

Food – Pharmaceuticals –
Cosmetics – Fine chemicals



The UM 160C-HP mobile poly-mill

shreds and grinds
a wide variety
of bulk goods

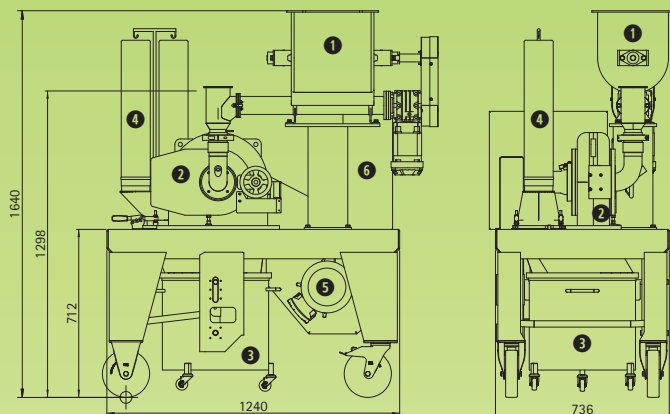


The UM 160C-HP mobile poly-mill

Solids often have to be broken up for analysis or further processing. The UM 160C-HP poly-mill can be equipped with various grinding tools suitable for coarse shredding or fine grinding.

This mill is ideal for trial runs in the course of tests, and can also be used for small batches or continuous operation with a throughput of up to 500kg/h. Its simple and robust design guarantees high functional reliability and the system's required durability is assured by scientific material research and extensive tests.

Dimensions



1 feed unit 2 mill 3 container 4 filter 5 motor 6 electrical control

The UM 160C-HP mobile poly-mill is mounted on a chassis and can be easily moved between locations by hand thanks to its compact dimensions of 140 × 74 × 160 cm. Very precise grinding results are guaranteed for a wide variety of bulk goods.

Feeding

The mill can be fed by hand or with a feed unit. A hopper with a slide is used for dosing the bulk goods into the mill. The feed unit guarantees continuous feeding of the mill with consistent throughput, which is advantageous especially with clumpy or non-uniform grinding stock such as mushrooms or nuts.

Grinding quality, grinding output, handling

The grinding output and grinding quality are controlled with the feed unit, by controlling the air supply and by regulating the speed of the grinding rotor. Subsequently the ground stock falls into a container mounted below the grinding chamber. A quick fastener allows the container to be replaced with an empty one as soon as it is full. For continuous operation, a hopper with a feed pipe can be connected to pneumatically convey the ground stock to a storage container.

Grinding tools

Grinding tools with pins, knives or plate beaters as well as screens with various perforations, i.e. with ribbed plates, can be used depending on the requirements. This means that even fibrous products that are usually more difficult to grind can be processed in high quality. A large door provides access to the grinding chamber for the fast and easy exchange of grinding tools, and for maintenance and cleaning.



Workmanship, output and control

All tools are made of high-grade stainless steel, in part tempered, making them extremely tough and robust to ensure a long service life. The installed high-precision bearings guarantee high durability as well.

Materials: V2a, AISI 304, V4a, AISI 316L or other
surfaces: polished inside and out, including welding seams.
Mean roughness index 0.8µm outside,
0.4 µm inside.

The speed of the mill's motor (5.5 KW) is controlled by a frequency converter with a range of 10 to 80 Hz, permitting speeds up to 16,000 RPM when pins are used. A fineness of D90 < 10 µm can be achieved in the grinding process.

Cleaning

The mill is easy to dry clean with a brush and vacuum cleaner, or it can be moved into a washing room and washed. All surfaces and components are readily accessible and washable, the filters and tools are easy to disassemble.

Safety

A sensor monitors the temperature and protects the system against overheating. The motor safety switch and sensors correspond to ATEX zone 22.

When tools designed for low rotational speeds are used, an automatic safety contact limits the speed as required.