

## Opolgraf does scheduling by the book with Preactor



Mitsubishi 1F-13000 printing machine

Opolgraf S.A. is a book printing and binding company located in Opole, Poland, which employs about 150 people, with approximately 8 million books under 1,700 titles produced annually.

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Opolgraf Printing House specialises in printing full-colour books and monochrome printouts on a wide range of paper, with high quality binding (carton or "hard"), with binding options such as sewing, hot-melt and PUR splicing. The covers may be both simple (one-sided) or with folded wings, varnished, foil covered, etc. They also produce periodicals (full colour) and job-printings (fliers, posters, commercial catalogues).

Preactor FCS200 version was chosen by Opolgraf S.A. in March 2006 to help in scheduling the complex book printing process. Implementation was carried out together with Pretczynski, Preactor Network Partner which supports Preactor systems in Poland.

Jerzy Nagórski (former Managing Director of Opolgraf S.A.) describes why he selected Preactor.

"It offers unrivalled functionalities, flexibility and user friendly interface while enabling planning capabilities that can handle very complex scheduling tasks. Imagine the complexity of having to schedule 100 book production cycles to be run simultaneously, each being in one of approximately 60 various fabrication phases, taking into account the number of 30 machines used, with up to 30 people per shift, 24 hour, 6 days a week operation!"



Recently installed Heidelberg Eurobind 4000 binding machine

Jerzy continues, “the number of likely combinations can be daunting for even the most skilful crew. What I can achieve now is an ability to answer a customer as to when they are likely to receive a printed book from the moment they’d have provided me with their file while taking all variables into account such as paper availability or customer blueprints approval phases, for instance. “

“Believe it or not: Preactor can handle such a job in minutes. It’s really has an outstanding capability. Also, it provides very important feature; it allows insertion, modifying or deleting any operation step manually if there is no clear rule available since it doesn’t necessarily have to do the whole job automatically”.

The crucial factor has been the integration between Preactor and Opolgraf’s own system.

Presently Preactor works as the scheduling engine with 2-way data flow. It is fed with new orders issued on Opolgraf’s triggered by customers demands. It also receives updates on all the status of each job from several terminals.

“Thus the workflow displayed in Preactor can be updated every moment within minutes”, says Opolgraf’s Production Process Analyst in charge of each application related to the calculations, reporting and scheduling.

The production analyst, who is responsible for overseeing production planning processes in Opolgraf S.A., describes how Preactor helps the company in his everyday job.

“Every day the C.E.O. provides an update on present priorities with the key production and account managers. The actual workflow and forecasts together with new or urgent orders arriving as well as order changes and quality issues are discussed. These multi-level sessions are used to control production queues on the printing and binding machines with Preactor. Preactor displays current and incoming orders and allows the managers to change the production order freely where needed, divide orders if required, and displays recently completed orders too. The schedules are displayed on a large screen to let all the staff see and discuss with no constraint. Each member of the team and the executive have prompt and continuous visibility of the situation in a fast changing environment. As the result, we are able to respond to customers’ queries without delay and react quickly to all that happens in the company’s processes”.

He also comments on a change of approach that was taken after first part of implementation was finished.

“By the end of 2007 we realised Preactor contained a tremendous amount of data we never used. Some processes did not need detailed scheduling. Some process steps took a very short time such as work in the CtP studio or other manual processes. On those processes we do not need to plan the forecasted order of operations, especially when we update the data in the terminals only twice a day.”

This is why Opolgraf proposed to simplify the scheduling in Preactor by excluding part of the processes from detailed digital planning.

Michał Prętczyński, who was in charge of the implementation process described the modifications he made. “We modified the model to manage which processes are, and which are not shown and are editable/schedulable in Preactor. Those, which we let go to the terminals “as is” from the calculation system, are transferred through a parallel, supporting data base with no additional operations required. They appear in a terminal like Preactor was transparent – with no order changed, no timetable edited, and no feedback shown in Preactor as feedback works for reporting only with the scheduled operations. “

The production analyst continued. “Thanks to this simplification we achieved an immediate improvement in scheduling speed compared to before. It contains “only” several hundreds of operations instead of a few thousand before, and keeps fewer relationships between those operations. This has made working with Preactor even more effective, faster, and user-friendly. When we need to schedule additional processes back in Preactor, there will be no need to involve Prętczyński to assist us. This will be possible to be done within minutes, and by ourselves.”

Michał Prętczyński explained the wider context of work that was done together with Opolgraf.

“It is important to understand that it was not an implementation that was finished at any particular point. We started with an aim to provide an interactive planning board, where scheduling rules were available, but people responsible for planning would schedule critical process manually at will. In this step we also integrated Preactor with the Opolgraf S.A. system. Then company invested in expanding their IT infrastructure and added changes into their own system, so Preactor could receive updates from terminals and in the end additional reporting capabilities were added. We could implement those changes quickly because Preactor is a flexible system that allows essential modifications without the need to change core code. Step by step, as company is progressing, we are moving into full automated scheduling.”

In 2007 a poll conducted by “Wydawca” – a prominent industry publication – among Polish publishers voted Opolgraf Poland’s best printing house. This was possible thanks to using advanced tools for calculating and production scheduling by Preactor.