FRITSCH

Rotor and Beater Mills · classic line

IDEAL FOR

ANALYTIC
BIOLOGY
CHEMISTRY
AGRICULTURE AND FORESTRY
FOODSTUFFS
GEOLOGY AND MINERALOGY
MINING AND METALLURGY
CERAMICS
PLASTICS AND TEXTILES
PHARMACEUTICALS
ENVIRONMENT/ROHS

classic line

VARIABLE SPEED ROTOR MILL AND CROSS BEATER MILL

QUALITY
MADE IN GERMANY

FRITSCH is more than just a brand: It is backed by a strong, medium-sized, family business in its fourth generation, which has been firmly embedded in the region since 1920 and globally active for decades. All FRITSCH-products are produced according to strict quality criteria, and our entire production is in-house. The innovative ideas of our development department are inspired by the close relationship with our customers and their practical work in the lab. Satisfied customers worldwide count on our quality, our experience and our service. This makes us proud and motivates us.

FRITSCH. ONE STEP AHEAD.

PULVERISETTE 14
classic line

THE VARIABLE SPEED ROTOR MILL

- **Rapid sample throughput due to high-speed grinding and simple cleaning**
- **Max. feed size 10 mm, max. throughput 5 l/h**
- **Final fineness d_{50} < 40 µm, sieve rings 0.08–6 mm**
- **Ideal for minimal sample quantities: < 10 ml**
- **Simple changing of all grinding parts without tools**
- **Variable speed settings between 6,000 and 20,000 rpm**
- **Automatic speed regulation for constant milling**

The FRITSCH Variable Speed Rotor Mill PULVERISETTE 14 *classic line* is the ideal mill for fast, effective comminution of soft to medium-hard, brittle and fibrous materials as well as temperature-sensitive samples – proven worldwide for the use in trace analysis.

The motor speed can be varied – rpm in increments of one-thousandth – making it possible to adapt the mill to each specific application. An automatic speed compensation feature ensures an ideal adaptation of the grinding to the specific comminution behaviour of the sample. At the same time reduces the fast, effective grinding significantly the thermal strain on the sample.

Impact and shearing

In the Variable Speed Rotor Mill, the sample is comminuted by impacting against the ribs of the rotor rotating at high speed and also sheared between the rotor teeth and the sieve ring.

Faster work

With a more powerful frequency converter, the modified Variable Speed Rotor Mill PULVERISETTE 14 *classic line* ensures that the motor output is precisely matched to the grinding material. Your advantage: faster sample feeding, a constant rotational speed and a higher throughput.

Efficient cooling

Available only from FRITSCH: The ingenious air routing of the PULVERISETTE 14 *classic line* ensures a constant airflow to cool the rotor, all motor components and the grinding material in the collecting vessel. At the same time, a large fan blows the cooling air into the instrument through a foam particle filter to create positive pressure that prevents the penetration of dirt particles from the ambient air.

Ingenious air routing for efficient cooling of the sample

OUR SUGGESTION

Use the PULVERISETTE 14 *classic line* for fine comminution after pre-crushing with the FRITSCH Cutting Mills.

Especially time-saving: **Fast exchange of all grinding parts** in just a few motions without tools, ensuring an easy cleaning of all parts outside the mill.

The especially smooth surface of the stainless steel impact rotors simplifies a thorough cleaning – fast and easy!

Secure protection against contamination: **Wear-free labyrinth seal** between the grinding chamber and the motor.

The **well-designed LED display** in the ergonomic operating panel with membrane keyboard displays the speed and motor load and alerts in the event of reaching the temperature limit and overload.

PULVERISETTE 14
classic line

One Mill – Many Possibilities

As a standard you receive the Variable Speed Rotor Mill PULVERISETTE 14 *classic line* in the basic configuration with collecting vessel and lid. In order to operate the mill, you must also order a rotor, a sieve ring, an impact bar or a pin insert – allowing you to select your grinding tools according to your specific application! To ensure this, an extensive accessory programme for the PULVERISETTE 14 *classic line* with rotors and sieve rings in various designs and materials as well as additional accessories are available. Choose exactly what you need – our experts will be happy to advise you.

ROTORS AND SIEVE RINGS

The extremely durable, low-wear, stainless steel rotors and sieve rings of the PULVERISETTE 14 *classic line* are suitable for all standard applications, for comminution of medium-hard, soft, brittle, fibrous substances from lime to plants. To meet various grinding tasks, rotors with 8, 12 and 24 ribs as well as sieve rings with trapezoidal or round perforation from 0.08 mm to 6 mm are available.

