



SIEBTECHNIK TEMA



Laboratory disc mill

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Sample preparation in a laboratory disc mill has been a tried and tested method for decades, especially in the fields of

- ◆ geology
- ◆ mineralogy
- ◆ metallurgy
- ◆ the glass/ceramics industry
- ◆ the construction materials industry
- ◆ soil/plan analysis
- ◆ power plants

The laboratory disc mill enables fast, loss-free and reproducible fine comminution and homogenization of the samples.

The grinding barrels can hold sample batches of 10 - 1000 cm³ and grind and homogenize the sample material to final finenesses of up to < 40 µm^{*)} in a single step.

Sample preparation with a laboratory disc mill is thus the ideal prerequisite for subsequent analysis using X-ray spectrometers, regardless of whether pressed tablets or melt tablets are produced from the ground samples.

^{*)} The fineness achievable depends on the sample material, the grinding barrel, and the mill settings.

The grinding tools (stones/rings) in the grinding barrel are set into a rolling impact motion by means of a circular oscillation.

This motion achieves very high forces, which rapidly result in fine comminution to analytical fineness.



Grinding barrels made from zirconium oxide, steel and agate

Available grinding barrels

Material	Useful capacity in cm ³
Chrome steel	10 50 100 250 500 1000 cont.
Tungsten carbide	10 20 50 100 250 cont.
Zirconium oxide	100 250
Agate	50 100



Laboratory disc mill TS 1200 - P

Now with:

- ◆ **Innovative app control**
 - Standard Operating Procedures (SOP)
 - Variable speed in the range 700 – 1200 rpm
 - Variable grinding duration
 - Accessing the operating instructions
 - Direct spare parts inquiry
 - Sample/machine data exportable in csv format
 - Update-friendly app and firmware
- ◆ **Closed, sound-insulated housing**
- ◆ **Optional pneumatic closing device**
- ◆ **Space under the mill for lift truck**
- ◆ **Drive system with brake**
 - allows immediate opening of the housing flap.



The laboratory disc mill is available in different designs:

- with manual or pneumatic closing device
- in sound-insulated housing (TS design) or also free-standing (T design)
- in fully automatic versions, where the grinding barrel remains in the machine and only sample loading and removal is performed from outside.
- integrated in an automatic milling and pressing system (AMP), which - in a single device - combines all processes from pre-crushing dividing, fine grinding, and compression of the powder into a tablet.

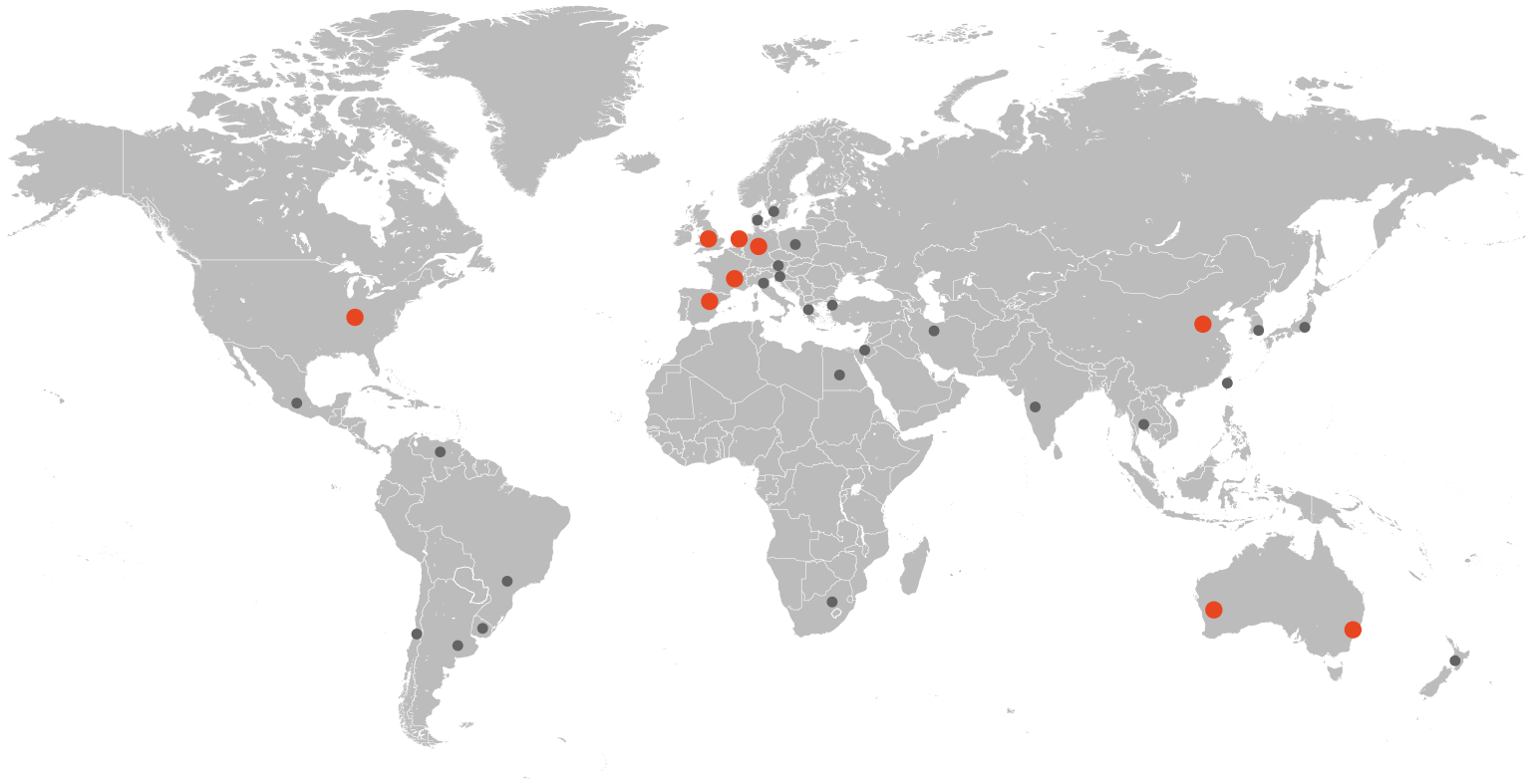


Automatic milling and pressing system AMP

Technical data

Laboratory disc mill		T 750	T 1000	TS 1200	TS 1200 - P
Dimensions (W x H x D)	mm	530 x 600 x 530		770 x 1167 x 595	
Weight	kg	150		360	
Drive power	kW	0.5	0.85	0.85	
Operating voltage		400 V, 3/N/PE, 50 Hz		230 V, 1/N/PE, 50 Hz	
Subject to technical changes.					

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