

About Shakers

There are three essential characteristics to look for in a good test sieve shaker.

- It should generate an effective sieving action for tests to reach an ultimate end point.
- The end point should be reached in the shortest possible time.
- The results achieved should be reproducible.

For consistent, reproducible results the correct sieving action is all important



At Endecotts we design and engineer our shakers around these key features. We ensure that the design performance provides optimum sieving action to the sieves to give rapid accurate results. Not only must the sample be vibrated vertically but it needs to rotate over the full surface of the sieve where it can be presented to the maximum number of apertures in the minimum time.

As manufacturers of test sieves we understand how sieves and shakers interrelate. This knowledge is built into every model. So too are the same skills and exacting engineering standards that have made Endecotts the finest test sieves in the world.

The new 2000 Series incorporates some of the latest features and technology whilst retaining all the essential features of earlier models.

Fast clamping, with consistent pressure.

Endecotts shakers are equipped with a unique clamping device enabling the clamp plate to be fitted in seconds. The device also ensures the clamp plate secures the sieves with consistent pressure providing positive clamping and reproducible results.



Long-life springs

Special non-metallic, non-corrodible, laminated leaf springs are used on Endecotts shakers to provide a long trouble free life.

Avoiding blocked apertures

A feature of the sieving action is the rapid vertical movement imparted by the shaker. The movement is continuously helping to clear the sieve apertures and avoid them blinding.



Certified to European Safety Standards



All the equipment in the new 2000 series carries the CE Mark showing it is designed and built to meet the electromagnetic compatibility and CE essential safety requirements of the EC legislation.

MINOR - Test Sieve Shaker

The low cost solution to fast, easy sieving

- Quiet operation
- Compact
- Portable
- Maintenance free
- Easy to use
- Affordable

LOW COST - BIG FEATURES



The Minor has been specially designed and manufactured to combine the advantage of low cost with the benefits of a well designed and engineered shaker incorporating many features usually found only on larger more expensive models.

It is ideal for the laboratory or plant since it is compact and genuinely portable (weighing only 17 kilos).

FEATURES	
Compact:	Only 250 mm diameter footprint Height: 180 mm excl. sieve stack
Lightweight:	Weighs only 17 kilos
Accommodates:	Up to 8 full height 200 mm (8") sieves Location for 100 mm sieves
Timer:	0 to 60 minute or continuous
Power:	Available in all standard voltages e.g. 230 V/50 Hz 100/60 Hz Other Voltages available

There are no moving mechanical parts in the Minor, consequently it is very quiet in operation and maintenance free. The sieve stack is held firmly in position between the location and clamp plates by an efficient, simple to use adjustable clamp system.

Simply set the 0 to 60 minute timer for a timed operation or select "I" for continuous sieving.

The vibrating action imparts a precise movement to the sieve stack ensuring efficient sieving and excellent repeatability.

The Minor is fitted with anti-vibration feet to ensure good stability.

The Powermatic

Heavy duty 450 mm test sieve shaker

Features include:

- Detachable control unit for convenient use
- Quick release clamps that ensure consistent clamping pressure
- Low noise level
- Accommodates sieves from 350 mm to 450 mm diameter
- Optimum sieving action for larger diameter sieves
- Fitted with anti-vibration feet
- 5 - 60 minute timer
- Unique braking action at end of cycle
- Two maintenance free sealed motors
- Immobilising safety lock

[▶ Product specification](#)





The high performance digital shaker

The new Octagon Digital is a high performance test sieve shaker offering excellent operator control for maximum efficiency.



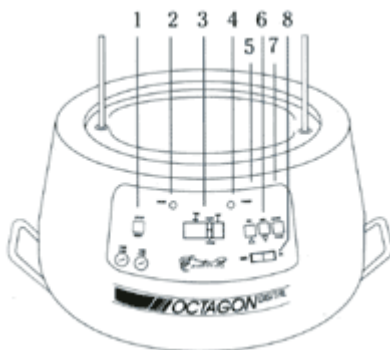
The Octagon is ideal for laboratory or on site use. It is robust, compact and sufficiently lightweight to be portable. A digital display makes the setting of the microprocessor controlled functions very straightforward.