For particularly heavy duty loads, during the grinding of harder materials, all FRITSCH sieve rings up to 2 mm trapezoidal perforation are available with additional reinforced edges.

Select the appropriate **rotor** for your application:	
Fast comminution of fibrous substances	8-ribs rotor
Feed particle sizes < 10 mm	12-ribs rotor
Fine materials with a feed particle sizes < 5 mm	24-ribs rotor

Select the appropriate **sieve ring** for your application:	
Fast comminution of medium-hard to soft materials	Sieve ring with trapezoidal perforation for additional shearing effects
Brittle material and medium fineness with narrow particle size range	Sieve ring with round perforation
Heavy duty loads	Sieve ring with reinforced edges

Our suggestion: The corresponding element analyses for the accessories of the PULVERISETTE 14 *classic line* with detailed information about the material, is found at www.fritsch.de.

MILLING WITH THE FRITSCH IMPACT BAR

Difficult-to-mill samples, temperature-sensitive samples and plastics

In addition to the special air cooling of the PULVERISETTE 14 *classic line*, which also allows grinding of temperature-sensitive samples, we have developed the FRITSCH impact bar: With its clever design, it enables together with a sieve ring a very gentle comminution of the sample which in many cases would be impossible without the impact bar. The bar acts as a stator on which the material is additionally beaten. The result: increased grinding performance for a particularly fast and effective grinding that minimises the thermal load. The ideal solution for especially heat-sensitive materials such as powder coatings or plastics as well as for smooth pre-crushing and fine comminution of hard-brittle to soft, fatty or samples with residual moisture! The corresponding rotor and sieve ring for the impact bar must be ordered separately.

Tablets before and after grinding in the PULVERISETTE 14 *classic line* with the impact bar and sieve ring with 2 mm trapezoidal perforation at 20,000 rpm

TEMPERATURE DATA COMPARISON

Material:	Wood fibres	
	With impact bar	41.7 °C
	Without impact bar	56.1 °C

Heavy-metal- and iron-free grinding

For both: heavy-metal-free and iron-free grinding you can order your PULVERISETTE 14 *classic line* with a PTFE-coated lid and collecting vessel:

- For grinding **soft samples** like leaves, grain and soft foods select additionally a 12-rib impact rotor and a sieve ring with reinforced edges made of pure titanium with a matching perforation for the desired final fineness.
- For grinding **medium-hard samples** like rice, wood, leather or plastics select additionally a sieve ring TiN-coated and for feed particle sizes < 10 mm a 12-rib rotor and for feed particle sizes < 5 mm a 24-rib rotor TiN-coated.

RoHS

For sample preparation according to RoHS – such as for verification of hexavalent chromium – equip your PULVERISETTE 14 *classic line* with a sieve ring and rotor TiN-coated. For feed particle sizes < 10 mm use a 12-rib rotor and for feed particle sizes < 5 mm a 24-rib rotor.

NEW: temperature-gentle fine grinding with the FRITSCH Cyclone separators

In combination with the FRITSCH Cyclone separators, the Variable Speed Rotor Mill PULVERISETTE 14 *classic line* is ideal for ultra-fine grinding of temperature-sensitive materials like powder coatings and plastics, as well as for smooth pre-crushing and fine-grinding of hard-brittle to soft samples, fatty or samples with residual moisture. The high-performance FRITSCH Cyclone separator, completely made out of stainless steel 304, in combination with the optional dust exhaust system is particularly indispensable in the analytical sector and in the food and pharmaceutical industries. The FRITSCH Cyclone separator with integrated dust exhaust system and HEPA ultra-fine dust filter provides the optimal solution for all standard grinding tasks.

The result: a particularly fast and efficient grinding with minimised thermal load at a significantly higher throughput – and particularly easy and fast cleaning.

High-performance Cyclone separator and FRITSCH Cyclone separator

PULVERISETTE 14
classic line

AUTOMATIC FEEDING

Combine your PULVERISETTE 14 *classic line* with the FRITSCH Vibratory Feeder LABORETTE 24 to ensure continuous feeding of the sample during the entire grinding process, even of smallest quantities. Due to a direct connection, the mill automatically matches the sample feeding to its load state at any given moment.

Grinding without sieve

Available only from FRITSCH: For grinding without a sieve for the most difficult, medium-hard, oil- or grease-containing materials such as waxes or paraffins, equip your PULVERISETTE 14 *classic line* with the unique pin rotor and the corresponding grinding chamber lid with pin insert for grinding entirely without a sieve ring.

