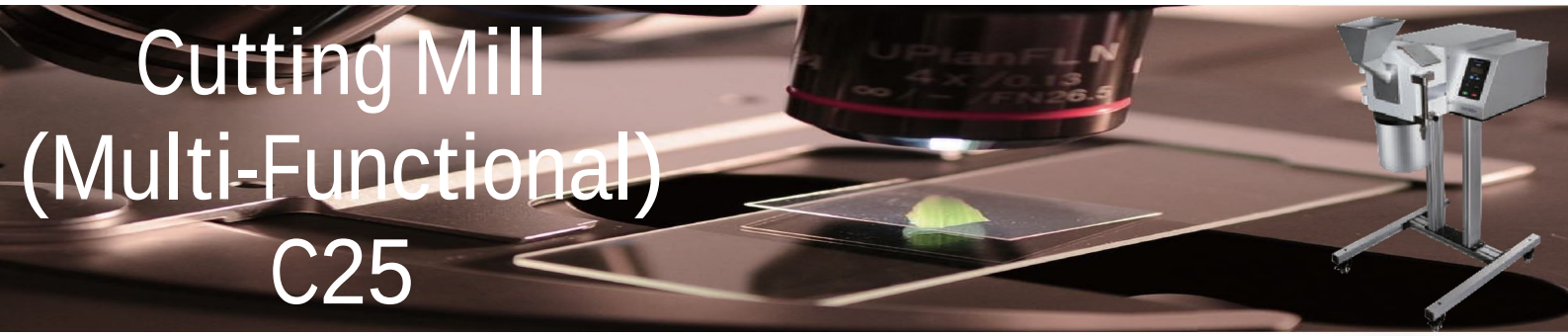
LABINDIA®
ANALYTICAL
WHERE COMMITMENT IS CULTURE

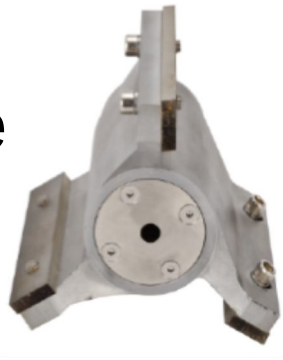
Cutting Mill (Multi-Functional) C25



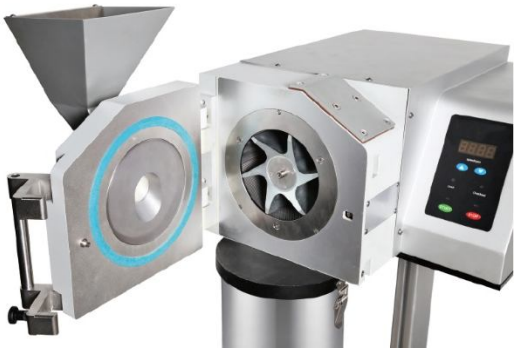
< 25 mm
< 100 µm

M1 : Cutting Type

M2 : Cross Beater Type



M3 : Rotor Beater Type



LABINDIA Multi-functional Cutting Mill C25, which is a unique product suitable for various soft, tough, fibrous and hard dry samples. It can be used for batch processing and continuous coarse crushing and fine crushing.

Ideal mill for the sample pretreatment of heavy-metal-free RoHS and WEEE test (e.g. rubber, plastics, garbage, circuit board, etc.). It is always used to process solid samples in batch or continuously, such as the wood, paperboard, paper, spice, straw, leather, rubber, raw material, bone, animal feed, cable, plastic, electric wastes, non-metallic waste, grain, lignite, peat etc.. for the long fiber and big volume sample it can process directly and do not need the pre-crush.

Safe and user-friendly design

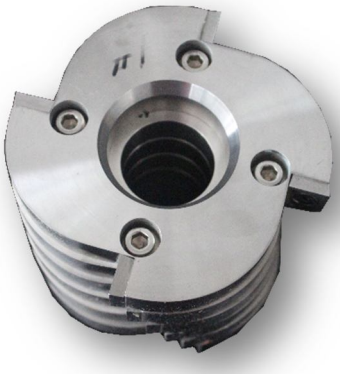
Three types of C25 (M1 / M2 / M3) are with security and user friendly design
Ex: Braking motor (braking time is less than 0.5 seconds), the instrument will stop immediately when the door is opening, rotors, bottom sieve, grinding chamber inner ring, door and hopper are easy to replace; with design of anti-splashing and inlet shielding design for inlet and outlet of samples.

M1 : Cutting Type

Sample Nature : Fibrous, Tough materials (Tobacco, Leather, Circuit boards) etc..

Applications : Paper, Cardboard, Medicinal materials, Seasoning, Wood, Straw, Leather, Rubber, Equipment raw materials, Bones, Cable, Plastic, Electronic waste, Non-metallic waste.

Working Principle : The sample passes through the hopper into the grinding chamber and is cut by the shearing action between a rotor and a fixed cutting bar. When the sample size is smaller than the aperture on the sieve plate, the sample falls into the collecting bucket.

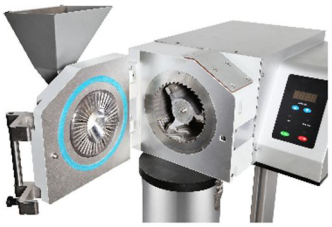


M2 : Cross Beater Type

Sample Nature : Mid-hard, Brittle materials (hardness no more than 6 Mohs), such as slag, coke, soil etc..

