



C.W. Brabender®
INSTRUMENTS, INC.

Determine the density of rubber compounds...

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

The sample material is compressed within the measuring cylinder. Any gas contained in the sample escapes during this compression process. Under a preset pressure, the moving piston reaches a position that is specific for each individual sample, i.e. the sample is compressed to its specific volume. The stroke of the piston is measured by a displacement transducer and transmitted to the computer.

From the sample weight and volume, the 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.



Elatest®

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. Then the sample is put into the measuring cylinder and compressed by the piston. Thereby the piston reaches a sample-specific position, in essence the sample is compressed to a specific volume.

In order to determine the sample volume, the difference between the piston lift is measured with empty cylinder and with filled cylinder.

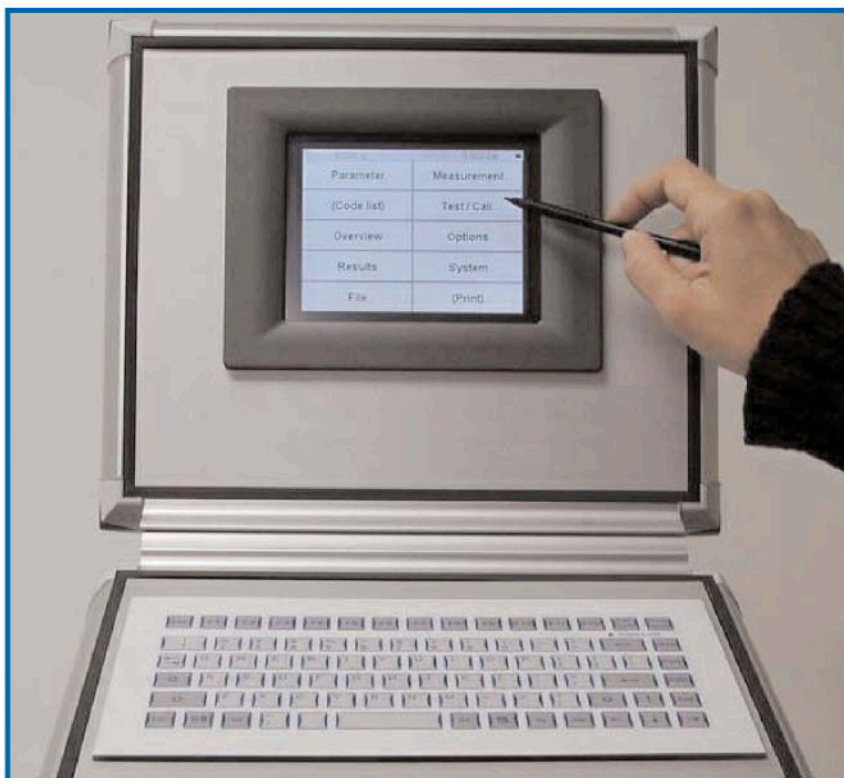
The sample density is automatically determined and specified by the sample weight and the determined sample volume.

SERVICE

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 for a personal demonstration of the **Elatest®** contact the technical staff at C.W. Brabender®.

Discuss what WE can do
for YOU...



Technical Data

Density range	0.8 - 2.6 g/cm ³
Accuracy	0.1 % (0.001 g/cm ³)
Reproducibility	0.03 % (0.0008 g/cm ³ absolute)
Meas. cylinder	59 mm
Diameter	80 mm
Max. path	
Sample volume	40 - 120 cm ³
Accuracy	better than ± 0.5 cm ³ /100 g
Mains	1 x 200...240 V 50/60 Hz, +N +PE or 100 ... 127 V, 50/60 Hz, +PE
Dimensions (W * H * D)	550 x 1450 x 650 mm (with monitor)
Weight	approx. 130 kg