

Features and benefits

Benefits

- Rapid sieve and knife changeover
- Quick and easy to clean
- Performance - enhancing diagonal cutting action
- No need to adjust the rotor knife
- Ideal granulate quality with similar grain characteristics
- No tool required to open
- Outer bearing assembly protected from dust ingress
- CE certified

Applications

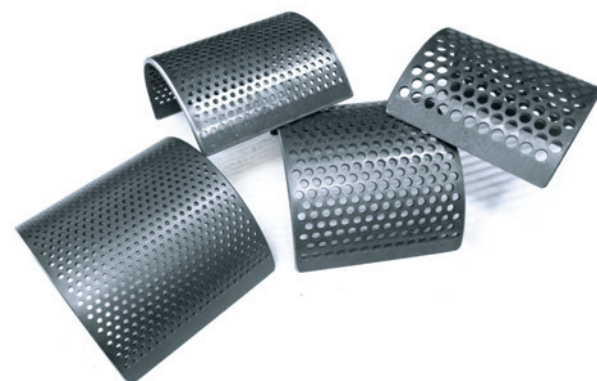
- Linoleum, Carpets, Cloth
- Secondary fuels and Bio Mass
- Food and Animal food
- Wood, Paper, Carton, Cellulose
- Rubber, Shredder Light Fractions
- House Waste, Industrial Waste
- Computer Scrap and Electronic Scrap
- Plants, Twigs, Roots etc.
- Herbs, Spices, Gras, Straw
- Bones
- Technical Plastics such as ABS, PA, POM, PE etc

Infeed Hopper / Rotor and Stator knives / Bottom sieves



Infeed Hopper of various sizes

- Hardened steel
- Heavy metal free steel
- Tungsten carbide



Bottom sieves of various sizes

Cutting Mill Data

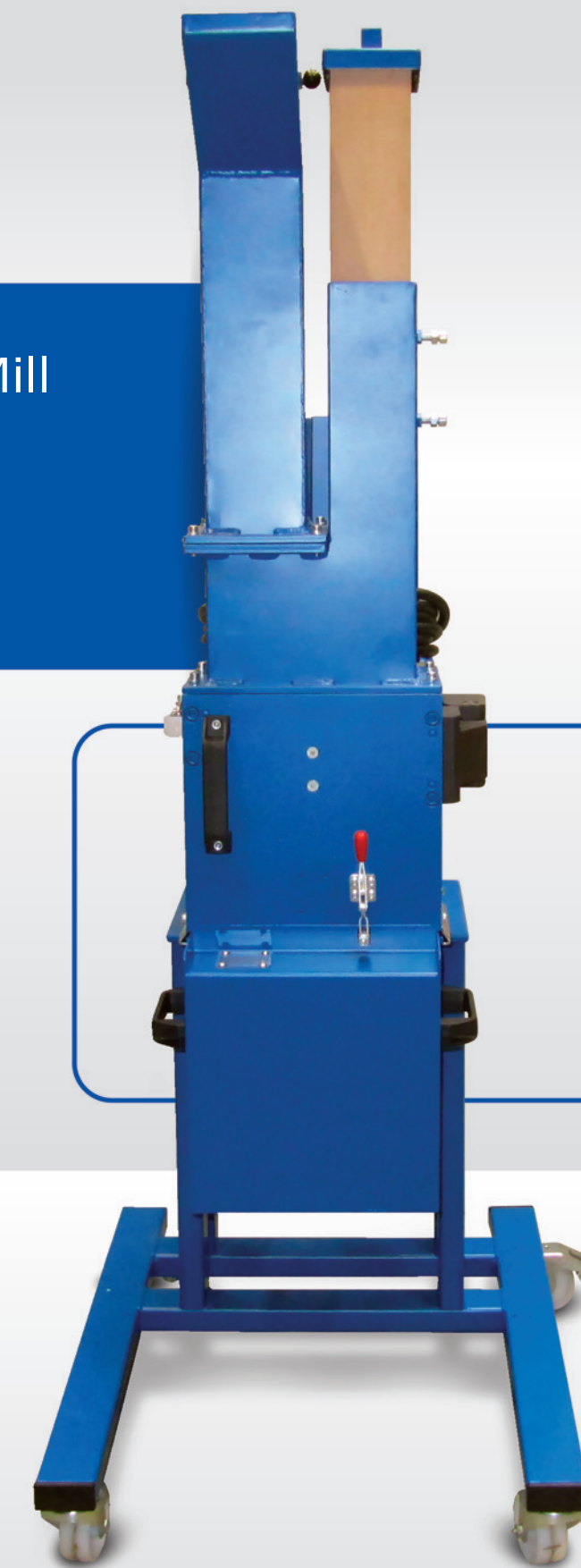
TECHNICAL DATA	
Electrical details	3x400V/50Hz
Speed	224 rpm
Motor Power	2.2 KW
TRANSPORT DATA	
gross dimensions wxdxh	app. 600 x 600 x 600 mm
net dimensions wxdxh	app. 390 x 485 x 375 mm
gross weight	190 kgs (only machine)
net weight	135 kgs (only machine)
FEATURES / PERFORMANCE	
working principle	Cutting
Feed size maximum	Up to 100 mm depending on sample
Quantity maximum	Up to 30 kgs per hour
Quantity minimum	50 gr.
Endfiness maximum	250 µm
Number of Rotor knives	9
Number of stator knives	2
Start / Stop function	By on/off button
Endfiness adjustment	By interchangeable bottom sieves
Cutting Chamber	130mm x 200mm
Rotor Diameter	150mm