Applications : Soil, Metal ore, Glass, Coke, Coal, Mineral, Oxide Ceramics, Slag, Ballast, Cement Clinker, Grave etc.,

Working Principle : The sample passes through the hopper into the grinding chamber and is cut by the shearing action between a rotor and a fixed cutting bar. When the sample size is smaller than the aperture on the sieve plate, the sample falls into the collecting bucket.

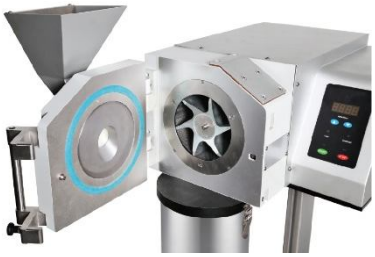
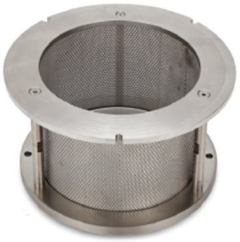


M3 : Rotor Beater

Sample Nature : Soft, Food samples (Cereals, Feed) & Chemicals.

Applications : Soil, Metal ore glass, Coking coal, Mineral, Oxide Ceramics, Slag, Ballast, Cement slag etc.,

Working Principle : The sample passes through the hopper into the grinding chamber and is cut by the shearing action between a rotor and a fixed cutting bar. When the sample size is smaller than the aperture on the sieve plate, the sample falls into the collecting bucket.


Techniques for achieving optimum grinding results

For samples such as rubber and plastic, better results can be achieved by freezing or adding auxiliary materials.

For fine grinding requirements, the large aperture bottom sieve shall be used for pre pulverization and then the small aperture bottom sieve for fine grinding.

For flexible and heat-sensitive samples, the speed of less than 1000 rpm while for the medium hard and soft samples, the speed above 1000 rpm is preferred

Accessories

The feed hopper and the shell of the instrument are made of hard steel, which is ergonomically designed and easy to operate.

- **Universal V type feed hopper (Image-1)**
  Suitable for block and granule samples
- **Standard feed hopper (Image-2)**
  Long strips of plant or other materials

(1)

Bottom Sieves
Various materials (Stainless Steel & Steel Without Heavy metal contamination) and various apertures Sieves with Mesh Sizes 0.20, 0.25, 0.50, 1.00, 2.00, 3.00, 4.00, 6.00, 8.00, 10.00, 20.00 mm & can be selected according to the sample nature and the final fineness required.

(2)

Connect Cyclone Separator, small volume sample receiver CM25 used with the cyclone separator, suitable for handling light or small sample volume samples. The use of cyclone separator extends the applications of the Cutting Mills. It not only effectively solves the heat transfer problem during the grinding process and makes cleaning easily, but also improve the uniformity and reproducibility of the grinding. Can be connected with collecting Bottles of 250 ml, 500 ml, 1 / 3 / 5 L. Also, 30 L Sample Collecting Bucket plastic, including filter bag and connection can be provided.

Dust Extraction System
Equipped with crushing dust collection device to prevent cross contamination.

LABINDIA Vibratory Feeder VF1100
To facilitate automatic sample feed for bulk material or fine powder samples.
Can be used in conjunction with the Cutting Mill C25 and is driven and controlled externally via the built-in interface.

Features & Advantages

- Equipped with crushing dust collection device to prevent cross contamination.
- It can be fixed on the floor and equipped with casters to move easily.
- With quick locking device and motor braking, it has high safety performance.
- Through three different grinding accessories to achieve different functions, which is suitable for wider range of samples.
- Easy cleaning thanks to exchangeable push-fit grinding insert, rotor and collecting container, grinding chamber, feed hopper and material inlet and outlet of stainless steel.
- The final fineness is up to 100 microns. The size of the sample is controlled by the bottom sieve and sieve with different sizes can be selected.
- A large amount of sample can be processed continuously, ranging from a few kilograms to several hundred kilograms per hour.
- All the three types can be equipped with small sample receiver and cyclone separator, which is convenient for sample collection, chamber cleaning and heat generation reduction.
- Optional grinding inserts 180° and 360° for grinding of hard-brittle materials by additional impact
- The grinding process is rapid and produces less heat
- CE Certified and IP Protected

TECHNICAL DATA (C25)

Feed Size	60 x 80 mm
Final Fineness	≤ 100 µm
Speed	500-4000 rpm
Handling Capacity	≥30kg/h
Collector capacity	0.25 - 30L
Collector	0.25, 0.5, 1, 3, 5, 30 Lit.
Peripheral Speed	**M1**: 3.4 - 20.1 m/s **M2**: 3.6 - 28.9 m/s **M3**: 3.5-28.5m/s
Sieves	0.20, 0.25, 0.50, 1.00, 2.00, 4.0, 6.0, 8.0, 10.0, 20.00 mm
Grinding Chamber Volume	Stainless steel, 1.1740 steel, Hardened steel
Grinding Chamber Material	Stainless, Steel of heavy-metal-free, Hardened Steel
Standards	CE
Protection	IP66
Noise	≤ 70 dB
Rated Power	1.5 KW
Power supply	240 V, 50 Hz
Instrument size(W*D*H)	590*705*1400 mm (M1) / 590*705*1230mm (M2/M3)
Packing size(W*D*H)	1300*900*600 mm
Net weight	120 kg