

# Fibertec™ 2010 Auto Fibre Analysis System



*A semi-automated extraction system for simple determination of crude fibre, detergent fibre and related parameters in plant materials, compound feeds, foodstuffs etc.*

## Features and benefits

### Safety

- Automated heating of reagents in an integrated, closed system
- Automated addition of preheated reagents

### Precision

- Fulfills boiling start time requirements for crude fibre specified in ISO and EC standards
- Enhances precision thanks to integrated extraction and filtration, thus avoiding sample transfer
- Ensures same extraction condition in each analysis by means of timer function
- Official approval: ISO 6865, 92/89 EEC and AOAC 2002.04 (feed).

### Value

- Automatic water filling/topping up
- Batch handling devices for simple transfer of samples to balance, furnace etc
- Water-saving device reduces consumption

## Description

The Fibertec™ 2010 is specifically designed for fibre determination in accordance with the Weende, van Soest and other recognized methods. Single or sequential extractions including boiling, use of internally preheated reagents, rinsing and filtration are performed under reproducible and controlled conditions.

The Fibertec 2010 is available with the following basic modules:

Fibertec 2010 Hot Extraction Unit, for hot hydrolysis and extraction, featuring built-in systems for heating and filtration, and for automatic preheating and addition of reagents

Fibertec 1021 Cold Extraction Unit, for de-fatting samples, extraction at ambient temperatures (e.g. in lignin determination) and solvent dehydration of fibre residues

Both modules use the same crucible system, permitting samples to be dried and weighed between extractions if required. Samples are handled in specially designed filter crucibles. Crucibles are used both as an integral part of the assembly during extraction, rinsing and filtration and as sample vessels during weighing, drying and ashing.

The Fibertec method is as described in the relevant ISO and EC standards. It is thus the reference method and is a sound choice for the future.

**System description:**

- Fibertec 2010, 240V, 50 Hz comprising: Hot Extraction Unit, Cold Extraction Unit, crucibles, crucible stand, crucible holder, reflector, spray bottle, tubing, anti-foaming agent and water supply tank, crucible seals
- Fibertec 2010, 240V, 60 Hz specifications. As above.
- Fibertec 2010, 240V, 60 Hz specifications
- Fibertec 2010 Hot Extraction Unit (240V, 50 Hz) same as 2010 but without Cold Extraction Unit

**Accessories:**

Crucible stand for 6 crucibles. At least two stands recommended.  
 Crucible holder for 6 crucibles  
 Water Aspirator Pump

Anti-foaming agent (octanol)  
 Filtering agent (celite 545), 1 l

**Optional accessories:**

Crucibles, P0 (porosity 160-250 µm), set of 6  
 Crucibles, P1 (porosity 100-160 µm), set of 6  
 Crucibles, P2 standard (porosity 40-100 µm), set of 6  
 Crucibles, P3 (porosity 16-40 µm), set of 6

**Sample preparation equipment:**

1093 Cyclotec™, Sample mill  
 1090 Cemotec™, Sample mill  
 2094 Homogenizer, blender type  
 2096 Homogenizer, blender type  
 1095 Knifetec™, water cooled

**Performance data:**

Sample size: 0,5 - 3 g  
 Measuring range: 0,1% - 100%  
 Capacity per batch: Up to 6 samples simultaneously  
 Capacity per day: Up to 36 analyses (crude fibre method). Up to 60 analyses using modified procedure

Repeatability: ±1 % relative at 5% - 30% fibre level  
 Reagent preheating time: 10-20 min  
 Heating-up time from preheated temperature to boiling: 5-7 min

**Installation requirements:**

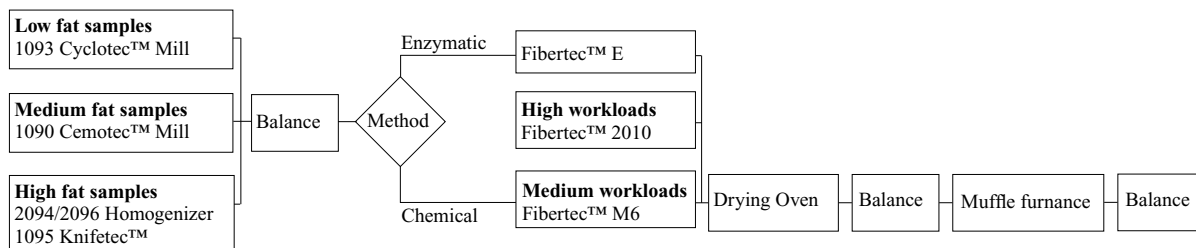
Equipment	Power supply	Power consumption	Dimensions w × d × h	Weight	Water supply
2010 Hot Extraction Unit	200 - 240V ± 10% 50 Hz or 200 - 240V ± 10% 60 Hz	2.3 kW	75 × 40 × 68	65 kg	Tap water* appr. 2 l/min
1021 Cold Extraction Unit with water aspirator	-	-	58 × 38 × 28	14 kg	Tap water

\* When Fibertec 2010 is in standby mode the tap water supply is closed down.

**Applications:**

- Crude Fibre (acc. to Weende).
- Acid Detergent Fibre.
- Neutral Detergent Fibre.
- Acid Detergent Lignin.

The Fibertec™ 2010 is also suitable for use with most other chemical extraction methods except those that involve the use of acetic acid, trichloroacetic acid and/or nitric acid. For specific method information, please ask for detailed FOSS Analytical Application Notes.

**Fibertec™ Systems for any fibre determination needs:**

\* Ordering information: See separate price-list

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