



F20 Automatic Filter-bag Fiber Analyzer

Product Introduction:

The filter-bag fiber analyzer is used to resolve problems of over-consumption of work and time, improper fire control, easy-loss of the residue, the potential safety problem against the operators and etc, which are caused by crucible extraction method. For batch determination, this determinator is with obvious advantage of high efficiency, stabilization, and reagent saving. Sonnen's this fiber analyzer is adopted with the special design of high-pressure sealing, With a new small appearance, the analyzer is strong functional. Particularly the special reaction cylinder, digesting with integrated stirring method, which is of high stability and reliability, strong sample handling capacity, and obvious high efficiency, and is especially suitable for the large-workload end-users.

Application:

- For crude fiber:
- For acid detergent fiber, neutral detergent fiber, lignin and insoluble dietary fiber.

Application Standard:

ISO 6865 & 92/89 EEC Crude Fiber in feed;

ISO 16472 aNDF in animal feed;

AOAC 2002.04 aNDF in feed;

ISO 13906 ADF and ADL in animal feed.

Product Feature:

- The color LCD touch-screen is equipped, simple interface for the user's easy and convenient operation;
- Automatic digesting, manually inlet the solvent, function of heating and accurate temperature control, automatic stirring, waste discharging and cleaning could all be realized through the touch-screen.

Technical Parameters	
Temperature range	Ambient temperature to 100℃
Sample Size	0.1-5.0 gram
Time consumption per determination	120 Minutes
Capacity per batch	up to 30 samples simultaneously
Capacity per day	About 90 – 180 (under the condition of 8 hours working and with different fiber.)
Reproducibility	≤0.5%
Safety requirements	Enclosed space, off-hand operation.
Installation environment	Routine laboratory, no need cooling water.
Power supply	AC220V 50Hz
Dimensions	375 X 500 X 450(mm)
Weight	25Kg



F22 Fully Automated Filter-bag Fiber Analyzer

Product Introduction:

The F22 fully automated filter-bag fiber analyzer is used to resolve problems of over-consumption of work and time, improper fire control, easy-loss of the residue, the potential safety problem against the operators and etc, which are caused by crucible extraction method. For batch determination, this determinator is with obvious advantage of high efficiency, stabilization, and reagent saving. Sonnen's this fiber analyzer is adopted with the special design of high-pressure sealing, With a new small appearance, the analyzer is strong functional. Particularly the special reaction cylinder, digesting with integrated stirring method, which is of high stability and reliability, strong sample handling capacity, and obvious high efficiency, and is especially suitable for the large-workload end-users.

Application:

- For crude fiber;
- For acid detergent fiber, neutral detergent fiber, lignin and insoluble dietary fiber.

Application Standard:

ISO 6865 & 92/89 EEC Crude Fiber in feed;

ISO 16472 aNDF in animal feed;

AOAC 2002.04 ANDF in feed;



ISO 13906 ADF and ADL in animal feed.

Product Feature:

- The color LCD touch-screen, which is strong functional, is equipped, simple interface for the user's easy and convenient operation;
- Fully automatic digesting is designed, including automatic solvent inletting, heating, accurate temperature controlling, stirring waste discharging, and cleaning can all be handled automatically, unattended operation;
- Automatically add reagents according to the number of samples to reduce the use cost;
- Comprehensive monitoring configuration, including reagent quantity monitoring, temperature monitoring and pressure monitoring;
- Efficient batch processing capacity, 30 batches/batch, high efficiency and reagent saving;
- F22 has a timing start function, which makes testing more convenient;
- F22 can be directly used in ordinary laboratory environment without fume hood;
- The filter bag technology is adopted, and the standard filter bag aperture is 25 μm . Optional 15 μm or 10 μm .