FRITSCH pin insert for grinding without sieve

Grinding of large quantities

Regardless of the specific configuration of rotor, sieve rings, impact bar or pin insert, you can turn your PULVERISETTE 14 *classic line* into a true workhorse for the grinding of large quantities with the special conversion kit. The kit consists of a special collecting vessel with outlet and flange-mount nylon support sack for easily replaceable paper filter bags. This allows the comminution of sample quantities of up to 1 litre in a single step without the need to open the grinding chamber and empty the collecting pan during the process.

Our suggestion: During grinding of very light materials, the material yield can be significantly improved by the high air circulation of the conversion kit for grinding large quantities – even when grinding smaller quantities!

Another suggestion: During grinding of temperature-sensitive samples, the conversion kit for grinding large quantities with its large nylon support sack ensures a high air throughput, resulting in even better cooling.

OUR SUGGESTION

Difficult-to-mill samples, or extremely temperature-sensitive samples such as styrenes, polyester, synthetic resins, films, PVC, PP and PE can be embrittled with the addition of liquid nitrogen and afterwards ground in the PULVERISETTE 14 *classic line.*

TECHNICAL DATA

Electrical details
200-240 V/1~, 50-60 Hz, 1100 watt
100-120 V/1~, 50-60 Hz, 1100 watt

Motor shaft power in accordance with VDE 0530, EN 60034
550 W

Weight
Net 23 kg
Gross 25 kg

Dimensions w x d x h
Bench top instrument 31 x 48 x 47 cm

Packaging w x d x h
Cardboard box 46 x 63 x 55 cm

Emissions value of workplace according to DIN EN ISO 3746:2005
Approx. 75 dB(A)
(depending on the material to be ground, adjusted rotor-speed and instrument configuration)

Order no.	**230-240 V/1~**	**100-120 V/1~**
	14.5020.00	14.5010.00

IQ/OQ documentation available to support equipment qualification.

Raw coffee before and after grinding with the P-14 and sieve ring 1 mm trapezoidal perforation at 20,000 rpm

APPLICATION EXAMPLES

Analytic	Creation of samples for the chemical analysis of soil samples, slurries or plant samples, spectroscopy
Biology	Plants, roots, leaves, needles, grains, drugs, peat, seeds, ash
Chemistry	Chemicals, fillers, waxes, paraffins, chalk, kaolin
Agriculture and forestry	Plants, wood, roots, leaves, needles, grains, soil (without stones), fertilisers, pellets, feed
Foodstuffs	Rice, spices, foodstuffs for protein and nitrogen analysis, dried fruits
Plastics and textiles	Textiles, leather, cellulose, compound materials, rubber, powder coatings, styrenes, polyester, synthetic resins, foils, PVC, PP and PE
Pharmaceuticals	Pharmaceuticals, dragées, tablets
Environment/RoHS	Electronic parts, plastics, glass

FACTS AND ADVANTAGES

- Simple, tool-free changing of rotor, collecting vessel, sieve ring and labyrinth seal
- Simple, contamination-free cleaning and assembly of all grinding parts outside the instrument
- Efficient cooling of the grinding chamber due to extremely high airflow
- Highly durable low-wear rotor made of stainless steel
- Grinding chamber made of stainless steel or PTFE-coated with practical quick-clamping lock
- Grinding parts made of stainless steel, pure titanium and TiN-coated
- Maintenance-free three-phase motor with regulated rotor speed 6,000–20,000 rpm
- High speed stability even under full load
- Wear-free labyrinth seal between the grinding chamber and drive motor
- Removable dust filter for convenient cleaning
- Ergonomic operating panel with membrane keyboard and timer
- Microcontroller with integrated regulation function for Vibratory Feeder
- 2-year guarantee

PULVERISETTE 16

THE FRITSCH CROSS BEATER MILL

- **Max. feed size 25 mm**
- **Final fineness < 100 µm already in the first step depending on the material**
- **Perfect for comminution of coal, coke, lime or slate**
- **Ideal for fast work with high throughput**
- **Easy to change bottom sieves with perforation sizes of 0.12–10 mm**
- **Easy cleaning due to grinding tools that are simple to remove**
- **Speed adjustment for different applications**
- **Batchwise or continuous operation possible**

Door quick-clamping lock
with electrical safety brake

With a freely adjustable rotor speed of 2,000–4,000 rpm, the FRITSCH Cross Beater Mill PULVERISETTE 16 is the ideal universal mill for fast and gentle pre-crushing and fine-grinding of medium-hard, brittle materials up to a Mohs hardness of 6 in laboratories, pilot plants and industry.

