



Ideally suited to product development purposes, the Armfield FT111 Laboratory-Scale Rapid Extractor is used to extract the active constituents from materials in laboratory-scale batch sizes.

## FEATURES

- Fast, efficient solid/liquid extraction of active constituents from plants, herbs, fruits and other similar materials
- High pressure, room temperature extraction, excellent for sensitive materials
- Unaltered natural properties and characteristics of the active constituents, no discolouration or oxidation
- Easy to use: microprocessor control and real time display of sequencing and process parameters
- Automatic pressure control
- Automatic alarm indication of process anomalies
- Highly flexible extraction parameters

## BENEFITS

- Fast response, results in hours rather than days
- Small-scale, 5, 10 and 20 litre options
- Simple cleaning and maintenance procedures
- Uses ethanol, glycerol, water or similar safe solvents
- Reproducible results



# armfield

## Develop with us

Armfield R&D products include:

316 Stainless steel ✓

CE certification ✓

Extended warranty as standard ✓



An ISO 9001 Company

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## Description

The Armfield FT111 uses high pressure and a combination of both static and dynamic extraction phases to achieve a rapid extraction of the active materials with minimum degradation to the product. In the dynamic phases, the solvent is passed through the material providing a forced percolation and agitation.

The process pressure, number of cycles and length of each phase are programmable by the user. In this way the effect of the extraction parameters on the end product can be explored and an optimum set of parameters determined for each product.

The FT111 vessel is loaded with solvent automatically under microprocessor control using a pneumatic solvent pump. Priming of the vessel and pipework is also automatic. Twin pistons (one primary and one slave) are used to generate the pressure in the vessel and to provide the solvent percolation.

APPLICATIONS	
● Natural food flavours	● Tinctures and infusions
● Fruit flavours	● Herbal extracts and homeopathy
● Herbs and plant extracts	● Cosmetics
● Spirit liquors	● Pharmaceuticals

## Specifications

Vessel volume:	FT111-5l	5l
	FT111-10l	10l
	FT111-20l	20l
	(larger sizes available on special request)	
Total solvent capacity:	6l/12l/24l respectively	
Maximum pressure:	8 bar	
Twin piston		

## Requirements

**Electrical Supply:** Single phase (see ordering codes)

**Compressed Air (or N<sub>2</sub>):** 8bar

**Connection for solvent inlet**

**Mains water supply:** (for cleaning)

## Ordering codes

FT111-5/10/20-A 220-240V/1ph/50Hz 0.5 kW

FT111-5/10/20-B 115V/1ph/60Hz 0.5 kW

FT111-5/10/20-G 220-240V/1ph/60Hz 0.5 kW



	Overall dimensions			Shipping specification	
	H	W	D	Gross weight	Volume
FT111-5l	1.34m	0.80m	0.60m	80kg	1.2m <sup>3</sup>
FT111-10l	1.34m	0.85m	0.60m	90kg	1.35m <sup>3</sup>
FT111-20l	1.34m	0.90m	0.60m	100kg	1.5m <sup>3</sup>

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.