

RDC-173

Name

WATER CONTENT PITCH

Material type

GRANULAR
PITCH
ELECTRODES
LINING

Utilization

R&D
IN-PLANT
LAB

General description

Depending on the production process of pitch and its storage conditions, moisture can be present in solid pitch. When this happens, the excess water is removed when the solid pitch is processed in the mixer of the electrode paste plant, leading to lower mixing efficiency and higher energy consumption. In addition, from a commercial point of view, the presence of water in a pitch shipment would mean buying water at a very high price.

The measurement is conducted with the RDC-173 apparatus with an azeotropic distillation method. A given weight of pitch sample is boiled with xylene under reflux, while the present water is collected in a graduated cylinder. At the end of the test, the volume of water with a known density is used for calculating the water content expressed as a percentage of the initial sample weight.

Technical information

Standard Method:	ISO 5939
Property:	
Water Content	[%]
Sample:	100 g of pitch (< 4 mm)
Process Time:	~2 hours
Installation:	Workbench under fume hood
Dimensions (LxWxH):	50 x 30 x 100 cm
Weight:	9 kg
Electrical Property:	230V 1/N/PE, 50 Hz 0.3 kW, 1.3 A
Fluid Property:	Water
Database Connection:	No
Consumable:	Xylene Distilled water

Additional Recommended Equipment:

Weighing scale with an accuracy of 0.1 g

Crusher (< 4 mm)

Oven for cleaning (min. temperature 550 °C)

