

RDC-155

Name DUST FINENESS BLAINE

Material type
**GRANULAR
PITCH
ELECTRODES
LINING**

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

General description
The fines fraction, consisting of mill product along with filter fines, contributes to more than 90 % of the total dry aggregate surface area and largely impacts the optimum binder requirement during the green electrode production, and hence the overall electrode quality and performance. For adequate process control, it is vital to monitor the fineness of all dust fractions in the dry aggregate and ensure stable conditions.

The measurement is conducted with the RDC-155 apparatus, where the time required by a given volume of air to pass through a dust sample is measured. The method is based on a comparative measurement: the actual time is compared to the time required for reference material with a known fineness level. The calculated fineness (or Blaine number) is expressed in Blaine units.

The advantage of this test is that the Blaine number directly corresponds to the overall surface area of the dust. This information is much broader than the results provided by (air forced) sieving, where the quantity below a given grain size is reported.

Technical information

Property:	Blaine Value	[Blaine]
Sample:	70 g of carbon dust	
Process Time:	1–15 minutes	
Installation:	Workbench	
Dimensions (LxWxH):	60 x 63 x 69 cm	
Weight:	60 kg	
Electrical Property:	230V 1/N/PE, 50 Hz 0.5 kW, 2.2 A	
Certified Reference Standard:	RDC 1155	
Database Connection:	Yes	

Additional Recommended Equipment:
Weighing scale with an accuracy of 0.1 g



RDC 1155

Technical information

Weight per unit:	N/A
Number of tests:	N/A

