

ET43 LABORATORY PASTEURISER





FT43 controller

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.

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





An ISO 9001 Company

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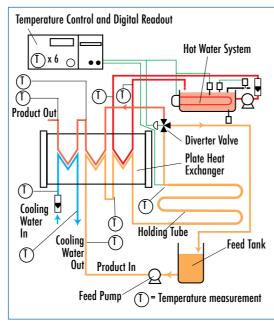
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Description

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.



Schematic diagram of the FT43

Holding Times:

Specifications

Throughput:

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

Variable from 0 to 30 lph for the process and

up to 100 lph for Clean in Place

with throughput

Temperature: Any temperature selectable between

ambient and 90°C

Viscosity limit: 2000 centipoise

APPLICATIONS

HTST pasteurisation of milk

Arresting of enzyme activity

Arresting of yeast activity

Quality control

Destruction of spoilage organisms

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 Microprocessor based, providing
Controller: 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

Requirements

Electrical Supply: Single Phase (see Ordering Codes)

Ordering Codes

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

Optional Accessories

FT43A-90-IFD-USB *Data Logging Accessory for FT43A

Shipping specification

Volume: 1.0m³ Gross weight: 150kg

Overall dimensions FT43: Console:

 Height:
 0.70m
 0.20m

 Width:
 0.80m
 0.35m

 Depth:
 0.60m
 0.30m

*Windows™ Data Logging Systems A unique henefit of the Armfield miniature scale

A unique benefit of the Armfield miniature scale food processing range is that the measured data may be captured and stored to disk.

An Armfield FT43A-90-IFD-USB Data Logging Accessory transfers results to a PC. This accessory allows the six temperature sensor outputs to be logged on a PC.

The data can be displayed in graphical and tabular forms and printed.

A PC with a USB port, and running Windows XP or later is required.

The Armfield range includes HTST/UHT/aseptic systems, carbonator/filler/cappers, spray dryers/chillers, multifunction batch processors, ice cream freezers, margarine crystallisers, extractors, edible oils processors and more. For further information about our products and services, or to book a trial at one of our trials facilities, please contact us.