

RDC-169

Name FURNACE FOR ASH CONTENT

Material type
**GRANULAR
PITCH
ELECTRODES
LINING**

Utilization
**R&D
IN-PLANT
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 weighed; 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:	400V 3/N/PE, 50 Hz 5.5 kW, 14 A
Certified Reference Standard:	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 (RDC-176 or RDC-208)

RDC 1169



Technical information

Weight per unit:	150 g
Number of tests:	30

