

Automatic Gravimetric Water Vapour Permeability Tester

GINTRONIC GraviTest



0,455

0,694

Applications

Polymeric films
Sheet materials
House wrap
Building products
Nonwoven
Textiles
Hygienic
and many others

GraviTest conforms to the most important international standards:

ISO 2528
ASTM E96
EN ISO 12572
EN 1931
DIN 53122 Part1
and many others



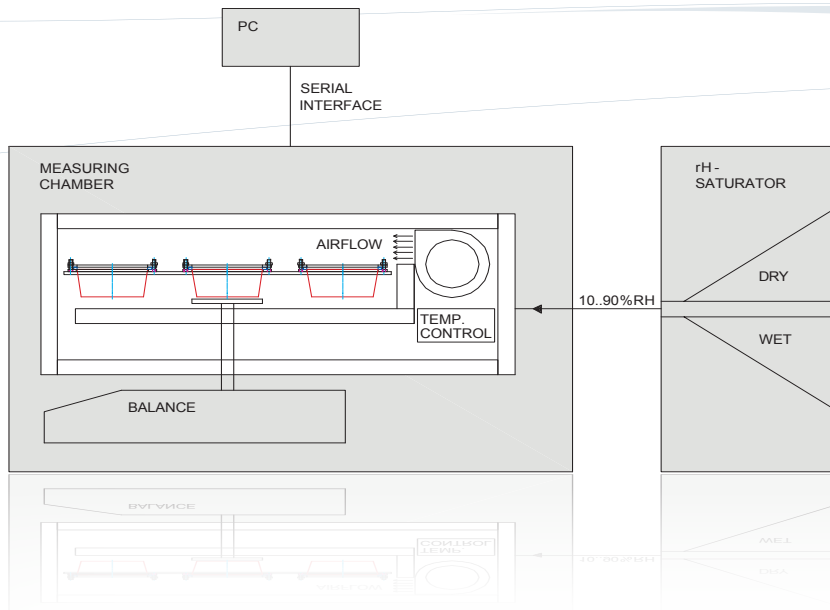
GINTRONIC

- Complete automated system
- Airspeed controlled
- Temperature controlled
- Humidity controlled
- No mismeasurements caused by erroneous reading off of the scales
- No missing off weighting intervall
- Re-sealable specimen holders

0,691

0,514

0,413



With GraviTest the determination of water vapour transmission rates of polymeric films and other sheet materials by gravimetric method becomes mere child's play. GraviTest offers simple specimen preparation, user-friendly PC software and the com-

plete automation of the measuring process. This, in combination with the accurate and robust balance, allows for high-precision gravimetric measurement of water vapour permeability, **with a minimum of expenditure of time** on the user's side.

Integrated fan for precise air speed control
Integrated precision balance
Standard six sample tray

0.368

0.397

0.450



Standard six sample tray



Through the Windows® based PC software, all measurement parameters of the samples, such as temperature, relative humidity of the air, air speed as well as the weighing interval, are predefined and then adjusted **automatically** by the instrument after the start up of the measuring process. As soon as the measuring conditions correspond to

the specified tolerances the specimen holders can be inserted into GraviTest and the measuring process can be started.

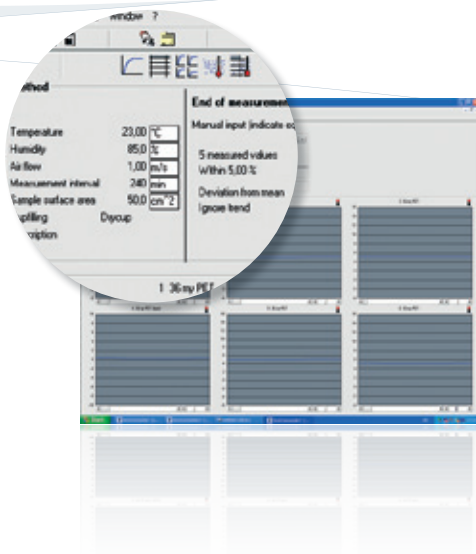
Re-sealable specimen holders with an integrated seal makes wax sealing of the samples mostly unnecessary. Assembling the samples into the 6 specimen holders takes a matter of minutes.

The flexibility of the system has nearly no boundaries. Wet cup, dry cup or multi-layer processes can be carried out trouble-free, at different climate conditions and air speeds, without any modifications.

