

Plastform and Preactor combine Capacity Planning and Detailed Scheduling to become leaner and increase customer service

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Plastform, a member of the Rigids Division of the Astrapak Group, based in Cape Town South Africa are the leading producer of rigid thermoformed packaging for the dairy, fresh and fast-food markets in Southern Africa. Formed products are sold in both printed and unprinted form.

Although Plastform were producing formed items to stock, against forecast, they were battling to offer consistently 'short' delivery lead times for printed items and then to meet the dates promised. Problems were being experienced in coordinating stock availability with changing schedules, priorities and customer requests.

Plastform Management realized that they needed a focused solution which would consider the availability of stock, confirmed production orders and existing customer orders during the scheduling and order promising process. After evaluating the Preactor software they selected the Preactor 400 APS as it provided the synchronization across process levels that are required.

During implementation and go live it was discovered that the Planner needed assistance to develop plans at the volume level i.e. how much of what to make in each week. It was agreed that the Preactor GMPS (Graphical MPS) model, which runs on a Preactor 400 APS license, would also be implemented as this provides the functionality to assist the Planner to calculate how much to produce of any product in any period.

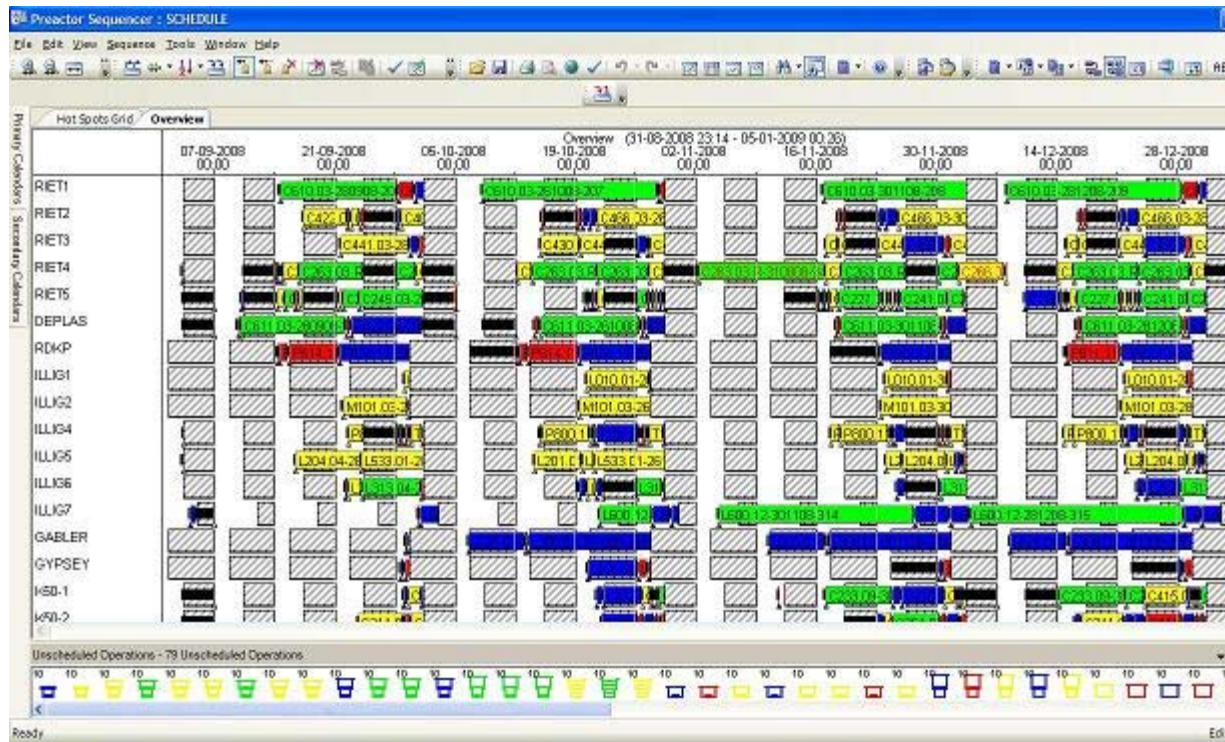
After evaluation Plastform agreed to implement the lean manufacturing 'green streaming' scheduling technique, developed by Ian Glenday, for their high volume formed items.



This approach is used to develop a repetitive volume cycle for selected items i.e. Plastform make some of the high volume items every cycle.

