



*The Armfield Cheese Vat makes an ideal research facility.  
When making Cheddar type cheese, approximately 1kg of cheese is produced from a 10 litre batch of milk.*

#### features

- 10 litre capacity stainless steel jacketed vat
- Bench mounting with small footprint
- Separate console controls vat temperature and paddle speed
- Water heater fitted in console
- Temperature and pH can be monitored by microcomputer using an appropriate interface
- Range of cheese making accessories
- Simple controls

#### benefits

- Makes all well known types of cheese
- Economical with raw materials
- 1kg batch provides adequate material for sampling
- Ease of use

Miniature-scale research & development technology





An ISO 9001 Company



Miniature-scale R & D technology

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#### Armfield R&D products include:

316 Stainless steel



CE certification



Extended warranty  
as standard



For more product  
information please visit:  
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## Description

Manufactured wholly in stainless steel and bench-mounted, the vat is hygienic in use. It has a removable paddle agitator of stainless steel, driven through a guarded linkage system by a variable speed drive motor. Water is circulated through the vat jacket at a preselected temperature by the pump contained in the separate control console which stands adjacent to the vat.

#### The control console incorporates:

- > chart recorder for continuous printout of pH of vat contents
- > digital display of pH of vat contents
- > digital display of temperature of vat contents
- > two analog output ports for computer monitoring of vat temperature and pH
- > agitator stop/start and variable speed control

The pH and temperature probes are suspended in the vat contents from a bracket on the rim of the vat.

A specially designed perforated strainer fits into the vat outlet to facilitate efficient draining.

CAPABILITIES

- heating and agitating milk, and holding at an exact temperature for addition of starter culture and rennet
- holding at temperature during coagulation
- cutting and healing the curd
- heating and agitating gradually and accurately to 'scald' the curd
- maintaining the higher temperatures and agitating for a further period
- settling the curd or 'pitching'
- drawing the whey
- milling
- salt addition

## FT20A Cheese Making Accessories

Designed to be used with the 10 litre Armfield FT20 Cheese Vat to produce approximately 1kg of finished cheese.

Using the accessories, it is possible to carry out the following operations: curd cutting, cheddaring, pH determination (chemical) and pressing.

- > Stainless steel horizontal blade curd knife
- > Stainless steel vertical blade curd knife
- > Stainless steel cheddaring box plus weights up to 10kg (2kg x 5) for initiating the traditional cheddaring process
- > Cheese press with 2 moulds
- > Acid testing kit comprising, including apparatus and chemicals

## Specifications

### Vat:

Working capacity: 10 litres  
Agitator paddle: Stainless steel  
Agitator drive motor: 50W, 0-30rpm  
The agitator drive linkage is designed to allow the paddle to traverse the vat at rates between 0 and 60 times per min.  
Perforated strainer: Stainless steel  
Hygienic outlet valve: 'Pinch type'

### Control Console:

As well as containing the necessary electrical circuitry, the console houses:

Heating water circulator: 0.85kW, temperature range ambient to 80°C set by analog dial, (Control accuracy:  $\pm 1^\circ\text{C}$ , Safety: over-temperature cutout), max. flow 10lpm

### Agitator paddle variable speed drive control:

Thyristor, DC voltage output 0-1Vdc proportional to temperature and pH (2 channels). Suitable for microcomputer connection via any appropriate interface, e.g. FT20-90IFD-USB

### Chart recorder for pH:

Choice of 25, 300, or 600mm/hr speed.  
Direct 'dotting' on pressure sensitive paper. Scale: 0-14pH

pH/temperature indication: 3½ digit display

Thermocouple probe: Type K

pH probe: Food spear type, 0-14pH

## Requirements

Electrical Supply: Single Phase (see Ordering Codes)

## Ordering Codes

FT20-A: 220-240V/1ph/50Hz, (1.2kW)

FT20-B: 120V/1ph/60Hz, (1.2kW)

FT20-G: 220-240V/1ph/60Hz, (1.2kW)

## Optional Accessories

FT20-90IFD-USB: Data Logging Accessory

Requires user supplied PC with USB interface running Windows XP or later.

## Shipping specification

Volume: 0.3 m³ Gross weight: 80kg

## Overall dimensions

	Vat:	Console:
Height:	0.40m	0.28m
Width:	0.28m	0.37m
Depth:	0.56m	0.38m

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.

[www.explorearmfield.com](http://www.explorearmfield.com)