

# Fibertec™ E Dietary Fibre Analysis System



*Semi-automated incubation and separation system for quantitative determination of dietary fibre in processed food, cereal products, fruits and vegetables, health food, feedstuffs, plant materials, etc.*

## Benefits

- Free choice of methods like AOAC, AACC, NMKL and Asp.
- Determines total, soluble and insoluble dietary fibre.
- Rapid filtration of six samples simultaneously.
- Specially designed incubation flasks
- High incubation and separation capacity.
- Repeatable readings, S.D. < 0.5% absolute.
- Easy and convenient to use.
- Saves time, space and manual work.

## Description

The Fibertec™ E is designed for rapid and rational determination of dietary fibre according to established enzymatic methods, including those approved by AOAC, AACC, NMKL and Asp.

The Fibertec E determines total dietary fibre as well as the insoluble and soluble fibres separately. It is also useful in sample preparation for detailed studies of fibre fractions, e.g. by chromatographic or colorimetric techniques.

The basic Fibertec E includes a Shaking Water Bath and a Filtration Module. The Shaking Water Bath incubates 12 samples in each batch. The temperature range is from ambient to 80°C and it is possible to preset three temperatures. The shaking frequency and amplitude are continuously adjustable.

The Filtration Module filters and collects 6 sample solutions batchwise and includes a system for rapid dehydration. The filtration step is speeded up through built-in “Pressure Mode”. Reversed pressure is applied to facilitate filtration by breaking up clogged filter residues during filtration. Filtration time varies according to sample type, but on average it is 2-4 minutes for 100 ml of digested solution.

The reproducibility (standard deviation) of the Fibertec E in determining total, insoluble and soluble dietary fibre is < 0.5% absolute.

**System description:****Fibertec™ E**

- Filtration Module complete, comprising: Filtration Module, Incubation Flasks (4 sets of 6), Standard Crucibles (P2, 2 sets of 6), Basket for Incubation Flasks, 2 Stands for Crucibles, 2 Spray bottles, 2 Water aspiration pumps, Filter aid, Tubing, Shaking Water Bath, complete, comprising: a tray for 12 Incubation Flasks and a hinged inclined lid.

**In addition, we recommend:**

Incubation Flask (set of 6), at least 4 sets

Crucible, P2 (40 - 100 µm) set of 6, at least 2 sets

Basket for 12 Incubation Flasks, at least 1

Total Dietary Fibre Kit for 200 determinations

Termamyl 300 L, 100 ml Boiling Water Bath Pipette 100 µl

Muffle or incinerator furnace ~525°C

**Accessories:****Alternative filter crucibles:**

Crucible, P0 (160 - 250 µm), set of 6

Crucible, P1 (90 - 150 µm), set of 6

Crucible, P3 (15 - 40 µm), set of 6

Stand for 6 Crucibles

1093 Cyclotec™ Sample Mill

1090 Cemotec™ Sample Mill

1095 Knifetec™ Sample Mill for high fat, high fibre samples

*For protein determination we recommend our Kjeltac analyzers.*

**Alternative flask trays for other applications, e.g. biochemical work:**

Tray for E\*\*-flasks, 50 ml

Tray for E\*\*-flasks, 100 ml

Tray for E\*\*-flasks, 250 ml

Tray for E\*\*-flasks, 500 ml

\*\* Erlenmeyer

**Performance data:****Filtration Module:**

Filtration and de-hydration capacity: 6 samples/batch

Filtration rate: 2-4 ml/100 ml of digested solution, depending on sample type

Repeatability: S.D. < 0.5% absolute

Flask volume: 600 ml

**Shaking Water Bath:**

Capacity: 12 flasks/batch

Temperature range: ambient to 80°C

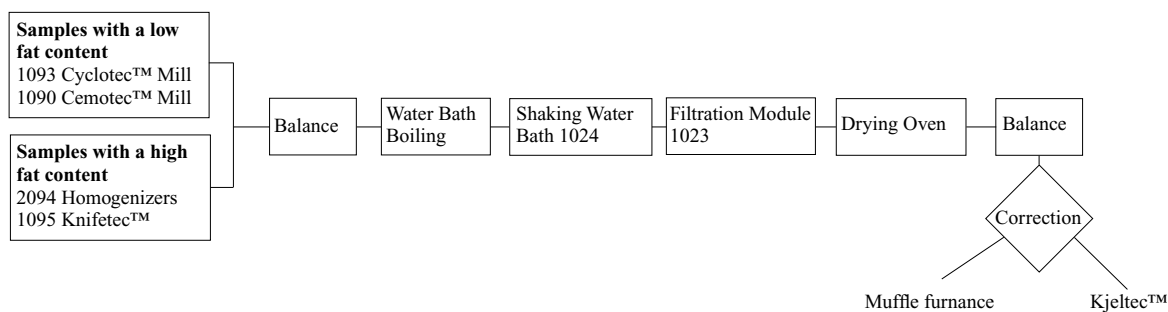
Temperature accuracy: ± 0.1°C

Shaking frequency: 0-150 strokes/minute

Stroke length: 0-50 mm

**Installation requirements:**

Equipment	Power supply	Power consumption	Dimensions w × d × h	Weight, kg
1023 Filtration Module	100-120 V, 50-60 Hz 210-230 V, 50-60 Hz	8	770 × 280 × 500	24
1024 Shaking Water Bath	100-120 V, 50-60 Hz 210-230 V, 50-60 Hz	1500	890 × 370 × 320	24

**A complete analytical scheme for dietary fibre determination consists of:**

\* Ordering information: See separate price-list

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