Task:

Application field: Ceramic

Material: Catalyst sticks (Aluminum oxide)

Feed size: 3 x 20 mm

Feed quantity: 130 g

Material specification(s): hard brittle, dry

Customer requirement(s): Particle size < 100 µm

Subsequent analysis: not defined

Solution:

Selected instrument(s): SR 300 Rotor Beater Mill

Configuration(s): Retaining frame with grinding assembly 180° of stainless steel;
Sieves 180° with trapezoid holes of 0.2 mm;

Parameter(s): Revolution speed: 9000 rpm

Time: approx. 30 s

Achieved result(s): 97.4% < 100 µm

Remark(s): Because the ceramic material is an abrasive product, a higher wear of sieve and rotor should be considered.

Recommendation: For the grinding of hard brittle, dry ceramic catalysts the Rotor Beater Mill SR 300 is suitable under the above mentioned conditions.
Pictures of the sample

**Fig. 1:** original sample (scale in mm / cm)  **Fig. 2:** after grinding in SR 300 (scale in mm / cm)