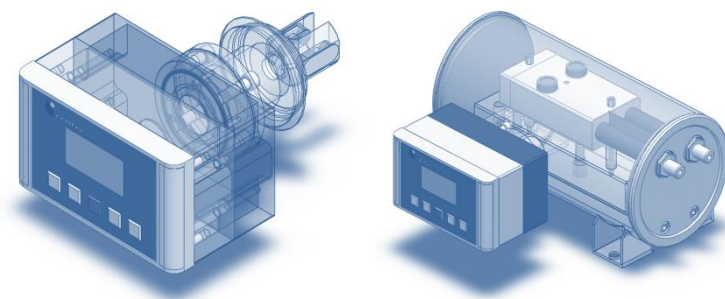


The Centec Group

Centec is a privately owned group of companies. A core business for us is customized systems for the production and distribution of high purity water and water for injection (WFI) for pharmaceutical and biotechnological plants in accordance with GMP and FDA guidelines. We are an experienced partner for pure steam generation, CIP- and SIP-processes as well as for services related to product preparation. Centec technology includes a range of high precision process sensors for accurately measuring critical product properties such as the concentration of acidic and caustic solutions and O₂ content. The largest pharmaceutical groups in the world are among our key customers.



Accuracy. Reliability. Centec.

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FlashPasto

Flash Pasteurization

Centec Pharma Systems



Automated
process skids
and high precision
sensors from a
single source.
Centec.

FlashPasto

The Principle

In 1864 Louis Pasteur discovered that the most harmful bacteria in a product are eliminated when the product is heated to a temperature slightly below boiling and kept there for a specific period of time. Today, flash pasteurization is well established and leads to long product stability and shelf life. The Centec FlashPasto unit gently pasteurizes the product without injuring its effectiveness or digestibility. For optimum results, pasteurization time and temperature have to be individually adjusted to the specific product. The name given to quantify the amount of pasteurization is Pasteurization Unit (PU). One PU is defined as 1 minute of heating at 60 °C. The number of PU's required for a particular product depends on various factors, such as specific bacteria, type of packaging and anticipated shelf life. A certain PU value can be obtained either by a high temperature applied for a short time, or by a lower temperature applied for a longer time. Based on highly accurate PU control, reliable flow meters and temperature sensors, the FlashPasto unit achieves a constant pasteurization quality even for variable product flow. In case the skid is installed directly before the filler, it can easily be expanded by adding a buffer tank.

Technical Data

Capacity	1 - 60 m ³ /h
Range of PU's	10 - 500
Pressure of Operation	0 - 25 bar
Holding Time	according to requirements
Temperature of Pasteurization	110 - 165 °C
Temperature of CIP	up to 165 °C
Material	1.4404/1.4435/... AISI 316L/... electropolishing possible
PLC	SIMATIC S7
Options	in-line O ₂ measurement blending buffer tank



The Centec production is certified according to ISO 9001.

- **Application Specific and Energy Efficient**
constant pasteurization quality by highly accurate PU control
gentle processing without harming taste and colour
- **Modular Design with Standard PLC**
skid mounted for easy installation and start-up
- **In Compliance with USP, ASME, GMP, FDA, ISPE**
- **Completely Qualified (DQ, IQ, OQ)**
- **Low Operating and Maintenance Costs**

Experience. Expertise. Centec.

Particle Pre-Filtration · Disinfection · Water Softening & Demineralization · Ultrafiltration · Reverse Osmosis
Electro Deionization · WFI Distillation · Membrane Deaeration · Column Deaeration · Vacuum Deaeration
Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · Pure Steam Generation

