PRODUCT DATASHEET

Essa® LM2 Pulverising Mill

From the iconic Essa® LM series, the LM2 is a bulletproof, reliable vibratory mill powered to rapidly prepare high volumes of mineral ore samples for analysis.

Benefits

- Accepts bowls from 50 cc to 2000 cc for adaptability to a wide range of grinding applications and sample sizes whilst reducing contamination and sample losses.
- User-friendly pneumatic bowl clamping for increased efficiency and reduced manual handling.
- Easy to clean insulated cabinet with effective noise suppression measures.
- Stationary 2.2 kW motor and drive shaft arrangement provides a reliable drive system and increased motor life.
- Compact footprint for easy installation and efficient use of plant space.
- Lid safety switch and emergency stop button for improved safety.
- Mineral industry recognised standard used by most major commercial laboratories.
- Available in many variable voltage options.
- Detachable front access panel for simplified maintenance access.

Built for high productivity and low cost of ownership

Powerful and flexible operation

With the power of a 2.2 kW driven shaft, this long-term tested and proven workhorse pulverising system rapidly prepares up to 1.6 kg of material for analysis, making it well suited to:

- High volume mineral laboratories that regularly prepare large samples in the unique Essa single-disc style of bowl.
- Any laboratory remote from the specialised repair services that are typically required for integral vibratory motor-driven mills.

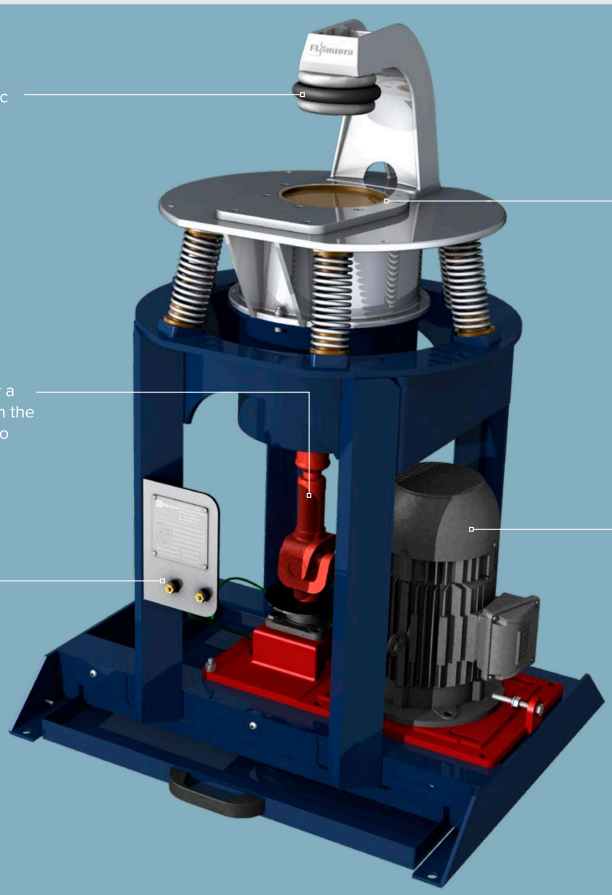
The ability to be fitted with a unique 800 cc, 1000 cc or 2000 cc single disc type grinding bowl, in addition to any standard size of ring and roller grinding bowl, makes it adaptable to a wide range of applications. Optional bowl materials include chrome steel, standard steel and tungsten carbide. The LM2 is used for pulverising ores, minerals, metallurgical samples, ceramics, soils, aggregates, chemicals and similar particulate. Typically, samples can be ground to 95% minus 75 micron in approximately three minutes, depending upon their mass and physical characteristics.

Unique safety features

The Essa LM2 has advanced design features for a user-friendly experience with improved safety.

- An external control box has motor overload, timer and pneumatic failure protection, preventing the bowl or lid from flying out in an uncontrolled manner.
- A lid locking safety switch makes the chamber inaccessible during operation. It incorporates a time delay to prevent the operator from accessing the mill platform until the machine has completely stopped.
- The mill will not start until the lid is completely closed.
- The machine can be stopped quickly with the easily accessible emergency stop button.
- The hard-wearing, stainless steel mill platform features improved accessibility and ergonomics.
- The optional MillMate pneumatic lifting device allows for reduced manual handling.

Long-term tested and proven pulverising system



Airbag clamp – fast and secure pneumatic bowl clamping lessens manual exertion

Heavy duty stainless steel mill platform with replaceable platform insert seat

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

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.

Easily accessible grease points

Can be fitted with a unique 800 cc, 1000 cc or 2000 cc single disc type grinding bowl, in addition to any standard size of ring and roller grinding bowl

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)	930 mm x 650 mm x 1210 mm
Working mass – mill	235 kg
Shipping dimensions – mill	1060 mm x 830 mm x 1460 mm
Shipping mass – mill	300 kg (approximate)

www.flsmidth.com/spa
automation@flsmidth.com

M 10-16 800-176-ENG V3