Endecotts

Particle Analysis Equipment of Outstanding Quality

Manufacturing the world's finest particle analysis equipment

For accurate, dependable sample analysis you couldn't specify a better test sieve than Endecotts. It's the perfect measuring instrument.

For accurate dependable results you can't buy a better test sieve than Endecotts. The combination of its many features and the quality of manufacture make it the perfect measuring instrument.

Each sieve is manufactured under the most stringent Quality Assurance procedures using the finest materials. The wire cloth is checked throughout manufacture either by optical projection or highly sophisticated computer scanning techniques. Precision measurement of apertures and the sieve frame dimensions ensures that our exacting standards are met and only then do we issue the Endecotts Certificate of Compliance.

The company has an enviable reputation as manufacturers of the world's finest test sieves. Skill, experience and modern production techniques help to ensure the finished product not only looks and feels right from the moment you open the box, but provides accuracy second to none.

Endecotts are currently the only test sieve manufacturer to be accredited with the BSI Kitemark - a proud position held since 1954 - confirming compliance of our sieves to BS 410-1 & 2 and ISO 3310-1 & 2). This requires the company to commit itself to regular manufacturing quality audits and independent test and calibration of sample products.

The same outstanding quality in sampling equipment

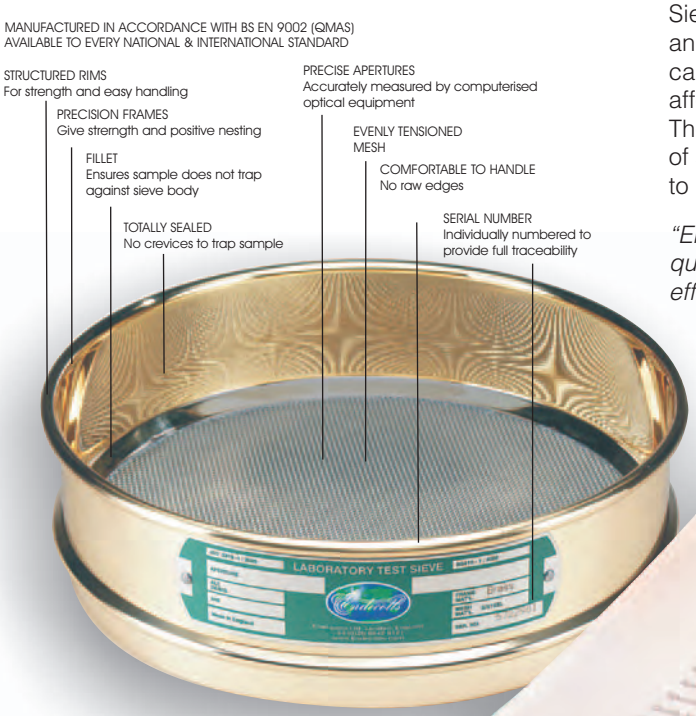
Endecotts have developed a wide range of shakers suitable for all types of sieving and samples. Careful consideration has gone into the design to ensure the correct movement of the sample across the sieve apertures.

The same stringent quality control procedures that go into the manufacture of our test sieves also go into the manufacture of the sieve shakers and associated equipment you'll find in this catalogue.

Endecotts

PARTICLE ANALYSIS EQUIPMENT
OF OUTSTANDING QUALITY

What to look for in a precision test sieve



Sieves can often look alike, but take a closer look and you'll find they are not all the same. In fact there can be some very important differences that may affect the results, performance or life of the sieve. The illustration shows some of the important features of an Endecotts sieve and gives a good idea of what to look for whenever you specify or reorder.

"Endecotts test sieves are of the highest quality and are designed for accurate and efficient particle analysis"

CERTIFICATE OF COMPLIANCE
Supplied with every test sieve

Endecotts test sieves can be supplied in a variety of different inspection levels depending on the information requirements specified.

Certified Test Sieves

All test sieves manufactured to a National or International Specification are supplied with a Certificate of Compliance and individually serial numbered to provide full traceability.

Inspected Test Sieves

Test sieves inspected in accordance with the procedures listed in clause 5.2 of ISO 3310: BS:410. Each sieve is supplied with an Inspection Certificate stating separately the values for the average aperture in both directions of the sieve medium.

Calibrated Test Sieves

Test sieves inspected and calibrated in accordance with procedures listed in clause 5.2 of ISO 3310/BS:410-1:2000. Each sieve is supplied with a Calibration Certificate recording the number of aperture and wire diameters measured, the average aperture size and standard deviation separately for the warp and weft direction. The type of weave will also be stated. Also available for perforated plate.

Matched Sieves

Two or more test sieves each fitted with a sieving medium having similar aperture characteristics. Each is supplied with a Calibration Certificate marked "Matched with sieve serial No....

Mid Point Sieves

Test sieves with the sieving medium specification tolerances reduced by 30%. Each sieve is supplied with an Inspection Certificate giving the range of tolerances and measurements taken. Also available with a calibration certificate.

Re-Inspection Service

Used sieves are examined and inspected in accordance with the appropriate specification. Complying sieves are issued with a Compliance, Inspection or Calibration Certificate as requested by the customer.

See Calibration Samples page 5

A precision instrument makes the analysis accurate

The widest range of test sie

made to every National and International Standard

Woven Wire Mesh Sieves

Endecotts woven wire mesh sieves are the most widely used test sieves for all types of laboratory sampling and particle size analysis. They are made with only the highest quality materials and are available in diameter sizes of 38,100, 150, 200, 250, 300, 315, 350 400, and 450mm or in 3, 8, 12 or 18 inches.

They can be supplied with aperture sizes ranging from 125mm down to 20 microns in full or half height versions. All sieves are available in frame materials of either brass or stainless steel.

