

## Determination of density of rubber and rubber compounds

**Brabender**<sup>®</sup>  
**Elatest**<sup>®</sup>



ISO certified to DIN EN 9001:2000 ✓

The Elatest® determines the density of polymers, in particular of rubber and non-vulcanized rubber compounds - a dimension which is of decisive importance for rubber processing, both during recipe development and for continuous production control.

From the sample weight and volume, the integrated computer automatically calculates the density. Use the software easily with the touch screen. Excellent reproducibility of the measured values, the ease of handling, and the reliability make the Elatest® best suited for production control as well as for research and development.

## The principle

The determination of density is defined by an electronic scale and an electronic position sensor.

Each measurement starts with measuring the sample weight. Following that, the sample is put into the measuring cylinder and compressed by the piston. Thereby the piston reaches a sample-specific position, i.e. the sample is compressed to its specific volume.

For the determination of the sample volume, the difference between the piston lift is measured with empty cylinder and with filled cylinder.

The sample density is automatically determined and specified by the sample weight and the determined sample volume.



Elatest® with touch screen

## The Brabender® support

A modern application laboratory is at the disposal of all customers and interested parties for trials with their own material. All Brabender® measuring systems can be tested under severe conditions.

An experienced expert team will assist the tests and will stay at your disposal at any time for further questions.

Together, we will find the optimum solution for your specific problems and prove their suitability.

## Technical data

Dimensions (H x W x D)	900 x 550 x 650 mm (without monitor) 1450 x 550 x 650 mm (incl. monitor)
Mains connection	1 x 200 ... 240 V, 50/60 Hz, +N +PE or 1 x 115 ... 127 V, 50/60 Hz, +PE
Density range	0.8 ... 2.6 g/cm <sup>3</sup>
Accuracy	0.1 % (0.001 g/cm <sup>3</sup> )
Measuring cylinder	
Diameter	59 mm
Max. path	80 mm
Sample volume	40 ... 120 cm <sup>3</sup>
Connections	<ul style="list-style-type: none"> <li>● RJ 45 network (Ethernet)</li> <li>● compressed air, 5 ... 6 bar, quick-coupling</li> <li>● USB port for printer and service</li> </ul>

Subject to change of design and technical modification without notice.

Brabender® agencies all over the world.  
© 2006 Brabender® GmbH & Co. KG  
All trademarks are registered.

