



FIWE ADVANCE

Automatic Fiber Analyzer

Crude and Detergent Fiber Determination
according to Official Methods



FIWE Advance Fiber Analyzer

The FIWE Advance is a fully automatic analyzer for Crude and Detergent Fiber determination according to standard methods. State-of-the-art technology ensures safety, premium remote connectivity and a unique user experience. FIWE Advance Load&Go operation, requires a minimum operator time of only 2 minutes, to improve lab productivity.

COMPLIANCE AND CONSISTENCY

- The FIWE Advance crucible method is adherent to official standards (ISO and AOAC) ensuring reliability and efficiency.
- Crude Fiber determination and Detergent Fiber determination of NDF, ADF and ADL.
- Fiber residues stay in crucibles during all steps of the analysis eliminating the risk of errors and ensuring consistent results.

LOAD THE SAMPLES AND GO

- The FIWE Advance heats and doses the required reagents precisely to analyze up to 6 samples.
- The VELP Dispensing Nozzle drives the reagents precisely into each column avoiding user contact with hot chemicals and fumes.
- FIWE Advance automates digestion, filtration and washing steps without any operator intervention.

SAVING TIME AND MONEY

- The operator time required is as little as 2 minutes.
- FIWE Advance treats each sample individually and takes care of each step of the analysis allowing for overnight work.
- The FIWE Advance automatic processes free up valuable time enhancing lab productivity and saving money.

COMPLETE SAFETY

- All the reagents required are contained in dedicated glass tanks and bottles located inside the instrument.
- The FIWE Advance pre-heats, dispenses, and collects hot chemicals automatically so the risk of contact with the operator is eliminated.

SMART AND EASY TO USE

- The 7" color touch screen offers simple and intuitive user interface designed to simplify operations.
- Choose from preset methods or customize your own, mark as your favorites for quick access.
- Optional balance connection and barcode scanner are available to simplify analysis preparation.



THE MAIN FIBER DETERMINATION OFFICIAL METHODS

CRUDE FIBER (Weende Method)

The crude fiber is a method of analysis based on the estimation of the amount of fiber or plant cell walls. Crude fiber is also known as Weende method and is widely spread for the determination of fiber content for monogastrics.

DETERGENT FIBER (Van Soest Method)

Van Soest method is based on the concept that plant cell can be divided into less digestible cell walls consisting of hemicellulose, cellulose and lignin. As a result is possible to fraction fiber in NDF, ADF and ADL that are used to estimate the energy intake from feed and particularly for ruminants.

| | | |
|---------------------------|-------------|-------------|
| CRUDE FIBER ANALYSIS - CF | EN ISO 6865 | AOAC 978.10 |
|---------------------------|-------------|-------------|

| | | |
|-------------------------------------|-----------|--------------|
| NEUTRAL DETERGENT FIBER - NDF, aNDF | ISO 16472 | AOAC 2002.04 |
|-------------------------------------|-----------|--------------|

| | | |
|--------------------------------------------|--------------|-------------|
| ACID DETERGENT FIBER and LIGNIN - ADF, ADL | EN ISO 13906 | AOAC 973.18 |
|--------------------------------------------|--------------|-------------|



**EASY TO USE,
INTUITIVE & SMART**

**FULLY AUTOMATIC AND
COMPLIANT TO OFFICIAL METHODS**



**STATE-OF-THE-ART
SAFETY**

OPTIONAL ACCESSORIES

| | |
|---------------------------------|-----------|
| Glass crucible P0 6pcs/box | A00000138 |
| Glass crucible P1 6pcs/box | A00000139 |
| Glass crucible P2 6pcs/box | A00000140 |
| Glass crucible P3 6pcs/box | A00000137 |
| Adapter USB-RS232 | A00000195 |
| Barcode scanner with USB socket | A00000364 |
| Wireless barcode scanner | A00000365 |
| USB Wi-Fi Adapter | A00000392 |
| H2O tank with caps | A00000266 |
| Residues tank with caps | A00000267 |
| Calibration pump device | A00000384 |
| Oat meal, 30g | A00000318 |
| IQ/OQ/PQ FIWE Advance Manual | A00000386 |
| VELP Ermes 1 Year Connection | E00010012 |
| VELP Ermes 3 Years Connection | E00010036 |

