



Desktop swing mill HK40

For effective grinding of mineral based samples such as cement, clinker, rocks, soils, slags, refractories, ores etc.

- Compact, portable desk-top swing grinder
- Fully balanced for smooth operation
- Accommodates a variety of 100ml grinding vessels
- Grinding of up to 30 ml sample material with starting particle size approx. 5 mm
- Reproducible setting of milling time by electronic timer interval setting
- Safe working chamber, electronically locked during operation
- Grinding process can be interrupted at any time with stop button

Technical specifications:

Power supply	230 V, 50 Hz, 200 W
Instrument dimensions (L x W x H)	345 x 295 x 540 mm
Alternative power	230 V / 60 Hz or 115 V / 60 Hz
Mass	~ 40 kg
Time setting	max. 10 min var. 1 sec steps



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In addition to various grinding, blending and pelletising additives, the following vessels are available:



HKMG1 - Corundum 99.6%, bio-inert

The material has very high resistance to abrasion and these vessels are ideal when steel and tungsten carbide vessels are not suitable due to elemental composition.

Hardness MOHS 9, vickers HV 1650, matrix Al with traces of Si, Ca, Mg, Na and Fe.



HKMG2 - Corundum 99.9%, bio-inert

This very pure material contains the lowest levels of trace elements and provides the ultimate hardness in grinding vessels. It is ideal where control of contamination is paramount.

Hardness MOHS 9+, vickers HV 1850.



HKMG3 - Hardened steel

Universal grinding vessel from internally hardened steel for general purpose applications. High durability and moderate abrasion resistance compared to corundum.

Hardness MOHS 5.5-6, vickers HV 800, matrix element Fe, minor elements Cr, Si, Mn, C, W and V.



HKMG4 - Nitrided steel

The surface hardness (0.1mm depth) of this steel vessel is considerably higher than the regular hardened steel version. This vessel is thus suitable for harder material with good durability and toughness for routine work.

Hardness MOHS 6, vickers HV 1150, matrix and minor elements as above.



HKMG5 - Tungsten carbide

Tungsten carbide is much harder and of higher specific weight than steel. This type of grinding vessel is widely used in laboratories because it allows fast and most effective grinding of very hard samples.

Hardness MOHS 8.5, vickers HV 1500, matrix W, C and Co, minor elements Ta, Ti and Nb.



HKMG6 - Zirconia Oxide 99.9%

This highly pure material is of special interest to the analyst, as it offers very low contamination from less commonly analysed elements: Zr and traces of Hf, Y and Mg. The higher specific weight increases the grinding speed over corundum.

Hardness MOHS 8.5, vickers HV 1350.

Ceramic vessels

The hardness and resistance to abrasion and corrosion is very high, however these ceramic materials are very fragile and require careful handling.

Press SPECTAB

Grinding and pressing additive, 0.3 g tablets, smallest packing unit 1,000 tablets/btl., cellulose basis, bonding properties.

Please see also the new mixer HK42 and the more robust HK50.

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