

Furnace for Ash Content

RDC-169

Granular Binder Electrodes Lining Lab

General Description

Impurities present in the different raw materials and in the final products have a significant impact on the entire process. Depending on the type of impurities, their presence can lead to potential issues in terms of metal quality, carbon and energy consumption, current efficiency, or environmental pollution. The exact chemical composition should be determined by X-Ray fluorescence (XRF), while the sum of all impurity compounds corresponds to the ash content. It is the first indication of the material overall purity.

The ash content can be measured by using the RDC-169 furnace, where a given quantity of milled sample is placed in a furnace at a high temperature for a given period of time to burn it. At the end of the test, the residual material is weighted; it corresponds to the ash content in the sample. Up to fifteen samples can be loaded in the furnace.



Technical Information

Standard Method	ISO 8005 or ISO 8006
Property	Ash Content [%]
Sample	2 g of powder (< 63 µm) or 4 g of pitch (< 0.25 mm)
Process Time	~ 12 hours
Installation	Workbench under fume hood
Dimensions (LxWxH)	68 x 78 x 54 cm
Weight	80 kg
Electrical Property	400 V 3/N/PE, 50 Hz 5.5 kW, 14 A
Certified Reference Material	RDC 1169
Database Connection	No

Additional Recommended Equipment

Weighing scale with an accuracy of 0.0001 g
Drying oven (min. temperature 110°C)
Crusher (< 4 mm)
Vibratory mill (< 63 µm)
Desiccator
Oil content Heating Method (RDC-208)

Certified Reference Material



RDC 1169

Weight per unit	150 g
Number of tests	30