Perforated Plate

Endecotts manufacture a wide range of perforated plate sieves for the many industries that require them. These are available in diameter sizes of 200, 300, 315, 350, 400 and 450mm. Aperture sizes range from 125mm to 4mm in square hole and 125mm to 1mm in round hole.
Perforated plate sieves can be supplied in frame materials of brass or stainless steel, and all are manufactured to the highest engineering standards to ensure quality and accuracy.

Woven wire sieves and perforated plate sieves are available to every national and international standard. Other materials and sizes can be produced to order.

Half Height Sieves

Where smaller quantities of sample are being analysed half height sieves are often used. These are available in diameters of 100, 200 or 300mm and 8 or 12 inches with the same range of woven wire mesh or perforated plate sieving mediums.

Microplate Sieves

For very fine particle analysis Endecotts produce a range of microplate sieves made from electro-formed nickel plate in stainless steel frames of 100mm and 20mm diameter. Tolerances of 2 . Available with self clearing apertures sizes from 500 to 5 microns.

Wet Washing Sieves

Extremely useful sieves where samples need to be separated with the help of wet washing. Available in 8 inch diameter by 4 or 8 inches deep or their metric equivalent with brass or stainless steel frames. A complete range of aperture sizes with optional support medium for fine mesh.

Extra Depth Sieves

Extensively used by the construction and cement industries. These extra depth sieves are available with a diameter size of 450mm and a depth of 300mm. Made from stainless steel with woven wire mesh or perforated plate sieving mediums.

eves available

Sieves

Grid Sieves

For testing the flakiness of aggregates. These 300mm square sieves are fully compliant to EN 933-3:1997. They are manufactured entirely from stainless steel yet are lightweight and durable. Available in slot widths from 2.5mm to 40mm.

Air-Jet Sieves

These sieves are specifically designed for use with air jet systems. They are available in 200mm diameter brass or stainless steel frames and an extensive range of aperture sizes.

Grain Sieves

As used by Government Intervention Boards and similar organisations within the EC for testing grain, cereals and coffee. Available in 200mm diameter brass frames with plated mild steel slotted plate and a range of aperture sizes certified to ISO 5223.

Lids & Receivers

Lids, receiving pans and intermediate receiving pans are available in brass, or stainless steel with the following diameters: 38, 100, 150, 200, 250, 300, 315, 400 and 450mm as well as 3, 8, 12 or 18 inches. Half height receivers are also available.

Pocket Sieve Set

High quality pocket sieves are very useful for testing small samples either in the laboratory or on site. The brass sieve has a range of interchangeable mesh discs of different aperture sizes. It is supplied complete with with sieve brush and belt pouch.

they're the perfect measuring instrument

SPECIFICATIONS

A table of the most widely used specifications

International Test Sieve Series ISO 3310 — British StandardSieve Series BS410

Wire Mesh Series
ISO 3310-1
BS410-1
Nominal Aperture Sizes
mm
125.00
112.00
106.00
100.00
90.00
80.00
75.00
71.00
63.00
56.00
53.00
50.00
45.00
40.00
37.50
35.50
31.50
28.00
26.50
25.00
22.40
20.00
19.00
18.00
16.00
14.00
13.20
12.50
11.20
10.00
9.50
9.00
8.00
7.10
6.70
6.30
5.60
5.00
4.75
4.50
4.00
3.55
3.35
3.15
2.80
2.50
2.36
2.24
2.00
1.80
1.70
1.60
1.40
1.25
1.18
1.12
1.00

Wire Mesh Series
ISO 3310-1
BS410-1
Nominal Aperture Sizes
m
900
850
800
710
630
600
560
500
450
425
400
355
315
300
280
250
224
212
200
180
160
150
140
125
112
106
100
90
80
75
71
63
56
53
50
45
40
38
36
32
25
20

Perforated Plate Series
ISO 3310-2
BS410-2
Nominal Aperture Sizes
Round & Square Holes
mm
125.00
112.00
106.00
100.00
90.00
80.00
75.00
71.00
63.00
56.00
53.00
50.00
45.00
40.00
37.50
35.50
31.50
28.00
26.50
25.00
22.40
20.00
19.00
18.00
16.00
14.00
13.20
12.50
11.20
10.00
9.50
9.00
8.00
7.10
6.70
6.30
5.60
5.00
4.75
4.50
4.00
Round Hole Only
3.55
3.35
3.15
2.80
2.50
2.36
2.24
2.00
1.80
1.70
1.60
1.40
1.25
1.18
1.12
1.00

Sieve Diameters and Frame Materials

Diameter	Height	Depth to Mesh or Plate	Frame Material
38	Full	19mm	Br or SS
100	Full	40mm	Br or SS
100	Half	20mm	Br or SS
150	Full	38mm	SS
200	Full	50mm	Br or SS
200	Half	25mm	Br or SS
250	Full	60mm	SS

Diameter	Height	Depth to Mesh or Plate	Frame Material
300	Full	75mm	Br or SS
300	Half	40mm	Br or SS
315	Full	75mm	SS
350	Full	60mm	Br or SS
400	Full	65mm	Br or SS
450	Full	100mm	SS

Br - Brass SS - Stainless Steel

Other materials and sizes available on request.