Technical Parameters	
Temperature range	Ambient temperature to 100 $^{\circ}\text{C}$
Sample size per bag	0.1-5.0g
Measuring range	0.1% - 100%
Time consumption per determination	120 Minutes
Capacity per batch	Up to 30 samples simultaneously
Capacity per day	About 90 – 180 (under the condition of 8 hours working and with different fiber.)
Determination result standard deviation	$\leq 4\%$
Repeatability	$\leq 0.5\%$
Safety requirement	Enclosed space, off-hand operation.
Installation requirement	Routine laboratory environment, no need cooling water
Power supply	AC220V 50Hz
Dimensions	375 X 500 X 450(mm)
Weight:	25Kg

Sonnen Comparison Table of Coarse Fiber Tester

Model/Function	F20	F22
photo		
Sample processing capability per batch	30	30
Measuring range	0.1~100%	0.1~100%
Repeatability	± 0.5%	± 0.5%
Daily average processing	180	180
Custom testing plan	×	250
interface	10 inch LCD screen	10 inch LCD screen
Reagent addition	Manual addition	fully automatic
Reagent recovery	fully automatic	fully automatic



G100 Automated Filter-Bag Fat Extractor

The filter-bag fat extractor is a kind of auto determining instruments on the analysis of the crude fat, specially designed on the basis of Soxhlet Extraction Principle and the Ultra-micro filter-bag technique. Under the microcomputer control, the extractor can realize its control of the temperature, pressure, and progress through the whole extraction procedure, and automatically process at most 10 samples per batch.

Model: G100

Product Introduction:

The filter-bag fat extractor is a kind of autodetermining instruments on the analysis of the crude fat, specially designed on the basis of Soxhlet Extraction Principle and the Ultra-micro filter-bag technique. Under the microcomputer control, the extractor can realize its control of the temperature, pressure, and progress through the whole extraction procedure, and automatically process at most 10 samples once a time. The extracting is fast and thoroughly, especially for the high fat content extraction, the extractor has obvious advantages and could help a lot to improve the working efficiency. This extractor can be perfectly applied to the fat determining involved in the food, oil, fodder industries, and also the soluble compounds extracting and determining in the agriculture, environment and various industrial fields.

Product Feature:

1. Filter-bag method keeps samples in the same sealed filter bag during weighting, processing, drying and washing, no sample transfer, no weight loss. Increases precision and accuracy
2. Up to 10 samples simultaneously per test, 75 samples per day
3. Support Soxhlet type extractions
4. High-temperature extraction, accelerate extraction time
5. Single solvent circulation system boosts solvent concentration during extraction and doubles extraction efficiency.
6. Temperature control, solvent recovery and pre-drying, No advanced training required
7. Solvent Recovery at a rate of $\geq 90\%$, no fume and solvent leakage during extraction
8. Automatic Solvent Recycling, no Vent-hood Required
9. Closed extraction vessel, Sealed for diethyl ether, Petroleum Ether and Hexane safer for operator

Application Scope:

- With the measuring range of 0.1-100%, the determinator is applied to the fat determining of the food, forage, grain, seed and various samples
- Oil and grease extracting from the waste water, sludge and etc
- The extraction of the semi-volatile organic compounds, insecticide, herbicide and etc from the soil
- The extraction of the plasticizer from the plastic, rosin from the paper and paperboard, grease from the leather, and etc
- Preprocess the sample before digestion, which is of liquid chromatography and gas chromatography
- The extraction of the soluble compounds and the determination of fat

Application Standard:

AOAC 2003.05 & 2003.06 crude fat in feed, cereal grain and forage

AOAC 991.36 fat (crude) in meat and meat products

ISO 1444: 1996 meat and meat products

ISO 11085:2008 cereals, cereals-based products and animal feeding stuffs

GB/T 15674-1995 Crude Fat Determining Method in Edible Mushroom

ISO 6492:1999 animal feeding stuff

ISO 3947-1994 Total Fat Content Determining in Raw and Processed Starch

AOCS Am 5-04

Technical Parameters	
Measuring range	0.1 - 100%
Capacity per batch	up to 10 samples simultaneously
Sample size	0.1-5g
Temperature range	Ambient temperature to 105°C
Solvent recovery rate	≥90%
Reproducibility	RSD ≤± 0.2%
Power consumption	500W
Power supply	AC220V 50Hz
Dimensions	500 X 300 X 660(mm)
Weight	30Kg



G350 Fully Automated Filter-Bag Fat Extractor 010

The filter-bag fat extractor is a kind of auto determining instruments on the analysis of the crude fat, specially designed on the basis of Soxhlet Extraction Principle and the Ultra-micro filter-bag technique. Under the microcomputer control, the extractor can realize its control of the temperature, pressure, and progress through the whole extraction procedure, and automatically process at most 15 samples once a time.