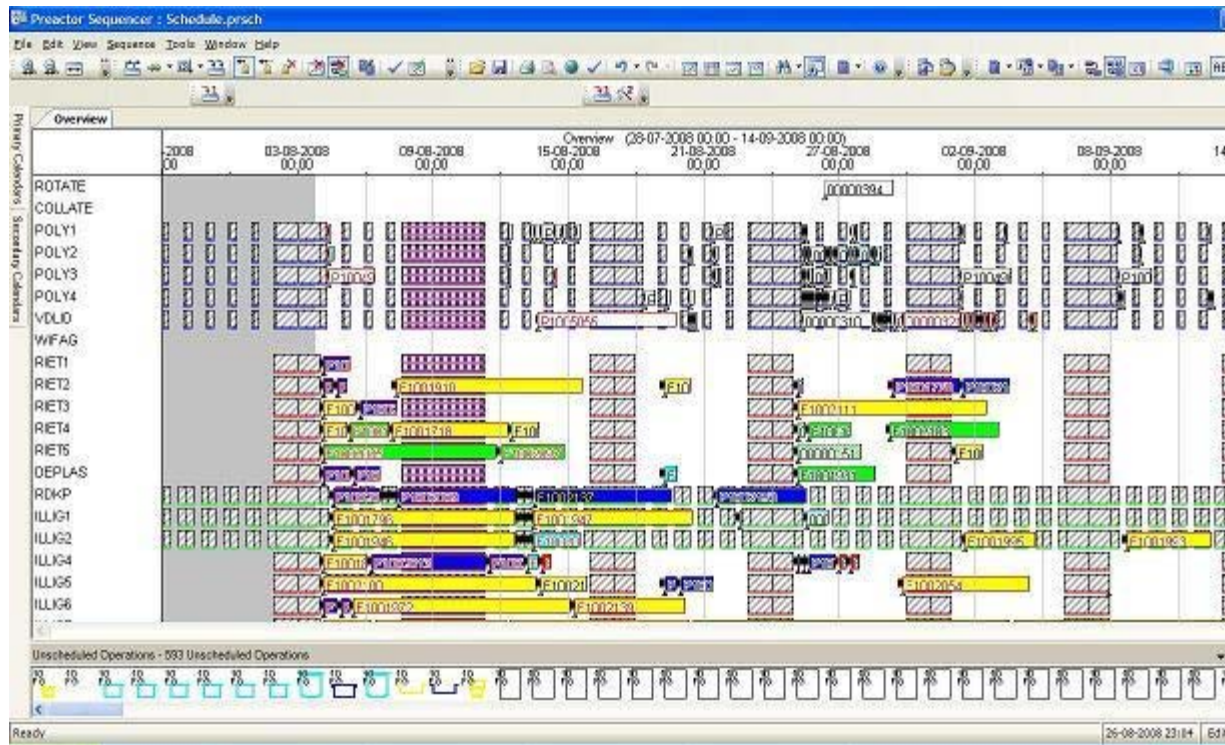
The implementation of the green streaming technique means that the Forming area are no longer doing long runs of frequent sellers, but are producing these items each week. This ensures that while a constant stream of high volume items is being produced, some capacity is available every week to produce less popular items.

On a monthly basis the planner uses the GMPS model to develop weekly plans, which produces a constant flow of formed products either for stock or specific customer orders. During development of the weekly plans the Planner is able to quickly identify and resolve capacity changes required to meet short term changes in both mix and volume. The visual format of the GMPS model facilitates communication with other staff members.



The Planner has color coded icons in the GMPS model to increase her ability to identify items by importance e.g. all green stream items are color coded green.

The weekly plans generated by the GMPS model are uploaded to the SYSPRO ERP system, in use by Plastform, as production orders, ensuring that the GMPS and ERP systems are synchronized. The detailed schedule extracts the customer and production orders and stock details from the SYSPRO system for the Planner. The Planner uses the data to develop detailed daily schedules for the factory to execute and to make delivery date promises to customers. The sales staff use a Preactor Viewers to obtain schedule timing and delivery date information.



The planning process now consists of the following cycle of events.

- Use the GMPS model monthly to develop weekly forming plans 8 – 16 weeks into the future.
- Within the GMPS use the green streaming technique to ensure that high volume items get produced each week.
- Use the Preactor detailed schedule model on a daily basis to develop detail forming and printing plans.
- Use the detail schedule to make delivery date promises.
- Integrate all schedules with the SYSPRO ERP system.

This new planning and scheduling approach has resulted in Plastform reducing their stock by 40% while improving their on-time delivery performance by 45%.

Adrian Jan Labuschagne, the Operations Manager at Plastform says “Preactor , together with other changes in systems, has delivered

significant improvements in our customer service levels while simultaneously allowing us to drop our stock holdings. Our next step is to use this information to improve our raw material supply chain.”

Chris Mollison, the CEO of Scheduling Solutions, the Preactor Network Partner for Sub-Saharan Africa commented. “We are pleased to see how the combination of the Preactor GMPS, green streaming technique and detail scheduling visibility provided by Preactor has allowed Plastform to achieve real business benefits.”
