



ICC-Standard no. 115/1  
AACC Method no 54-21  
ISO 5530-1  
and others

## Farinograph®-AT

New technology, optimized reproducibility  
and integrated water dosage



... where quality is measured.



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.

### Details of the automatic water dosing system

- Water tank (2 l) simple to remove
- Temperature control of added water
- Low maintenance cost



AT-Display with temperature

## Application

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

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 manifold baking and noodle products.

## Manifold applications

- Measure the water absorption of flours
- Determine the rheological properties of the dough
- Check production and flour blends in the mill
- Test rye flour, biscuit batters, egg foam, etc.
- Special applications, e.g. for chocolate, chewing gum, fish, cheese, meat etc.

## Principle

Fill your flour / water suspension into the heated measuring mixer where it is subjected to a defined mechanical stress by the rotating mixer blades which are driven by a motor, carried in a pendulum bearing.

The resistance of the dough against the blades, which depends on the viscosity of the dough, causes an opposite deflection of the motor housing. This deflection is measured as torque and recorded and plotted on-line as a function of time in a clear color diagram.

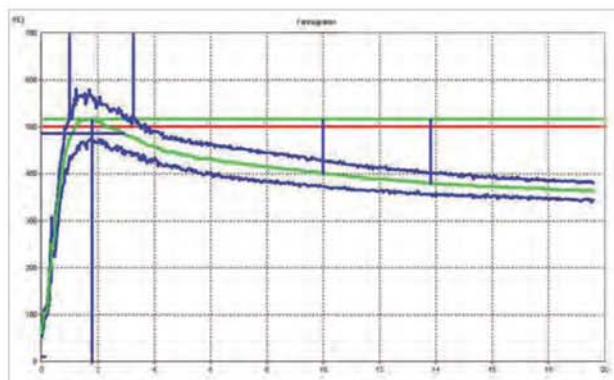
## Advantages

- Automatic water dosing system
- Extended software applications
- Variable speed (0 - 200 min<sup>-1</sup>)
- Higher torque 20 Nm
- Colored display shows temperatures
- Recording of two temperatures (dosing water and dough)
- Calculates mixing energy
- Patented

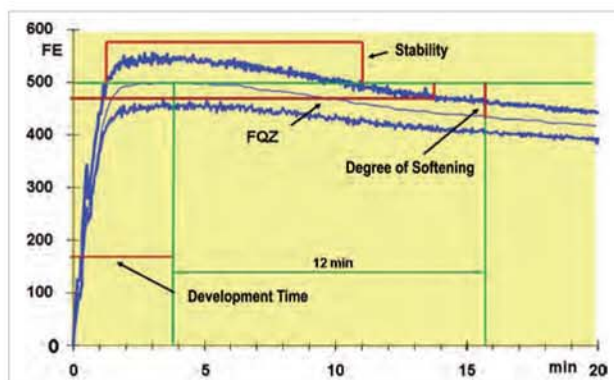
## Additional software

- Programming of speed profiles
- Creating of individual test profiles
- Free definition of own evaluation methods
- Integrated videos show test procedures
- Auto save mode
- Reference curve could be integrated

## The Farinogram



Farinogram



Schematic diagram

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

- Water absorption
- Development time
- Stability
- Degree of softening
- **Farinograph®** quality number



## Mixing tools for the Farinograph®-AT



### Sigma mixer S 300

- For standard Farinograph® test (300 g of flour) according to ICC, AACC, ISO
- For mixing the dough for Extensograph® tests
- Removable blades



Planetary mixer closed

### Planetary mixer P 600

- For rye dough and sponge batter
- With dough hook, K-hook, whisk



### Sigma mixer S 50

- For standard Farinograph® test (50 g of flour) according to ICC, AACC, ISO
- Removable blades



Planetary mixer lowered



Planetary mixer open



### Sigma mixer S 10

- For standard Farinograph® test with small sample weights (10 g)
- For breeders and research work



### Hardness and Structure Tester

- For testing the hardness of grain (wheat, barley, malt, etc.)
- Special software