American Standard Sieve Series ASTM E11

Wire Mesh Series	
Designation	
Standard	Alternative
mm	
125.00	5 in
106.00	4.24 in
100.00	4 in
90.00	3½ in
75.00	3 in
63.00	2½ in
53.00	2.12 in
50.00	2 in
45.00	1¾ in
37.50	1½ in
31.50	1¼ in
26.50	1.06 in
25.00	1 in
22.40	⅞ in
19.00	¾ in
16.00	⅝ in
13.20	0.530 in
12.50	½ in
11.20	7/16 in
9.50	⅜ in
8.00	5/16 in
6.70	0.265 in
6.30	¼ in
5.60	No. 3½
4.75	No. 4
4.00	No. 5
3.35	No. 6
2.80	No. 7
2.36	No. 8
2.00	No. 10
1.70	No. 12
1.40	No. 14
1.18	No. 16
1.00	No. 18
m	
850	No. 20
710	No. 25
600	No. 30
500	No. 35
425	No. 40
355	No. 45
300	No. 50
250	No. 60
212	No. 70
180	No. 80
150	No. 100
125	No. 120
106	No. 140
90	No. 170
75	No. 200
63	No. 230
53	No. 270
45	No. 325
38	No. 400
32	No. 450
25	No. 500
20	No. 635

Sieve Diameters and Frame Materials

Diameter	Height	Depth to Mesh or Plate	Frame Material
3 in	Full	1¼ in	Br or SS
8 in	Full	2 in	Br or SS
8 in	Half	1 in	Br or SS
12 in	Full	3 in	Br or SS
12 in	Half	1½	Br or SS
18 in	Full	3½ in	SS

CALIBRATION SAMPLES

For accurate test sieve calibration

What are calibration samples?

Endecotts calibration samples are microspheres formed of soda-lime glass that range from 3.35mm down to 20 micron sizes. Because of the precise nature and extent of the range of spheres, samples can be supplied to enable the accurate calibration of individual sieves.

Being spherical the use of calibration samples gives extremely accurate results.

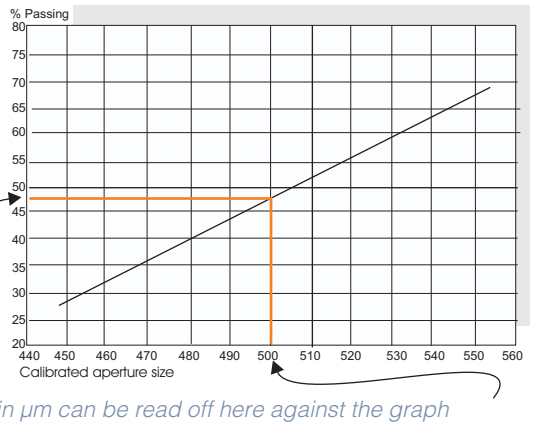
Endecotts glass calibration samples will enable you to calibrate your test sieves to an accuracy of approx 1µm. Because the microspheres pass over virtually the total surface of the sieve more apertures are examined than with any other method, making it one of the most accurate methods of sieve calibration available.

Endecotts glass microspheres are calibrated by Whitehouse Scientific, who are recognised as one of the leading particle analysis laboratories by the BCR, and by 20 other leading European particle size analysis laboratories.

Accurately calibrate test sieves in a matter of minutes

Select the calibration sample size that matches the aperture size of the sieve.

1. Place the 'single shot' sample on the sieve under test and shake for 2 minutes.
2. Weigh the sample again and calculate the percentage passing through the sieve.
3. Simply read off the percentage passing along a graph like this supplied with every sample...



...and the mean average aperture size in µm can be read off here against the graph

Endecotts glass calibration samples are supplied in 'Single Shot'- 'Single Use' - 'Single Test' vials

Sample No.	For Sieve Aperture Size	Nominal Sample Quantity
ZSICSA-020	20 Micron	5 x 0.8 grms
ZSICSA-025	25 Micron	5 x 0.8 grms
ZSICSA-032	32 Micron	5 x1.0 grms
ZSICSA-038	38 Micron	5 x1.0 grms
ZSICSA-045	45 Micron	5 x1.0 grms
ZSICSA-053	53 Micron	5 x1.0 grms
ZSICSA-063	63 Micron	5 x1.0 grms
ZSICSA-075	75 Micron	5 x1.0 grms
ZSICSA-090	90 Micron	5 x1.0 grms
ZSICSA-106	106 Micron	5 x1.0 grms

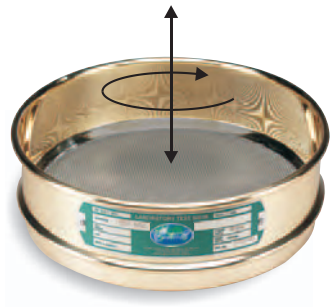
Sample No.	For Sieve Aperture Size	Nominal Sample Quantity
ZSICSA-125	125 Micron	5 x 1.0 grms
ZSICSA-150	150 Micron	5 x 1.5 grms
ZSICSA-180	180 Micron	5 x 1.5 grms
ZSICSA-212	212 Micron	5 x 1.5 grms
ZSICSA-250	250 Micron	5 x 2.5 grms
ZSICSA-300	300 Micron	5 x 2.5 grms
ZSICSA-355	355 Micron	5 x 2.5 grms
ZSICSA-425	425 Micron	5 x 2.5 grms
ZSICSA-500	500 Micron	5 x 2.5 grms
ZSICSA-600	600 Micron	5 x 2.5 grms

Sample No.	For Sieve Aperture Size	Nominal Sample Quantity
ZSICSA-710	710 Micron	5 x 2.5 grms
ZSICSA-850	850 Micron	5 x 3.0 grms
ZSICSA-1.00	1.00 mm	3 x 7.0 grms
ZSICSA-1.18	1.18 mm	3 X 10.0 grms
ZSICSA-1.40	1.40 mm	3 x 15.0 grms
ZSICSA-1.70	1.70 mm	3 x 15.0 grms
ZSICSA-2.00	2.00 mm	2 x 20.0 grms
ZSICSA-2.36	2.36 mm	2 x 20.0 grms
ZSICSA-2.80	2.80 mm	2 x 25.0 grms
ZSICSA-3.35	3.35 mm	2 x 25.0 grms