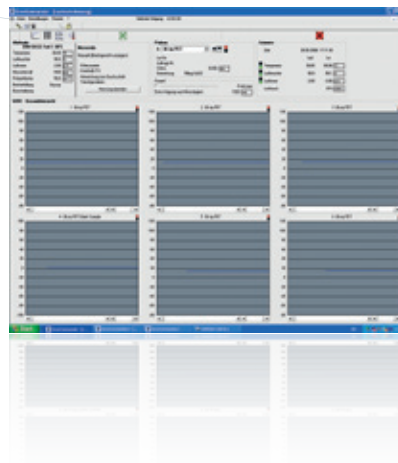
All data is stored in the data-base
 All data is exportable to Excel®
 Automatic calculation of standard deviation of WVTR

0,592

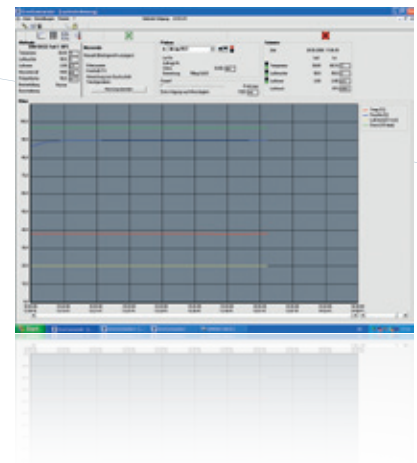
0,824



Running measurement



Climatic data



The results of the measurement and the corresponding atmospheric pressure will be represented in a chart and stored by the PC software. Thus, each measurement result, together with the parameters of each individual sample are **always retrievable and comprehensible**.

The following errors can thereby be excluded: mismeasurement caused by erroneous reading off of the scales, incorrect record of the measurement results, and missing of the weighing interval. The software is able to export all data easily to Excel®. The software comes complete with multiple

Excel® modules. These modules are used for various standards when the results are reported in different values such as perms, permeability, permeability coefficient or a SD-value.

0.368

0.397

Specific characteristics

Applications

The determination of water vapour transmission rates of polymeric films, other sheet materials, concrete, stucco, wood, house wrap, other building products, woven, nonwoven, and coated textiles, tapes, hygienic, barrier, and medical material by gravimetric method. Also the measurement of blister packs, and other small packages and package material is possible.

For other possible applications, please ask your local distributor or the GINTRONIC Application lab.



GINTRONIC GraviTest 6300

- Standard Model with precise and robust balance for all standard applications.
- Maximum load of balance 300 g with resolution 0,0001 g



GINTRONIC GraviTest 6400

- Same Model as GraviTest 6300 with a 400 g balance
- For applications with heavy samples or cups
- Maximum load of balance 400 g with resolution 0,0001 g



GINTRONIC GraviTest 6125

- Same Model as GraviTest equipped with high resolution balance
- For samples with low permeability or for applications where higher precision is needed
- Maximum load of balance 125 g with resolution 0,00001 g

Distributed by:

0,548

Technical specifications

0,392

0,362

- Conform to the following standards: ISO 2528, ASTM E96, EN ISO 12572, EN 1931, DIN 52615, BS 3177, DIN 53122 Part 1 and others
- Microprocessor controlled
- Easy and userfriendly input of all measuring parameters in a Windows® based PC software
- Integrated RS 232 interface for datatransfer with the PC
- The results of the measurement together with the corresponding atmospheric pressure will be represented in a chart in $g/(d \times m^2)$ and stored by the PC software
- System requirements of PC: Windows® XP-Professional or Windows® VISTA Business Edition; min. Excel®2000; free serial (RS 232 / COM) port
- 6 samples with 50 cm² sample surface
- Re-sealable specimen holders with an integrated seal and mask for sample preparation. Please notice that several norms need extra accessories or cups
- Resolution of balance: 0,0001g / 0,00001g depending on model
- Measuring range of balance: 0 – 300 g; 0 – 400 g; 0 – 125 g depending on model
- Integrated temperature control: selfcooling of the instrument min. 3° C below ambient temperature
- Integrated temperature control: selfheating of the instrument up to 40° C (whole humidity range)
- Integrated temperature control: selfheating of the instrument up to 50° C and max. 50 % r. H.
- Integrated humidity control: 10 – 90 % r. H. depending on quality of compressed air
- Accuracy of humidity control: +/-1,5 % r. H. in the range over the samples
- Integrated control of the air velocity over the samples: 0,15 – 4,0 m/s
- Integrated sensor for measuring the atmospheric pressure
- Sample thickness: 0,01 – 3 mm, other thickness on request
- Size of sample surface: 50 cm²
- Integrated Touchscreen display; shows actual operating conditions
- PC not contained in scope of supply
- Voltage: 230 V/50 Hz or 115/110 V 50/60 Hz
- Compressed air with 6 bar needed
- Dimensions without PC: approx. 700 x 650 mm
- Weight without PC: approx. 55 kg

Subject to modifications in the interest of technical progress.

Device conforms to valid CE-Norms.

