

pulverisette 25



Power Cutting Mill

- Coarse crushing of soft to medium-hard, dry materials, fibrous materials and plastics
- Very simple to use and easy to clean
- Computer-optimised cutting geometry for powerful coarse crushing

crushing
cutting mill
sample preparation
for your lab

FRITSCH

Power Cutting Mill

Field of application

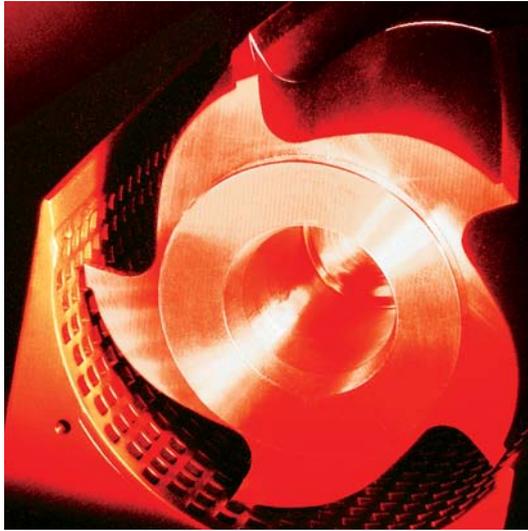
The pulverisette 25 is suitable for coarse grinding of soft to medium-hard dry materials. With a feed size (depending on the material) of 120 x 85 mm and a throughput rate of up to 85 l/h, the power cutting mill sets high standards.

The mill can be used, for example, to crush the following materials: rubber, leather, paper, cardboard, tissues, plastics, wood, non-metallic waste, coal, animal feeds, maize, grain, confectionery, malt, farinaceous products, spices, dried meat, bones, horn, dragées, tablets, leaves, fibres, peat, roots, tobacco, cork, straw or film.

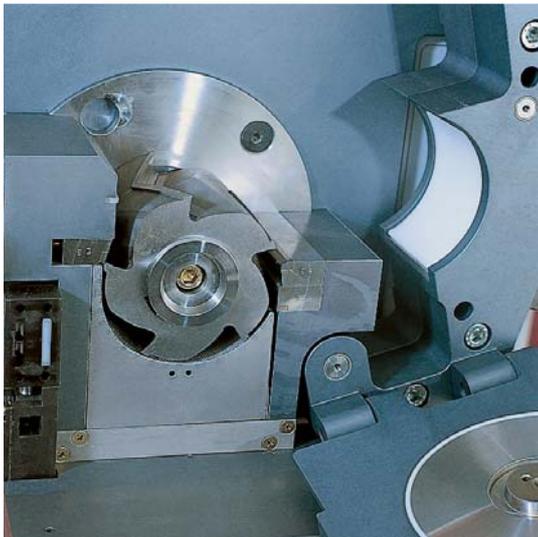
Furthermore, the power cutting mill can also be used in the pharmaceutical or animal feed industries, in dental, medicinal and metallurgical technology, in veterinary institutes and for RoHS testing.



grinding quality control
Power Cutting Mill



cutting tool set with sieve cassette



standard rotor with V-cutting edges and fixed knives

Method of operation

The grinding chamber of the power cutting mill pulverisette 25 houses a rotor fitted with knives in combination with three fixed knives to effect size reduction of the grinding sample at low rotational speeds. The material which has been processed remains in the grinding chamber until the desired particle size is achieved. It is then carried out by the permanent air throughput through the mesh of the replaceable sieve cassette into the collecting vessel.

Due to the computer-optimised blade alignment with different cutting angles for the three fixed knives, the coarse-grained material is optimally pre-crushed while, at the same time, an excellent rate of efficiency for coarse crushers is achieved in the fine range.

