

# RDC-188

## Name HARDNESS TESTER

Material type  
**GRANULAR  
PITCH  
ELECTRODES  
LINING**

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

General description  
Depending on their reactivity levels, prebaked anodes can be attacked by CO<sub>2</sub> and air gases during their use in the electrolysis cell. When a strong burning occurs, the porosity of the anodes increases and soft anode butts are created. Recycling this material will make the next anode generation even more reactive. A vicious circle then starts, with consequences such as increased carbon consumption, carbon dusting, spikes, pot instability and reduced current efficiency.

Measuring the butts hardness is an efficient tool to timely react to a deterioration of the anode butts quality. The measurement is conducted with the RDC-188 hardness tester, which consists of measuring the penetration depth of two steel pins into the anode butts surface.

Technical information

Property:	Hardness	[mm]
Sample:	Full anode butts	
Process Time:	~ 2 minutes	
Installation:	Portable	
Dimensions (LxWxH):	25 x 25 x 10 cm	
Weight:	1 kg	
Database Connection:	No	

