

# Sterilizer Tetra therm aseptic flex NG - 6.3T UTH with homogenizer

<b>Machine type:</b>	Pasteurizer
<b>Ref:</b>	PST33
<b>Model:</b>	Aseptic Flex
<b>Condition:</b>	Ready For Operation
<b>Products:</b>	Dairy

## Technical details

Type:	Flash	Temperature:	144
Stages:	4	Steam:	22
Water:	2000	Safety features:	Yes
Manuals:	Yes	Width:	5400 mm
Length:	12350 mm	Height:	3165 mm
Power:	60 kW	Voltage:	400 V
Frequency:	50 Hz		

## Description

### Sterilizer Tetra therm aseptic flex NG - 6.3T UTH with homogenizer

#### Technical Specifications & Performance Data

This Flash Pasteurizer and UHT sterilizer is engineered for high-efficiency thermal processing across dairy and beverage applications. The configuration described as 6.3T UHT + HOMO indicates a continuous aseptic module with integrated homogenizer capability and a maximum process temperature up to 144°C. Designed around tubular or plate heat exchangers, it delivers stable performance with precise thermal control.

- **Process type:** Indirect, continuous UHT in aseptic conditions
- **Heat exchanger configuration:** Tubular or plate
- **Capacity range (standard fixed modules):** 4,000–32,000 L/h
- **Turndown option:** up to 1:3 with split heater and F0 control available
- **Max process temperature:** 144°C
- **Electrical power (excluding homogenizer):** 23–60 kW

- **Utilities consumption (reference tubular HX with product-to-product regeneration):** Rinse water 1,000–2,000 L/h; Cooling water 0–100 L/h during production and 500 L/h during cooling; Steam 22 kg/h typical (110 kg/h peak during heat-up); Instrument air 50 NI/min
- **Voltage / Frequency:** 400 V / 50 Hz
- **Model/Configuration:** Tetra Therm Aseptic Flex, 6.3T UHT + HOMO
- **Materials:** Product piping in stainless steel AISI 316
- **Approximate layout dimensions (14,000 L/h reference module):** Length 12,350 mm; Width 5,400 mm; Height up to 3,165 mm

## Advanced Automation & Control Systems

The system is fully automated and structured into defined operating phases for consistent product quality and simplified operation. It integrates modern PLC control and operator-friendly HMI to ensure repeatability, traceability, and safety.

- **Operating phases:** Pre-sterilization, Production, AIC (aseptic intermediate cleaning), CIP (clean-in-place)
- **PLC:** Allen Bradley CompactLogix or Siemens S7
- **HMI:** TPOP operator interface
- **Electrical:** 400 V, 50 Hz
- **Automation features:** Frame-mounted frequency converters, prewired power and signal cabling
- **Safety and monitoring options:** Conductivity meter for CIP control, differential pressure gauge, UPS, turbidity meter for phase fine-tuning, paperless data recorder
- **Quick optimization:** Swing-bend sections for manual thermal-area adjustment; F0 control option

## Production Line Integration Capabilities

This UHT Flash Pasteurizer integrates seamlessly within industrial packaging and beverage production plants. It can be paired upstream with deaeration and mixing and downstream with aseptic holding, sterile tanks, and filling monoblocks in a used bottling line or second hand processing setup.

- **Inline/standalone:** Operates as a standalone thermal unit or integrated within a complete beverage production line
- **Upstream options:** Deaeration module (eco-mode available), product preparation, split heater for high-viscosity products
- **Downstream compatibility:** Aseptic tanks, sterile manifolds, aseptic filling machines for PET, Glass, or carton systems
- **Format flexibility:** Suited to a wide viscosity range, including fiber-containing juices with tubular backflush CIP

## Machine Condition & Maintenance History

The unit is offered as-is with no missing parts. The configuration corresponds to a new model specification with homogenizer capability. Overall presentation indicates a system suitable for recommissioning and integration into

beverage production or dairy processing lines.

## Operational Performance & Versatility

Optimized for a broad product portfolio, the system maintains product quality through precise thermal profiles and controlled residence time. Energy-saving features and advanced cleaning options enhance uptime and reduce operating costs for industrial packaging and processing operations.

- **Product applications:** Milk, flavored milk, cream, drinking yogurt, buffalo milk, formulated dairy; fruit juices; soy milk; tea; coffee
- **Special product treatments:** Extra holding tube up to 30 s; product-to-product tubular sections suitable for fibers; additional heating section for drinking yogurt with automatic on/off homogenization at 75°C
- **Energy efficiency options:** Additional regenerative tubes, aseptic hibernation mode, tubular HX insulation
- **Final cooling options:** Additional tubular section (to below 30°C) or plate section (to below 10°C)
- **Homogenizer integration:** Aseptic, non-aseptic, swing-bend interchangeable, or split; optional timing pump with flow control and automatic CIP of the dampener

## Installation Requirements & Site Preparation

Plan the installation area to accommodate service access and utility routing. The layout references provided for a 14,000 L/h module can be scaled to the selected capacity.

- **Space envelope (reference):** 12,350 mm (L) x 5,400 mm (W) x up to 3,165 mm (H)
- **Electrical supply:** 400 V, 50 Hz, up to 60 kW (excluding homogenizer)
- **Steam:** 7 bar, approx. 22 kg/h typical; 110 kg/h peak during heat-up
- **Cooling water:** 300 kPa, 20°C; 0–100 L/h during production; 500 L/h during cooling
- **Rinse/CIP water:** 300 kPa; 1,000–2,000 L/h during CIP rinse
- **Instrument air:** 50 NI/min

## Safety Standards & Compliance Certification

The unit is designed for hygienic processing and operator safety in food and beverage environments. Construction and component selection support sanitary operation and compliance with typical industry standards.

- **Hygienic design:** AISI 316 stainless steel product piping; sanitary pneumatic valves
- **Process safety:** Differential pressure monitoring, turbidity-based phase control, and data recording available
- **Automation safety:** UPS option for safe control continuity
- **Cleaning regimes:** AIC and CIP cycles for aseptic integrity and hygiene