Power Cutting Mill

CM 500

Superior Cutting Mill
engineered for
rapid reduction
of large particles

- Rapid reduction of large particles from 100mm to 1mm
- Quick and easy to clean
- Full range of bottom sieves
- The CM500 can handle samples of up to 30kg/h



Your local contact

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Cutting Mill with closed "EASY LOCK COVER"

Cutting Mill with opened "EASY LOCK COVER"

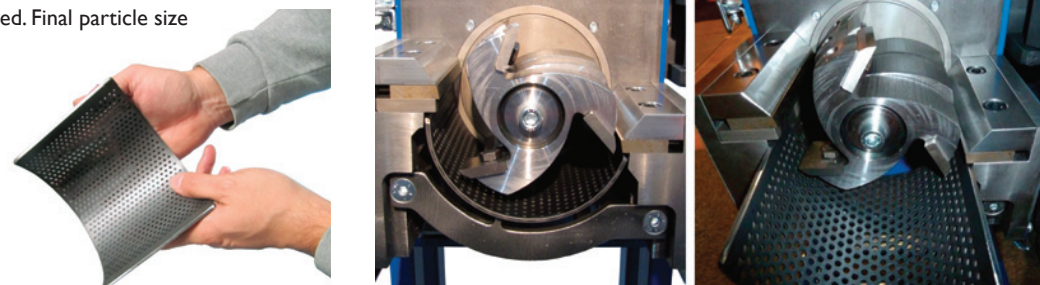
Superior Cutting Mill engineered to reproducibly grind volumes from 30g of up to 30 kg/h.

Method of operation

The Model CM500 Cutting Mill is used by Laboratories and processing Companies to granulate solid materials such as waste or wood and thermoplastics. The material to be processed falls into the cutting chamber of the CM500 via a guide chute and is shredded by cutting between rotating and fixed knives until it passes an attached sieve as ground product. The sieve extends over the lower half of the grinding chamber and is easily exchanged. Final particle size is determined by the selected sieve perforation aperture.

No other Cutting Mill is easier to clean than the CM 500 Cutting Mill. When the grinding process is finished the Front door and the Infeed Hopper can be opened sidewise and the milling chamber is fully accessible for quick and easy cleaning in order to perform a fast and systematic cleaning of the grinding tools.

- Sieve dimension (free open surface) must be large in order to obtain:
- a high throughput
 - a low heat creation
 - a homogeneous result.



Grinding

The Cutting Mill is the first machine in a sample prep. Laboratory of today when it comes to sample prep. of cuttable materials. This system is suitable for the coarse and fine grinding of any dry substance. Typically samples with a feed size of up to 100mm and a total batch of up to 30kgs per hour (volume depending on the characteristic of the samples) can be ground down to 1,00 mm or finer depending on the product.

High operator convenience and maximum safety

Maximum Grinding performance and maximum safety is important for Laarmann Mills. Due to two integrated safety switches (door and collector) the machine can only be started when the "Easy Lock Cover" is closed and the Sample collector is inserted properly.



Safety switch housing

Safety switch sample collector

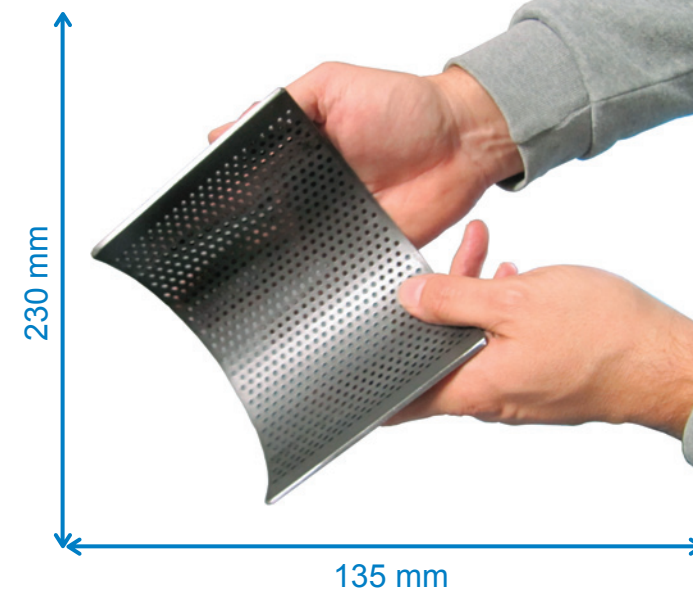
The Infeed Hopper as well as the housing of the CM500 is made from solid steel.

The ergonomic design of the machine and the positioning of the funnel and the starter box require a minimum space in the laboratory.

