

## **RDC-194 Ramming Behaviour**

A compactability test to determine the temperature window for optimal ramming is a highly relevant test. In order to prevent catastrophic deterioration of the carbon lining, certain material properties are to be specified. The ramming paste properties play a very important role during the start-up of the cell. Important properties for ramming paste are compactability, shrinkage upon baking and quality of carbon filler and binder.

The RDC-194 Ramming Behaviour apparatus can be used for two different applications. First, rammed ramming paste cylinder can be produced in order to determine the following properties:

- Paste Shrinkage
- Baking Loss
- Green and baked apparent density
- Compression strength
- Air permeability
- Thermal Conductivity
- Abrasion
- Sodium vapour test etc.

Second, the ideal temperature to use the ramming paste, the so-called temperature window can be determined. This is the temperature range, at which the ramming paste is to be used in order to obtain maximum density.

The RDC-194 apparatus consists of the ramming device, the control unit and a laptop with temperature window software. It may be used both, in manual or automatic mode.



Electrical Connection	230V 1/N/PE, 50/60Hz
Power	0.50 kW
Weight Rammer	160 kg
Weight Controller	15 kg
Dimensions Rammer	60 x 55 x 75 cm (LxWxH)
Dimensions Controller	52 x 45 x 25 cm (LxWxH)
Function	Producing Rammer Paste Cylinder
Measurement	Temperature Window [°C]
Standard compatible	ISO 17544
Configuration	Bench-top
Sample Size	Ramming paste ± 150 g
Number of samples /test	1