



Task:

Application field:	Agriculture
Material:	Feather of chicken and ducks, total quantity approx. 200 g
Feed size:	0-10 mm (after pre cutting in SM 100)
Feed quantity:	30 g (for fine grinding)
Material specification(s):	fibrous, bulky
Customer requirement(s):	< 10 - 100 µm, 1 kg/h
Subsequent analysis:	not defined

Solution:

Selected instrument(s):	Cutting Mill SM 100 Planetary Ball Mill PM 100
Configuration(s):	Long stock hopper SM; Bottom sieve SM square holes 6 mm, stainless steel; Ring-type filter with trapezoid hole body for collecting receptacle 5 litres; PM - grinding jar "comfort" zirconium oxide 250 ml; 5 grinding balls zirconium oxide ø 30 mm
Parameter(s):	Revolution speed of PM 100 = 400 rpm
Time:	30 min. (for fine grinding)
Achieved result(s):	80 % < 100 μm
Remark(s):	The pre cutting of the total quantity was done in the Cutting Mill SM 100, bottom sieve 6 mm. For fine grinding of a representative sample, the Planetary Ball Mill PM 100 was used.
Recommendation:	For sample preparation of different feather material, the
The application report is based solely on the processing of the available sample material in the indicated amount. No legal claims shall be derived from this test report. Subject to technical modification and errors.	

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Cutting Mill SM 100 is suitable for pre cutting and the Planetary Ball Mill PM 100 for fine grinding under the above mentioned conditions.

Pictures of the sample



Fig. 1: Original feather sample



Fig. 2: Original feather sample



Fig. 3: After fine grinding in PM 100

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