The Octagon is powered by an electromagnetic drive which has no rotating parts to wear making it maintenance free and extremely quiet in operation. The vibratory action produced by the power unit moves the sample over the sieve in a unique way producing faster more efficient sieving, while the rapid vertical movements also help keep the apertures from blinding.

The Octagon's digital controller is used to set both the process time and amplitude setting while a further control enables the vibration to run continuously or intermittently. Intermittent vibration improves performance and helps to clear apertures that may have become blocked. The controller will also set the duration of both the on and off times of the vibration. The Octagon Digital offers total flexibility enabling optimum settings to be established for virtually any material under test.

Octagon shakers are fitted with a new and totally unique clamping device. It ensures sieves are held firmly without overtightening and allows them to be quickly removed and replaced. Non-metallic springs and anti-vibration mountings are fitted to isolate vibrations from work surfaces and reduce noise levels.

THE OCTAGON DIGITAL CONTROLS:



1. Start/reset button
2. Mains light
3. Separate LEDs display: Setting and running times, time or amplitude setting mode, intermittent vibration setting mode and amplitude level
4. Power light
5. Increment control
6. Decrement control
7. Mode switch
8. Continuous or intermittent vibration switch



Octagon 2000

Specification

Height including rods: 730 mm



//// EFL 2000

The ideal heavy duty shaker

The EFL 2000 series are rugged no nonsense shakers ideal for on site and heavy duty applications When heavy or large bulk samples need to be analysed it's important to use a shaker that is built for the job.

The EFL has been specially designed to operate with heavy samples without loss of performance. It is equipped with a dynamic power source which ensures the right vibration is imparted to the sieves and sample for fast, accurate and reproducible tests. The vertical movement is fixed to ensure the sample spends maximum time seeking apertures rather than being suspended in mid air. As with other Endecotts shakers the unique vibratory action also helps keep the apertures clear and free from blinding.

The EFL shaker is fitted with a new and totally unique clamping device. It ensures sieves are held firmly without overtightening and allows them to be quickly removed and replaced.

The timer can be pre-set for any duration up to 60 minutes. Non-corrodible, non metallic springs are fitted making the EFL maintenance free.

EFL 2000/1

Specification

Height including rods: 850 mm

Diameter: 510 mm (Handles: 2x35 mm)

Unpacked Weight: 83 kg

Packed Weight: 106 kg

Power Supply: 220/240 V 50 Hz 430VA,
100/110 V 60 Hz 375VA

Other voltages & frequencies on request.

Sieve capacity	200 mm	100 mm
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	8"	3"
Full height	150 mm	
Half Height		

	8	12
Full height	8	12
Half Height	18	24

EFL 2000/2

Specification
 Height including rods: 1000 mm
 Diameter: 510 mm (Handles: 2x35 mm)
 Unpacked Weight: 83 kg
 Packed Weight: 106 kg
 Power Supply: 220/240 V 50 Hz 430VA,
 100/110 V 60 Hz 375W

Other voltages & frequencies on request.

Sieve capacity	315 mm	250 mm	200 mm
	300 mm		8"
			150 mm
Full height	8	7	12
Half Height	18		24



EFL shakers are designed to comply with the latest European EC standards of safety

/// STAR 2000

For fast, accurate test sieve analysis



The Star 2000 is an extremely efficient way of conducting test sieve analysis. It is fast and accurate and provides detailed information about the particle size distribution of a sample in a clear, concise manner.

The Star 2000 is a dedicated "Sieve Test Analyser and Recorder". It incorporates a precision balance linked to a microprocessor and printer.

