The success of Valmex

Innovation with the Demand Driven methodology

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Innovative planning processes in the production of heat exchangers using the Demand Driven methodologies thanks to a single suite for MRP and Sales & Operations Planning

The procurement and logistics manager Barbara Nesta and the procurement specialist Francesco Conti illustrate the ambitious path undertaken by Valmex to evolve the planning processes. The innovative project, among the first in Italy, was completed within the ambitious set deadlines and led to the implementation of Demand Driven MRP (DDMRP) and Demand Driven Sales and Operations Planning (DDS&OP) of CyberPlan, two tools that use the Demand Driven methodology to manage the strong variability that characterizes the sector of Valmex: production of heat exchangers for domestic boilers. All within a single solution: CyberPlan.

The headquarters of Valmex, in Lucrezia di Cartoceto, Italy.

Managing critical issues with the theory of constraints

“Variability has always been a rather difficult aspect to manage in the manufacturing process”, says Barbara Nesta, “the MRP, supplied with the ERP (Infor LN), wasn’t the right tool to manage obsolete and slow moving materials, because of the variability of the demand”. Therefore, in 2011 Valmex decided to solve these problems and evaluated the adoption of the Theory Of Constraints (TOC). Furthermore, thanks to the support of expert consultants and the training of the personnel, Valmex started a process which led to the analysis of dynamic buffers, decoupling of stocks and the management of demand variability.

By applying the Theory Of Constraints (TOC), Valmex firstly divided inventory management into two large macro-families: those with low turnover managed with the MRP and all the rest of the inventory managed using dynamic buffers. However, the TOC had quite important constraints by then: being based on data coming from the past it wasn’t aligned with the precise needs of the company which therefore had to constantly correct the forecasts.

Furthermore, the waiting time expected by some customer was shortened and started to be quite challenging, especially in a context that regardless of the fast internal production process has an international supply of stock and requires often long lead times. Also, new products (and thus without historical data) required forward-looking data.

Valmex aimed at maintaining dynamic inventory management and the use of buffers, aspects that had allowed to focus on the decoupling of stock into the various levels and on having materials available accordingly to production requests. The classic MRP was no longer sufficient and the new needs prompted Valmex to seek an evolution of the theory of constraints.

The selection and implementation of the Demand Driven solution

Valmex began with the training of the personnel, who obtained the Demand Driven Planner Professional (DDPP) certification, and then continued with the selection of the best tool. After a long and careful software selection, the company chose Cybertec's DDMRP, an advanced solution which, thanks to the use of logics very similar to those of the TOC, made it possible to satisfy all the following needs and objectives:

- Development of forecasts,
- Use of KPIs,
- Analysis of dynamic stocks,
- Parametrization of data (to understand whether to use the historical or the forecasts).

The preparation of the project done together with expert consultants has been essential to clarify the needs and the perimeter of the activities, as well as to define the Gantt of the implementation, all aspects that contributed to respecting the short deadlines set.

"It broadened our view on materials management."

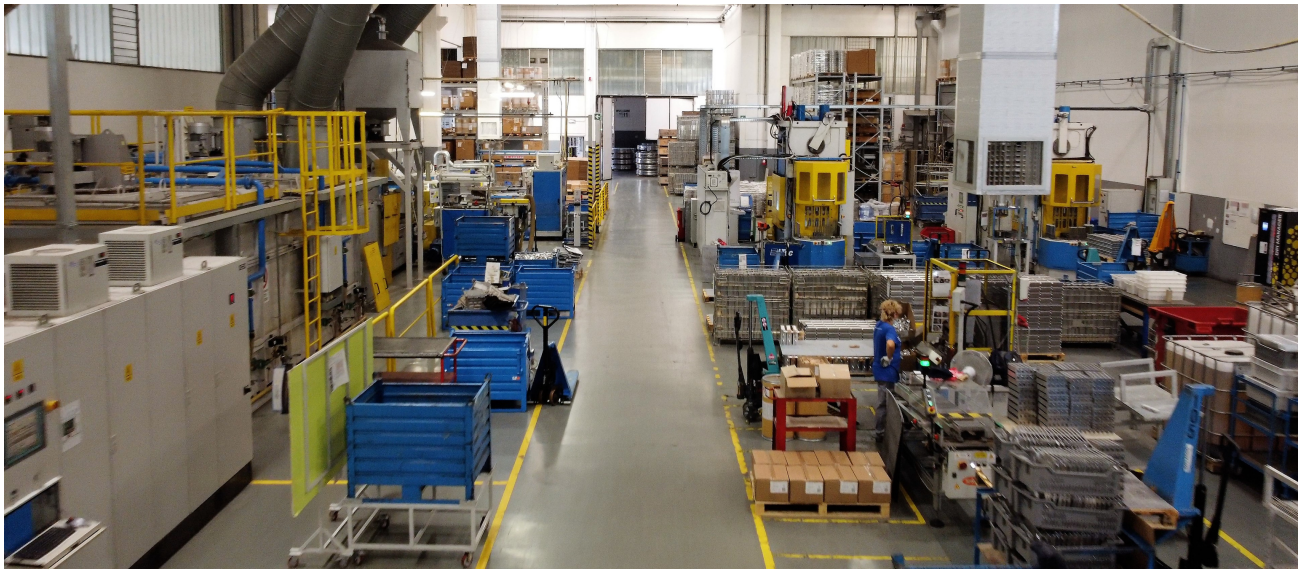
Inventory and production planning, now demand-driven

With CyberPlan DDMRP Valmex takes advantage of inventory and production planning, but not through the classic APS, it is done with the Demand Driven methodology.

