Task:

Application field: Chemistry / Plastics

Material: Plastic formed components: elastomer, polyoxymethylene (POM), high crystallinity polypropylene (HCPP), polyurethane (PUR) foam

Feed size: 30-80 mm (after pre-cut)

Material specification(s): elastic, electrostatical

Customer requirement(s): about 3 x 3 mm;

Subsequent analysis: Melting index, dilution viscosity

Solution:

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

Configuration(s): Standard hopper; bottom sieve of stainless steel with square holes of 4 mm; ring-type filter with Conidur hole body for collecting receptacle 5 l

Parameter(s): Revolution speed 750 rpm

Time: 5 min. (per sample)

Achieved result(s): predominantly < 3 mm

Remark(s): The samples elastomer and PUR foam can only be ground after pre-embrittlement with liquid nitrogen. Otherwise the increasing frictional heat leads to a softening and smearing of the products. The formed components have to be pre-cut in that way that they can pass the opening of the hopper (80 x 80 mm) of the Cutting Mill.

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.

© Retsch GmbH - www.retsch.com - lab@retsch.com
Recommendation: We recommend for the pre-cutting of plastic formed components our Heavy Duty Cutting Mill SM 2000 following the above mentioned conditions.