Comminution can take place batchwise or continuously. The maximum feed size for bulk solids is up to 25 mm. For batchwise operation, a 5 litre collecting vessel with filter hose is delivered as standard. A 30 litre collecting vessel with filter hose is also available for larger quantities. The final fineness depends on the selection of the bottom sieve and the breaking properties of the respective material. A final fineness of < 100 µm can often be achieved after the first step due to the powerful drive and a rotor speed of up to 4,000 rpm.

Impact, friction, shearing

Comminution in the Cross Beater Mill takes place through impact, friction and shearing forces. The feeding funnel guides the grinding material directly into the centre of the grinding chamber, where it is taken up by the cross beater and comminuted between the impact plates of the cross beater and the teeth of the grinding insert. The selected bottom sieve determines the final fineness. The rotating cross beater also creates an airflow through the funnel that accelerates the discharging of the ground sample into the collecting vessel. The supplied filter hose can be integrated here to effectively reduce the release of fine dust.

Highest operational safety

If the quick-clamping lock is opened unintentionally, a safety switch activates the motor brake so that the rotor comes to a stop in less than 0.5 seconds.

THE FRITSCH EXTRA

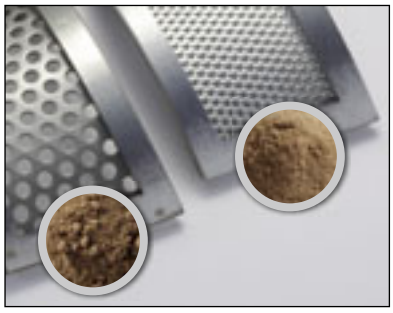
The standard equipment delivered with the PULVERISETTE 16 includes a cloth filter hose between the mill and the collecting vessel that ensures a constant airflow in the grinding chamber, accelerates the throughput and prevents blockages – for fast, gentle comminution.

The **grinding insert** of the PULVERISETTE 16 is available in either cast iron or stainless steel.

The **impact plates** of the PULVERISETTE 16 can be unscrewed and therefore are easy to replace.

Opened grinding chamber with removable **bottom sieve**, available with trapezoidal or round perforation in various sizes.

PULVERISETTE 16



OUR SUGGESTION

In general, the finer the desired final fineness, the smaller the perforation of the bottom sieve should be; the larger the perforation, the higher the throughput.

The right equipment

The Cross Beater Mill PULVERISETTE 16 is equipped with a grinding insert and cross beater made of cast iron, and impact plates made of hardened steel. Alternatively, you can select the Cross Beater Mill with grinding insert, cross beater and impact plates made of stainless steel. Also included is a stainless steel 5 litre collecting vessel with filter hose and a bayonet lock that ensures an especially convenient and dust-free connection. The bottom sieve must be ordered separately.

Bottom sieves

Bottom sieves made of stainless steel are available in various sizes and perforations for your PULVERISETTE 16.

Collecting vessel for large quantities

For comminution of large quantities, you can equip your PULVERISETTE 16 with the special 30 litre collecting vessel with filter hose.

Practical use as a free-standing instrument

Combine your PULVERISETTE 16 with a separately available support stand for a free-standing instrument that you can place anywhere.

Our suggestion: The corresponding element analyses for the bottom sieves of the PULVERISETTE 16 with detailed information about the materials, is found at www.fritsch.de.

TECHNICAL DATA

Electrical details
200-240 V/1~, 50/60 Hz, 1500 watt

Motor shaft power in accordance with VDE 0530, EN 60034
1.1 kW

Weight
Net 45 kg
Gross 83 kg

Dimensions w x d x h
Table-mounting or on stand 50 x 50 x 58 cm

Packaging w x d x h
Wooden case 80 x 65 x 116 cm

Emissions value of workplace according to DIN EN ISO 3746:2005
Approx. 85 dB(A)
(depending on the material to be ground and instrument configuration)

Order no.	**200-240 V/1~**
Grinding insert cast iron	16.6020.00
Grinding insert stainless steel	16.6050.00

Stones before and after grinding with the Cross Beater Mill PULVERISETTE 16

APPLICATION EXAMPLES

Agriculture and forestry	Grains, peat, seeds, dried plants, feed, pellets
Geology and mineralogy	Salts, gypsum, potash, minerals, stones and soil, bauxite, limestone, dry clay, pyrite, cement clinker, refractory materials
Mining and metallurgy	Coal, coke, ores, slate, slags
Ceramics	Oxide ceramics
Plastics and textiles	Resins, cellulose, synthetic resins

FACTS AND ADVANTAGES

- Practical grinding chamber quick-clamping lock
- Easily replaceable impact plates made of hardened or stainless steel
- Useable as a table-mounted or free-standing instrument with support stand (order separately)
- 1.1 kW brake motor, adjustable speed of 2,000–4,000 rpm (in 200 rpm steps)
- Toothed grinding tools made of cast iron or stainless steel
- Collecting vessel in 2 sizes: 5 litres made of stainless steel or 30 litres made of plastic (optional)
- Trapezoidal and round perforation bottom sieves made of stainless steel in various sizes
- Grinding insert, cross beater and bottom sieve can be removed quickly and without tools, and are therefore especially easy to clean
- 2-year guarantee

ORDERING DATA

Order no.	Article

VARIABLE SPEED ROTOR MILL *classic line*

PULVERISETTE 14
Instrument without impact rotor and sieve ring, incl. collecting vessel with lid

14.5020.00	For 200-240 V/1~, 50-60 Hz, 1100 watt
14.5010.00	For 100-120 V/1~, 50-60 Hz, 1100 watt
	Impact rotors made of stainless steel
44.4080.10	With 8 ribs
44.4120.10	With 12 ribs
44.4240.10	With 24 ribs
	Sieve rings made of stainless steel
44.1000.10	0.08 mm trapezoidal perforation
44.1010.10	0.12 mm trapezoidal perforation
44.1020.10	0.2 mm trapezoidal perforation
44.1050.10	0.5 mm trapezoidal perforation
44.1080.10	0.75 mm trapezoidal perforation
44.1100.10	1 mm trapezoidal perforation
44.1150.10	1.5 mm trapezoidal perforation
44.1200.10	2 mm trapezoidal perforation
44.2100.10	1 mm round perforation
44.2200.10	2 mm round perforation
44.2400.10	4 mm round perforation
44.2600.10	6 mm round perforation
	Sieve rings for heavy duty loads made of stainless steel with reinforced edges
44.3000.10	0.08 mm trapezoidal perforation
44.3010.10	0.12 mm trapezoidal perforation
44.3020.10	0.2 mm trapezoidal perforation
44.3050.10	0.5 mm trapezoidal perforation
44.3080.10	0.75 mm trapezoidal perforation
44.3100.10	1 mm trapezoidal perforation
44.3150.10	1.5 mm trapezoidal perforation
44.3200.10	2 mm trapezoidal perforation
	Accessories for heavy-metal- and iron-free grinding and sample preparation according to RoHS
14.3750.00	Lid and collecting vessel, PTFE-coated
44.4120.32	Impact rotor with 12 ribs, pure titanium
44.3021.32	Sieve ring 0.2 mm trapezoidal perforation, pure titanium with reinforced edges
44.3051.32	Sieve ring 0.5 mm trapezoidal perforation, pure titanium with reinforced edges
44.3101.32	Sieve ring 1 mm trapezoidal perforation, pure titanium with reinforced edges
44.3201.32	Sieve ring 2 mm trapezoidal perforation, pure titanium with reinforced edges
44.4120.00	Impact rotor with 12 ribs, TiN-coated
44.4240.00	Impact rotor with 24 ribs, TiN-coated
44.1010.00	Sieve ring 0.12 mm trapezoidal perforation, TiN-coated
44.1020.00	Sieve ring 0.2 mm trapezoidal perforation, TiN-coated
44.1050.00	Sieve ring 0.5 mm trapezoidal perforation, TiN-coated
44.1100.00	Sieve ring 1 mm trapezoidal perforation, TiN-coated
	Accessories for difficult-to-mill and temperature-sensitive samples
44.1121.10	Impact bar (Please note: impact rotor and special sieve ring are additionally necessary!)
	Sieve rings made of stainless steel for impact bar
44.1301.10	Sieve ring 0.08 mm trapezoidal perforation
44.1311.10	Sieve ring 0.12 mm trapezoidal perforation
44.1321.10	Sieve ring 0.2 mm trapezoidal perforation
44.1351.10	Sieve ring 0.5 mm trapezoidal perforation
44.1381.10	Sieve ring 0.75 mm trapezoidal perforation
44.1401.10	Sieve ring 1 mm trapezoidal perforation
44.1451.10	Sieve ring 1.5 mm trapezoidal perforation
44.1501.10	Sieve ring 2 mm trapezoidal perforation
44.1711.10	Sieve ring 1 mm round perforation
44.1721.10	Sieve ring 2 mm round perforation
44.1741.10	Sieve ring 4 mm round perforation
44.1761.10	Sieve ring 6 mm round perforation
	Accessories for grinding without a sieve
14.2600.00	Pin insert (consisting of pin rotor and grinding chamber lid with pin insert)

