Task:

Application field: Environment

Material: Industrial waste, paper and plastics

Feed size: 0-50 mm

Feed quantity: 10 l (appr. 2000 g)

Material specification(s): medium-hard, dry

Customer requirement(s): < 0.5 mm, for determination of heavy metalls

Subsequent analysis: MW Micro Wave Digestion

Solution:

Selected instrument(s): SM2000 Heavy-Duty Cutting Mill

As the SM 2000 was discontinued we recommend to use the SM 200 now

RT Sample Splitter

Configuration(s): Standard hopper;
Bottom sieves of stainless steel, square holes 8 mm;
Bottom sieves of stainless steel, square holes 2 mm;
Ring-type filter with trapezoid hole body for collecting receptacle 5 l

Parameter(s): Rotation speed 750 rpm

Time: 30 min.

Achieved result(s): predominantly < 0.5 mm

Remark(s): Pre cutting of the total quantity with SM 2000 and bottom sieve 8 mm
Sample dividing with sample splitter RT 37.5
Fine grinding of a single sample approx. 200 g with SM 2000, bottom sieve 2 mm
Recommendation: For sample preparations of medium hard waste material, the Heavy Duty Cutting Mill SM2000 is suitable for grinding the material under the above mentioned conditions.

Fig. 1: Original sample  
Fig. 2: After grinding in SM 2000, bottom sieve 8 mm

Fig. 3: After fine grinding in SM 2000, bottom sieve 2 mm  
Fig. 4: