



Product datasheet

Essa® LM201 Pulverising Mill

The user-friendly, top-of-the-range Essa® LM201 Pulverising Mill is a vibratory mill combining added strength and increased safety measures, with the power to rapidly prepare ore mineral for analysis.

Benefits

- The drive arrangement delivers more power to the grinding bowl and optimises motor life by not exposing it to direct vibrations while operating.
- Rapid preparation of up to 1.6 kg of mineral ore for analysis.
- Ability to be fitted with 800, 1000, or 2000 cc single disc-type grinding bowls, in addition to the standard-size ring and roller grinding bowls.
- Gooseneck clamp and platform insert seat can be easily unbolted and replaced if necessary.
- Platform assembly bolts increased in size for added strength and reliability.
- Sealed bearings throughout reduce maintenance time and cost.
- Removable cabinet panels allow for quick and easy maintenance access.
- Mill assembly can be removed, independent of the cabinet, transported and replaced simply by using a forklift or pallet truck.

FLS

Engineered for safe, reliable and long-term operation



Excellent capabilities

Featuring several design improvements, the premium Essa LM201 Pulverising Mill is a workhorse suited to high-volume mineral laboratories regularly preparing samples in the unique Essa single puck style of bowl, or to any laboratory remote from the specialised repair services typically required for integral vibratory motor-driven mills.

Differing from traditional mills, the Essa LM201 has the ability to be fitted with 800, 1000, or 2000 cc single disc-type grinding bowls, in addition to the standard size ring and roller grinding bowls. The mill was designed around CE requirements and retains the well-proven Essa LM2 mill assembly inside. There are design improvements such as a stronger cabinet, larger

Refined safety features

The LM201 has operator safety in mind with several improved safety features. There's an insulated steel cabinet which suppresses noise, while the operation of the Millmate – from either side of the machine – means less manual handling and continuous heavy lifting for the operator.

The pneumatic and electric controls are separated for extra safety, and the lid – which has an improved safety lock – is fitted with a gas strut to eliminate the possibility of slamming.

Efficiency & ease of maintenance

The Essa LM201 Pulverising Mill rapidly prepares (grinds) up to 1.6 kg of ore for analysis, with the extra power of a 2.2 kW motor powering the drive shaft arrangement. It can be operated 24 hours a day, seven days a week.

The mill, designed to meet CE compliance, has a steel casing and a number of features for improved maintenance access, such as the motor being moved to the left hand side away from the electrical box. Additionally, the back, left and front cabinet panels are fully removable, and the right hand panel can be removed to provide access to separate electrical and pneumatic controls.

Handles high volumes with reliability

Used for pulverising ores, minerals, metallurgical samples, ceramics, soils, aggregates, chemicals and similar particulate, the Essa LM201 Pulverising Mill's samples can be ground to 95% minus 75 micron in approximately three minutes, depending upon their mass and physical characteristics.

The Millmate, which is supplied as standard, has an improved design based on the trusted Essa LM5 Pulverising Mill, and is driven by a pneumatic cylinder rather than an airbag. Bolted directly onto the cabinet, the Millmate does not require a separate base plate so can be quickly relocated to either side of the cabinet.

Pneumatic bowl clamping means there's less manual handling thus increasing speed and productivity.

Heightened performance and user-friendly



1. Millmate reduces the manual handling of bowls in and out of the mill
2. Standard, stationary (non-vibrating) 2.2 kW electric motor - motor life is optimised as it is not subjected to direct vibration as occurs in traditional integral vibratory driven mills
3. Easily replaceable bolt-on gooseneck
4. Airbag clamp – fast and secure pneumatic bowl clamping lessens manual exertion
5. Heavy duty stainless steel mill platform with replaceable platform insert seat
6. The vibratory head of the mill is driven by a universal shaft powered by vee belts from the motor pulley – this delivers more power to the pulverising bowl
7. Drive pulley guarding

Specifications	
Feed size	<20 mm
Grinding capacity	40 g to 1600 g
Compatible grinding bowls	50 cc, 100 cc, 125 cc, 300 cc, 400 cc, 800 cc, 1000 cc, 2000 cc
Grinding bowl material	Standard Steel, Chrome Steel, Tungsten Carbide (125 cc only)
Timer settings	1 sec to 60 hr
Motor power	2.2 kW

Electrical requirements	380–415 V 50 Hz three phase AC or other power configurations as required
Compressed air requirements	Clean, dry air service required for pneumatic bowl clamping: 700 kPa supply with a minimum flow of 1 L per minute
Mill dimensions (W x D x H)	957 mm x 754mm x 1375 mm
Working mass	375 kg (mill), 25 kg (Millmate)
Shipping dimensions - mill	1060 mm x 830 mm x 1460 mm
Shipping mass - approximate	460 kg (mill). 44 kg (Millmate)

FLSmidth A/S
2500 Valby
Denmark
Tel. +45 3618 1000
info@flsmidth.com

www.flsmidth.com

FLSmidth Inc.
Salt Lake City Operations
Midvale, UT 84047
USA
Tel. +1 801 871 7000
info.sl.c@flsmidth.com

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