CM500 Benefits and applications

Bottom sieves

A full range of bottom sieves is available in various sizes

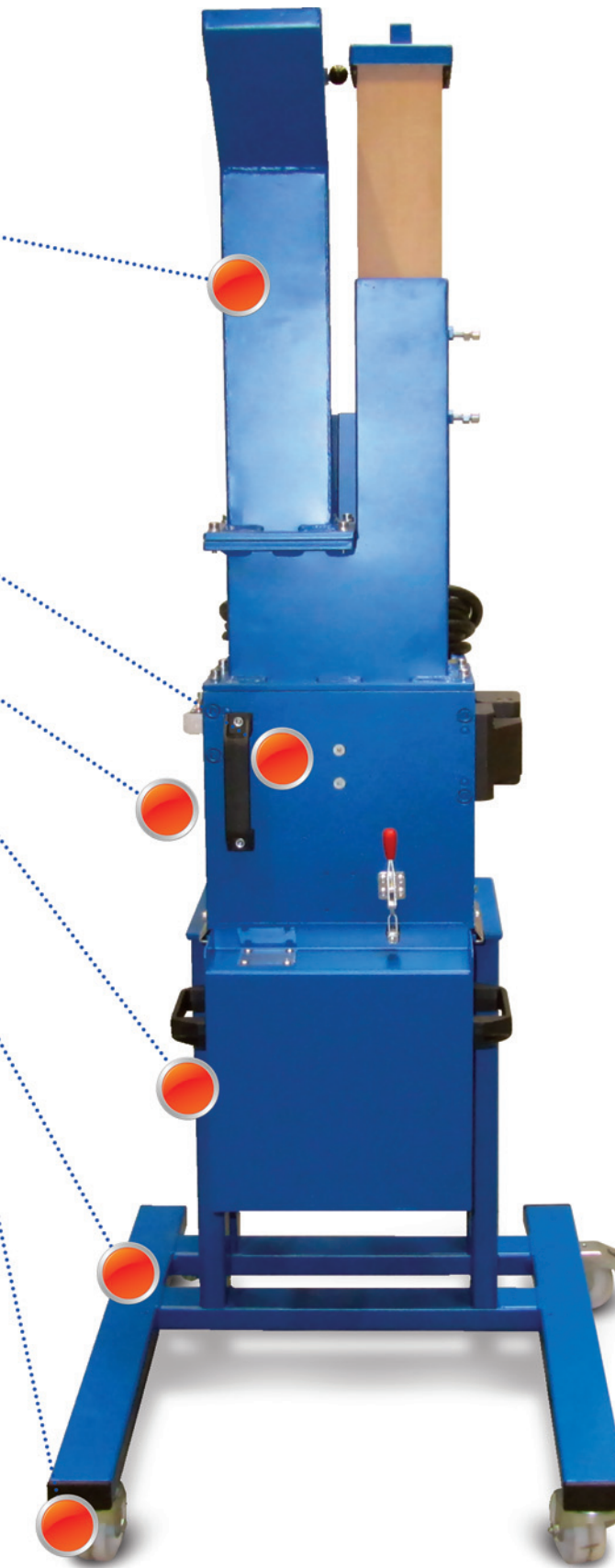


The size of the bottom sieve is important in order to decrease the heat creation during the grinding and to increase the capacity.

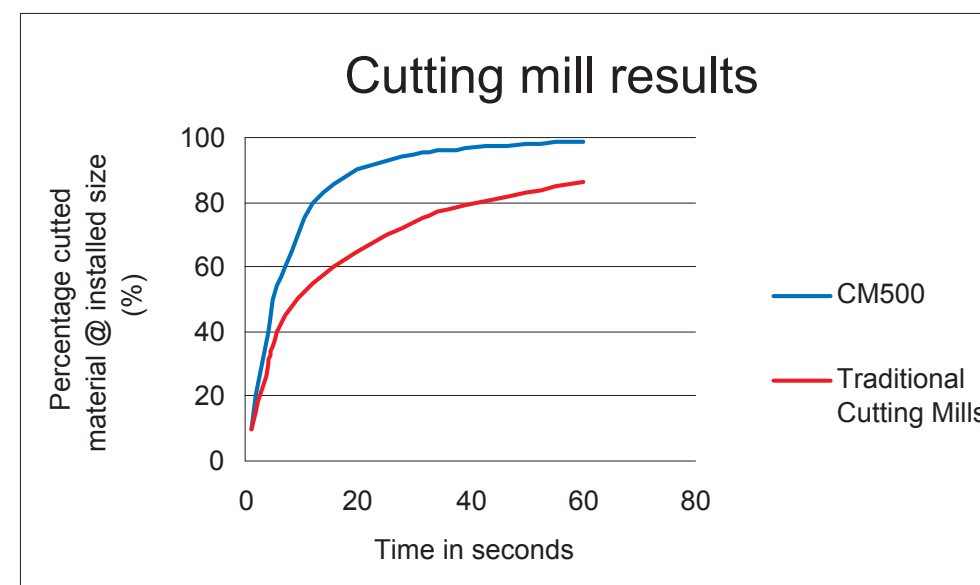
The sieve dimension is 230mm by 135mm which assures a large open surface which is essential for the cutting process to: obtain a high throughput (see graphics), have a low heat creation during the grinding process and receive a homogeneous result.

Performance features CM500

- Accoustic Noise Reduction In Feed Hopper made from Bondal. Bondal is a vibration damping composite material with a sandwich structure consisting of a viscoelastic core between two outer steel sheets. Various In Feed Hopper Types are available with wooden/teflon plunger
- Massive grinding chamber made from vibration reducing components
- Solid door with safety switch for easy access and cleaning
- Solid 30 Liters sample collector with two side handles and a plexi window for sample process observation
- High precision solid steel underframe
- Industrial Castor wheels lockable



CM500 has a small foot print of only 50cm



Graphic: Capacity of the Mill in relation to the size of the bottom sieve and the size of the rotor

Grinding before / after

Wood samples



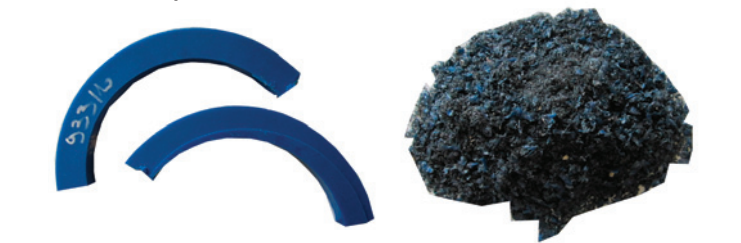
Different secondary fuels such as plastics, paper etc.



Salt such as Iron sulfate



Different plastics



CM500 options



30 litre sample collector

1 litre bottle attachment

Infeed Hopper for bulky products