



## Glutograph®-E

Testing the quality of  
wet and dry gluten



... where quality is measured.

# Glutograph®-E



Apart from dough-rheological measurements of the flour quality, e.g. with the **Farinograph®-E** or **Extensograph®-E**, separate quality control of wet and dry gluten, as being used as a flour additive, gains more and more importance.

The **Brabender® Glutograph®** for testing the gluten quality has been revised and now appears as **Glutograph®-E** with a completely new, compact design.

The convincing features of the new instrument:

- State-of-the-art electronic measuring system
- Easy and comfortable operation via touch-screen
- Integrated computer with user-optimized measuring and evaluation software
- Printer output + Ethernet
- Windows CE

## Application

The **Glutograph®-E** represents the state-of-the-art on the sector of gluten testing.

The instrument enables:

- Reliable, objective, and reproducible measurement of the stretching and elastic properties of washed wet gluten and of dry gluten mixed with water to a dough
- Testing of sample size, usually occurring in practice, when gluten is washed out
- Testing flour quality with regard to its suitability for noodle production
- Recognition of drying and heat damage of flour and dry gluten
- Surveillance the quality of doughs during production

## The principle

The measuring system of the **Glutograph®-E** consists of two parallel, round, corrugated plates mounted at a defined distance opposite to each other. The sample is placed between these two plates.

The fixed distance and diameter of the two plates provide a defined sample volume and a reproducible sample geometry.

While the upper plate stands still, the lower one is turned with a constant force – independent of shear angle and sample. Depending on your gluten quality, this constant force (shear stress) stretches the sample more or less, i.e. the lower plate is deflected more or less quickly against the upper one. This deflection (shear angle) is recorded as a function of time.

After having reached a certain deflection, the sample is released and recovers according to its elasticity.

## The diagram

The resulting diagram first shows the stretching process (rising curve). The falling curve in the second part represents the recovery of the sample.

The shear time (time up to reaching a certain preset deflection) is a measure of the stretching properties of the sample.

The recovery of the sample after a certain time mirrors the elasticity.

### Measuring diagrams of different qualities of gluten



Weak gluten



Strong gluten

Glutograph®-E	
Sample weight	approx. 2 - 3 g
Torque measurement	electronically
Printer port	USB/Ethernet
Mains connection	1x 230 V; 50/60 Hz + N + PE; 1.0 A 115 V; 50/60 Hz + PE; 1.0 A
Dimensions (W x H x D)	290 x 320 x 340 mm
Weight	approx. 12 kg net



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