

Product description

The gas extraction is the ideal method to detect moisture in solid and pasty substances. For this analysis, the Solid Module is combined with the Basic Module of AQUA 40.00.

The measurement of trace amounts of water is realized by the special designed heating chamber for solid and pasty samples. The sample has no contact with the reagent. Therefore the consumption of reagent is low.

The sample is applied into a sample container. So it is possible to analyse small sample amounts (down to 1 mg). The sample container is heated out in the solid chamber with temperature program or isothermal heating depending on the consistency of sample. The measurement of water content is based upon the titration according to Karl Fischer. After analysis, the used sample container is ejected from the heating chamber into collecting vessel.

With closed-loop carrier gas circulation, any additional gas drying is no longer necessary: the carrier gas is continually titrated to dryness within the closed loop. The total dryness of the gas enhances the moisture desorption from the sample. Moreover, sensitive samples can be heated out very gently. Degradations and side reactions are eliminated.

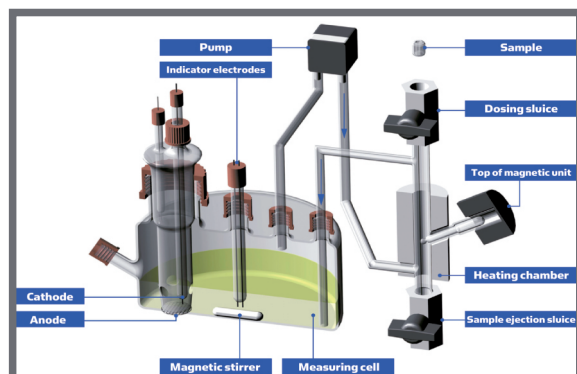
Heating with temperature programm, you can distinguish between various types of bonded water.



AQUA 40.00 - Basic Module coupled with Solid Module

Advantages

- Closed-loop carrier gas circulation
- No contact of sample with the reagent
- Low consumption of reagent
- Wide range of application
- No sample preparation
- For small sample amounts (from 1 mg)
- Moisture determination down to 0.001 %
- Short measuring time
- Small blank values
- Heating with temperature program or isothermal heating
- Software complies with requirements of FDA to 21 CFR Part 11



Closed-loop carrier gas circulation

Applications

- Fats and tar products
- Paper, wood and timber
- Pigments and soaps
- Pharmaceuticals
- Inorganic salts
- Fertilizer
- Colorants
- Plastics
- Food

Details

Heating out of the samples isothermally at freely selectable temperature (35 up to 250 °C) or with individual set-up temperature program, e. g.:

- Freely selectable temperature gradients
- Time-controlled temperature programs for step-by-step heating
- Titration-controlled temperature program depending on the water release

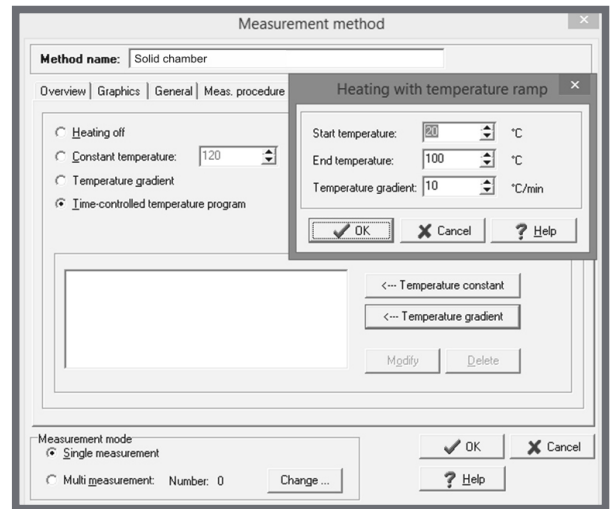
Specifications

Sample administration:	With sample containers of glass or metal
Sample amount:	1 ... 1000 mg
Heating temperature:	35 ... 250 °C, isothermal or temperature program
Blank value:	0 ... 20 µg
Measuring range:	0.001 ... 100 %
Type of result:	µg, mg/kg, ppm, %, by using the formula generator
Power supply:	230 V/50 Hz; 115 V/60 Hz
Dimensions:	Approx. 110 x 450 x 200 mm (W x H x D)
Weight:	Approx. 5 kg

We are here for you



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Preparation of measurement with temperature ramp