



Sample preparation for X-ray fluorescence

HSM 100 Grinding Mill (right) Beside [HTP 40 Pellet Press \(left\)](#)

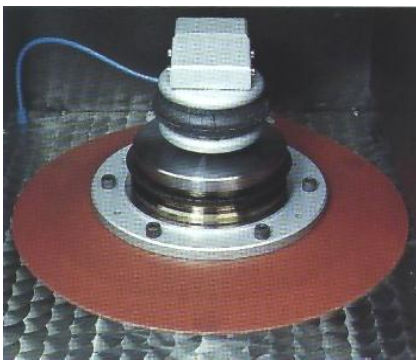
HERZOG vibration mills offer the full benefits of program – controlled grinding processes for the preparation of samples for x – ray fluorescence analysis. Control by programmable controller results in a substantial improvement in the reproducibility of sample preparation and consequently optimum analysis results.

HERZOG HSM 100 vibration grinding mills are suitable for the grinding of minerals, slags, ferro alloys, organic substances and other materials. The high speed of the drive motor enables even hard material to be ground with short process times. The robust design with twin eccentric disk bearings enable the grinding mills to achieve a long service life with a minimum of maintenance.

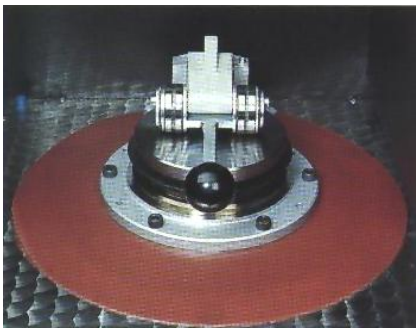
The grinding processes on the HERZOG vibration mills are controlled reliably by a PLC program. This eliminates incorrect handling or settings as sources of errors. The parameters can be accessed only through a password.



Grinding vessels for a range of applications, with capacities of 10, 50 and 100 ml (steel and tungsten carbide) and 100 ml (agate) are available.



HSM 100 P: pneumatic clamping facility for the grinding vessels



HSM 100 H: manually operated clamping facility for the grinding vessels

HERZOG vibration grinding mills are fully encapsulated, insulated against noise, and have safety cut-outs for operator protection. The dust and noise burden at the workplace is therefore reduced considerably and the safety enhanced.

HERZOG vibration grinding mills are high-quality, precision engineering products with compact dimensions, and are therefore ideally suited to laboratory requirements.

TECHNICAL DATA:

Available models and grinding vessels:

HSM 100 H: HERZOG grinding mill with manually operated clamping device
Steel and tungsten carbide grinding vessels with capacities of 10 ml, 50 ml and 100 ml can be used.

HSM 100 P: HERZOG grinding mill with automatic pneumatic clamping device
Steel and tungsten carbide grinding vessels with capacities of 10 ml, 50 ml and 100 ml can be used.

HSM 100 A: HERZOG grinding mill with automatic pneumatic clamping device and frequency driven motor
Steel and tungsten carbide grinding vessels with capacities of 10 ml, 50 ml and 100 ml can be used.
Agate grinding vessels with a capacity of 100 ml can be used

Dimensions:

550 x 750 x 1000 mm

Weight :

approx. 250 kg

Electrical power supply and consumption:

400 V , 50 Hz, 3 – phase, or other as required

Neutral conductor not required

Power consumption of approx. 1,9 kVA

Electrical switchgear cabinet:

Programmable controller SIMATIC C7-621

Degree of protection : IP 54

Insulation class: B

Pneumatic supply (only for the model HSM 100 P):

Pressure: min. 5 bar; max. 10 bar

Consumption per sample : approx. 10 dm³

Sample types:

A range of materials, e.g. raw cement meal, cement, clinker, slag of different types, ores, ferro alloys, organic materials

Grain size : 10 mm

Hardness: max. 9 Mohs

Temperature : max 100 °C