

FT43 Laboratory Pasteuriser



FEATURES

- *Miniature plate heat exchanger*
- *Fully self-contained design with integral hot water system*
- *Choice of holding tubes*
- *Variable product temperature and holding time*
- *Control console incorporating comprehensive instrumentation*
- *CIP facility*

BENEFITS

- *Bench top operation*
- *Tests can be carried out quickly and easily*
- *Simulates the conditions used in a production plant*
- *Small quantities of liquid product can be processed*

MINIATURE SCALE R&D TECHNOLOGY



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The Armfield FT43 laboratory pasteuriser is a miniature-scale HTST unit which allows developers to test the effects of heat processing on product quickly and economically.

The HTST pasteurisation process can be undertaken using very small quantities of product in a relatively short time so testing is both quick and economical. Temperatures of up to 90 °C can be achieved and holding times varied with throughput using the two holding tubes supplied.

The unit can operate with as little as one and as much as 30 litres of product per hour.

Description

The Armfield pasteuriser has a unique miniature plate heat exchanger with heating, interchanging and cooling sections. Two holding tubes are provided to allow a wide range of holding times to be achieved.

This allows processing conditions identical to those in production equipment to be achieved and the certainty that any organoleptic and physico-chemical changes will be replicated.

Batch sizes as small as 1 litre can be processed making the unit ideal for preparing product for kitchen trials and taste panel tests.

Applications

- HTST pasteurisation of milk
- Destruction of spoilage organisms
- Arresting of enzyme activity
- Arresting of yeast activity
- Quality control

Unit specifications

Throughput:	Variable from 0 to 30 lph for the process and up to 100 lph for Clean in Place
Holding Times:	
Using tube 1:	15 secs at 20 lph. throughput
Using tube 2:	45 secs at 20 lph throughput
	Both of these holding times can be varied with throughput
Temperature:	Any temperature selectable between ambient and 90 °C
Viscosity limit:	2000 centipoise
Feed Pump:	Peristaltic, variable speed.
	Hygienic construction
Heating	Hot water circulation by centrifugal pump
System:	Heated by 1.5kW electric cartridge in a self-filling water tank. Circulation rates up to 1.2 lpm using variable area flowmeter
Diverter Valve:	Stainless steel, 3-way solenoid type
Temperature Controller:	Microprocessor based, providing time proportioned P+I+D action to the water heater. Range 0-100 °C
Temperature	6 semi-conductor sensors, stainless steel sheathed
Measurement:	Use in 9 possible measurement points
Feed Tank:	4 litres

Ordering Specification

FT43A - Standard unit
 FT43A-90-IFD-USB Data Logging Accessory for FT43A
 - This accessory allows the six temperature sensor outputs to be logged on a PC.

Electrical Supply

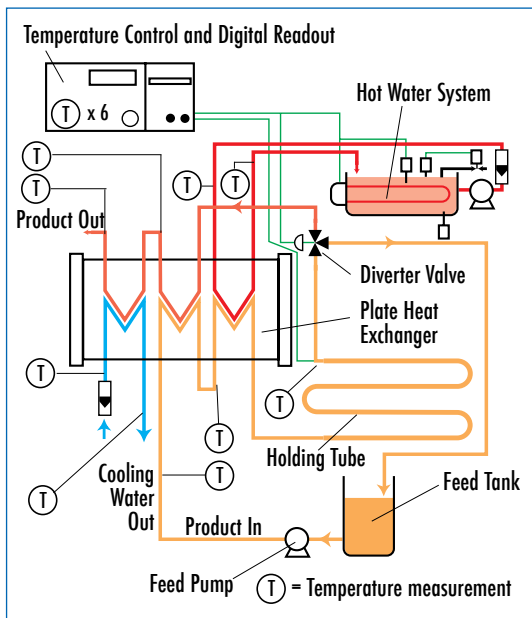
FT43A-A: 220-240V/1Ph/50Hz, (2kW)
 FT43A-B: 110-120V/1Ph/60Hz, (2kW)

Overall dimensions

FT43A:	Control Console
Height: 700mm	Height: 200mm
Width: 800mm	Width: 350mm
Depth: 600mm	Depth: 300mm

Shipping specification

Volume: 1.0m³
 Gross weight: 150kg



Schematic diagram of the FT43