**Task:**

**Application field:** Environment  
**Material:** Wood, paper paste, thermostable resin  
**Feed size:** 0-5 mm (after pre-grinding)  
**Feed quantity:** 5 g (per batch)  
**Material specification(s):** medium-hard, fibrous  
**Customer requirement(s):** < 200 µm, even < 100 µm  
**Subsequent analysis:** DTA Differential Thermo Analysis

**Solution:**

**Selected instrument(s):** MM 400 Mixer Mill  
**Configuration(s):** Grinding jar screwable 50 ml, stainless steel; 1 grinding ball of stainless steel, Ø 20 mm  
**Parameter(s):** Frequency 30 Hz; for the thermostable resin only 15 Hz  
**Time:** 2 min. (per sample; resin 20 sec.)  
**Achieved result(s):** homogeneous < 200 µm  
**Remark(s):** The wood and paper sample, both were pre-cut in our Cutting Mill SM 100 down to a fineness of < 4 mm. To avoid sticking effects during grinding, the resin sample should be prepared only with a frequency < 20 Hz. Pre-cooling of the jars with liquid nitrogen improves the efficiency of grinding.

**Recommendation:** For sample preparation of different materials the Mixer Mill MM 400 is suitable under the above mentioned conditions.