



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.



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



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:

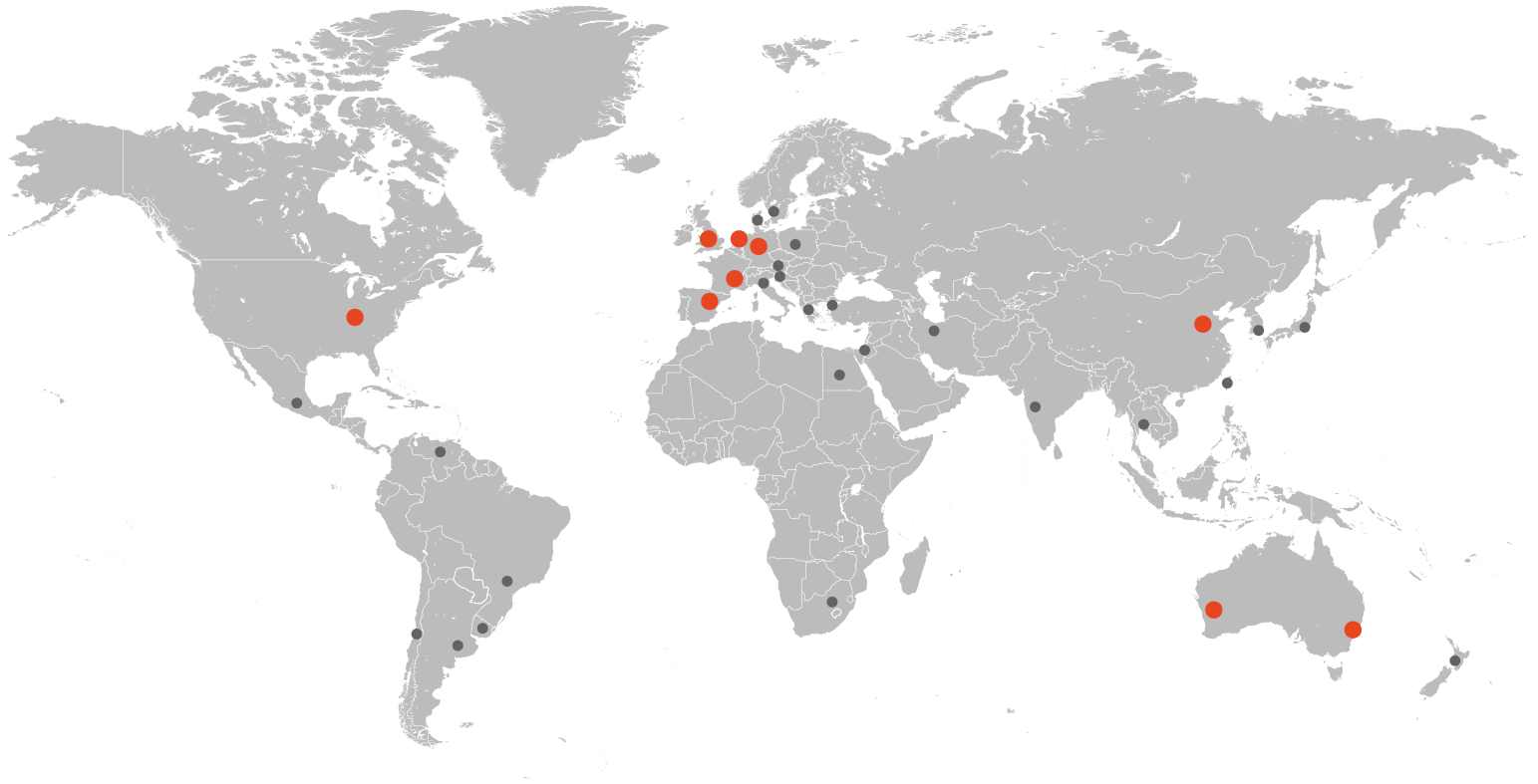
- with manual or pneumatic closing device
- in sound-insulated housing (TS design) or also free-standing (T design)
- in fully automatic versions, where the grinding barrel remains in the machine and only sample loading and removal is performed from outside.
- integrated in an automatic milling and pressing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



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.					

One Solution. Worldwide.



SIEBTECHNIK TEMA provides more than 50 local support offices worldwide as well as main sites located in:

Mülheim an der Ruhr, Germany | Rijswijk / The Hague, The Netherlands | Madrid, Spain
Daventry, Great Britain | Mundolsheim, France | Sydney & Perth, Australia | Cincinnati, USA
Tianjin, China | Moscow, Russia

We are experts in the field of solid-liquid separation and the processing of bulk materials

Automation | Channel conveyors | Crushing & Milling Equipment | Control Screening Machines
Decanter | Dryers | Laboratory Equipment | Pneumatic Tube Systems | Preparation Systems
Process Equipment | Pulsator Jigs | Pusher Centrifuges | Sampling Systems | Screening
Machines | Screen Worm Centrifuges | Sliding Centrifuges | Vibrating Centrifuges