Today, Disaronno, Amaro 18, Isolabella, Mandarinetto, Zucca and Artic use the most modern Plant Intelligence tools to ensure the correct alignment of production and management data.

Saronno (VA), Italy - Six bottling lines work tirelessly to feed two warehouses, one for products destined for the Italian market and the other for exports, each managed with a very different logic.

Working on similar volumes implies a significant workload, also because, when handling a food product that is subject to specific governmental regulations, the warehouse employees’ tasks are particularly complex. In fact, the company, which is based in the Province of Varese, boasts a series of prestigious products that are appreciated throughout the world: Disaronno, Amaro 18 Isolabella, Mandarinetto, Zucca and Artic. Each of these can be packaged in different sizes and, in the case of exports, must also meet the requirements of each individual country’s laws. So all these products can go to market with front and back labels and sizes that differ from country to country. Obviously, different packaging translates into as many different product codes to manage and this implies the need to structure corporate processes, for both production and management, in the best possible way.

The best of the market
Starting from these premises, one can easily conclude that management based on traditional methods, or proprietary software, is inadequate, also due to the obvious difficulties of adapting rapidly to new laws in terms of traceability or in developing support for new functions. This is why ILLVA’s management decided to expand its production and warehouse automation systems.
with a partner that specializes in this sector, able to guarantee a state-of-the-art product that can also support future needs.

The choice fell to Wonderware and Beta 80 Group, a leading market supplier and a System Integrator that, in its twenty years in business, has gained experience that is unique in the Italian market. According to Business Development Manager Roberto Ronchiadin, “Because Beta 80 Group has an organization articulated into four operating companies and a staff of 220 employees, it is able to make the best use of Wonderware’s solutions and complement its offering with management software like Maut that meets the needs for planning, scheduling, control and operational logistics.”

The current system
ILLVA uses its own ERP system to manage work, sales and invoicing cycles. These are high-level functions that don’t get down to production and operational details. This is a task that is handled by Maut, which receives work orders directly from the management system through a series of shared tables.

Based on these requests, the system generates the appropriate “picking missions” of available products and records the operations performed in a sort of “line warehouse”. At the same time, labels are printed that, applied to the pallets, allow the personnel to retrieve the information for each individual production batch.

These transactions, like all the others that take place in the warehouse, are completely controlled and supported by WiFi-connected portable terminals.

Upon the completion of each work order, the operators enter material consumption data into the management system, which plays the role of master and, in its turn, informs Maut of the need to remove the quantities used from the line warehouse. Then, a function developed for the purpose reports the return of the unused quantity to the warehouse.

In the same way, the elimination of any broken or damaged materials is recorded along with the relative cause.

Finally, the system detects and informs ERP about each movement of pallets and single packages, the fruit of a daily production of sixty thousand liters, which are picked from the storage warehouse for shipment to customers scattered all over the world.

Always aligned
This set of functions allows ILLVA to constantly monitor its entire production and, in particular, the status of the warehouse where raw materials and bottles ready for sale are stored. All with the additional advantage of storing operations and the products used in a timely manner. This guarantees a level of traceability that provides information that is actually better than what is required by current law. Consequently, even if the government asks for more, ILLVA will be able to respond quickly and without additional investments, “thus confirming the company’s own philosophy of staying in the vanguard”, Ronchiadin stressed.

This is a characteristic that is further enhanced by the functions of Wonderware’s InBatch, which has allowed for the progressive implementation of different functions without imposing limits on future development. In addition, the choice of InBatch allowed the Beta 80 Group to activate the entire system in just three days, avoiding production interruptions and accompanying internal personnel for just the first few weeks. In fact, production information is gathered in a completely
automatic way and, after a brief training period, the technicians are able to operate and create new production recipes completely autonomously. In fact, InBatch’s approach of adapting itself to the existing automation has allowed the management of individual production batches with no intervention at the PLC level and, thus, without interfering with the operating logic of the system. Finally, the solution is completed by the ability to analyze several fundamental parameters in real-time, thus providing the management and operational system a series of data that is updated in real-time and always aligned.

You have to know how to choose

Accurate knowledge of the entire production and warehouse cycle, made possible by InTouch, allows ILLVA’s managers to always make the most appropriate choices. In fact, solutions implemented on the platform created by Wonderware are not limited to gathering and displaying data in a disaggregated way, but add Intelligence to their activities. So, those who are called to make strategic decisions for the correct planning of individual production batches can work with complete data because it’s reported in real-time. At the same time, the system provides the ability to conduct production simulations. It’s a functionality that guarantees better planning in the use of systems since any dead time is avoided and the availability of the raw materials needed for each production batch is verified in advance. And all completely automatically by simply entering production orders and assigning the system the task of making the necessary checks.

“The patrimony of experience we’ve accumulated over the years - explains Beta 80’s Technical Manager, Giacomo Miani - has led us to experiment with different SCADA systems. In the light of what we’ve learned, we prefer to use Wonderware solutions because, in addition to offering a series of products that meet all the precise needs, they all have an excellent ability to interface with the corporate management system. In fact, thanks to the coordinated use of Wonderware’s InTouch and InBatch, it’s possible to track the raw materials and products for packaging from the moment they arrive at the company, then following all the production and warehouse management processes.”

In addition, the simplicity of use of the ArchestrA-based system allows ILLVA’s technicians to operate more or less autonomously. This was certainly another advantage in favor of choosing the Wonderware solution: ease of use means a shorter intervention and implementation time on the part of the System Integrator. And, for ILLVA, this translates into a significant competitive advantage.

Certified skills

The decision to use Wonderware’s ArchestrA platform in such a demanding installation was also suggested by the patrimony of skills developed by Beta 80’s personnel. In fact, the company is a recognized Wonderware System Integrator. This is a recognition that guarantees the market the level of knowledge and ability required to handle complex needs like ILLVA’s.

“In the success of an implementation”, Miani repeated, “a fundamental role is played by a perfect knowledge of the product, matured over years of activity and in periodic training that allows us to best exploit the potential of this platform. Moreover, its elasticity allowed us to respond to the client’s requests rapidly and efficiently. In fact, generally speaking, the main problems are not those listed in the project assignment but the ones that emerge during development or when modifications are dictated by legal or market requirements. On the other
hand, thanks to their modularity and the advantages offered by object programming, Wonderware’s solutions allow confronting and overcoming even these types of problems. Also because, even in the same sector, there’s no such thing as a standard problem, but each organization has its own specific needs, which we are called to satisfy, always in the shortest time possible.” This is an ability that Beta 80 has developed and expanded over the years, always offering to play the role of the System Integrator with all the necessary skills to confront the most sophisticated implementations with an offer that is truly complete. In fact, the trend of the current market is to reduce the number of suppliers, trusting oneself to organizations that have the necessary manpower and skills to manage the implementation of an entire process. All completed by the ability to progressively insert new tools provided by Wonderware. Those who manage and account for production need the ability to maximize production and manage the warehouse. Two objectives that ILLVA has achieved in the best possible way, thanks to Wonderware and Beta 80, while maintaining the value of a brand appreciated the world over.