

Ash Content Quick Method

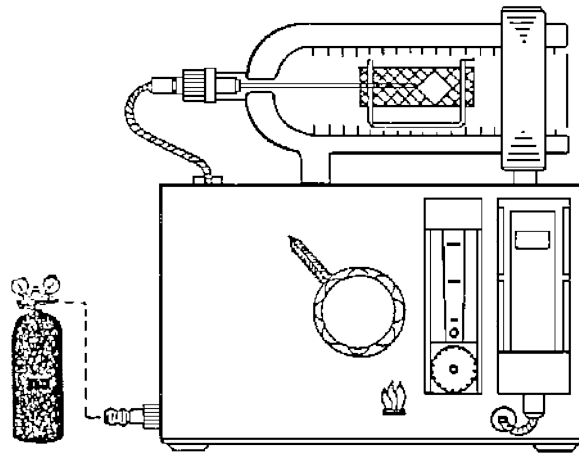
Ash content quick method with filler compounds with temperature selection 600° C and 1100° C (e.g. kaoline, CaCO₃).

For determining the coating quantity of coated and pigmented papers.
(Incineration in oxygen atmosphere)



Operating instructions

1. Incineration tube (Duran glass)
2. Basket with net
3. Temperature sensor
4. Oxygen connection
5. Digital-thermometer (switch)
6. Oxygen flow meter
7. Temperature controller
8. Oxygen pressure reducer
9. Temperature controller off
10. Temperature: 600°C
11. Temperature: 1100°C



Ash Thermo

Ash content quick method with filler compounds with temperature selection 600° C and 1100° C (e.g. kaoline, CaCO₃).

With paper production or also with tests in pilot or laboratory scale for the production of ash-containing printing paper (also coated paper) with the use of filler or pigment compounds (e.g. kaoline, CaCO₃), it is extremely important to know the actual filler content as well as the fraction of kaoline and CaCO₃.

The determination of both filler components, however, must be carried out very quickly in order to avoid unnecessary waiting times.

Until now, a muffle furnace has been used for this purpose. In actual fact, two muffle furnaces were necessary in order to determine the fraction of ash at 600° C and 1100° C.

Ash determination in a muffle furnace takes approx. 20 – 30 minutes.

Very quickly, meaning within less than minutes, the ash content can be determined at 600° C and 1000° C if the ash content quick method is used with this unit.

By operating a control valve, the oxygen supply can be regulated such that either 600° C or 1100° C is set in the incinerating chamber. The set temperature can be read by means of a meter.

Determination of the ash content at 600° C and 1100° C:

E.g. Place weighed samples of approx. 1 – 1,5 g of paper into the incineration gauze and insert into the glass container. Set oxygen bottle to 1,5 bar supply pressure. Open the oxygen supply valve on the incineration unit all the way to the stopper, ignite the paper and then set the valve to the desired temperature (1100° C or 600° C). After approx. 2 – 10 minutes (approx. 2 minutes at 1100° C and 8 – 10 minutes at 600° C), weigh the residue on ignition.