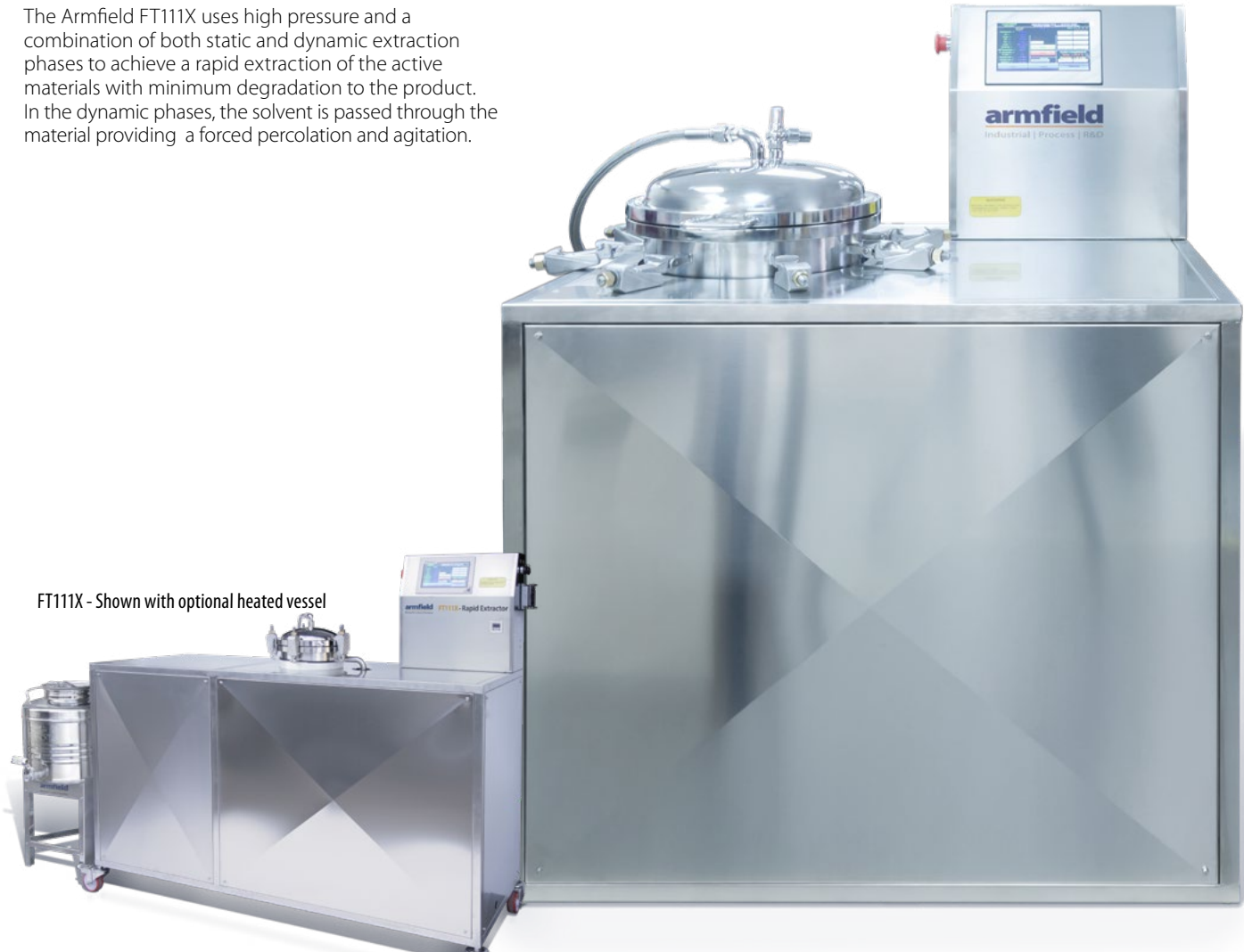


Laboratory-Scale Rapid Extractor – FT111X**FT
SERIES**

The Armfield FT111X Laboratory-Scale Rapid Extractor is ideally suited to product development purposes, used to extract the active constituents from materials in pilot-scale batch sizes.

The Armfield FT111X 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.

FAST RESPONSE, RESULTS IN HOURS RATHER THAN DAYS
SMALL-SCALE, 5, 10 AND 20 LITRE OPTIONS
CLEANING AND MAINTENANCE PROCEDURES
EXCELLENT FOR SENSITIVE MATERIALS



FT111X - Shown with optional heated vessel

Solvent tank



Operating pressure up to 8 bar



Touch screen operation & data logging



Description

The Armfield FT111X 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 FT111X 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
- ▶ Fruit flavours
- ▶ Herbs and plant extracts
- ▶ Spirit liquors
- ▶ Tinctures and infusions
- ▶ Herbal extracts and homeopathy
- ▶ Cosmetics
- ▶ Pharmaceuticals

Requirements

Scale



- ▶ Electrical supply: Single phase (see ordering codes)
- ▶ Compressed Air (or N₂) 8bar
- ▶ Connection for solvent inlet
- ▶ Mains water supply: (for cleaning)

Technical specifications

Vessel volume

FT111X-5L	5l
FT111X-10L	10l
FT111X-20L	20l

(larger sizes available on special request)

Total solvent capacity: 6l/12l / 24l respectively

Maximum pressure: 8 bar

Twin pistons

Overall dimensions

Model	FT111X-5L	FT111X-10L	FT111-20L
Length	0.80m	0.85m	0.80m
Width	0.60m	0.60m	0.60m
Height	1.34m	1.34m	1.34m

Packed and created shipping specifications

Volume	1.2m ³	0.135m ³	1.5m ³
Gross weight	80kg	90kg	

Features / benefits

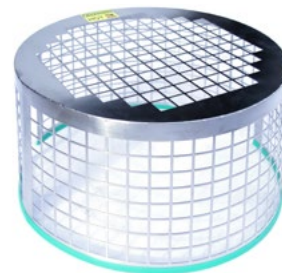
- ▶ Fast response, results in hours rather than days
- ▶ Small-scale 5, 10 and 20 litre options
- ▶ Simple cleaning and maintenance procedures
- ▶ Uses ethanol, glycerol, water or similar safe solvents
- ▶ Reproducible results
- ▶ Touch screen control
- ▶ Built in solvent tank
- ▶ Data logging recovery
- ▶ Remote control via VPN
- ▶ 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
- ▶ Heated tank option



FT111X Product extraction vessel

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
- ▶ Heated tank option available on request



Extraction vessel safety cage supplied as standard

Knowledge base

- > 28 years expertise in research & development technology
- > 50 years providing engaging engineering teaching equipment

Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.

An ISO 9001:2015 Company



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