

## Brevini Geared up for Growth with Preactor Planning and Scheduling



BPT, Brevini Power Transmission, was founded in 1960 by three brothers, Renato, Luciano and Corrado Brevini, in the town of Reggio Emilia (Italy). Since then, the name of Brevini has become synonymous with planetary gear units.

Today Brevini maintains a presence around the globe, with 24 subsidiaries and an extensive distribution network. The latest 10 years saw a significant increase in sales, from 86 to 284 million euro, also in jobs, from 470 to 1.000, and in output, which rose from 67.000 to 172.000 gearboxes per annum.

This growth combined with the objectives to reduce stocks and work in progress and to improve the service to customers meant that BPT needed to improve its operation processes and also its planning and scheduling methods.

Carniato Alberto is Logistics Manager of BPT. “We have 15,000 orders a year and 70,000 production jobs. We needed a tool that could help us to easily manage this and to generate quickly an optimized sequence of both internal and outsourced production. However the main point we had to face was to be able to anticipate any bottlenecks in our processes in the medium term period in order to avoid unpredicted delays to the customer and to quickly simulate alternative scenarios”.

So in 2008 BPT decided to adopt a planning a scheduling system with the aim to have a better control of the flow of the orders in the plant and in that way have a clear view of delivery dates and usage of resources.

After having considered several APS systems, BPT chose Preactor 400 APS. The choice was done by comparing the wide range of features, the ease of integration with any ERP system, and the flexibility to meet user requirements.

Having chosen Preactor, BPT looked for suitable expertise and chose the consultancy company proe2, a Preactor reseller based in Italy, to help them implement Preactor.

The project started in October 2008 and was structured to have a continuous improvement approach.



Firstly the key functionalities were implemented, and then additional features were added accordingly to the real needs of the user and as the quality of data received from ERP increased.

By December 2008 the user was able to use Preactor to schedule all the production resources considering the availability of raw materials and components. Renato Castagnetti, Scheduling Manager of Brevini Italia commented on the project. “It’s amazing how easy the implementation of the project was. We started to use Preactor just the day after the software was installed, leaving behind our previous working methods. Before the major amount of my time was spent adjusting the schedule due to delays in supplies or breakdown of machines with little visibility. Now we can focus on real exceptions and anticipating problems in advance.”



In January 2009 all subcontracted operations were added to the schedule and in February, after having improved the logic of the scheduling rules, the scheduled dates were transferred back to the ERP system, so they could be used to guide shipments to the customers and deliveries of raw materials and components.

Furthermore BPT would like to expand the use of Preactor not only for scheduling but also for planning looking at a longer forward horizon. So during the project another configuration of Preactor was implemented. In this configuration the planning horizon is extended to 8 months and production model is slightly simplified. In this not only are the confirmed work orders loaded into the schedule but also the MRP suggestions. This planning model is used in both infinite capacity and finite capacity modes.



The infinite capacity gives a fast view about the future usage of the resources and is used for decisions about shifts, calendars and make-or-buy policy. Then, having done this, the possible bottlenecks and work order lead times are verified using finite capacity. Of course several scenarios are simulated before taking any decisions.

At the end of project the objectives have been successfully achieved as Carniato confirmed. “The finished dates are known, the bottlenecks are promptly recognized, the capacity is modelled accordingly to the demand and the planning manager has a clear control of the production and materials flow”.