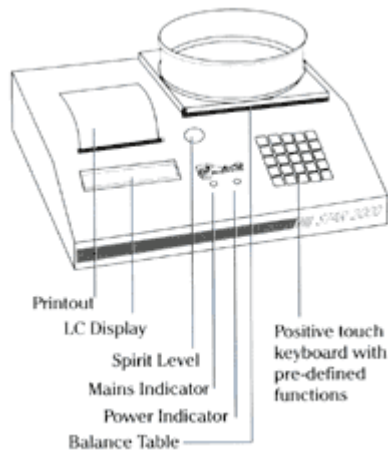
The Star accurately weighs and memorises the net weight of the sieves and receiver before sieving. It compares these with the gross weight after sieving and makes the necessary calculations to provide a detailed analysis of the particle size distribution .

Because the Star does all the necessary weighing and calculations and then stores the data and results it saves a great deal of time particularly in volume work.

But that's not all.

- ★ The test results can be stored for future reference as a master
- ★ It will compare current test results with up to five master tests.
- ★ It will store the individual sieve weights of up to ten sieve stacks.

★ It also operates as a stand along balance.



SPECIFICATION

The Star 2000 is a single portable unit weighing less than 16kg. It incorporates a balance sensitive to 0.1g.

Max sieves per test: 8 per set plus receiver

Max practical sieve dia: Up to 200mm or 8in

Height: 120mm

Depth: 415mm

Width: 440mm

Weight:(Unpacked) 15.5kg

Weight: (Packed) 18kg

Power Supply: 220/240V or 100/110V 50VA

Typical Sample Test Printout

Sample Ref No	_____			
Test Ref No	_____			
Time 08:32	Date 09:21:00			
Stack Reference	60			
Diameter Sieves	200mm			
Total sample size	541.9g			
<hr/>				
Sieve	Weigh Percentage			
Aperture	Wt	Retained	Cumulative	
(mm)	(g)		O-size	U-size
<hr/>				
0.800	11.9	2.2	2.2	97.8
0.600	60.1	11.1	13.3	86.7
0.400	108.4	20.0	33.3	66.7
0.200	156.6	28.9	62.2	37.8
0.100	96.5	17.8	80.0	20.0
Re'ver	108.4	20.0		
Comparison between 2 tests				
<hr/>				
Sieve	Percentage Retained			
Aperture	Master 3			dif
(mm)		Test		
<hr/>				
0.800		2.2	2.2	0.0
0.600		11.1	11.1	0.0
0.400		20.0	20.0	0.0
0.200		28.9	28.9	0.0
0.100		17.8	17.8	0.0
Re'ver		20.0	20.0	0.0

Fluid Bed Dryer

A bench top unit for the rapid drying of chemicals, foodstuffs and minerals prior to sieve analysis and other tests.

► [Product specification](#)

The FBD 2000 is a compact, portable dryer. Its powerful air delivery system makes drying a very fast operation. The fluidisation mixes and separates the particles minimising the risk of abrasion and the creation of lumps resulting in a truly representative sample.

The comprehensive set of controls makes it ideal for use in the laboratory on a wide selection of materials.

The FBD is simply the most efficient method of drying samples for analysis



Fast

Drying times range from a few seconds to minutes.



Efficient

High rates of heat transfer ensure faster and more homogeneous drying than oven, microwave or vacuum drying.



Versatile

Suitable for most granular and powder materials.



Reproducible results

Precise controls ensure uniform and reproducible results.



Easy to use

Manageable controls with straightforward settings.



Sonic Sifter

Fast accurate separation down to 5 micron

Outstanding value

- Simple to operate
- Unique action
- Very quick cycletime - typically less than one minute
- Virtually no attrition of sample
- Virtually no screen wear
- Very quiet operation



The Sonic Sifter is a precision instrument for the rapid separation of a wide variety of dry particles and powders in the fine micrometer range.

It will successfully separate samples down to 5 μm in as little as one minute, sometimes less, with consistent repeatability.

The sieving action, which can be varied for different densities and textures of material, is unique. A vertical column of air is made to oscillate through a sieve or set of sieves. The motion of the air alternately lifts the sample and then assists it through the sieve apertures. The oscillation amplitude is variable. A vertical mechanical pulse may also be applied to the sieves at regular intervals to break down any clustered particles and help eliminate any blinding of the apertures.

