

RDC-185

Name PASTE FLOWABILITY

Material type
**GRANULAR
PITCH
ELECTRODES
LINING**

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

General description
Söderberg pastes are used in the aluminium and arc furnaces industries. In contrast to prebaked technology where anodes must regularly be replaced, the Söderberg technology is a continuous process. Green carbon paste is added to the top of the cell or of the furnace. During its consumption, the fresh paste is moving down to the hot zone of the furnace and is baked in situ with the process heat. Given by the process, the flowability of the paste is an important property to ensure constant electrode quality with smooth and stable operations.

The measurement is conducted with the RDC-185 apparatus, where the deformation of a paste cylinder is measured after being exposed to a specific temperature for a given time. The equipment includes a table and molds for the preparation of the paste cylinders. It is also equipped with weights that can be applied to the sample during the test to increase the sensitivity for dry Söderberg pastes.

Technical information

Property:	Flowability	[%]
Sample:	~ 500 g of Söderberg paste	
Process Time:	~ 3 hours	
Installation:	Furnace	Workbench
	Sample Preparation Table	Floor standing
Dimensions (LxWxH):	Furnace	74 x 66 x 58 cm
	Sample Preparation Table	80 x 60 x 100 cm
Weight:	Furnace	55 kg
	Sample Preparation Table	150 kg
Electrical Property:	230V 1/N/PE, 50 Hz 1.64 kW, 7.5 A	
Database Connection:	No	

Additional Recommended Equipment:

Weighing scale with an accuracy of 0.1 g