Each individual sample is supplied with a *Certificate of Calibration*

What makes a good test sieve shaker

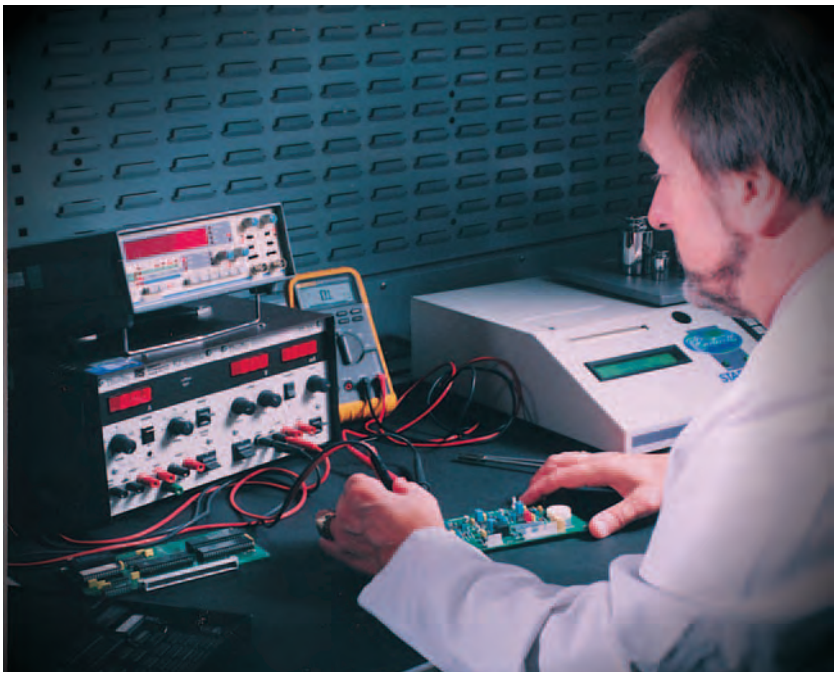
For consistent, reproducible results the correct sieving action is all important



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.

At Endecotts we design and engineer our shakers around these key features. We ensure that the design performance provides the 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.



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 apertures and avoid them blinding.

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.

The Minor is fitted with poly fibre straps. These enable the sieves to be quickly and firmly clamped while the whole unit can be packed away in a space less than 200mm in height.

Certified to European Safety Standards
All Endecotts machines carry the CE Mark showing they are designed and built to meet the electromagnetic compatibility and essential safety requirements of the EC legislation.

MINOR

The low cost solution to fast, easy sieving

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

The Minor has been specially designed and manufactured to combine the advantages 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).

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.

SPECIFICATIONS

Compact: Only 250mm diameter footprint
Height: 180mm excl. sieve stack
Lightweight: Weighs only 17kilos
Accommodates: Up to 8 full height 200mm (8”) sieves Location for 100mm sieves
Timer: 0 to 60min or continuous
Power: 230V 50Hz 80VA
115V 60Hz 60VA
Other voltages on request

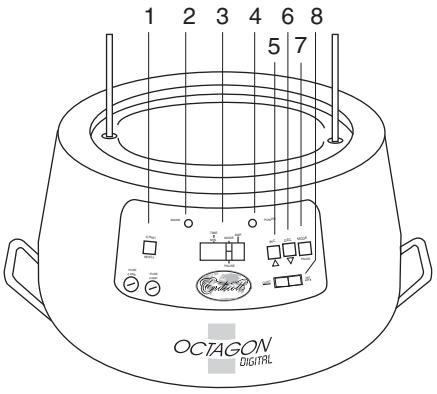
OCTAGON DIGITAL

The high performance digital shaker

- Total operator control
- Easily set to maximum efficiency
- Non blinding sieving action
- Compact
- Portable
- No mechanical moving parts
- Precise sieve clamping

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

SPECIFICATIONS

Height excluding rods: 210mm
Diameter: 410mm(Handles: 2x35mm)
Unpacked Weight: 43kg
Packed Weight: 65kg
Power Supply: 230V 50Hz 300VA
115V 60Hz 300VA
Other voltages on request.
Accommodates up to 8 full height and 18 half height 200mm/8" diameter sieves plus lid and receiver.

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 to keep the apertures from blinding.

The Octagon's digital controller is used to set both the process time and the 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.

WET SIEVING KIT

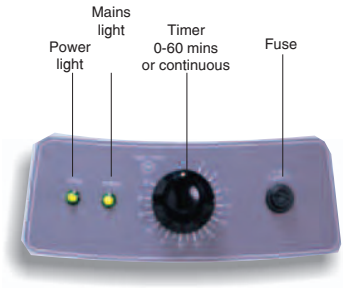
For tests that require wet sieving Endecotts offer a conversion kit suitable for the Octagon and EFL shakers. The kit includes top clamping plate with a Perspex cover and spray rose, watertight seals and a stainless steel receiver with drainage spout.

EFL 2000

The ideal heavy duty shaker

The EFL 2000 series are rugged no nonsense shakers ideal for on site and heavy duty applications.

- Simple to operate
- Quick release clamps that ensure consistent clamping pressure
- Low noise level
- Accommodates sieves from 200mm to 315mm diameter
- Fitted with anti-vibration feet
- 5 - 60 minute timer or continuous setting



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 the loss of performance. It is equipped with a dynamic power source that ensures the right vibration is imparted to the sieves and sample for fast, accurate and reproducible tests. The vertical movement is fixed ensuring the sample spends maximum time seeking apertures rather than being suspended in mid air. The unique vibratory action also helps keep the apertures clear and free from blinding.
The EFL shaker is fitted with a unique clamping device that ensures sieves are held firmly without over-tightening and allows them to be quickly removed and replaced.
The timer can be pre-set for any duration up to 60 minutes or continuous. Non-corrodible, non-metallic springs are fitted making the EFL maintenance free.

