

# RDC-176

## Name OIL CONTENT CHEMICAL METHOD

Material type  
**GRANULAR  
PITCH  
ELECTRODES  
LINING**

Utilization  
**R&D  
IN-PLANT  
LAB**

General description  
Handling of calcined coke potentially creates dust emission during loading and transportation, especially when its grain size distribution is fine. To prevent this, a dedusting agent is usually added after calcination. Excessive addition of dedusting oil creates devolatilization problems during the baking of the electrodes. A correct oil content is thus mandatory for a smooth production. In addition, the presence of oil can influence other testing procedures, like the real density or the specific electrical resistance. Therefore, removing any dedusting agent should always be part of the typical sample preparation. The measurement is conducted with the RDC-176 apparatus, where the oil present in the calcined coke is removed by extraction with dichloromethane. After the test, the losses are expressed as percentage of the initial sample weight for the calculation of the oil content.

The dusting propensity of a calcined coke can be tested with the RDC-177 equipment to confirm the requirement of dedusting agent.

Alternatively, to avoid the use of chemical products, the RDC-208 equipment can also be used for the same purpose.

Standard Method:	ISO 8723
Property:	
Oil Content	[%]
Sample:	100 g of granular carbon (< 4 mm)
Process Time:	~ 3 hours
Installation:	Workbench under fume hood
Dimensions (LxWxH):	25 x 25 x 100 cm
Weight:	6 kg
Database Connection:	No
Consumable:	Dichloromethane

### Additional Recommended Equipment:

Weighing scale with an accuracy of 0.001 g

Oven (min. temperature 110 °C)

Crusher (< 4 mm)

