

ELPRO CASE STUDY

Suter Viandes

Central monitoring system in the food industry



The requirements for traceability and compliance with the obligations for production and storage conditions in the food industry are on constant increase.

Dataloggers which record storage and production temperatures play an important role in complying with the IFS (International Food Standard) guidelines.

Logging storage and production conditions

Dataloggers have already been used for quite some time in the food industry. In most cases, the implemented dataloggers are autonomous devices which require periodical manual readout of the recorded data.

A new generation of datalogger systems, so-called central monitoring systems, opens up many new opportunities for simplifying workflows. With the aid of these new networked systems, online monitoring of all measured data points can be realized, providing you with an overview of storage and production conditions at all times. In addition, it is no longer necessary to perform manual readouts of data points. Central monitoring systems carry out this function fully automatically.

The project partner

Suter Viandes is one of the largest meat processing companies in Suisse Romande. The production plants are located in Villeneuve/VD on the shore of Lake Geneva. More than 200 employees produce all kinds of meat products including various regional specialties and fresh meat products.

With more than 1000 products, **Suter Viandes** delivers to large distributors and many restaurants throughout Switzerland. Perfect compliance with all hygiene and cold chain regulations is a matter of particular concern for **Suter Viandes**.

The project

Customer requirements

Suter Viandes was on the lookout for a system which would provide a simple method for uninterrupted and safe monitoring and documenting of all storage and production conditions.

To maintain the cold chain in the sprawling factory, Suter Viandes required that a total of 61 measuring locations for temperature or temperature and humidity be installed.

For the following reasons, **Suter Viandes** decided in favor of an ELPRO central monitoring system:

- Uninterrupted monitoring and documenting of storage and production conditions in compliance with IFS.
- The concept implemented by ELPRO systems allows for the use of existing LAN cabling which reduces the time and effort involved drastically.
- The system has a modular structure, is flexible and can, at any time and without major effort, be extended to include additional measuring locations.

Measuring locations for central monitoring

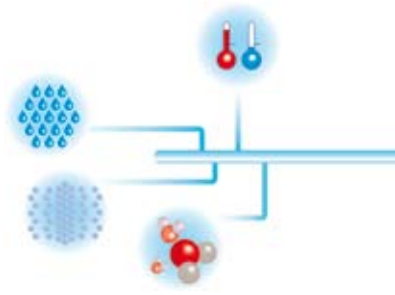
All important storage and production areas were fitted with temperature and, if necessary, with temperature/humidity sensors.

The following are monitored and documented:

- Cooking cabinets
- Refrigerators and deep freezers
- Working areas
- Storage (temperature and humidity logging)

Alarming

Suter Viandes uses the elproLOG MONITOR PLUS software which, in addition to online monitoring of all the measuring locations, also supports alarming functions. Information about threshold violations is forwarded automatically via the in-house alarm system to the responsible employees on standby duty. This enables immediate reactions to deviations.



Installing and commissioning

ELPRO was responsible for commissioning all dataloggers and installing the software, for setting the system parameters and for providing basic training for the users. All the above work was carried out within one day.

The probes were positioned and connected to the loggers during the following days by Suter Viandes' in-house Technical Services.

Customer benefits

The ELPRO central monitoring system provides Suter Viandes with uninterrupted monitoring and documenting functions. Easy data access is made available at a central location and, in the case of deviations, a fully automatic alarm is triggered and the responsible personnel are informed.

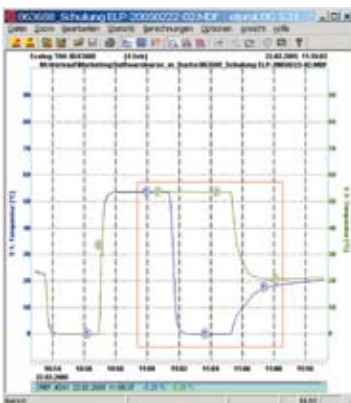
The most important customer benefits at a glance:

- The ELPRO system complies with IFS guidelines and offers Suter Viandes optimal safety during cold chain monitoring.
- The system has a modular structure making it easy to install and extend.
- It was possible to make use of the available Suter Viandes infrastructure (i.e. existing sensor wiring and network) for the ELPRO monitoring system, thus reducing the time and effort involved drastically.



Implemented components

- **ECOLOG-NET LP4** (Part No. 2701)
Network compatible datalogger for monitoring and documenting one to four temperatures.
- **ECOLOG-NET LA8** (Part No. 2720)
Network compatible datalogger for monitoring and documenting temperature or temperature/humidity. 8 channel datalogger for 4..20mA transmitter signals
- **elproLOG NET** (Part No. 2344), **elproLOG MONITOR PLUS** (Part No. 2346) Software package for monitoring, analyzing and documenting measured data.





- **Alarm interface** (Part No. 2355-A)
Interface for forwarding alarm states to external systems, e.g. factory master control systems, hooters or telephone dial units.



- **Temperature sensor PT100** (Part No. 3188-L0)
PT100 4-wire DIN A ML temperature probe made of stainless steel.



- **Temperature sensor PT100** (Part No. 3164-L04)
PT100 4-wire DIN A needle probe with Teflon cable



- **Humidity/temperature transmitter** (Part No. 3310-T02)
Humidity/temperature transmitter for wall mounting, range 0..100%rF, -40..60°C



- **Transmitter PT100 - 4..20mA** (Part No. 3350-A)
Transmitter PT100 4-wire to 4..20mA