An important feature of the Sonic Sifter is that it causes very little attrition of the sample and virtually no screen wear.

Sieves for the Sonic Sifter			
Aperture	Standard Sieves	Special Sieves	Precision Sieves
	Fitted with st/st woven wire # Max six per column	Fitted with st/st woven wire # Double depth max three per column	Fitted with electroformed nickel plated Only one sieve per stack recommended.
150 μm	0	-	0
125 μm	0	-	0
106 μm	0	-	-
105 μm	-	-	0
100 μm	-	-	0

95 µm	-	-	0
90 µm	0	-	0
85 µm	-	-	0
80 µm	-	-	0
75 µm	0	-	0
70 µm	-	-	0
65 µm	-	-	0
63 µm	0	-	-
60 µm	-	-	0
55 µm	-	-	0
53 µm	0	-	-
50 µm	-	-	0
45 µm	0	-	-
40 µm	-	-	0
38 µm	0	-	-
35 µm	-	-	0
32 µm	-	0	-
30 µm	-	-	0
25 µm	-	0	0
20 µm	-	0	0
15 µm	-	-	0
10 µm	-	-	0
5 µm	-	-	0
Other aperture sizes up to 5.60 mm are available on request.			

SPECIFICATIONS
 Height: 585mm
 Height with door open: 734 mm
 Width: 254 mm
 Depth: 302 mm
 Unpacked Weight: 15.4 kg
 Packed Weight: 29 kg
 Power Supply: 230 V 50 Hz 100VA
 115 V 60 Hz 50VA
 Other voltages on request

Sieve stacks must be made up to the height of six single sieves. Where less sieves or double sieves are used, spacers are provided.

Ultrasonic Cleaner



Sieves should be cleaned after each analysis and replaced in their storage containers. Most of the "near mesh size" particles which block the apertures can usually be removed by inverting the sieve and gently tapping the frame. If this fails, the underside of the mesh may be stroked gently with an Endecotts sieve brush specially designed for use on test sieves with apertures over 1mm.

For sieves with smaller apertures and almost any other application the most efficacious method is the use of an Ultrasonic cleaner.

Endecotts Ultrasonic cleaner has been specially designed for cleaning test sieves and is also suitable for general laboratory use. It is easy to operate and extremely efficient to use.

The all stainless steel construction and digital control panel are ergonomically designed to give a long trouble free life. Endecotts

Ultrasonic cleaner is environmentally friendly, operating on 10.5 litres of organic solvent free water. It is equipped with 4 high frequency 30 - 40 KHz transducers, rear mounted for optimum performance. A sieve up to 200mm or 8" in diameter is placed on a special sieve holder. This presents the sieve at the ideal angle to the transducers as well as allowing contaminants to fall free of the sieve onto a catch tray. Simply emptying the tray reduces the need to change the fluid. The control panel enables the user to set the following parameters:

Fluid temperature: Off/On with range of 25-80°C

Cycle Time: 0-59 minutes

Ultrasonics: Off/On

SPECIFICATIONS

Compact: Only 340x270mm footprint

Height: 350mm

Weight: 10 kilos

Timer: 0-59 minutes

Power Consumption:

200 VAA RMS (Ultrasonic) (250VA Heaters)

Power output into fluid: 20 Watts/Litre

Power: 230/50HZ

Other voltages available

Cyclone Air Sizer

Simply the most efficient method of analysis for fine particles.

Features include:

- Integral bench top unit (no vacuum cleaner or hose needed).
- Fluidisation by a jet of air to separate the sample.
- Uses *Standard 200mm Test Sieves*.
- Logical setting and control operation.
- Variable speed control
- Constant or adjustable time setting.
- Optimum technique for separation of fine powders.
- Ideal for electrostatic materials.
- Efficient & accurate sieving analysis.
- Sample fines discharged by cyclonic action into collection drawer.

