sedApta group
smart manufacturing made easy

Quin
start the value
QUID GROUP

CASE STUDY PASTIC MOLDING
PIBIPLAST

Founded by Paolo Bosi in 1954, **Pibiplast S.p.A.** has been producing primary plastic packaging for cosmetics and make-up, gaining renown for its vast range of standard products for skincare, make-up and tubes and its ability to develop custom products.
Pibiplast is synonymous with the design, production, decoration and sale of packaging containers and accessories in thermoplastic materials, including food grade plastics, and through its various divisions the company has always been the partner of choice of leading international cosmetics brands.
Continuous improvement is an essential part of the story of Pibiplast, and that applies to technology as well as personal and professional growth.

Thanks to an approach that focuses on customer satisfaction, the continuous pursuit of effective manufacturing process control systems, the fine-tuning of management processes and ongoing personnel training, day after day Pibiplast moves closer to the concept of Total Quality.
This path has allowed the company in recent years to improve both standing as well as performance, promptly meeting the high quality standards demanded by the market.

No mean feat, given that we remain wholeheartedly committed to the company's other core values: safeguarding the environment, safety and corporate social responsibility.
Pibiplast Group has its headquarters in Correggio (Reggio Emilia), but makes strategic use of production plants in Robbiate (Lecco), Tortona (Alessandria) and Calenzano (Florence) to satisfy all requirements related to the production, assembly and decoration of containers for the cosmetics industry.
In the production plants of bottles and jars for skincare, packaging for make-up and tubes, the company is always at the forefront with innovative technologies and a keen eye on the Research&Development sector. Growing staff and turnover allow Pibiplast Group to think big with an eye always on the future, sustainability and innovation.

ANALYSIS

Around 2011, Pibiplast S.p.A. had to face the typical complexity in planning the production of the plastic sector. In particular:

- the presence of **many resources**,
- the need to timely plan **molds and equipment**,
- the need to optimize **setup times** and **batch sizes**,
- the high **impact** that the **unavailability** of a resource can have on the entire production chain, even if only for a short period.

SOLUTION

The project has foreseen a revision of the production planning processes thanks to the implementation of the following sedApta application modules:

- **Factory Scheduling**
- **Resource&Supply Planning**.

The collaboration process, which began in 2011 and is still ongoing, has seen the constant evolution of improvement initiatives.

Phase 1

In particular, the first phase concerned the **Factory Scheduling**, with:

- introduction of a new flexible and efficient scheduling process
- roll-out to all Group plants.

The primary objectives of this first phase were:

- **Dating of sales orders:** providing reliable and constantly updated delivery dates for the entire order portfolio.
- **Maintenance of an updated and optimized production plan:** allowing the preparation of an optimized production plan and its constant updating according to variations deriving from changes in demand, products or production problems or the availability of materials.
- **Setup optimization and productivity increase:** obtaining an increase in productivity by optimizing production sequences and minimizing changeover times by guaranteeing delivery dates to customers.

COMPANY
PIBIPLAST S.P.A.

SECTOR
PASTIC MOLDING

SIZE
340 EMPLOYEES
4 PRODUCTION SITES

TURNOVER
60.3 MLN€ (2019)

SEDAPTA MODULES
FACTORY SCHEDULING
RESOURCE&SUPPLY
PLANNING

Phase 2

The second phase, on the other hand, relates to **Sales & Operation Planning**, with:

- verification of the production feasibility of the budget plan.
- identification of any bottleneck resources and the need to increase production capacity (increase in the number of shifts in some period of the year, purchase of new machinery, outsourcing of some activities, ...).
- indication to sales regarding which products to push or which changes to the production mix to make in order to exploit the production capacities of not fully loaded resources.
- comparison during the year between budget value and actual values and modification of the projection of turnover at the end of the year based on the final balance.

BENEFITS

The main results obtained by the project can be summarized as follows:

- Reduction of setup times (-10-15%).
- Reduction of plan update times in case of changed conditions (-80%).
- Increase in the customer service level.
- Reduction of the time spent in the production planning (- 10h / week).

"We developed the project to introduce a new planning management method in the company, initially focusing on a single plant. Once the activity was normalized and the benefits obtained were measured, we rolled out the model to the other production plants as well. The most striking result concerns the considerable compression of the time required for planning and the ability to react to any changes, results that benefit the process managers, the company and the end customer."

Paola Plichero,
Continuous Improvement & Sustainability