated planning of complex and flexible manufacturing processes saves time and resources.

About Zollner Elektronik AG

Since being founded in 1985 as a one-person operation, Zollner Elektronik AG has grown into an EMS market leader in Europe. The family-owned company is active in electronics and mechatronics services and offers custom-tailored solutions along the entire product life cycle ranging from the idea to development, consulting production, traceability and supply chain management to after-sales services. With over 13,000 employees at 24 locations worldwide, Zollner is one of the top 15 international EMS service providers and one of the largest employers in Eastern Bavaria. Through organic growth and a high level of innovation, Zollner has been able to win leading companies and medium-sized companies from seven different industries as customers. Speed, flexibility and a high level of personal support are the hallmarks of Zollner, making the company a reliable partner for cross-sectoral system solutions and technological innovations.

- **More efficiency and flexibility:** WORKS Planning reduces the number of setups and improves the utilization of the manufacturing equipment.
- **Better adherence to deadlines:** Planning solutions combine production and deadline requirements into an optimal workflow for on-time production.
- **Less dependence on individual employees:** Software-driven planning reduces the dependence on experienced employees and the loss of know-how when they leave the company.
- **Reduced downtime:** The custom-tailored assignment and pooling of orders with WORKS Planning reduces the downtimes caused by line reconfigurations.
- **Quick orientation for newcomers:** A clear and ergonomic user interface makes it easier for employees to get up to speed.

ASMPT

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