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ISO 9001:2008
2YR EXTENDED WARRANTY

FEATURES

- Full control of barrel speeds to over 1000rpm
- Temperature control system incorporated
- Integral membrane control panel enabling simple control and monitoring of all major variables
- Enclosed self-contained, mobile, stainless steel service cabinet for easy cleaning and wash down
- Hard chromed barrels
- Hygienic design
- Made from AISI 316 stainless steel
- In cabinet refrigeration

Available:

- Variable speed pinworker for margarine and soft spreads
- Air incorporation system
- Computer data logging facility
- Pinworker

BENEFITS

- Duplicates full-scale process
- Fast, accurate new product development
- All process parameters under operator control for maximum flexibility
- Rugged and reliable units

ISSUE - 8



Scan to learn more



Armfield miniature-scale technology is well established as offering developers the opportunity to run small trials, which provide enough information to enable scale-up to larger plant with confidence. The formulations go through similar physico-chemical changes as they would in production plant and real time data logging permits results to be recorded and repeated.

The FT25 range of miniature-scale scraped surface heat exchangers has built-in control and flexibility with a graphic representation on the membrane technology control panel. The operator can choose the parameters wanted for any particular formulation. The FT25 has a number of configurations according to the required use.

Description

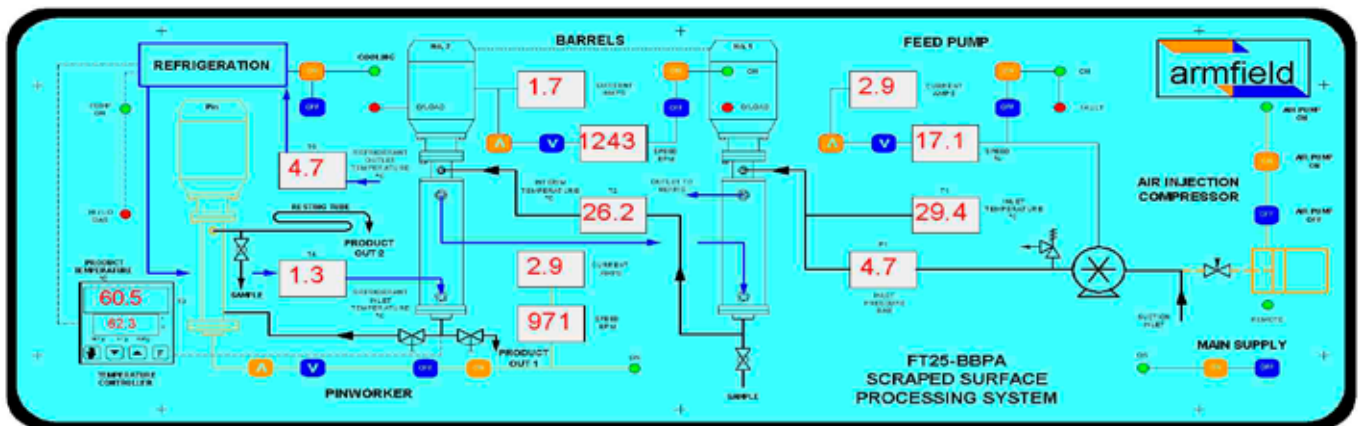
The FT25 Scraped Surface Heat Exchanger Series utilises the Armfield monocoque stainless steel cabinet with membrane technology control panel. The working platform can accommodate one or two barrels (B) and a variable speed pinworker (P) alongside a product reservoir and progressive cavity feed pump.

The unit uses a refrigeration system supplied within the cabinet and utilises a chilled, food grade refrigerant, which is pumped through the barrel jackets.

An air incorporation system can also be added if required.

Small batch sizes enable rapid product testing and a Clean-In-Place (CIP) facility speeds turnaround for increased productivity.

All services required are housed inside the wash-down cabinet, which also contains a drawer mounted with the electrical chassis.



The splashproof, touch sensitive, membrane control panel with diagrammatic representation of the process. It shows variables such as product feed pump rate, barrel and pinworker speed temperature and pressure, which are all under operator control. Process data is displayed in real time and can be logged to a PC running the Windows™ operating system.

Note:

For Scraped surface heat exchanger applications involving product heating, UHT, or combined heating and cooling, please enquire about our FT174X - Modular Miniature HTST/UHT Process System.

Typical Configurations

Continuous Margarine Crystalliser

FT25BP-IF-C: One barrel and one pinworker

FT25BBP-IF-C: Two barrels and one pinworker
A resting tube for product settling and food grade refrigeration unit for process cooling are supplied. A range of oil emulsions can be processed.