Model: G350

Product Introduction:

The filter-bag fat extractor is a kind of auto determining instruments on the analysis of the crude fat, specially designed on the basis of Soxhlet Extraction Principle and the Ultra-micro filter-bag technique. Under the microcomputer control, the extractor can realize its control of the temperature, pressure, and progress through the whole extraction procedure, and automatically process at most 15 samples once a time. The extracting of the determinant is fast and thoroughly, especially for the high fat content extraction, the extractor has obvious advantages and could help a lot to improve the working efficiency. This kind of extractor can be perfectly applied to the fat determining involved in the food, oil, fodder industries, and also the soluble compounds extracting and determining in the agriculture, environment and various industrial fields.

Product Feature:

1. Filter-bag method keeps samples in the same sealed filter bag during weighting, processing, drying and washing, no sample transfer, no weightloss. Increases precision and accuracy
2. Up to 15 samples simultaneously per test, 150 samples per day
3. Support Soxhlet type extractions
4. High-temperature extraction, accelerate extraction time
5. Dual solvent circulation system boosts solvent concentration during extraction and doubles extraction efficiency.
6. Internal pump for solvent adding, less operator involvement
7. Fully Automatic Operation for solvent adding and sealing, temperature control, solvent recovery and pre-drying, No advanced training required
8. Solvent Recovery at a rate of $\geq 90\%$, no fume and solvent leakage during extraction
9. Automatic Solvent Recycling, no Vent-hood Required
10. Closed extraction vessel, Sealed for diethyl ether, Petroleum Ether and Hexane safer for operator

Application Scope:

- With the measuring range of 0.1-100%, the determinator is applied to the fat determining of the food, fodder, grain, seed and various samples
- Oil and grease extracting from the waste water, sludge and etc
- The extraction of the semi-volatile organic compounds, insecticide, herbicide and etc from the soil
- The extraction of the plasticizer from the plastic, rosin from the paper and paperboard, grease from the leather, and etc
- Preprocess the sample before digestion, which is of liquid chromatography and gas chromatography
- The extraction of the soluble compounds and the determination of fat.

Application Standard:

- AOAC 2003.05 & 2003.06 crude fat in feed, cereal grain and forage
- AOAC 991.36 fat (crude) in meat and meat products
- ISO 1444:1996 meat and meat products
- ISO 11085:2008 cereals, cereals-based products and animal feeding stuffs
- GB/T 15674-1995 Crude Fat Determining Method in Edible Mushroom
- ISO 6492:1999 animal feeding stuff
- ISO 3947-1994 Total Fat Content Determining in Raw and Processed Starch
- AOCS Am5-04

Technical Parameters:	
Measuring range	0.1 - 100%
Capacity per batch	up to 15 samples simultaneously
Sample size	0.1 - 5g
Temperature range	Ambient temperature to 105℃
Solvent recovery rate	≥90%
Reproducibility	RSD ≤ ± 0.2%
Power Consumption	500W
Power supply	AC220V 50Hz
Dimensions	500 X 300 X 660(mm)
Weight	30Kg

Sonnen

Comparison table of fat analyzer

Model/Function	G100	G350
Photo		
Sample processing capability per batch	10	15
Temperature range	room temperature~105℃	room temperature~105℃
Measuring range	0.1~100%	0.1~100%
Repeatability	± 0.2%	± 0.2%
Batch processing time	90minute	90minute
Daily average processing	50	90
Custom testing plan	×	250
interface	4.3inch LCD screen	4.3inch LCD screen
Reagent addition	Manual addition	fully automatic
Reagent recovery	fully automatic	fully automatic