### Task:

**Application field:** Chemistry / Plastics  

**Material:** Raw material for brake coverings, mixture of phenol resin, ferro particles, CaO, 2 samples  

**Feed size:** 1-2 mm  

**Feed quantity:** 20 g (per batch)  

**Material specification(s):** ductile, tough  

**Customer requirement(s):** < 60 µm for x-ray  

**Subsequent analysis:** X-ray Fluorescence Analysis

### Solution:

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

**Configuration(s):** Ring sieve of stainless steel trapezoid holes 0,25 mm; Push-fit rotor of stainless steel with 12 teeth  

**Parameter(s):** 18 000 rpm  

**Time:** 5 min.  

**Achieved result(s):** < 100 µm, see sample a higher fineness can be reached, if the material will be grind a second time in the ZM 200.  

**Remark(s):** If ring sieves with hole sizes < 0.25 mm are used, a heating up by friction will influence the material.  

**Recommendation:** For sample preparation of medium hard and ductile materials, the ZM 200 is suitable under the above mentioned conditions.