

Task:

Application field: Environment

Material: Activated charcoal, untreated (received by coconut combustion)

Feed size: 300-850 µm

Feed quantity: 50 ml

Material specification(s): hard brittle, dry

Customer requirement(s): < 1 µm

Subsequent analysis: GC Gas Chromatography

Solution:

Selected instrument(s): PM 100 Planetary Ball Mill

Configuration(s): Grinding jar 250 ml, tungsten carbide (WC);
14 grinding balls $\varnothing$ 20 mm of tungsten carbide (WC)

Parameter(s): 400 rpm; reverse mode (interval of 1 min)

Time: 30 min.

Achieved result(s): Particle size analysis by HORIBA Laser-LA-300:
D50 = 1.5 µm

Remark(s): Higher throughput values are achievable by the Planetary Ball Mill PM 400 which offers 4 milling stations for placing 4 grinding jars per cycle at the same time.

Recommendation: For the fine-grinding of hard brittle and dry activated charcoal our Planetary Ball Mill PM 100 is suitable under the above mentioned conditions.