SPECIFICATIONS

Diameter: 510mm (Handles 2x35mm)
Unpacked Weight: 83kg
Packed Weight: 106kg
Power Supply: 230V 50Hz 485VA
115V 60Hz 390VA
Other voltages on request

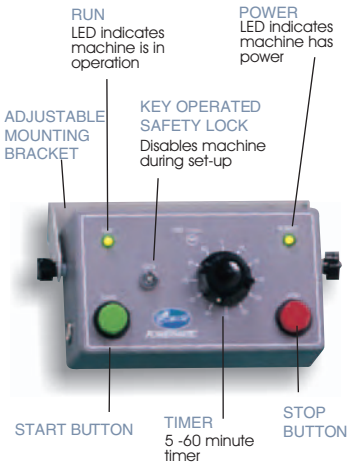
For 200mm diameter sieves
Model EFL2000/1
Height excluding rods: 330mm
Accommodates lid and receiver and up to 8 full height or 18 half height sieves of 200mm/8".

For 250mm and 300mm/12" sieves
Model EFL2000/2
Height excluding rods 330mm
Accommodates lid and receiver and up to 7 full height or 12 half height sieves of 300mm/12"; 7 full height sieves of 250mm; or 12 full height, 24 half height sieves of 200mm/8".

POWERMATIC

Heavy duty 450mm test sieve shaker

- Detachable control unit for convenient use
- Quick release clamps that ensure consistent clamping pressure
- Low noise level
- Accommodates sieves from 300mm to 450mm diameter
- Optimum sieving action for larger diameter sieves
- Anti-vibration feet
- 5 - 60 minute timer
- Unique braking action
- Two maintenance free sealed motors
- Immobilising safety lock



SPECIFICATIONS

Height excluding rods: 385mm
Width: 580mm
Depth: 580mm
Unpacked Weight: 91.5kg
Packed Weight: 118kg
Power Supply: 230V 50Hz 480VA
115V 60Hz 280VA
Other voltages on request
Accommodates the following sieve diameters: 300mm, 315mm, 350mm, 400mm, 450mm & 18in and a sieve stack up to 610mm. Long clamp rods will accommodate sieve stacks up to 910mm.

The Powermatic is a powerful test sieve shaker specially designed to handle larger sieves up to 450mm/18" diameter.

It overcomes the problems normally encountered with lighter shakers where the sheer weight of the sample and sieves cause both performance and results to be erratic.

The Powermatic is fitted with two powerful motors offset at strategic angles transmitting exactly the right vibration frequency and movement to the sample for optimum performance. At the end of the cycle the motors are braked to produce a gentle stopping action.

The unique design and construction of the shaker ensures all the energy is transmitted to the sieves and sample. The design also enables the machine to be virtually silent in operation while the tough construction makes it suitable for most environments.

The Powermatic is designed to operate with a sieve stack up to 610mm high or using long rods sieve stacks up to 910mm. The location plate is fully adaptable to a range of sieve diameters.

The Powermatic is fitted with a low voltage removable control unit and extension lead enabling it to be controlled from a bench, wall or other convenient location. For safety a key operated isolator is fitted to the Powermatic to immobilise it during loading or unloading sieves.

SCREENING SIEVES

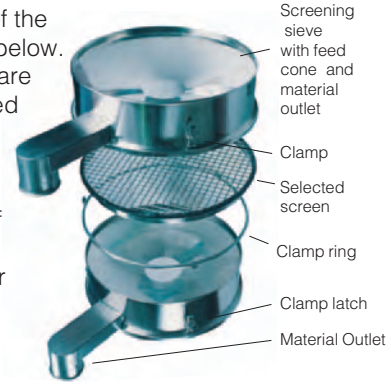
Specially designed for use with the Powermatic for small scale screening operations

Filling the gap between test sieving and screening are these extremely versatile screening sieves designed for small scale continuous screening operations.

Screening sieves are available in 400mm and 450mm diameter sizes. The aperture size of each screen can be selected from a wide choice and is inserted into the base of the sieve and clamped in place by the clamp ring.

The screening sieve then nests with the one below and can be rotated to give the most convenient outlet position.

The Powermatic imparts an outward spiral movement to the material requiring separation. In its travel from the centre to the outlet, undersize material falls through to the cone and the centre of the screen below. Outlets are equipped with a rim for positive fitting of bags, tubes or chutes.



SONIC SIFTER

Fast accurate separation down to 5 micron

- Outstanding value
- Simple to operate
- Unique action
- Very quick cycle time - typically less than one minute
- Virtually no attrition of sample
- Virtually no screen wear
- Very quiet operation
- 10 program memory
  (Stores 10 sieving operations)
- Integral selectable tapping operations
- Microprocessor control

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

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

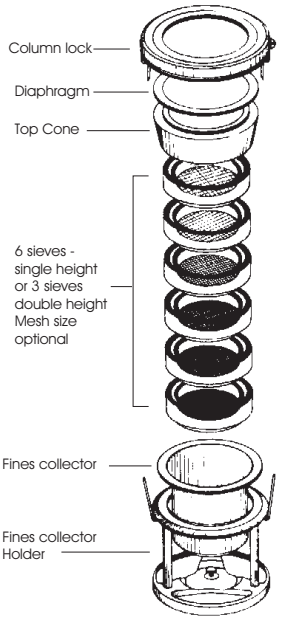
The sieving action, which can be varied for different densities and textures of material, is unique. A vertical column of air is made to oscillate through a sieve or set of sieves. The motion of the air alternately lifts the sample and then assists it through the sieve apertures. The oscillation amplitude is variable.

