# **Electric Extensograph**

#### 1The principle

Before starting the test in the Extensograph, prepare your sample dough from flour, distilled water, and salt in the Farinograph. This ensures objectivity and reproducibility during dough preparation and a constant starting consistency.

After a certain proving time, the dough is stretched until rupture in the Extensograph. The force exerted is measured and recorded. This procedure is repeated three times.

### 2 Manifold applications

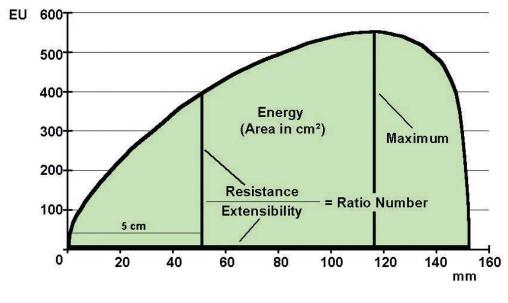
The application of constant flour qualities is of decisive importance for the milling and baking industries.

Different baking products make different demands to the flour quality. Use the Extensograph for measuring the stretching properties of your dough, in particular the resistance to extension and the extensibility, to make reliable statements about the baking behavior of the dough.

The Extensograph shows the influence of flour additives like ascorbic acid, enzymes (proteinases), and emulsifiers and, thus, permits to determine the rheological properties of each flour and to adjust the "rheological optimum" for the respective purpose.

#### 3 The Extensogram

The Extensogram recorded on-line and represented as a color diagram on the monitor shows the exerted force as a function of the stretching length (time). The shape of the measuring curve and its variation during the individual proving times, the area below the curve as well as the numerical values of the different evaluation points permit to make reliable and reproducible statements as to the flour quality and the suitability of the flour for a certain task. Furthermore, the influence of flour additives on the flour characteristics can be made evident.



Farinogram

The Extensogram includes:

- \* Resistance to extension
- \* Extensibility
- \* Maximum
- \* Area below the curve (energy)
- \* Ratio number (extensibility/resistance)
- \* Extensibility/maximum

From these values, the rheological properties of the respective flour and the influence of flour additives (ascorbic acid, enzymes, emulsifiers) on the flour quality can be clearly recognized. Furthermore, the "rheological optimum" for the respective application of the flour can be determined and adjusted on the basis of the evaluation data.

#### 4 Technical data

Motor power	0.020 Kw+0.020W+0.020W
Mains	AC 220V 50Hz
Sample weight	300 g of flour+6 g of sale +dist.water
Speed of balling unit	83±3rpm
Speed of dough roll	15±1rpm
Speed of stretching hook	14.5 ±0.5rpm
Force measurement	electronically
PC port	USB
Dimensions with try holder arms (H * W * D)	980 * 530 * 940 mm
Weight approx.	80 kg

## 5 Operating procedure

Before starting the test in the Extensograph, prepare your sample dough from flour, distilled water, and salt in the Farinograph. This ensures objectivity and reproducibility during dough preparation and a constant starting consistency. After a certain proving time (45, 90, 135 min), the dough is stretched until rupture in the Extensograph. The force exerted is measured and recorded. This procedure is repeated three times.