



# An acquired taste

An autoclave with computer control – this was Patrice Camu’s idea with which he has brought success to his company STERITECH over the past 30 years. Today, this idea enjoys global success and captivates users not only with its excellent process quality and low energy consumption, but also as a coordinated solution for automation, remote access, and operation, offering the user optimal comfort and high data transparency by means of features such as, for example, an integrated user recognition via RFID.

The beginning of STERITECH dates back to the year 1988 and the Alsatian town of Saverne where the company has its headquarters until this day. The solutions of the company, however, can be found in more than 30 countries across the globe. Pivotal for this success is the fact that STERITECH consistently developed upon the idea of its founder – equipping an autoclave with an automatic control. It is very visible today how “current key factors discussed under the umbrella of Industry 4.0, e.g., traceability, data transparency, access to production data, have been a part of our solution for a long time,” explains Christophe Wendling, Head of Electrical Engineering and Automation Technology at STERITECH.



One part of the solutions portfolio are autoclaves for pasteurizing and sterilizing different products and packages.

### **Transparency and efficiency on all levels**

One example for this is the MES solution Trilogy for collecting and evaluating machine and batch data that STERITECH developed based on SIMATIC WinCC Professional. Also almost all automation and network components used in the autoclave are from Siemens, according to Christophe Wendling: "Our users expect our solutions to work. That is why we put our trust in industrial-grade components that reliably perform over the course of many years – which is exactly what the components of Siemens do".

The focus is not only on reliability, but also on data transparency, including its high requirements. This is particularly the case in the pharmaceutical industry. Here, it is necessary to precisely know at any point in time what processes the product went through with which settings, who changed what parameters, and which steps of the process were enabled and confirmed. The information must be recorded and archived accordingly. This also applies to the food industry in which lawmakers and producers continuously increase the requirements for transparency and traceability of processes. At the same time, it must be possible to operate the machines intuitively

and error-free: "We must take into account that we have a large spectrum of operators – from well-educated and highly specialized professionals to machine operators without much knowledge of automation as well as employees from the crafts business," explains Christophe Wendling. Therefore, the interaction with the machine must be as easy as possible, especially with regard to identification and authorization of machine operators: "I think everybody knows at least one example in which authorization takes place by means of the famous "piece of paper with a password" on it – which is often taped to the machine," according to the expert. "Of course, this neither very safe nor traceable."

### **Reliable and comfortable user identification via RFID**

Therefore, STERITECH offers its users the possibility to easily identify oneself with the employee ID card. For this, STERITECH uses robust SIMATIC RF1000 readers that can easily be integrated into the extension units of the operating device due to the high degree of protection (IP65). Operators simply insert their IDs into the slot and then get access to the corresponding machine functions. Not only does this ensure that solely authorized personnel

can adjust settings of the machine, but also the allocation of rights is much easier and more flexible than before, according to Christophe Wendling. "In the past users were grouped together according to their roles – operation, management, administration, service – and the rights were allocated accordingly. However, it did not become clear who performed a certain action. Now, it is not just possible to match each action to a group or function but, by means of the employee ID card, it can be matched to a certain person. This allows us to fulfill all requirements with regard to traceability."

The identification via RFID is not only safer, but also clearly more comfortable than the identification with password – which is why this solution is not solely relied upon by industrial customers, explains Christophe Wendling: "Operation, identification – everything comes from one provider and is very easy for the user. Hence, one of the first reactions when users see this solutions is "oh, this is easy" – which is why we install these RFID systems for big customers and more and more in smaller companies." For Christophe Wendling one of the major advantages is the fact that the RFID systems as well as all the other components are part of the Siemens automation solution. They are planned in the TIA portal just like all the other components: the system control with SIMATIC S7-1500, the SINAMICS drives, SIMATIC HMI devices and software, RFID readers, and the SITOP power supply are all placed in one project. Christophe Wendling and his team hence save quite some effort in project planning – integrating the RFID reader alone required 50% less effort compared with other solutions.



The Goût'stave is an autoclave developed specifically for small companies and the crafts business but nevertheless is equipped with all features of an industrial-grade solution.

#### **Efficient commissioning via remote access**

The seamless interplay of all automation components allows STERITECH to develop and manufacture its autoclave highly efficiently, making the systems interesting even for price-sensitive applications. One example is the particularly compact autoclave Goût'stave, which was developed for applications in small companies, for regional producers, or for the crafts business. The first customer of the compact autoclave Goût'stave was an Alsation fruit company that uses it to make products such as chutneys and marmalade durable. "This regional relation further increased our motivation to develop a sophisticated solution," Christophe Wendling remembers. This is why even the smallest STERITECH system offers the same functions as the larger autoclaves – including a modern solution for remote access, as per Christophe Wendling: "We use SINEMA Remote Connect for a safe remote access to our autoclaves. This allows us to quickly support our users in case of problems even from afar. The secure connection gives us full access to the plant data, and we can instantly see where the problem lies". With the compact autoclave Goût'stave STERITECH hence has the possibility of completely commissioning the machine from a distance: "The technician connects the device and turns it on – then our technician connects to the device and commissions it, without travel time and without additional effort for the user".

## Security information

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User identification with RFID is particularly comfortable and allows a personalized traceability of all operating procedures.

## Robust and reliable on a rough day

It is precisely details like the easy and secure remote access, but also the high-quality long-lasting automation components that win over the user. "All of the systems are highly robust and reliable starting with the SIMATIC S7-1500 control all the way to the power supplies. And in case a component does need to be exchanged, we can guarantee an excellent global spare part availability for our autoclaves for many years thanks to the Siemens service network." This is particularly important as some of the machines are in operation for more than 20 years in a diverse range of operating conditions, explains Christophe Wendling. Therefore, he knows the value of, e.g., SITOP power supplies being capable of compensating for power failures: "This allows us to ensure that we do not lose data in case of a power outage. That alone saves us many service hours a year – the user can turn the machine back on and continue production".

### Simple, comfortable, and secure: the solution at a glance

- Efficient project planning by means of an integrated automation solution
- Efficient commissioning via remote access
- User support during operation via remote service
- Easy and secure user identification with SIMATIC RFID
- 50% less project planning effort for the integration of the RFID systems
- Detailed tracking of all actions and process data
- Balanced solution portfolio with SIMATIC, SINEMA, SINAMICS, and SITOP components