Selectable vertical or alternating vertical and horizontal tapping actions help clear blinding of near-size particles or samples which tend to agglomerate.

The Sonic Sifter is recommended for fine powder sample applications which can be difficult or where fine aperture sieving is required.

Sieves for the Sonic Sifter

Aperture	Standard Sieves	Special Sieves	Precision Sieves
	Fitted with stainless steel woven wire mesh Max six per column	Fitted with stainless steel woven wire mesh Double depth max three per column	Fitted with electroformed nickel plate Only one sieve per stack recommended
150µm	O	-	O
125µm	O	-	O
106µm	O	-	-
105µm	-	-	O
100µm	-	-	O
95µm	-	-	O
90µm	O	-	O
85µm	-	-	O
80µm	-	-	O
75µm	O	-	O
70µm	-	-	O
65µm	-	-	O
63µm	O	-	-
60µm	-	-	O
55µm	-	-	O
53µm	O	-	-
50µm	-	-	O
45µm	O	-	-
40µm	-	-	O
38µm	O	-	-
35µm	-	-	O
32µm	-	O	-
30µm	-	-	O
25µm	-	O	O
20µm	-	O	O
15µm	-	-	O
10µm	-	-	O
5µm	-	-	O



SPECIFICATIONS

Height: 508m
Height with door open: 623mm
Width: 254mm
Depth: 254mm
Unpacked Weight: 16.8 Kg
Packed Weight: 28kg
Power Supply: 230V 50Hz 70VA
115V 60Hz 90VA
Other voltages on request

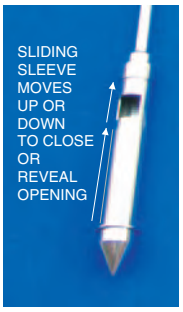
Sieve stacks must be made up to the height of six single sieves. Where less sieves or double sieves are used, spacers are provided.

SAMPLING EQUIPMENT

For the collection of sample for analysis

Sleeve Sampler

Ideal for taking samples of free flowing powders and granules from depths up 2,500mm. Inserting the sampler into the bulk forces sleeve up sample chamber to close opening. At required depth pull up the sampler and the sleeve slides down allowing sample to fall into chamber. Produced in high quality 316 stainless steel, in two heavy duty rod/handle lengths (1000mm and 1500mm). 1 metre extension tube also available. Screw on sample chambers available in 100, 150 and 200ml sizes.



Tip Sampler

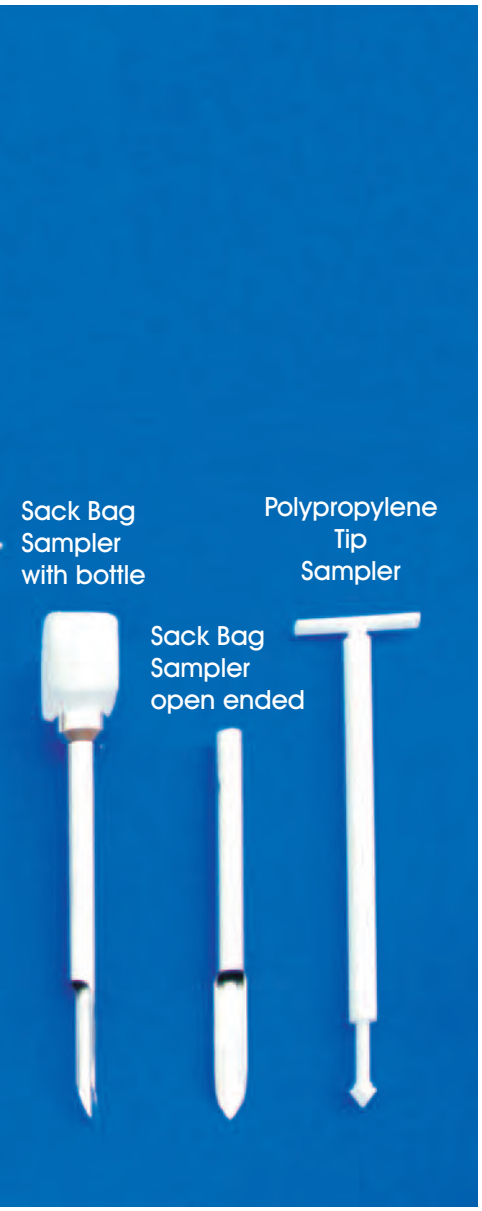
Similar to the sleeve sampler but with an outer tube and inner rod. The outer tube slides back to reveal a collecting cavity behind the tip. Once at the required depth the sleeve is slid back, allowing the cavity to fill with sample. The sleeve is closed and the probe withdrawn. The sampler comes in stainless steel 316, and in standard nominal lengths of 600mm, 1000mm and 1500mm and is designed for heavy duty applications. A disposable polypropylene version is also available.

Pocket Sampler

The Pocket Sampler is ideal for taking a set of multi level samples from free flowing powders and granules. The sampler is inserted into the bulk and the outer tube rotated to open pockets on the inner rod. The pockets fill and the outer tube rotated closed. The sampler is manufactured from 316 stainless steel with a PTFE or Stainless Steel inner rod. Versions with 3 pockets of 14ml or 17ml and lengths of 550mm or 850mm or 5 pockets of 17ml and 1500mm in length.

