

Task:**Application field:** Agriculture**Material:** **Wheat straw****Feed size:** **length: 100 mm (before pre-grinding)**
30 mm (before fine grinding)**Feed quantity:** 50 g (pre-grinding), 15 g (fine grinding)**Material specification(s):** fibrous**Customer requirement(s):** 100 % < 200 µm**Subsequent analysis:** Digestion in pilot plant**Solution:****Selected instrument(s):** **Cutting Mill SM 100**
Ultra Centrifugal Mill ZM 200**Configuration(s):** SM 100: Bottom sieve square holes 4 mm, stainless steel;
ZM 200: Push-fit rotor, 12 teeth, stainless steel;
Ring sieve trapezoid holes 0.2 mm, stainless steel**Parameter(s):** SM 100: revolution speed 1400 rpm
ZM 200: revolution speed 18000 rpm**Time:** 30 s (pre-grinding), 10 s (fine grinding)**Achieved result(s):** 100 % < 200 µm
(the length of some particles can be > 200 µm)**Remark(s):** For grinding of larger quantities a cyclone can be used.**Recommendation:** For pre-grinding the Cutting Mill SM 100 and for fine grinding the Ultra Centrifugal Mill ZM 200 are suitable under the above mentioned conditions.

Pictures of the sample



Fig. 1: after pre-grinding in SM 100 with 4 mm bottom sieve

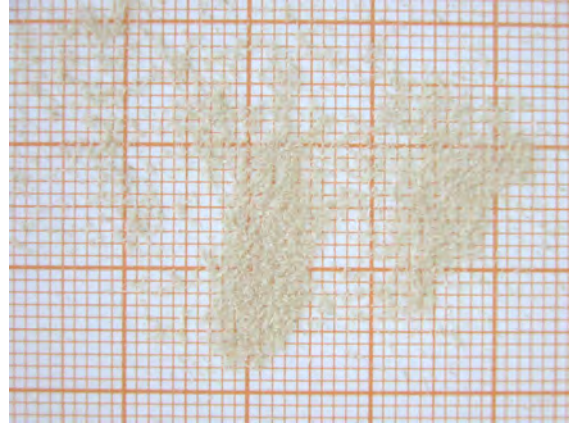


Fig. 2: after fine grinding in ZM 200 with 0.2 mm ring sieve