The adherence to pre-defined temperature values is of paramount significance in the food industry. This is the only way legal hygiene standards can be fulfilled and the quality, safety and preservation of foodstuffs guaranteed. The precise monitoring of the complex processes and procedures is defined in the HACCP guidelines (Hazard Analysis Critical Control Points), whose purpose is the prevention of health risks in the food sector.

The measurement data monitoring system testo Saveris is HACCP-certified, and is thus ideally suited to use in the food industry. It measures, monitors and stores the temperatures in food production, storage and logistics highly accurately, and informs those responsible for the system with alarms when limit values are exceeded.
The challenge.

Fresh and frozen goods whose quality and freshness are dependent on constant refrigeration are only protected optimally from spoiling if defined temperature values are adhered to. In this context, legal stipulations regulate the temperature zones for the cold chain of various foods. While for meat and fish products, microbe growth in particular must be kept as low as possible by maintaining temperature limit values, for fruit and vegetables the prevention of premature full ripening is in focus. The corresponding temperature stipulations must be adhered to in every stage of the production chain, without exception. This is the only way high-quality products can be produced, the safety of the consumer guaranteed, and the legal requirements fulfilled. The wrong temperatures in production, storage or logistics can have grave financial consequences for the affected companies, while also seriously endangering the lives of the consumers.

In 1959, the HACCP concept was developed in order to minimize these risks. It contains guidelines for risk management analysis in the food industry, whose objective is to systematically monitor and maintain security and quality in all food processes. The HACCP principle demands, for example, that all dangers to the safety of the foods present in a company must be analyzed. According to HACCP, it is furthermore indispensable for the safety of the foods that critical control points and their intervention limits be determined, so that a procedure for the continuous monitoring of these control points can be implemented. Following this, correction measures must be established which should then be carried out in the case of a deviation. For the prescribed measurements during the transport, storage and distribution of refrigerated, frozen and deep-frozen foods, temperature registration instruments must be used which conform to EN 12830. Measurement results must be documented without interruption, and the measurement method regularly verified. In order to be able to guarantee food safety, it is of crucial importance to maintain these basic principles of the HACCP concept thoroughly.
The solution.
The measurement data monitoring system testo Saveris is HACCP-certified, and is thus ideally suited to use in the food industry. It supports you efficiently in the maintenance of prescribed limit values, and simplifies the safe and economic implementation of the HACCP concept – no matter which link in the production chain is your responsibility.

In the case of a limit value violation, a number of alarm options are available to you: For example, you can choose to be informed of an undesired temperature deviation by SMS or e-mail alarm, as well as by alarm relay. Remote alarms can even be given when the system is not connected to a running PC. Even in a power cut, the data recording continues without interruption, meaning that the safety of your foods is at no time at risk.

The transfer of the measurement data takes place via wireless and/or Ethernet probes to a base station. This monitors and documents all measurement data automatically – which saves time and money. The base station itself can store up to 18 million measurement values, independently of the PC. From here, all data are immediately transferred to a PC or fed into a database. Thanks to the easily and intuitively operable testo Saveris software, you can call up the measurement values from a central archive at any time. This allows the comprehensive analysis and evaluation of all recorded measurement data.

A high level of security, reliable checks and efficient cost-savings: testo Saveris is the optimum solution for temperature monitoring in the food industry. With the measurement data monitoring system, you can:

- Guarantee food safety.
- Fulfil legal requirements.
- Monitor the entire food cold chain.
- Save costs by reducing loss of spoilt foods.
- Minimize the risk of financial losses from call-back measures.
- Improve company image and customer satisfaction.

The Saveris radio probes measure the temperatures highly accurately and transfer them to the Saveris base station wirelessly.

HACCP-conform monitoring of temperature values in food production.
**Example application** HACCP guidelines in the food industry

**Be sure** testo

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**Measurement data monitoring system testo Saveris**

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**testo Saveris – all advantages at a glance:**

- Automated, uninterrupted data management
- Flexible and automated reporting
- Comprehensive alarm management
- EN 12830-compliant measurement technology

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**More information.**

For more information and answers to all your questions concerning temperature monitoring in the food industry at www.testo.com.

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