

## MCP CASE STUDY – MACHINE ENGINEERING



# Brinox: Challenging process limitations with the help of Preactor.

Brinox is an established European family business based in Sora, Slovenia, with 40 years of experience in providing fast, efficient, cost-competitive, and tailored turnkey solutions for the complex problems in the process industry. Its vision, over time, is to become the leading European supplier of customized process solutions.

The professional knowledge and combined years of experience of its team of experts enables Brinox to offer entire process



systems, as well as individual units and components, to the pharmaceutical, chemical and food processing industries.

In addition to implementation engineering, another speciality of Brinox process systems is production and assembly of key components for entire process systems or individual units at the client's location. In this way, the firm

can challenge production limitations and provide a one-stop, turnkey process solution anywhere, at any time.

### THE PROJECT

Because business levels have increased, Brinox needed a detailed scheduling and resource utilization overview. Their previous method of making a rough plan using MS project was no longer sufficient. Brinox turned to Slovenian Preactor partner INEA d.o.o for help. INEA agreed with Brinox to collect in-depth information about the firm's processes and procedures, in order to suggest the best solution to meet its requirements. During two fact-finding visits, experts from INEA assessed the company's production methods, existing planning process and undertook discussions with employees involved in planning. INEA then produced a report which included a description of the current situation in the company, a proposed solution using Preactor scheduling software and an offer for the project. The necessary changes to Brinox's ERP system were also defined, since it would provide most of the necessary data for planning.

### Company and product

Brinox to offer entire process systems, as well as individual units and components, to the pharmaceutical, chemical and food processing industries.

### Key challenges

- Need for a detailed scheduling and resource utilization overview
- The accurate time needed for the work on each of the resources was not known

### Key benefits

- Improving visibility and allowing the firm to meet production deadlines.
- Planner can create a detailed plan for the whole shop floor.
- Allowing enough leeway to deal with any unexpected problems without affecting delivery to deadline.

The work on the ERP data improvements was the first part of the project to be tackled. It was necessary to better define the resource groups, technological processes and to improve the data from the shop floor.

Technological processes were not defined sufficiently and there was no overview of how departments needed to interact. Most of the work orders consisted of three separate operations, each of which was given to a different one of the three main shop floor departments. Production time was represented with the expected time each department needed to carry out the work, but the accurate time needed for the work on each of the resources was not known. This lack of accuracy in production times was a big problem, since the production process is mostly unique and project-orientated, where no two orders are the same. As part of the project to install Preactor, experts from Brinox needed to specify detailed technological processes for each new order. Today a typical



work order consists of around 10 operations for which the resource groups are well defined.

Another major change was entering data on the amount of finished work at shop floor level. Before the project started, each operation recorded used material and time taken, but not progress on how much of the order was actually completed. This meant that the planner was only able to estimate the time until order completion. As part of the project, the production workers began recording the finished percentage of the operation each time there was an interruption, break or change. Based on this and the actual start time, Preactor is able to accurately calculate the time needed to complete the operation. The project to install the Preactor 400 APS scheduling system involved collaboration

between three Brinox employees, two experts from INEA and two ERP specialists, who implemented the improved data capture in the ERP system.

#### IMPROVEMENTS

Preactor enabled Brinox to produce a detailed production plan for the first time, thus improving visibility and allowing the firm to meet production deadlines. This further improved the already good relationships with customers. Now the firm's planner can create a detailed plan for the whole shop floor, as well as allowing enough leeway to deal with any unexpected problems without affecting delivery to deadline.

Urgent orders can be easily and quickly inserted into an existing plan and the planner can examine the impact on other work orders before it is launched onto the shop floor. Compared to the rough plan Brinox had before, Preactor enabled better resource usage and adjustments could be made to react to the actual situation on the shop floor.

Dejan Lamovšek, head of the project office and main planner for Brinox, said: "It is very important for our business that Preactor is providing us with an overview of critical capacities utilization and warns us before any of the resources run out of work."

#### WHAT'S NEXT?

The plan is to update the Preactor configuration with stock information and to begin more accurate planning of workers' time, taking into account their different skills and knowledge. Such improved planning will allow Brinox to be even more accurate and some additional savings are expected because of the resulting stock reduction.

### Key Benefit

**Urgent orders can be easily and quickly inserted into an existing plan and the planner can examine the impact on other work orders before it is launched onto the shop floor**

### Key Benefit

**Full transparency and the planner can create a detailed plan for the whole shop floor.**

**"It is very important for our business that Preactor is providing us with an overview of critical capacities utilization and warns us before any of the resources run out of work."**

*Dejan Lamovšek, Head of project office and main planner*

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