UNITED FOR A FLAWLESS SERVICE

Lilly: 125 years of growth through innovation
Lilly, the world’s 11th largest pharmaceutical group, bases its development on the discovery of innovative medicines: from the very first industrial production of insulin in 1923 to the development of products stemming from genetic engineering, the company’s aim has always been to market products that are the first or best in their therapeutic class. Lilly employs 44,000 people around the world, with a presence in over 150 countries, and has 20 production sites and 9 research and development centres on all 5 continents.

The production plant that has stood in Fegersheim, not far from Strasbourg, for over 35 years has become one of Lilly’s main production sites, thanks to continuous investment geared towards meeting market demand for lifesaving products, such as insulin for anti-cancer drugs in particular.

MICROMEDIA and Lilly in Fegersheim: a long-term collaboration
Pharmaceutical production is subject to a set of rules that do not tolerate the slightest breach, in an environment where compliance and compliance verification are draconian. Since 1997, when Micromedia was still a young company, Lilly France and Micromedia
have worked together in the remote monitoring of fluid and energy supplies. In the highly standard-driven environment of pharmaceuticals, the aim of this collaboration is to obtain a flawless supply of the fluids and energy that are so vital to the smooth running of the production of injectable medicines.

Such continuity of service requires an effective duty system and, over the last 7 years, Micromedia’s Alert, in its 3.3 version, has been more than proven to be able to fulfil the role. In 2004, a new stage was reached in Lilly’s relationship with its supplier Micromedia thanks to the “Site Alert Server”, which aims to turn Alert into a standard: “The aim is to replace the existing system with a site system that can be shared by several duty teams attached to different entities (for instance, Energy, Production Areas and Laboratories).”

For the moment, Alert is focused on energy management. The system is dedicated to monitoring the production of the company’s primary energy sources. These raw energy sources enable the industrial process to function: electricity, industrial steam, iced water, air mixtures of varying quality. The air conditioning units for the office areas are also monitored by ALERT. There are plans, in a second phase, to integrate the monitoring system with the production of sterile air, which is used in the manufacture of medicines. Monitoring is carried out on refrigeration towers, boilers and waste water, and relates essentially to regulatory constraints.

Alert is installed in server mode in the most secure conditions possible: the main licence is backed up by redundant versions, which are installed in different locations in order to minimise the risks in the event of destruction. The two telephone lines are also separate.

When Lilly France decided to acquire Alert, it drew up user specifications in order to communicate its expectations of the system. International market research was conducted in order to identify the most appropriate set-up. Several products were singled out for their potential ability to meet the expectations of Lilly France. These were then examined and finally tendered by applying the extremely narrow criteria stipulated by Lilly France. Alert came out on top in the performance comparison tests. It stood out in particular for its openness and the ease with which it can be integrated with monitoring software via OPC and net DDE.

Alert works in synergy with Wonderware’s Intouch supervisor, distributed in France by Factory Systemes. Rockwell Automation’s RSView product is also integrated in the monitoring system.

**Alert: The ideal configuration**

Lilly France identified 1500 potential variables. However, the aim was to define priorities in order to keep volume down to the essentials. The system was therefore limited to 3 or 400 uses, allowing all major alarms to be covered. As a result, Alert handles variables such as pressure, discharge, quantity of waste water discharged, temperature, carbon dioxide content, oxygen and sulphur content and the water’s pH.

Alarms are first ranked by level of importance and this ranking is then sent to Alert. In addition, alarms are distributed and used depending on the individuals present at the site. The person on duty is equipped with a mobile phone, which is the channel through which alarms are managed. One person in each department is in charge of managing the
schedule for duty staff. The process encompasses 5 departments, with each operational unit being comprised of 6 people.

If an alarm is triggered, it is sent by voice message and/or SMS depending on the degree of urgency of the message: Voice + SMS if the alarm is extremely urgent, and voice only if it is less urgent.
The voice synthesizer collects the content of the message and the nature of the alarm from the monitoring system, and converts it into a voice message.
The message is acknowledged by mobile phone. The alarm may require a presence at the site or a visit to the machine, or be deactivated remotely via a PC.
If the alarm is not acknowledged, the call cycle initiates the following stages:
  • a reminder 3 times every 2 minutes
  • failing this, a call to a backup number
  • failing this, a call to another backup number
  • and so on

More comprehensive use of the alarm log and more complex processing of alarms are some of the future developments being envisaged.

**Alert: a durable and adaptable system for a flawless service**
One of Alert’s major strengths is the ease with which it can be both integrated with the system and assimilated by the user. The user does not require in-depth training in order to master the software as its operation and use are simple. Lilly France appreciates the fact that Alert is a native industrial system, with an integrated alarm engine. They were also attracted to the product because it works well with Windows. In addition, Alert is highly upgradeable thanks to its OPC openness.
Beyond the product’s intrinsic qualities, Lilly France attaches great importance to the overall service the product is part of. Thus, the quality of the package as a whole has played as important a role as the product itself; both in terms of the incorporation of modifications and for the analysis of requirements.
The willingness on the part of the supplier to both listen and assist therefore add a more human side to the relationship, which went some way to tipping the balance in Alert’s favour, even though the product itself had already been met with enthusiasm.
The trust granted by Lilly France is also rooted in the solid guarantees provided by Alert. This trust has been tried, tested and renewed for 7 years now and is the foundation stone on which highly fruitful and progressive Alert projects are now being built.