

Supravis gets more from IFS Applications with Preactor APS



Supravis Group S.A., based in Bydgoszcz, Poland specializes in production of packaging for the food industry where the company's brand is known across all the cured meat producers in the domestic market. It has a significant market share in the Polish packaging market and 50% of its revenues come from overseas. Supravis's products include multilayer casings, monolayer casings, barrier films and bags.

Production scheduling at Supravis involves tens of resources in three departments responsible for the production of packaging, printing and confectioning. Planning is based mainly on customer's orders where key information is the due date requested by customer. In 2005 Supravis Group S.A. decided to implement Preactor APS 400 integrated with their ERP system, IFS Applications. The integration and implementation was carried out by Pręczyński sp. z o.o, the Preactor Network Partner in Poland.



Wojciech Rzycki from Supravis Group S.A. explains why Preactor was chosen as the scheduling solution. "When we were selecting the IT system for our company we were aware that one of the main problems of a company like ours is the process of production planning. This is especially important in our industry because we offer a wide range of products mainly to customer's orders. Looking for the best solution we were trying to find a system that would ensure we get the maximum flexibility in generating a production schedule, taking into account many criteria, and the number of our resources. On the other hand it would have to provide us with optimization that would give us cost reductions. Analyzing solutions available on the market, Preactor met our requirements with maximum functionality, ease of use for Planner, and what was very important to us, its ability to be integrated with our ERP system."

One of the goals of the implementation was to introduce a concept of a central schedule with a 'Main Planner', which would result in obtaining visibility of all resource used in the production process and links between them. Before, separate planning departments were responsible for sequencing orders within their set of resources. This meant that there could be

a considerable delay to answer a customer enquiry because multiple departments had to be consulted before the estimated delivery date could be provided.

This is why the aim of introducing a central schedule was to get a quicker answer to the question “When can we deliver this order?” So the Preactor system was placed in the first department which generated an initial schedule for all resources. This was then used as a basis for other departments to work with. Each department could then make some additional changes when confirmed by the Main Planner.



Integration with IFS Applications was important in the process of making information available from the schedule quickly. Preactor imports data needed for scheduling, production orders with routing, and after schedule is ready Preactor sends to IFS the expected start and end times of the orders. In this way the sales department by analyzing customer’s orders can see the information from Preactor on expected due dates without the need to make constant telephone contact with Planner. Supravis also uses Gantt charts in form of web pages. That includes additional information about the utilization of production lines in time and current sequence of jobs on schedule.

A key requirement for customization was the ability to model changeover times on the production lines because their length would be determined by the sequence of orders and their attributes. For example the time needed to set up line when changing from white color product to black would be shorter compared to a changeover the other way around. Apart from losing time in using an incorrect sequence it would also result in additional waste.

In the Supravis model some additional attributes apart from color were important for changeover times, for example the type of tool that was used (full reconfiguration of line because of tool change could result in 12 hours of set up time), size of



product and product group. Every line could have different set-up times and in different departments (for example on printing) different attributes would be more significant. Functionality to define sequence dependant changeover time matrices was used in Preactor.

Separate matrixes for changes between colors, between types of tool, and between sizes of products were defined to take care of that.

When importing order data from IFS, production attributes are attached to every operation. The time needed for the set up assigned to every operation is calculated based on its attributes, those of the attributes of operation placed before it on the resource, and data from the matrices. In the model it is possible to define if the total time is a sum of all changeover times, or only the longest time.

Because the Main Planner at Supravis has the option to make manual changes by moving an operation to an alternative resource, it is important that Preactor recalculates the set up time as he drags the operation across the planning board. In effect he has a constant visibility on how the set up time will change, as the length of the bar that represent the operation is constantly updated.

Setting up the changeover matrixes was the prerequisite to preparing scheduling rules that would aim at minimizing changeover times. A Preactor 400 APS rule was used to define a preferred sequence of attributes, where minimum set-up time was the most important one. But in a day-to-day task of generating a production schedule the Main Planner also uses the drag & drop functionality to make manual changes in the sequence of orders. Using his experience and additional information such as priorities assigned to every order, he has full control over his schedule. After making changes on resources from the first department, the Planner then runs an additional rule that will set the sequence of jobs in the other departments.

Michał Pręczyński (Pręczyński sp. z o.o.) who was responsible for preparing the customized model for Supravis, explains this approach. “Of course it would be ideal to have scheduling rules that would do 100% of the Planner’s job, but in the end the final decision is down to the Planner and he must have the option to make manual changes when needed. This is why an interactive planning board is one of the key Preactor features. It gives you the ability to choose alternative resources for a single order and provides quick feedback about the consequences of change. For example how changing an operation from one resource to another will affect changeover times. In cases where many different criteria will determine the quality of a schedule, manual changes are sometimes necessary.”

Wojciech Rzycki comments on results achieved: “From a time perspective the decision to implement Preactor was the right one. Benefits from using the system includes effective, less time consuming planning. It provides optimized schedules which result in an increased productivity while lowering costs and minimizing waste. Flexibility and an easy way to change schedules gives us the ability to react quickly to market requirements. Together with an instant feedback about expected delivery dates it has improved effectiveness of work in the sales department and decreased time needed for customer service. In addition to the fact that information is being sent back to our IFS ERP system, by using Gantt charts our Management has a constant and clear view of production capacity utilization”.