“It allows us to have inventory planning and management (both raw materials and semi-finished products and therefore also the production side) much more accurate than what we had before" says Francesco Conti - Procurement Specialist of Valmex.

The adoption of CyberPlan has been rapid thanks to the intuitiveness of the system, the support of the consultants and the expertise of the IT department of Valmex in entering the data into the frontier tables. Indeed, it is important to feed the instrument with the correct data on a daily basis, an aspect that has led Valmex to carry out analysis and proposals relating to the buffers to improve its planning. In fact, Conti adds: “In terms of operations, it doesn't change much compared to what we did before but the output is totally different. Today I work aware that I'm also working for tomorrow. Yesterday I worked and I knew that what I was doing perhaps didn't take into account tomorrow. This, In my opinion, that's the biggest difference the system has brought. The software is also very intuitive and I think this is an added value.”.

Not only DDMRP: Valmex also worked simultaneously on the implementation of the DDS&OP solution, used to forecast supply and trends for the following months. The DDS&OP is a tool mainly used by the Procurement department but it is also used by the Purchasing department to check contracts, residual quantities and future plans with suppliers.



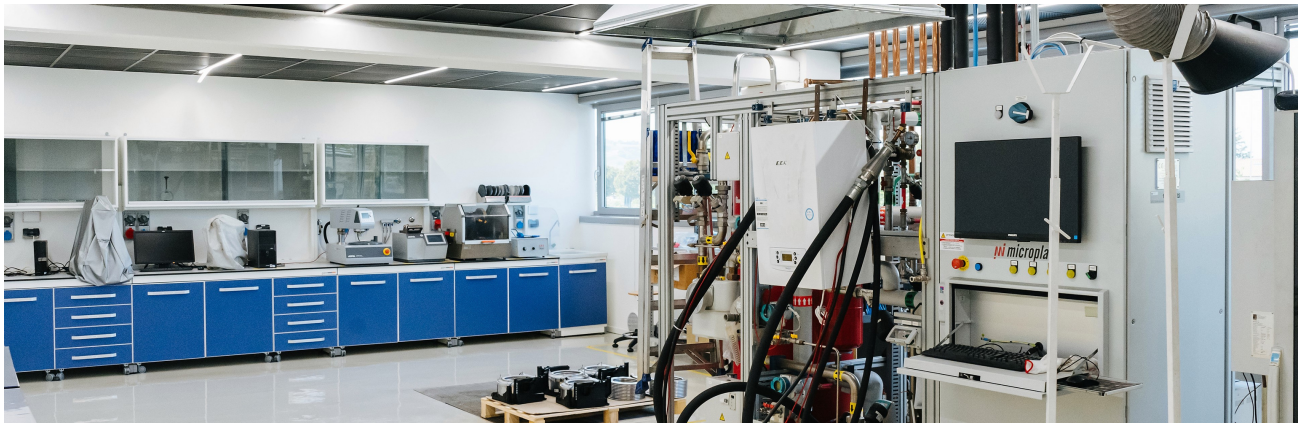
The multiple benefits of Demand Driven solutions

The first benefit noted by users is the responsiveness of the system, followed by the ability to understand, comprehend and intercept what will happen in the production department in the near future, something that wasn't possible before because the analysis were based on the past.

With the DDMRP have been implemented also some useful KPIs that have had multiple positive implications: they allow to verify the progress of production, to carry out self-assessments and to improve communication: all the collaborators are now aligned on the production planning.

The DDS&OP has accelerated the sending of forecasts and updates on future consumption and today Valmex can communicate clearer information to suppliers thanks to the division between order and forecasts. The data extrapolation frequency can be done on a weekly, monthly or quarterly basis and therefore Valmex can meet the supplier's needs and extract the data as the latter prefers, because everyone has different needs. CyberPlan has given added value compared to the previous situation of monthly forecasts that weren't split between sent and pending orders, something that generated uncertainty in sending data to suppliers.

"With CyberPlan our work has changed, it gives us more information, better KPIs and parameters thanks to which we can analyze and improve ourselves."



Valmex, growth and innovation

Based in Lucrezia di Cartoceto, in the province of Pesaro and Urbino, Valmex S.p.A. is today one of the world's leading manufacturers of heat exchangers for domestic wall-mounted gas boilers; the company also supplies microchannel condensers for various applications in the refrigeration industry. The products and services offered by Valmex to its customers have increased over the years so much that today the customer can receive the product starting from an idea, which reaches production and delivery after passing through the processes of design, prototyping, certification, assembly and testing. Also through this project, Valmex has demonstrated that it is an innovative, capable company with a great desire for growth and improvement. The constant attention to processes and technologies has led it to become one of the companies at the forefront regarding the profitable use of an innovative methodology such as that of the Demand Driven MRP.

Discover CyberPlan: the suite for Demand Driven solutions

Find out more about **CyberPlan Demand Driven,** the Demand Driven MRP and Demand Driven Sales and Operations planning tools based on over 30 years of experience. Advanced Planning and Scheduling have been the focus of Cybertec since it’s foundation and the continuous improvement has led to a comprehensive portfolio of solutions to support manufacturing companies, worldwide.

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