Slot Sampler

The Slot Sampler is similar to the pocket sampler with a rotating sleeve that opens and closes slots in a core. However in the slot sampler the core rod is hollow. It is ideal for free flowing powders and granules, even slightly cohesive powders where a larger volume of sample is required without the need to retain the distribution from different depths.
To recover the sample it is simply tipped out through the open handle end of the sampler. A bottle can be fitted to the sampler for easier handling.
Available in 600mm, 1000mm and 1500mm lengths with 3, 4 or 5 slots. Sample vols 110ml, 190ml and 300ml.



Powder Lance

The Powder Lance is manufactured from high quality 316 stainless steel and is for use in the collection of large volumes of cohesive powders. Along one side of the lance is a slot one edge of which forms a scraper. The sampler is inserted into the bulk and rotated - the scraper simply scoops sample into the slot.
The screw tip can be removed and the sample pushed out into a suitable container using the sample ejection rod. The powder lance is available in two versions 600mm with a 500mm slot and 110ml capacity or 1000mm with 900mm slot and 190ml capacity. There are Sample Ejection Rods for either length as well as a Cleaning Brush and Sampler Case.

Sample Scoops

Heavy duty sample scoops produced in highest quality 316 stainless steel. Crevice free to reduce contamination and easy to clean.
Available in eight capacity sizes from 10ml to 2,500ml

Sack Bag Sampler

Specially designed with a 'chisel' end to enable samples to be taken through the sides of a sack or bag.
Simply pierce the bag using the sampler and allow the required sample volume to flow into the sampler tube.
Or, use with an adapter and bottle to take samples of 250ml or 500ml.
Alternatively using an open ended version will allow as much sample as required to be poured out into a bag or other receptacle.
Also available a 500mm cleaning brush.

Sample Dividers

These hand held sample dividers will subdivide material samples into two smaller portions by a single pass or further subdivisions can be attained by multiple passes. The important feature of Endecotts sample dividers is that each subdivision retains the characteristics of the original sample. Based on the recommendations of BS 5309 and BS 3406/1.

Produced in stainless steel with slot widths of either 6.35mm (1/4in) or 12.7mm (1/2in).

FLUID BED DRYER

Simply the most efficient method of drying samples for analysis

The FBD 2000 offers significant advantages over conventional drying techniques.

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

- 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

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.

High air flow rates provide high rates of heat transfer and ensure much faster and more homogeneous drying than other methods such as oven, microwave and vacuum drying.

Drying times range from a few seconds to minutes. Complete drying is usually achieved in under 15 minutes.

How the FBD 2000 operates

A powerful fan delivers high volume air flow from the base unit into a special tub assembly which holds the sample material.
The flow of heated air passes through a diffuser gauze which supports the bed and evenly distributes the air as it passes into the tub.
A filter bag at the top of the tub keeps the sample in while allowing the air, moisture and gases to escape.

TEMPERATURE CONTROL
Air is heated by a 2kW electric heater and can be set to any temperature up to 200ºC. The temperature is controlled by a closed loop system that can achieve stability to within 1ºC.

TIMED CYCLE
A built in digital timer enables the drying time to be pre-set and the drying operation to be carried out unattended. At the end of the cycle time an alarm sounds and the unit switches off automatically.

AIR FLOW
The air flow rate and fluidisation velocity are infinitely variable from 0.4 to 2.4 m /min volume (0.9 to 5 m/sec speed). Optimum levels can be set by observing the sample behaviour within the glass tubs.

FILTER BAG MATERIAL
Filter bags are usually nylon or terylene with other materials available to suit more aggressive conditions such as sustained high temperature drying.

Accessories

Single tubs come in 2 and 5 litre sizes in either stainless steel or glass. A multi-tub unit with 4 x 250ml tubs is also available for drying four samples simultaneously. Glass tubs are particularly useful for observing the fluidisation process to establish optimum settings.

An attachment is also available for the efficient drying of test sieves.

SPECIFICATIONS

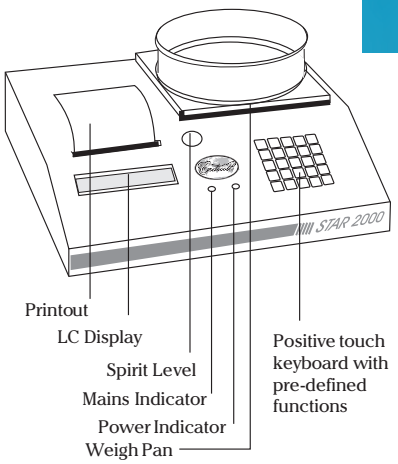
Max. Sample Weight: 5kg
Voltage Rating: 115V or 230V 50Hz or 60Hz
Power Consumption: 2.6kW
Dimensions: 260 x 320 x 505mm H x W x D
Weight: 19kg

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 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 alone balance.



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.

Typical Printout

Sample Ref No _____
Test Ref No _____
TIME 08:32 DATE 09:21:06
Stack reference 60
Diameter of sieves 200mm
Total sample size 541.9g

Sieve Aperture	Wt (g)	Weigh Retained	Percentage Cumulative O-size	Cumulative U-size
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 two tests

Sieve Aperture (mm)	Percentage Retained Master 3	Test	dif
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

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
Voltage: 230V or 115V 50VA

'SIEVE ANALYSIS' Software

Endecotts *'Sieve Analysis'* software collects, displays and reports accurate data from virtually any balance with an RS-32 interface. It helps eliminate time consuming operations and reduces operator error. It improves documentation and quality assurance procedures.

It is easy to use and fully integrated with Microsoft Excel enabling data to be calculated and displayed in many ways including distribution curves bar charts and histograms etc.
The database maintains records of individual sieve serial numbers, sieve tare weights, stack configurations and individual balances.

System requirements: Pentium PC. Microsoft Windows 2000, Windows XP, Windows NT. CD ROM drive. RS-32 or USB com port. 36 MB RAM

SIEVING GRAPH PAPER

Endecotts graph paper is specially designed for plotting sample analysis results. They enable a clear, accurate perspective of the test to be drawn up on paper that's correctly headed with the relevant details.

