Task:

Application field: Glass / Ceramics

Material: Carbogrit glass, laboratory sample of 4000 g, rest humidity 5%

Feed size: 0-5 mm (after pre-crushing)

Feed quantity: 100 g (after sample dividing)

Material specification(s): hard brittle

Customer requirement(s): representative analytical sample of < 90 µm

Subsequent analysis: AAS Atomic Absorption-Spectroscopy

Solution:

Selected instrument(s): RS 200 Vibratory Disc Mill
MM 400 Mixer Mill

Configuration(s): For RS 200: grinding set of tungsten carbide 100 ml WC
For MM 400: grinding jar of stainless steel, 50 ml
1 grinding ball, stainless steel, 25 mm Ø

Parameter(s): RS 200 = 1200 rpm
MM 400 frequency 30/s

Time: 2 min. (per batch)

Achieved result(s): 87 % < 90 µm (RS 200)
80 % < 90 µm (MM 400)

Remark(s): Operating process of the sample preparation:
1. Drying the sample at 105°C in a drying chamber
2. Pre-crushing of the total quantity in Jaw Crusher BB 200
3. Sample dividing in the Rotating Tube Divider PK 1000, undercone with 2 outlets, single samples of approx. 100 g
4. Fine grinding of the single samples in RS 200 and for comparison in MM 400

The application report is based solely on the processing of the available sample material in the indicated amount. No legal claims shall be derived from this test report.
Subject to technical modification and errors.
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**Recommendation:** For a representative preparation of an analytical single sample, the above mentioned operating process is suitable.