### Resistograph mixer R 100

- Flat blades
- Narrow bowl
- Intensive mixing
- High shearing force

Further special mixers on request



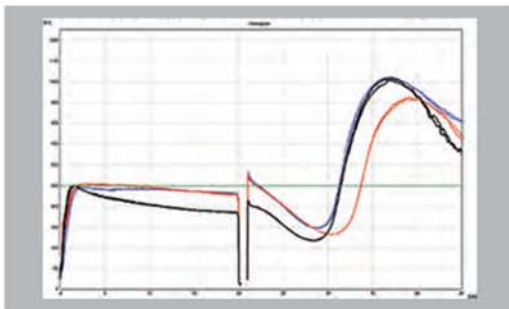
... where quality is measured.

# Farinograph®-AT

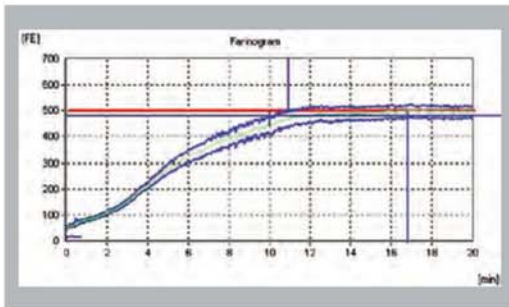
## Individual test procedure

Apart from the standard evaluation, the software allows to adapt the test procedure to your individual requirements:

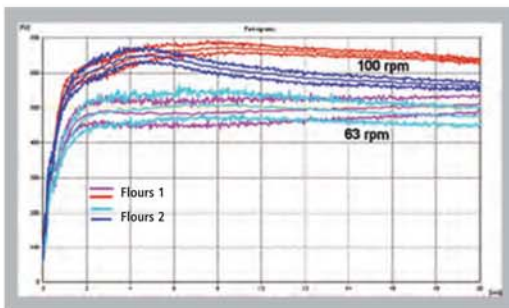
- Reduced test time and/or increased mixing intensity by variable speed (0 - 200 min<sup>-1</sup>)
- Variable mixing intensity and energy input to the dough for research and development applications
- Additional software for programming complex speed profiles, e.g. premixing at a low speed and measurement at an increased speed or definition of rest times for long dough systems
- Evaluation of diagrams which differ from the typical Farinogram profile



Heating of doughs



Wholemeal flour

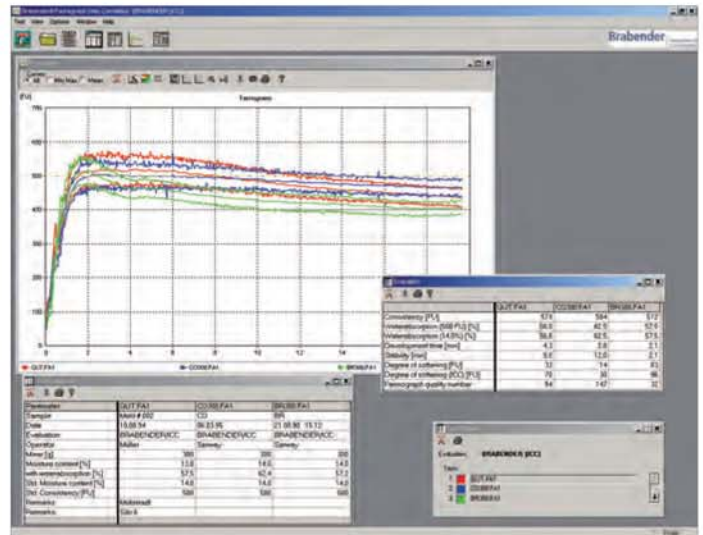


Two flours – different speeds

## 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.

Quick assess trends or irregularities by drawing and printing all diagrams of the correlation together in a single plot.



Data correlation

Farinograph®-AT	
Motor power	0,45 kW
Speed	0 - 200 min <sup>-1</sup>
PC port	USB
Mains connection	1x 230 V; 50/60 Hz + N + PE; 3,2 A 115 V; 50/60 Hz + PE; 6,5 A
Dimensions (W x H x D)	470 x 450 x 880 mm
Weight	approx. 75 kg net



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