

EXT-100 Brookfield Viscometer

An apparatus used for the determination of the viscosity Pitch.

The viscosity of a known binder is a function of the temperature and is depending on the softening point of the pitch. The relationship between the viscosity and the softening point is however also depending on other parameters (like the QI content, the presence of mesophase, ...) and the softening point only is then not enough for ensuring a viscosity level when different sources of pitch are used.

During the mixing and the forming of the anode, the temperature has to be chosen in order to obtain a constant paste viscosity. The ideal viscosity has to be defined depending on the parameters and equipment of each specific plant.

In conclusion, for a constant anode quality it is preferable to measure:

- The softening point, to ensure that the binder can be used depending on the thermal capacity of the plant
- The viscosity, to set up the mixing and forming temperatures accordingly



*Photos and illustrations are not contractual.

Standards	Compatible	ASTM D5018
Specifications	Measurement	Viscosity [cPn]
	Temperature sensing range	24 °C to 300 °C (75 °F to 572 °F)
	Viscosity Accuracy	1.0 % of full scale range
	Viscosity Repeatability	0.2 %
	Temperature Accuracy	1 °C: -100 °C to +149 °C 2 °C: +150°C to +300 °C
	Sample	Fraction <8 mm
	Sample / test	1
	Process time	~ 1 hour
Configuration	Set up	Workbench
	Weight	10 kg
Facilities	Electrical connection	230V 1/N/PE, 50/60Hz
	Ventilation	Fume hood
	Analog Torque Output	0 - 1 Volt DC (0 - 100% Torque)
	Analog Temperature Output	0 - 3.75 Volts DC (-100 °C to +275 °C)
	Operating Environment	0 °C to 40 °C temperature range (32 °F to 104 °F)
	20% - 80%R.H.	non-condensing atmosphere