

# Fibretherm - Crude fibre / ADF / NDF



**Automated Crude Fibre Determination**  
Based on the established Gerhardt FibreBag Method, the new Fibretherm offers the fully automated processing of the tedious boiling and filtration steps for the crude fibre-, ADF- and NDF-determination. FT has many advantages compared to the standard method. Up to 12 samples can be digested and filtrated simultaneously, which saves precious bench space as well as chemicals. The savings are especially significant for labs with a high sample throughput. The procedure with controlled boiling steps as well as the unique, highly precise filtration mesh of the Fibre Bags ensure highly precise results. The entire process takes place in a closed system.

FibreBag and glass spacer



## FibreBag-Method

Up to 12 samples are each weighted into a Fibre Bag. Just like in the traditional method, the required boiling times and filtration steps are done for all samples simultaneously.

When determining the crude fibre content, the non soluble contents as sulfuric acid and caustic potash solution remain in the Fibre Bag. The residue is dried, weighted and then incinerated. The difference between the ash content and the non-diluted residue in relation to the initial sample weight, is the crude fibre content.

When doing an ADF- and NDF-determination, the sample is treated with the respective detergents, the remaining substances of the cell structure are specified and determined according to this method as well. Also the calculation is done identically to the crude fibre determination.

Since all analyses are conventional methods, it is very important to observe the respective times for the boiling procedures as well as observing the weighing procedures as exactly as possible.

## Advantages

### Saves time

- ▶ simultaneous analysis of up to 12 samples
- ▶ quick and safe filtration
- ▶ short heating up time

### Ergonomic features

- ▶ small footprint - saves bench space
- ▶ easy cleaning
- ▶ safe operation
- ▶ storage of up to 10 methods
- ▶ use of inert materials - prevents corrosion

### Reduces the costs

- ▶ automation of procedure
- ▶ saves chemicals thus saves as well the costs for waste disposal
- ▶ monitors cooling water and energy

### Optimizes the quality of the analysis

- ▶ automated reproducible conditions of analysis
- ▶ constant filtration quality of FibreBag
- ▶ low blank values due to almost complete incineration

# Fibretherm - Overview

## Fibretherm configuration

Ceramic hotplate	Yes
Max. amount of samples	12
Programs	10
Pneumatic Lift	Yes
Addition of acid can be programmed	Yes
Addition of caustic soda can be programmed	Yes
Addition of rinsing water can be programmed	Yes
Suction can be programmed	Yes
Cooling water control	Yes
Optical and acoustical error messages	Yes
Extensive error control	Yes
Drip tray	Yes

## Fibretherm technical data

Cooling water consumption	ca. 5 l/min
Nominal voltage	230 V AC, 50 Hz
Nominal wattage	1900 W
Weight	42 kg
Dimensions (W x D x H)	330 x 650 x 860 mm

## Ordering informations

### Fibretherm

Order No.	Type	Description
175000	FT 12	Fibretherm 12-place, automated system for the Crude fibre-, ADF- and NDF-determination

### FibreBags

Order No.	Type	Description
1776	RF	100 bags, small mesh size for the determination of crude fibre
1775	ADF	100 bags, small mesh size for the dertermination of ADF/NDF

### FibreBag manual

For labs with a low sample throughput, Gerhardt offers 2 simple systems which require the user to do the extensive boiling and filtration steps manually. You can obtain further info on request.

