

RDC-200

Name

PNEUMATIC HAMMER AND RAMMING CASE

Material type

GRANULAR
PITCH
ELECTRODES
LINING

Utilization

R&D
IN-PLANT
LAB

General description

The bottom of aluminium electrolysis cells is lined with cathode blocks that are sealed with a ramming paste to avoid any leakage. When lining a cell, the green paste is directly rammed between the cathode blocks and baked in situ during the start-up of the pot by the process heat. The quality of the paste is of primary importance as to ensure long operation without disturbance. The quality control requires the preparation of pilot electrodes, which can be done with the RDC-160 Pilot Press. To evaluate the cohesion between layers during the ramming procedure, a pilot rammed block should also be produced and tested.

The ramming can be done by using the RDC-200 apparatus, which consists of a ramming case and a pneumatic hammer. The case is filled in several layers of green ramming paste that are then compacted with the pneumatic hammer. When the entire case is filled, the green rammed block can be taken out for baking in the RDC 167 baking furnace. Drilling of core samples in both vertical and horizontal directions by using the RDC-157 drilling machine provides samples that are ready for further measurements of the paste properties.

Technical information

Function:	Rammed block preparation
Sample:	~ 100 kg of green ramming paste
Process Time:	~ 1 hour
Installation:	Floor standing
Dimensions (LxWxH):	120 x 80 x 60 cm
Weight:	250 kg
Fluid Property:	Air, 3–7 bar
Database Connection:	No

Additional Recommended Equipment:

Core Drilling Machine (RDC-157)

Test equipment for analysis

Baking Furnace (RDC-167)

