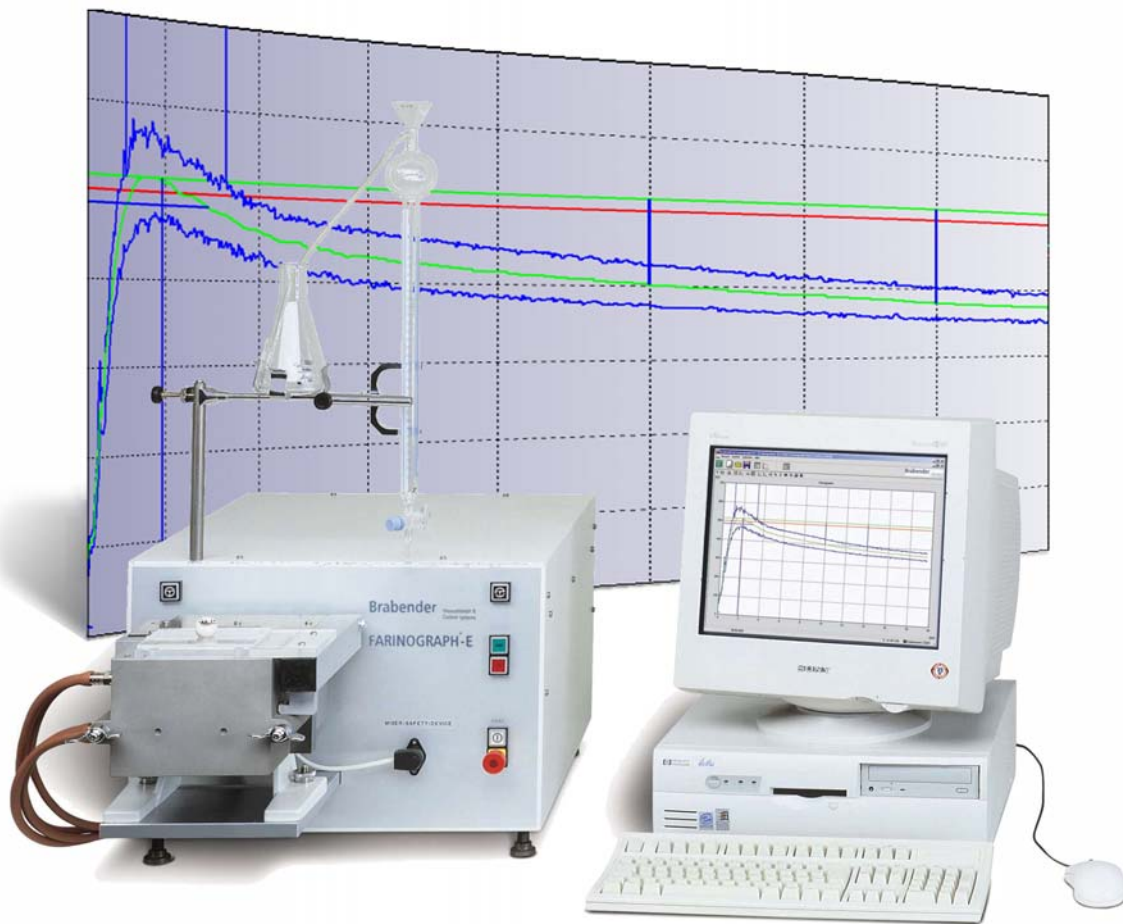


# Brabender® Farinograph®-E

Worldwide Standard for Testing  
Flour Quality

• AACC 54-21 • ICC 115/1 • ISO 5530-1



# The principle

## Farinograph®-E

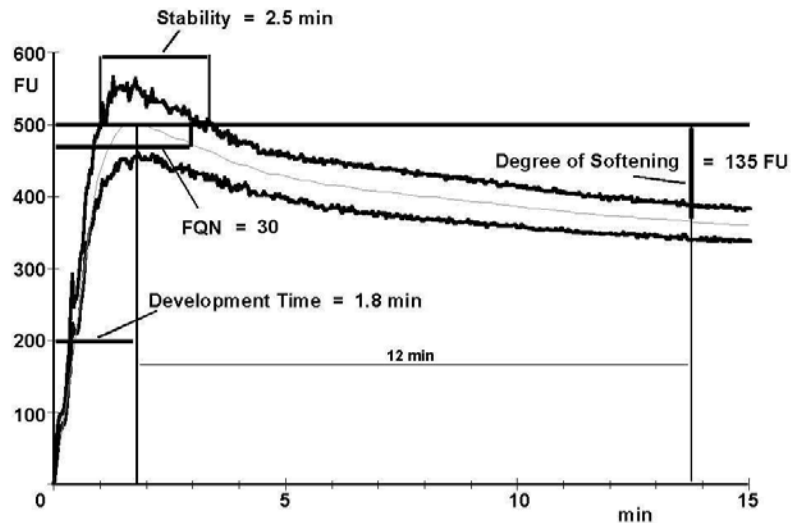
Reliable and reproducible determination of the flour quality and its processing characteristics is a basic demand in the milling and baking industries for ensuring optimum and uniform flour qualities for the various baking and noodle products.

