Task:

Application field: Environment

Material: Electronic cards and electric cable

Feed size: 20 x 30 mm (cards); approx. 30 cm length (cable, pre-cut with scissors)

Feed quantity: 30 g - 40 g (pre-grinding); 10 g (fine grinding)

Material specification(s): medium-hard (cards); elastic (cable)

Customer requirement(s): < 500 µm; preparation for RoHS analysis

Subsequent analysis: X-ray Fluorescence Analysis

Solution:

Selected instrument(s): Heavy-Duty Cutting Mill SM 2000

As the SM 2000 was discontinued we recommend to use the SM 300 now

Ultra Centrifugal Mill ZM 200

Configuration(s):

SM 2000: Standard hopper; 6-disc rotor,
Bottom sieve square holes 2 mm, stainless steel;
ZM 200: Push-fit rotor, 12 teeth, stainless steel;
Ring sieve trapezoid holes 0.75 mm, stainless steel

Parameter(s):

SM 2000: revolution speed 700 rpm
ZM 200: revolution speed 18000 rpm

Time: 3 - 4 min (pre-grinding); approx. 45 s (fine grinding)

Achieved result(s):

pre-grinding in SM 2000: predominantly < 2 mm
fine grinding in ZM 200: predominantly < 500 µm

Remark(s): For RoHS analysis grinding tools of stainless steel are suitable.

Recommendation:

For pre-grinding of electronic cards and electric cable the Heavy-Duty Cutting Mill SM 2000 and for fine grinding the Ultra Centrifugal Mill ZM 200 are suitable under the above mentioned conditions.
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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