RDC-163

Name **WETTABILITY & WETTING POWER**

Material type
GRANULAR
PITCH
ELECTRODES
LINING

Utilization
R&D
IN-PLANT
LAB

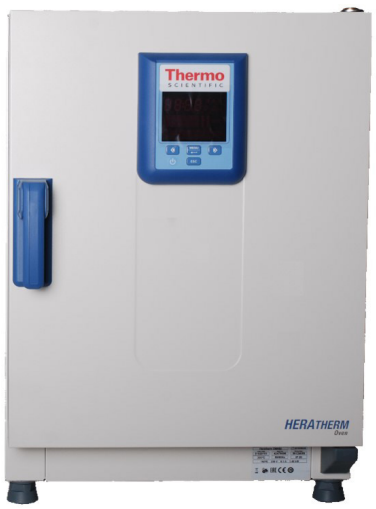
General description

The manufacturing of high-quality electrodes requires a good interaction between the dry aggregate and the binder. Analysis of the individual raw material properties only does not provide direct information regarding the wetting behavior of a specific granular carbon with a specific binder material.
The RDC-163 apparatus can be used for evaluating the Wettability of a coke (with use of a standard pitch) or the Wetting Power of a pitch binder (with use of a standard coke). For this purpose, a given mass of pitch is added to the top of the coke sample in a cylinder, firstly tapped for a given number of strokes in the bulk volumeter and then placed in a preheated air-forced cabinet for a given period of time. After cooling down, the weight of coke agglomerated with pitch is determined by calculating the Wettability or the Wetting Power [-].

Technical information

Property:	
Wettability	[-]
Wetting Power	[-]
Sample:	15 g of coke (0.5–0.25 mm) 5 g of pitch (2–1 mm)
Process Time:	~ 3 hours
Installation:	Workbench under fume hood
Dimensions (LxWxH):	
Bulk Volumeter	35 x 35 x 40 cm
Air Forced Cabinet	90 x 64 x 70 cm
Weight:	
Bulk Volumeter	14 kg
Air Forced Cabinet	38 kg
Electrical Property:	
Bulk Volumeter	230V 1/N/PE, 50 Hz 0.05 kW, 0.2 A
Air Forced Cabinet	230V 1/N/PE, 50 Hz 1.6 kW, 7.5 A
Certified Reference Standard:	RDC 1163–C and RDC 1163–P
Database Connection:	No

Additional Recommended Equipment:
Weighing scale with an accuracy of 0.01 g
Crusher (< 1.5 mm)
Sieving machine (2, 1, 0.5 and 0.25 mm sieves)



RDC 1163-C

Technical information

Weight per unit: 800 g
Number of tests: 53

RDC 1163-P

Technical information

Weight per unit: 150 g
Number of tests: 30