Benefit from our long experience in the field of flour testing and use the advantages of the Brabender® Farinograph®. Easy handling, reliability, and the objectivity and reproducibility of the results have made it the instrument most frequently used all over the world for determining the water absorption and mixing characteristics of wheat and rye flour.

### State-of-the-art measuring system

The instrument consists of a drive unit with continuous speed control and an attached measuring mixer for mixing the dough to be tested.

Fill your flour/water suspension into the heated measuring mixer where it is subjected to a defined mechanical stress by the rotating mixer blades. The resistance of the dough against the blades, which depends on the dough viscosity, is measured as torque and recorded and plotted on-line as a function of time in a clear color diagram.



### The Farinograph®

Get reliable and reproducible data about the quality characteristics of your flour from the Farinograph® which shows

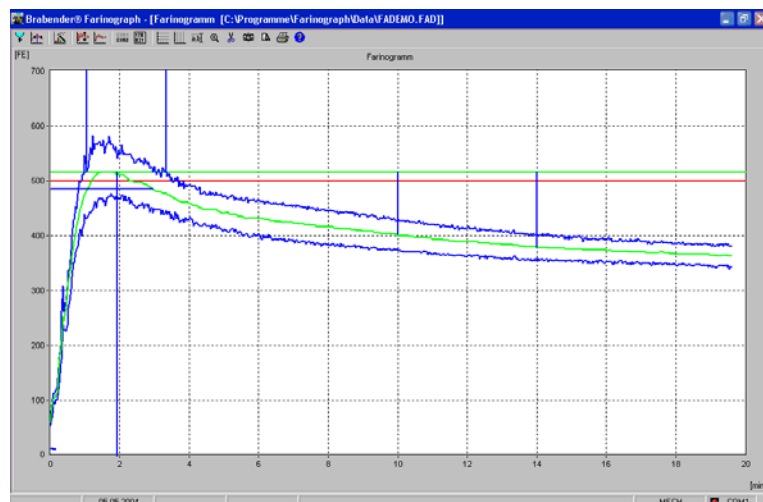
- Water absorption
- Development time
- Dough stability
- Degree of softening
- Farinograph® quality number

### Continuous speed control

The new feature of infinite variable speed allows the running of tests at an increased mixer speed, in order to reduce the mixing time and with variable mixing intensity to perfectly adapt the test procedure to modern production conditions. Furthermore, complex mixing programs including rest times can be defined.

### Multiple applications

- Measure the water absorption of flours
- Determine the wheat quality and suitability of your flour for various applications
- Check production and flour blends in the mill
- Measure the processing and dough characteristics of flours (development time, stability, dough softening)
- Test rye flour
- Special applications e.g. for chocolate, chewing gum, fish, etc.



Farinogram® of a wheat flour

# Farinograph®-E

## Measuring mixers / Software

### The Farinograph® mixers

- **Sigma mixer S 300**
  - for standard Farinograph® test (300 g of flour)
  - for mixing the dough for Extensograph® tests
- **Sigma mixer S 50**
  - for standard Farinograph® test (50 g of flour)
- **Sigma mixer S 10**
  - for standard Farinograph® test with small sample weights (10 g)
- **Resistograph mixer R 100**
  - flat blades, narrow bowl
  - intensive mixing
  - supplies high shearing force and work to the dough
- **Planetary mixer P 600**
  - practice-oriented mixing and kneading of rye and wheat flour doughs
  - Capacity 1.5 - 2 kg of dough
- **Hardness and Structure Tester**
  - for testing the hardness of grain (wheat, barley, malt, etc.)
  - special software



