Pradip Polyfils Pvt. Ltd. (PPPL)

PPPL gains visibility to see the impact of change and deliver on-time

Pradip Polyfils Pvt. Ltd. (PPPL) is a leading organization in the Indian filter press industry since its foundation in 1979. PPPL is a manufacturer of quality polypropylene filter plates used in the industries of chemicals, dyes, metallurgy, pharma, food & beverage and ceramics. PPPL has been awarded as highest exporter of engineering plastic by the Plastic Export Promotion Council of India for the last 11 consecutive years.

The company caters for original filter press manufacturers in India as well as developed countries in Far East Asia, Europe, and the USA, manufacturing recessed chamber filter plates, detachable membrane plates, caulked & gasket (CGR) plates, plate & frame type filter plates in various configurations and specifications, as well as customized solutions in the 250 sq.mm to 2500 sq.mm size range.

PPPL is a specialist in manufacturing custom filter plates as per customer designs following extrusion, compression moulding, machining and assembly processes. The plant shop floor is equipped with state of the art CNC machines and moulding presses.

The company had a major challenge in the visibility of the production schedule and timely deliveries given the complexity and long lead times of the products. Management was looking for a tool that could give them quarterly, half-yearly and yearly visibility of their orders.

At the shop floor level, the company was facing a changeover challenge, especially in the moulding presses, which require a combination of die-boxes and stamps. The setup times often increased due to the non-availability of a die-box or a stamp. Capital expenditure was difficult to justify as die-boxes were also seen to be underutilized.

PPPL found a partner in SNIC India and the product Preactor to solve its challenges. The aim of installing Preactor was:

- To increase on-time delivery.
- To identify constraints leading to improper capacity utilization.
- To reduce changeover times.
- To make strategic capacity expansion decisions based on the dynamic bottlenecks identified.

Managing Director, Mr. Vijay Kansara says, “In our research to identify a solution to our challenges, initially I started looking at ERP solutions, but realized that none of them really had a resource scheduling solution to offer. “I felt that my company required scheduling of resources like a Gantt chart if we were to solve our problems. “This is when we came across Preactor and could instantly relate to it. “We selected Preactor because the software was used by a large number of manufacturing companies globally, including some of our clients and also because the partner SNIC India could demonstrate the capabilities of Preactor to our team.”

The implementation started with master data preparation and instantly they realized that this is the most important step of the entire project especially because they, as a company, had never done such an exercise before. It took a couple of iterations before they could streamline the data and start using Preactor. But the master data preparation activity gave the team a very good insight into
thier own existing system, which was a great value addition. The data preparation was followed by Preactor configuration and testing in parallel, going live in 2009.

The Preactor implementation had its initial impact on the existing work practices where they found that the exact number of die-boxes and stamps for the required product sizes was estimated using Preactor constraint plots, leading the shop floor to immediately resolve shortages which reduced the setup times.

The second impact was the visibility of sales orders and their delivery dates. They were able to talk to their customers and make the necessary changes to the delivery dates, which initiated a huge confidence in their customers regarding capabilities to deliver on-time, every time. In many cases, if delays were caused due to issues like downtime or material unavailability, Preactor would exactly estimate the delay due to these issues which allowed them to inform customers in advance about changes in the delivery date. As Preactor scheduling stabilized, they were able to estimate a buffer period to ensure issues were covered to increase their ability to deliver on the initial promised date to their customers.

The biggest impact was that the top management was able to see the capacity utilization and dynamic bottlenecks and compare it with the annual forecasts and make decisions on capital expenditure like tools development, machine purchase and space expansion. Since PPPL products have extensive lead times, in this industry they need to take CAPEX decisions two to three years in advance which is where Preactor has added tremendous value by acting as a predictive decision support.

The benefits achieved since Preactor has been live are:

**Hard Benefits:**
- Increase in on-time delivery from 60% to 95%.
- Increase in overall capacity for the existing plant by 22%.
- Overall financial savings of $ 1.5 Million.

**Soft Benefits:**
- Visibility of all our orders.
- Dynamic response to changes from our customers.
- Efficient communication across the plant and customers.
- Understanding our bottlenecks.

Mr. Bhadresh Maisuria, Production Planner at PPPL says, “I used to plan earlier on MS Project but always faced a problem of re-scheduling with day to day changes on the shop floor. Also, planning used to consume a lot of my time, but with Preactor I was able to schedule quickly, multi-task and spend more time on other aspects of my responsibility.”

Mr. Vijay Kansara, Managing Director at PPP says, “I am glad I took the decision to Implement Preactor as it has allowed me to sustain lean improvements on the shop floor and grow the organization in less time than expected.”

“...with Preactor I was able to schedule quickly, multi-task and spend more time on other aspects of my responsibility.”

Bhadresh Maisuria
Production Planner
PPPL