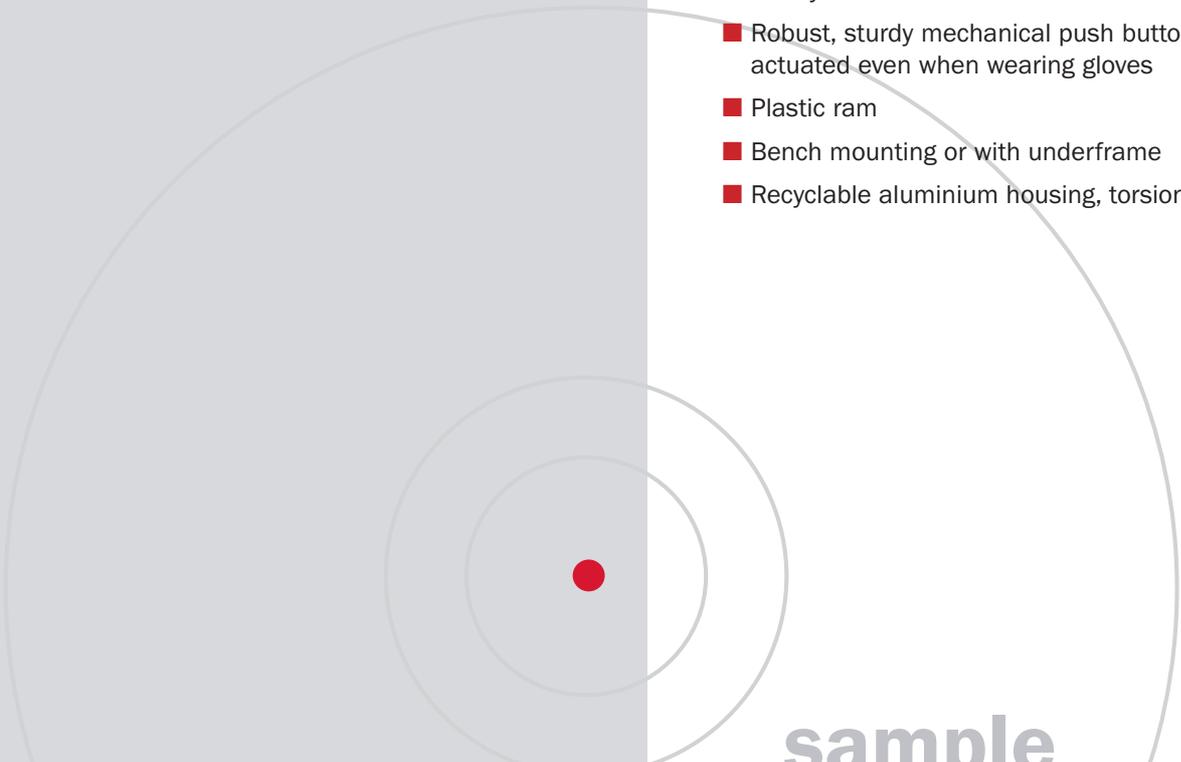
Power Cutting Mill

Advantages

- Easy to use
- Easy, rapid and thorough cleaning of grinding chamber
- Easy cleaning of all grinding components
- Fast, reproducible grinding
- Extremely wide range of possible applications due to comprehensive range of accessories
- Different rotors to suit the cutting process appropriate to the sample
- Permanent cooling of the sample to be ground due to constant air throughput (when using sample exhauster)
- Specific particle size available due to a choice of sieve cassettes
- Ram for pressing in the sample can be completely removed when the housing is open
- Safety tested (CE mark)
- 2 year guarantee

Design Characteristics

- High-torque gear motor (2.2 kW)
- Single-handed central locking device
- Double hinge between the upper and lower housing ensures stability
- All housing components inter lock when the housing is closed
- Strong, torsion-resistant housing
- Hinged housing and cover can be fully raised
- Removable cover
- Cutting rotor and sieve cassette can be easily removed without tools
- Smooth, easy-to-clean grinding chamber walls
- Grinding chamber externally anodised for improved cleaning
- Cutting rotor with dual bearings
- Automatic recognition of rotational direction for protection of the rotor
- Cutting gap can be externally adjusted
- Bearings protected against dust
- Dust-free cutting chamber
- Soundproofed motor cover
- Safety switch with inter lock of cover and housing
- Robust, sturdy mechanical push buttons, can be actuated even when wearing gloves
- Plastic ram
- Bench mounting or with underframe
- Recyclable aluminium housing, torsion-resistant



sample
cutting mill preparation
pre-crushing



different rotors of the cutting tool sets

Accessories

Funnel

The standard funnel can be used to process most samples. It offers 3 litres volume and a pressing device ensures successful supply of the feed material to the mill. The funnel for bulk solids offers 10 litres volume and can be used without pressing device for free flowing materials.

Sieve cassette

Sieve cassettes with trapezoidal or square perforations can be selected from the range to obtain final particle size of your choice.

Collecting vessel

Collecting vessels are available in a range of sizes. An adapter is required when these are used in combination with sample extraction equipment using the cyclone.