INSTRUMENT - CODE

| | | |
|---------------------|------------------|------------------|
| FIWE Advance | 230 V / 50-60 Hz | F30500500 |
|---------------------|------------------|------------------|

SUPPLIED WITH

| | |
|--------------------------------------------------|-----------|
| Cooling tap water inlet tube | 10000280 |
| PVC tube Ø 7x10 mm | 10001086 |
| EPDM tube Ø 6.4x11.2 mm | 10002412 |
| Tubes with sensors: Inlet tube for distilled H2O | 40000153 |
| Outlet tube for residues | 40000387 |
| Glass crucibles P2 6 pcs/box | A00000140 |
| Pincer for crucibles | 10000247 |
| Holder for crucibles | 40002662 |
| Heat shield | 40002545 |
| Handling device for crucibles | 40002596 |

Premium technology

The VELP Nozzle automatically doses and dispenses the reagents into each column.

The 7" LCD touch display and VELP User Interface ensure smart operations.

Multiple USB port and LAN to connect the balance, Wi-Fi Adapter, Barcode scanner.

Bright LED illumination of the active positions.



Advanced filtration sensors ensure consistency and repeatability

The transparent tanks allow an immediate visualization of the reagents level.

TECHNICAL DATA

| | FIWE ADVANCE |
|---------------------------------------------|--------------------------------------------------------------------|
| POSITIONS / NUMBER OF SAMPLES | Up to 6 samples simultaneously |
| CAPACITY PER DAY | Up to 36 (Crude Fiber / Weende Method) Up to 60 (Other Methods) |
| SAMPLES PROCESSING | Individually processed |
| SAMPLE QUANTITY | From 0,5 to 3 g |
| DISPLAY | 7" LCD color touch screen |
| MEASURING RANGE | 0.1-100% |
| REPEATABILITY | ± 1% relative at 5%-30% fiber level |
| BARCODE READER CONNECTION | Yes |
| LIGHTING | LED |
| HEATING AND DISPENSING OF REAGENTS | Automatic |
| REAGENT PRE-HEATING TIME | 5 - 7 min |
| TIME FROM PRE-HEATED TEMPERATURE TO BOILING | 5 - 10 min |
| CONNECTIVITY | Cloud via USB Wi-Fi adapter and LAN |
| INTERFACES | 3 x USB, Ethernet (PC) |
| RESULT CALCULATION | Automatic, On-board archive for data storage |
| PROTOCOL LIBRARY | 5 standard methods + 30 customizable methods |
| WATER CONSUMPTION | From 1.0 l/min |
| DIMENSION (WXDXH) | 735 x 420 x 666 mm 28,9 x 16,5 x 26,2 in |
| WEIGHT | 57 Kg 125 lb |
| POWER SUPPLY | 230 – 50/60 V-Hz |
| POWER CONSUMPTION | 2100 W |



SERVICE & SUPPORT

VELP Scientifica products are designed by our engineers to resist years of laboratory use.

Our products are manufactured with premium materials to guarantee the best performance with maximum safety.

According to our experience, a proper and regular maintenance is necessary to ensure the highest performance of analytical instrument. VELP Service Department and VELP Official Partners are always ready to offer you maintenance and service support tailored to your needs.

GET THE SUPPORT YOU NEED CHOOSING THE OPTIONS:

- Installation
- Preventive Maintenance
- Help-desk and Remote support
- Technical Assistance
- Analytical Support
- Calibration Certification



We reserve the right to make technical alterations
We do not assume liability for errors in printing, typing or transmission

VELP Official Partner

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