### Task:

**Application field:** Food

**Material:** Different herbs (1. Pollen; 2. Green Tea; 3. Anise; 4. Nettle root)

**Feed size:** 3-10 mm

**Feed quantity:** 1400 g (pollen); 500 g (tea); 450 g (anise); 200 g (nettle root)

**Material specification(s):** fibrous, containing oil

**Customer requirement(s):** 150 - 250 µm

**Subsequent analysis:** not defined

### Solution:

**Selected instrument(s):** Rotor Beater Mill SR 300

**Configuration(s):** Retaining frame for ring sieves, stainless steel; Ring sieves trapezoid holes 0.25 / 0.5 / 1 mm

**Parameter(s):** Revolution speed approx. 9000 rpm

**Time:** approx. 3 min. (per each sample)

**Achieved result(s):**
- Green tea (0.25 mm sieve): 99 % < 250 µm
- Pollen (0.5 mm sieve): 72 % < 250 µm
- Nettle root (0.5 mm sieve): 65 % < 250 µm
- Anise (1 mm sieve): 32 % < 250 µm

**Remark(s):** Due to the material properties of the different samples, ring sieves with a smaller hole size than chosen are not suitable for these applications.

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**Recommendation:** For the grinding of herb products we recommend the Rotor Beater Mill SR 300 according to the above mentioned conditions.

**Pictures of the sample**

**Fig. 1:** Initial pollen / ground with SR 300, ring sieve 0.5 mm trapezoid hole

**Fig. 2:** Initial green tea / ground with SR 300, ring sieve 0.25 mm trapezoid hole

**Fig. 3:** Initial anise / ground with SR 300, ring sieve 1 mm trapezoid hole

**Fig. 4:** Initial nettle root / ground with SR 300, ring sieve 0.5 mm trapezoid hole