Cutting tool set

The rotor with V-Cutting edges and fixed knives made of hardmetal tungsten carbide has a combined impact/shearing action, while the standard rotor with V-cutting edges and fixed knives made of tool steel has pure cutting action, gently reducing the sample size. In addition to these rotors, the disk milling rotor - with indexable inserts and fixed knives made of hardmetal tungsten carbide - has a high level of resistance to excessive stress because of their stability under load. This rotor is even suitable for crushing p.c.b. scrap with glass fibre residue.

Underframe

The pulverisette 25 can be used on the bench or on a free standing underframe which can be ordered as an optional extra.

Power Cutting Mill

Special Accessories

Sample exhauster with cyclone separator

This type of collection is the most convenient because the ground material is transferred directly to a glass bottle, from which it can be easily removed, transported or stored. The strong air current cools and transports the ground material so that even samples which would normally be difficult to grind can be processed. „Clogging“ of the sieve meshes is virtually negligible. At the same time, the amount of cleaning required in the mill itself is minimal. As standard, the sample exhauster with cyclone separator is delivered with a 500 ml glass bottle. If a larger sample collection is required, a sample glass for 1 litre, 2 litres or 5 litres with additional adapter can be ordered.

Cutting Mill combination

The Power Cutting Mill pulverisette 25 can be combined with the Universal Cutting Mill pulverisette 19. This Cutting Mill Combination pulverisette 25/pulverisette 19 is the optimum solution for the pre- and fine crushing of soft to tough and more plastic or fibrous materials in the laboratory. The important effect is that samples with a feed size of 120 mm maximum can be grind to a few 100 µm within a very short time and in a single operation.

Further information can be seen in the separate leaflet Cutting Mill Combination pulverisette 25/pulverisette 19.



pulverisette 25
with funnel for bulk solids and sample exhauster



Cutting Mill Combination
pulverisette 25/pulverisette 19

quality control
fine crushing
Cutting Mill Combination

Technical data

working principle	cutting
funnel opening	120 x 105 mm
max. feed size (depending on the material)	120 x 85 mm
min. sample quantity	100 - 150 ml
max. throughput (depending on the material and sieve size)	85 l/h
final fineness depending on sieve cassette	1 - 10 mm
feeding	batchwise/continuous
rotor speed	300 rpm (other speeds on request)
electrical details	400 V/3~, 50-60 Hz, 3340 watt (other voltages on request)
motor-shaft-power according to VDE 0530, EN 60034	2.2 kW
weight	net: 75 kg, gross: 105 kg
dimensions w x d x h	table mounting or on stand: 45 x 65 x 63 cm
packing details	wooden case: 80 x 70 x 90 cm

Special Accessories

Order no.	Description
	Sample exhauster with cyclone separator
45.5900.00	sample exhauster with cyclone separator for 230 V/1~
25.2800.00	adapter for sample exhauster (essential in combination with 45.5900.00)
83.3230.00	sample glass 5 litres
83.3220.00	sample glass 2 litres
19.5770.16	adapter for sample glass 2 and 5 litres
83.3210.00	sample glass 1 litre
19.5780.16	adapter for sample glass 1 litre

pulverisette 25

Ordering data

Order no.	Description
25.2030.00	Power Cutting Mill pulverisette 25 without funnel, cutting tool set, sieve cassette, collecting vessel and underframe for 400 V/3~, 50-60 Hz, 3340 watt Attention: The pulverisette 25 with voltage of „/3~“ can <u>only</u> be operated on a three phase supply network. Other voltages on request!
25.2850.00	Accessories standard funnel, 3 litres
25.2700.00	funnel for bulk solids, 10 litres
45.7000.00	Cutting tool sets standard rotor with V-cutting edges and fixed knives made of tool steel
45.7370.00	rotor with V-cutting edges and fixed knives made of hardmetal tungsten carbide
45.7200.00	disk milling cutter rotor with indexable inserts and fixed knives made of hardmetal tungsten carbide
45.7440.10	Sieve cassettes with sieve insert made of stainless steel 1 mm trapezoidal perforation
45.7460.10	2 mm trapezoidal perforation
45.7500.10	4 mm square perforation
45.7510.10	6 mm square perforation
45.7520.10	8 mm square perforation
45.7530.10	10 mm square perforation
45.5730.00	Collecting vessels collecting vessel, 3 litres
45.5700.00	collecting vessel for large quantities, 10 litres
45.5800.00	Further accessories underframe