Order no.	Article
	Accessories for grinding large quantities
14.3510.00	Conversion kit for grinding large quantities (consisting of pan with outlet and flange-mount nylon support sack [outside] for paper filter bag [inside])
83.0010.00	Set paper filter bags for conversion kit (set = 20 pieces)
	Accessories for sample exhaust system with Cyclone separator
14.3740.00	Sample exhaust system with Cyclone separator, incl. sample glass 500 ml for 230 V/1~
83.3250.00	Sample glass 1 litre
83.3260.00	Sample glass 2 litres
83.3270.00	Sample glass 5 litres
19.5790.00	Adapter for sample glass 1, 2 and 5 litres
	Accessories for sample exhaustion with high-performance Cyclone separator
14.3760.00	High-performance Cyclone separator made of stainless steel 304 for sample exhaustion, incl. sample glass 1000 ml and connections for exhaust system
43.9070.00	Exhaust system, dust category „M“ according to DIN EN 60335-2-69 for 230 V/1~, 50-60 Hz, 1000 Watt
43.9055.00	Fleece filter bag for exhaust system (pack = 5 pieces)[1)]
43.9052.00	Plastic bag for exhaust system (pack = 5 pieces)[1)]
43.9051.00	Filter set polyester for exhaust system[1)]
	Certification
96.0230.00	IQ/OQ documentation (questionnaire format – implementation by customer)
	Accessories for automatic sample feeding
	Vibratory Feeder LABORETTE 24
	Instrument with V-shaped channel, funnel and control unit
24.0030.00	For 200-240 V/1~, 50-60 Hz, 25 watt
24.0040.00	For 100-120 V/1~, 50-60 Hz, 25 watt
24.9100.00	Stand for Feeder

Sieve rings are also available in further perforations.

[1)] Remark: One pack/one piece is included in the scope of delivery of the exhaust system.

Order no.	Article

CROSS BEATER MILL

PULVERISETTE 16
Instrument without bottom sieve and stand, incl. collecting vessel 5 litres with filter hose

	Grinding insert, cross beater made of cast iron, impact plates made of hardened steel
16.6020.00	For 200-240 V/1~, 50/60 Hz, 1500 watt
	Grinding insert, cross beater and impact plates made of stainless steel
16.6050.00	For 200-240 V/1~, 50/60 Hz, 1500 watt
	Bottom sieves made of stainless steel
16.6710.10	0.12 mm trapezoidal perforation
16.6712.10	0.2 mm trapezoidal perforation
16.6714.10	0.25 mm trapezoidal perforation
16.6715.10	0.35 mm trapezoidal perforation
16.6716.10	0.5 mm trapezoidal perforation
16.6718.10	0.75 mm trapezoidal perforation
16.6720.10	1 mm trapezoidal perforation
16.6722.10	1.5 mm trapezoidal perforation
16.6724.10	2 mm trapezoidal perforation
16.6750.10	3 mm round perforation
16.6752.10	4 mm round perforation
16.6754.10	5 mm round perforation
16.6756.10	6 mm round perforation
16.6758.10	8 mm round perforation
16.6760.10	10 mm round perforation
	Further accessories
45.5820.00	Universal support stand
16.6124.00	Collecting vessel 30 litres with filter hose

Cross Beater Mill and bottom sieves are also available for heavy-metal-free grinding.

Worldwide at your service
in 116 countries

Always nearby

Wherever you use your FRITSCH instruments: we are nearby. With direct contact persons for application consulting and technical service – and in Europe with the FRITSCH mobile laboratory for practical demonstrations on-site.

Grinding reports online

An extensive database of grinding reports for various materials and industries is available online at www.fritsch.de/solution. It's worth taking a look!

Free sample grinding

Send us your sample for a free-of-charge sample grinding. We will then send you a detailed grinding report, identifying the right choice of mill for your grinding task.

Or simply give us a call – our experts will be happy to assist you.

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