Production efficiency and customer service: Just a matter of "label!"

by Wonderware Italy

“Our main goal was to find a universal and reliable software platform, with an interface that the user could easily manage and that allowed a customization in a short time.”

Matteo Cardinotti, Software Manager, GIDUE

---

VALUE DRIVERS

Goals
- To continue to be the market leader by supplying the printing and packaging industry with innovative technologies and solutions for printing machinery.

Challenges
- To supply customers with assistance and technical support at a global level;
- To find a universal and reliable software platform with an interface that the user could easily manage and which allowed a high customization in a short time.

KEY METRICS

Wonderware Solutions
- InTouch HMI;
- Wonderware Industrial Computers.

Results
- InTouch HMI allowed the engineers at GIDUE designed a very user-friendly and highly customizable interface for their machines;
- With the Wonderware solution it is possible to manage the production recipes and alarms.

Company Overview

GIDUE S.p.A. – Turate (Como), Italy

GIDUE, located north of Milan, supplies technology and original solutions to the industry of printing and packaging. GIDUE has three production branches – Turate, Florence and Rio de Janeiro – and over 40 agents and expert distributors strategically positioned on the most important markets around the world. GIDUE is currently largely investing in programs for training as well as programs for and highly innovative technological development, and it has also started to widen its Service network internationally, creating certified centres worldwide located.
Throughout the years labels and packaging have gained a wider function, far beyond the primary task of simply identifying. In fact they currently play a crucial role in promoting the products on the market: they are attraction and communication tools, as well as information and protection elements against frauds and forgeries. In this respect, printing the packaging represents a crucial step in the whole process of the packaging production, in which the choice of the appropriate printing technology, the materials and the use of the best machinery are of extreme importance. The labels and flexible packaging printing has a high qualitative value. The companies in this sector use several traditional and innovative processes to meet the market needs for high added value packaging as best as they can. While for high volumes of flexible packaging printing, which is currently always more rare, the rotogravure and the offset with large scale machines assure high quality and productivity. Most of the low and medium volumes mainly use the inline, medium-web flexo rotary printing press. In the labels market, the flexo and narrow-web offset technologies, very often combined, are consolidated and have unquestionable quality and efficiency levels.

An evident growth with the development of new technologies was lately recorded in this sector of the graphic industry, and GIDUE S.p.A. is active in this highly developing field. Since almost for thirty years GIDUE S.p.A. has supplied the printing and packaging industry with innovative technologies and solutions for printing machinery. Since the installation of the first Combat, in April 2000, the company saw a rapid and continuous growth and has managed to strengthen its role within the international market of printing machines producers. It positioned itself very well on the segment of flexo and flexo/offset combined printing of medium/low volume packaging and labels. GIDUE S.p.A. identified the key success factors in these markets, and met their needs with a targeted offer.

Looking for productivity

The collaboration with Wonderware started at the end of 2006, when InTouch was used as the standard for the supervision of the printing machinery most recently produced by GIDUE.

“Our main goal” – says Matteo Cardinotti, Software Manager at GIDUE for the Xpannd offset/flexo combined machines – “was to find a universal and reliable software platform, with an interface that the user could easily manage and that allowed a customization in a short time.”

Since quite a while GIDUE has understood that the magic words for the label industry are “increase the productivity”, which meaning to reduce time and production costs, especially for low volumes. The objective was then to build machines that could find innovative solutions to the traditional problems of this sector: need for automatic adjustments, replicable print quality, time and waste reduction. After having taken into consideration several suppliers and various solutions, GIDUE chose Wonderware. A thorough analysis of the specifics was followed by the realization of a pilot application, which successfully passed several tests.

At this point GIDUE decided to standardize the control system based on InTouch HMI, and in particular to use the Wonderware Industrial Computers solution with a preinstalled software licence. This allowed the combination of the reliability of the HMI software (more used worldwide with the robustness of the Wonderware Industrial Computers), and a significant reduction in the installation time. The InTouch HMI–based control system is currently used on the main GIDUE machines: Xpannd, the offset/flexo combined machines for very decorative labels, Athena, the medium-web flexo UV machine for flexible packaging, extremely stable and productive at high speed, and I-Combat, newly born of the Combat line, servo-driven machine characterized by a wide range of digital controls.

Beyond the software: flexibility and customization

Thanks to InTouch HMI the engineers at GIDUE designed a very user-friendly and highly customizable interface for their machines: with the Wonderware solution it is possible to get an effective management of the production recipes and of the alarms regarding technical maintenance or potential failures.

Furthermore, data exchanges can be managed at different levels according to specific needs, in order to perfectly integrate the printing machine within more complex systems, for example, the business systems used by the customer. Matteo Cardinotti says: “During the process of customization of the interface, GIDUE and the technicians of the Electric and software programming Offices in Turate and Florence worked in order to realise intuitive graphic functionalities. The aim of these is to make easier the access to information and the download...”
of useful data such as the machinery’s manuals or the electrical schemes that can be uploaded on the machine’s control software and be downloaded when needed. The possibility of having an Ethernet® connection to the company network allows working in network and locally. The software is available in Italian and English, but can also be translated in other languages, according to the customer’s needs."

The use of the Wonderware technology for GIDUE is functional to the application of the Intelligence to the modern printing machines in narrow and medium-web. Intelligence means digital control over every single process, in order to obtain a perfect repeatability of processes, reducing time loss and wastes. This translates into consistency of the machine control, especially quick set-up time, and little waste, independently from changes in speed and work. The temperature and the pressure are digitally controlled, the printing and inking pressure are recorded and can be automatically be recalled during the process or afterwards, also supporting the quality check of the labels.

The Intelligence can be easily linked to the Management Information & Execution System (MIS and MES) of any factory dealing with printing. It is possible to exchange orders, plans and additional information thanks to the interface of the Wonderware software, easy to use and compatible with the Microsoft® platforms through the Ethernet® protocol. The system ensures interactive and bi-directional communication, reducing time wastes and minimizing the loss of information.

**Local needs, global support**

Additionally, GIDUE chose Wonderware as a technological partner also because they needed to supply their customers with assistance and technical support at a global level. It is known that GIDUE is strongly oriented towards international markets. For this reason it is of strategic importance to be able to rely on qualified on-site staff for all the support and maintenance activity. Wonderware, with a network comprising of 160 distribution offices and a Technical Support structure in 200 locations worldwide, is the ideal partner for the machines producers. And the collaboration with GIDUE proves it.