Task:

**Application field:** Chemistry / Plastics

**Material:** Thermoplastic; plastic granulate elastomer

**Feed size:** 3-4 mm

**Feed quantity:** 120 g (= about 200 ml; pre-embrittlement in liquid nitrogen)

**Material specification(s):** elastic, electrostatical

**Customer requirement(s):** As fine as possible, micro granulate for bonding in pastes

**Subsequent analysis:** Particle Size Analysis

Solution:

**Selected instrument(s):** ZM 200 Ultra Centrifugal Mill

**Configuration(s):** Push-fit rotor of stainless steel with 12 teeth; ring sieve of stainless steel with Conidur holes of 0.75 mm

**Parameter(s):** Revolution speed 18000 rpm

**Time:** 10 min.

**Achieved result(s):** predominantly < 300 µm

**Remark(s):** The grinding of the elastomer granulate material is only possible after pre-embrittlement with liquid nitrogen. Ring sieves with sizes of holes < 0.75 mm cannot be used in this case because in spite of pre-cooled sample material still a high frictional heat occurs which affects the product.

**Recommendation:** We can recommend our Ultra-Centrifugal Mill ZM 200 for the grinding of elastic plastic granulate elastomers due to the above mentioned conditions.