S 10

S 50

S 300



Hardness and Structure Tester



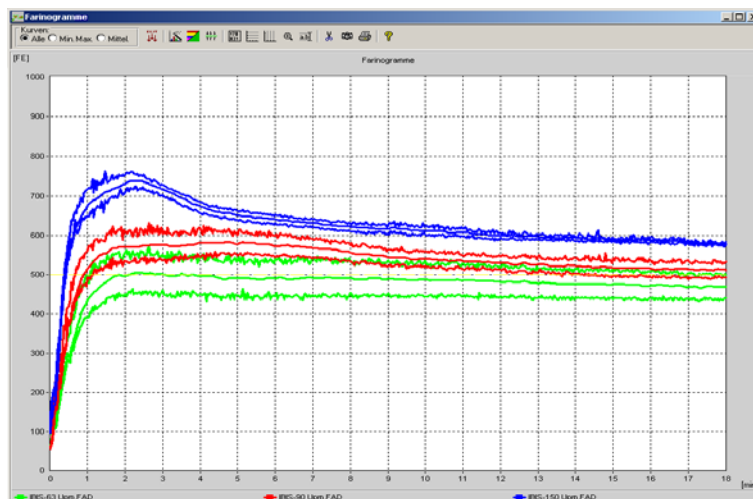
Planetary mixer P 600

### 32-bit Windows software with USB data transfer

Enter your test parameters from your PC - they are transmitted automatically via USB to the instrument. The user-optimized software offers multitasking, automatic range setting according to the selected mixer, and automatic zeroing.

The menu guides you through the entire test procedure including all preparations. The Farinogram® is shown on-line on the monitor. Define a reference curve with tolerance limits acc. to your individual requirements and determine during

the running test whether your sample flour meets the specification for a certain application or not. All test data can easily be used in other applications like word processing programs or spreadsheets.



Farinogram® with three different speeds

### Individual test procedure

In addition to standard evaluation, the software allows to adapt the test procedure to your individual requirements:

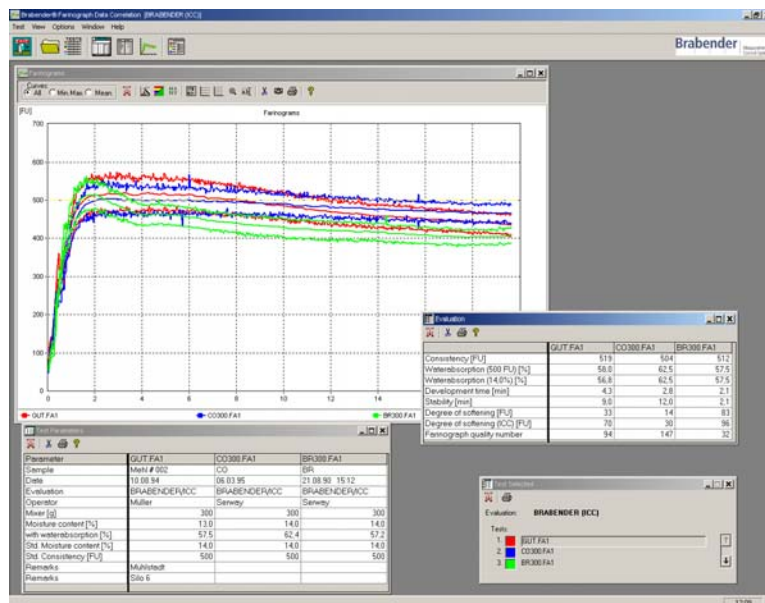
- Reduced test time and/or increased mixing intensity by variable speed (2 - 200 min<sup>-1</sup>)
- Variable mixing intensity and energy input to the dough for research and development applications
- Additional software for programming complex speed profiles, e.g. premixing at a low speed and measurement at an increased speed or definition of rest times for long dough systems
- Evaluation of diagrams which differ from the typical Farinogram® profile

# Data correlation / Specification

## Farinograph®-E

### Data correlation

Use the powerful Farinograph® correlation program to compare diagrams and results of up to 10 tests with each other. Test conditions and results are contrasted in tables and evaluated statistically. Quickly assess trends or irregularities by drawing and printing all diagrams of the correlation together in a single plot.



### Customer Service

C.W. Brabender® provides unparalleled service and technical support for our customers by employing highly skilled tradesmen, service technicians, and an experienced sales force.

We have a modern application laboratory located at our National Headquarters to benefit the interests of our customers. An experienced technician shall attend to the specific needs of each and every individual, and shall remain present throughout the entirety of the test and trial periods in order to assist in the customer's quest for desired results.

To arrange a personal demonstration of the Farinograph®-E and software programs, contact the technical staff at C.W. Brabender®. Discuss what we can do for you.

### Technical data

Motor power	0.25 kW
Speed	0 -200 min <sup>-1</sup>
Safety device	two-hand control with crawling speed
PC port	USB
Mains	115/220/230/240 V, 50/60 Hz, 3 A
Dimensions with buret (H * W * D)	1010 * 530 *900 mm
Weight	approx. 75 kg

Subject to change of design and technical modification without notice.

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