Continuous Ice Cream Freezer

FT25BA-IF-C: One barrel
Air incorporation via a small air compressor and refrigeration.
Overrun can be achieved up to 300% (dependant on product).

Combined Ice Cream and Margarine System

FT25BBPA-IF-C Two barrels, one pinworker plus air incorporation.



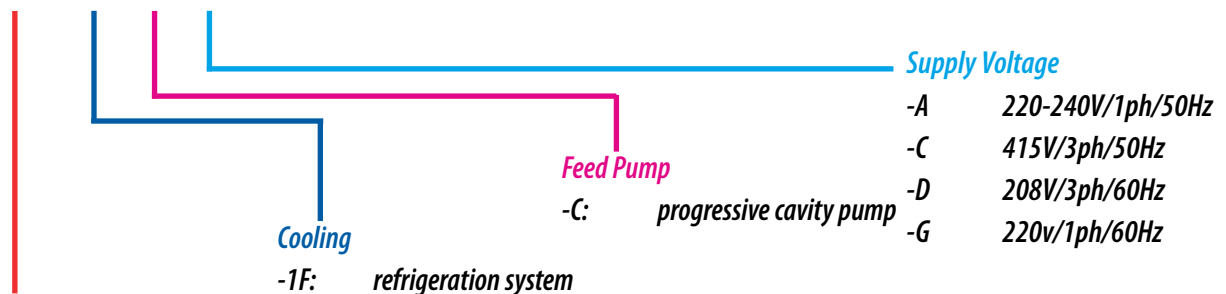
FT25BA Continuous Ice Cream Freezer

Ordering Specifications

Orders for Armfield FT25 units may be placed by using a specification code: for example **FT25BBP-1F-G-A**.

An explanation of the specification may be found by reference to the table below:

FT25XXX - YY - Z - W



Barrel Configuration

- BP:** one barrel, one pinworker
- BA:** one barrel, air incorporation
- BBA:** two barrels, air incorporation
- BBP:** two barrels, one pinworker
- BBPA:** two barrels, pinworker, air incorporation

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Develop with us

Armfield R&D products include:

Hygienic connections as standard ✓

316 Stainless steel ✓

CE certification ✓

Extended warranty as standard ✓



An ISO 9001 Company

Head Office:

Armfield Limited
Bridge House, West Street,
Ringwood, Hampshire.
BH24 1DY England

Tel: +44 1425 478781
Fax: +44 1425 470916
E-mail: sales@armfield.co.uk

U.S. Office:

Armfield Inc.
9 Trenton - Lakewood Road
Clarksburg NJ 08510
Tel/Fax: (609) 208-2800
E-mail: info@armfieldinc.com

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Specifications

Heat Exchanger Barrel:

Heat transfer area: 0.045m²
Shaft/barrel volume ratio: 1 : 3.5
Scraper blades: 4 along shaft stainless steel, 180° separation

Barrel length: 0.35m
Barrel working pressure: 8.0 bar

Pinworker:

No of pins on shaft: 20
No of pins on barrel: 42

Barrel/pinworker drives:

Variable speed ac motors, inverter controlled:
speed range 0-1400rpm

Refrigeration system:

Food grade refrigerant: -25°C capability

Feed pumps:

Progressive cavity pump:
Process throughput: 0-20l/h, independent of back pressure

Particulate capability: up to 0.6mm
Fibre handling capability: up to 25mm

Air incorporation system: Air pump with multiple turn control valve and dial to vary overrun

NOTE: Air incorporation systems use a suction inlet and are not fitted with an inlet tank.

Optional Accessories

Data Logging Accessory: FT25-DTA-ALITE

Windows™ Data Capture Software

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 FT25-DTA-ALITE Data Logging Accessory transfers results to a computer.

Feed pump flow rate, barrel/pinworker speeds, temperatures and pressures can be monitored in realtime. The data can be displayed in graphical and tabular forms and printed.

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

Requirements

Electricity supply: (see ordering codes)

Water supply: For refrigeration cooling

Cooling water supply with flow rate of 3l/min @ 3bar and ≤20°C

Ordering Codes

FT25BA/BP/BBP/BBPA-A	220-240v 1ph 50Hz
FT25BA/BP/BBP/BBPA-G	220-240v 1ph 60Hz

Overall dimensions

Height: 1.4 m
Width: 0.85 m
Depth: 0.90m

Shipping specification

Volume: 2.1 m³
Gross weight: 380 kg

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.