

HydroTracer HT3

Moisture Analyzer
for plastics

aboni

HydroTracer HT3

Mobile measuring device for residual water in solids

For over 20 years, the HydroTracer has been supporting our customers in the plastics processing industry when it comes to reliably determining the residual moisture of granulates, powders or finished parts.
The easy handling and the light and robust design allow a wide field of application in the,

- *Incoming inspection,*
- *Monitoring and optimization of material drying,*
- *Testing of conditioned components or final inspection.*

For operation, the measuring device is connected to a computer via USB cable. Step by step, the application software guides the user through the measurement process. All measurement results are automatically saved in a clear PDF report.

Compared to other methods such as the weight-loss method or capacitive moisture measurement, the HydroTracer as an absolute measuring instrument offers the advantage of measuring the actual water content. Therefore, it is not necessary to calibrate the measuring device to the respective material.



Highlights

High Accuracy

Resolution 0.01 mg \ 1 ppm \ 0.0001 % H2O

Simple Operation

Software-Assistent with picture und text instructions

Mobile & Robust

Flexible use in production or on the road

Technical Data

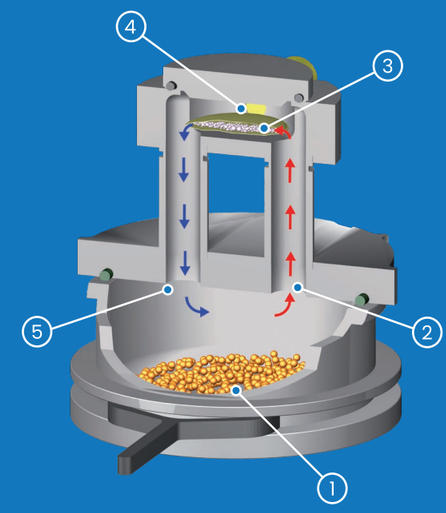
*Computer with Windows operating system required

Measuring principle:	Calcium hydride method
Resolution:	0.01 mg \ 1 ppm \ 0.0001 % H_2O
Accuracy:	± 2 % from measuring range end value
Measuring range:	0.2 - 25 mg \ 0.0001 - 5 % H_2O
Measuring temperatures:	50 - 210 °C in 1 °C steps
Measuring time:	10 - 45 Minutes (typical)
Display of results:	%, ppm, mg
Interface:	USB
Electric power supply:	100 - 240 VAC, 50\60 Hz, max. 1000 W
Ambient conditions:	5 - 45 °C, 5 - 95 % rF
Dimensions:	29 x 18 x 26 cm (H x W x D)
Weight:	6.4 kg

How does it work?

Measurement of trace moisture using calcium hydride

1. A material sample is placed in the sample pan and heated. Water steams out of the specimen.
2. The humid gas flows into the upper, cooled area of the measuring chamber.
3. The measuring powder contained in a capsule exchanges the water for hydrogen.
4. The gas sensor measures the hydrogen concentration which equals the introduced amount of water.
5. The cooled, dry gas sinks into the lower part of the measuring chamber and can absorb water again.





Comparison

Results from comparative measurements between Karl-Fischer-Titration (KF) and HydroTracer in [% H_2O]

Material	HydroTracer	KF-Titration
ABS	0.0351	0.0372
PA 6	0.0195	0.0217
PA 66	0.0160	0.0150
PA 12	0.0280	0.0300
PBT	0.0252	0.0270
PC	0.0203	0.0189
PC/ABS (undried)	0.1505	0.1450
PE	0.0442	0.0403
PEI	0.0099	0.0087
PET	0.0029	0.0031
PETr (undried)	0.2073	0.2190
PETr	0.0130	0.0160
PMMA	0.0430	0.0418
PS	0.0520	0.0563

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