

# EXT-100

## Name BROOKFIELD VISCOMETER

Material type  
**GRANULAR  
PITCH  
ELECTRODES  
LINING**

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

General description  
The viscosity of a binder is one of its main properties, as it has a strong impact on the mixing and forming steps of the electrode production, and ultimately on the final electrode quality. The viscosity is a function of the temperature. Defining its value for given temperature levels is the basis to determine the optimum mixing and forming temperatures to obtain a constant green paste viscosity.

The measurement is conducted with the EXT-100 apparatus, where a given quantity of binder is first heated in an external oven and then placed into the viscosimeter at a regulated temperature level. A spindle turns in the molten sample while the torque on the spindle is used for the calculation of the viscosity in centipoise (cP). Several temperature levels, usually between 140 °C and 180 °C, are measured to determine the temperature at which a given viscosity level is reached.

Standard Method:	ASTM D5018
Measurement: Viscosity	[cP]
Maximum Temperature:	300 °C
Sample:	9 g of pitch (< 4 mm)
Process Time:	~ 2 hours
Installation:	Workbench under fume hood
Dimensions (LxWxH):	28 x 56 x 56 cm
Weight:	10 kg
Electrical Property:	230V 3/N/PE, 50 Hz 0.3 kW, 1.3 A
Certified Reference Standard:	RDC 1100
Database Connection:	No

### Additional Recommended Equipment:

Weighing scale with an accuracy of 0.1 g  
Oven (min. temperature 180 °C)



# RDC 1100

Weight per unit:	200 g
Number of tests:	22