SIEVE CLEANING

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. Full care instructions are provided with each sieve.

SIEVE BRUSHES

These double ended sieve brushes are specially designed for cleaning sieves with medium or large apertures. They have coarse bristles at one end and fine at the other.

ULTRASONIC CLEANING CONCENTRATE

Recommended for use with Endecotts Ultrasonic cleaner.

ULTRASONIC CLEANER

THE BEST WAY TO CLEAN YOUR SIEVES

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

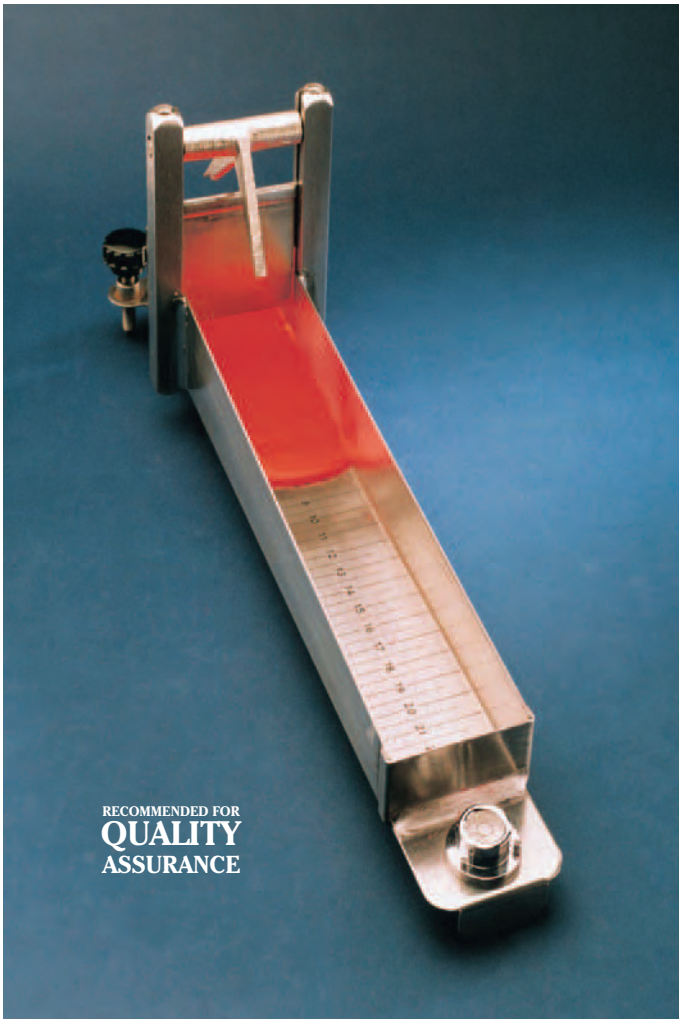
SPECIFICATIONS

Compact: Only340 x 270mm footprint
Height: 350mm
Weight: 10 kilos
Timer: 0 -59 minutes
Power Consumption:
200VA RMS (Ultrasonic) (250VA Heaters)
Power output into fluid: 20 Watts/Litre
Power:230/50HZ
Other voltages available

CONSISTOMETER

Checks consistency, viscosity or flow rate standards

- Low cost
- Ease of use
- Suitable for a variety of tests
- Provides a consistent platform for tests
- Requires only 75 ml of sample
- Stainless steel construction
- Engraved graduations for accurate results
- Leveling screws and spirit level enable accurate set up



The Consistometer is a low cost, durable, instrument for accurately checking laboratory or production samples against consistency, viscosity or flow rate standards.

It uses little bench space yet is probably the simplest, most accurate method of conducting a variety of flow associated tests. It is already widely used in the chemical, paint, cosmetic and food processing industries.

It provides a single parameter for a variety of flow tests which can be carried out over any period under as near identical conditions as possible.

The Consistometer is manufactured from stainless steel engraved with a series of precise graduations at 0.5cm intervals.

To ensure accurate reproducibility the instrument is leveled using the adjustment screws and spirit level.

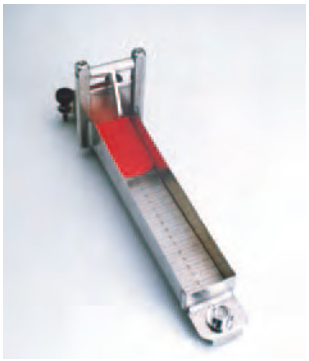
This instrument is sometimes known as a "Bostwick Consistometer"

METHOD OF USE

A measured sample, usually 75 ml, is placed in the reservoir behind the gate.

The gate is released, by pressing the lock release lever, while the spring action ensures it opens instantaneously.

As the fluid flows down the instrument its progress can be accurately measured using the graduated scale. By comparing the flow rate to specified time periods the physical properties of the sample can be calculated.



Used worldwide

Endecotts sample analysis equipment is used in more laboratories worldwide than any other manufacturer.

Test sieves are available to every National and International standard.

To manufacture a high quality measuring instrument capable of meeting the demands of a worldwide market - we have to be good.

To produce the finest sieves in the world we have to be the best.

Whether it be heavy engineering, mining, pharmaceuticals or some other critical area for analysis you know you can rely on the Endecotts name - worldwide.








...international distribution

Endecotts have a global network of distributors.

Endecotts' policy is one of continuous development and we reserve the right to alter our specifications without prior notice.

Cert No. FM24761

MANUFACTURED IN ACCORDANCE WITH BS EN ISO 9002(QAMS)

Licence No. KM 1587

Endecotts are licensed to use the Kitemark on BS410 products

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