Endecotts

WHEN PARTICLE SIZE MATTERS

Precision Test Sieves | Sieve Shakers

WWW.ENDECOTTS.COM

When Particle Size Matters

Whether you are looking for test sieves, sieve shakers or related accessories, ENDECOTTS offer the world's finest particle analysis equipment designed and produced in London. Endecotts sieves not only look good, they offer unique qualities that make them extremely precise and accurate whilst offering excellent handling, nesting and strength.

No matter whether it is a standard test sieve or a sieve engineered for a particular application, e.g. diamonds, you will find the same meticulous quality in design and manufacture. Endecotts sieves are supplied in a complete range of aperture sizes, diameter sizes, depths, choice of materials and certified degrees of inspection to meet virtually every requirement.

Contents

Years of experience in the manufacture of high quality test sieves have also led to a great knowledge of particle sizing technologies and processes. This has enabled Endecotts to develop a wide range of shakers for optimum sieving action as well as fast and reproducible results. Endecotts shakers are suitable for all applications and comply with national and international standards.

In addition Endecotts provides sample dividers, consistometers and an ultra sonic cleaner.

You can be sure of Endecotts quality - it's guaranteed.

200 mm / 8" brass & stainless steel sieves: Different designs, same quality

At Endecotts we know how important reproducibility is for making sieves, so you know with confidence each sieve will perform the same, as it is made to same high standards.

With this in mind we have moved our 200 mm / 8" Stainless Steel sieves to automated production, allowing us to concentrate on manufacturing all other sizes and 200 mm / 8" Brass.
Expect the same superior quality our team has been producing for years!

The change to automation means we can plan our stock holding and ensure a larger number of our sieves are available off the shelf for dispatch straight away. Meaning they are quicker where they are needed!

What isn't changing is our commitment to quality: the combination of our first class sieve shakers and high precision test sieves ensures reproducible results - always.

****Excellent product quality**

due to extensive optical inspection guarantees standard compliance. Each sieve supplied with compliance certificate, with full test data available upon request

****Easy handling & stacking**

due to curved rim.

****Precise apertures**

and evenly tensioned mesh in accordance with standards and norms

****Sturdy sieve frame**

of high alloy stainless steel ensures high degree of corrosion resistance and easy cleaning

Full compatibility

Perfectly nesting with current style Endecotts sieves

*Hi-tech welding process

for ultra-tight fabric and transition-free one-piece construction means there are no grooves where sample can be trapped (prevents cross contamination)

*Soldering-free manufacturing

up to the aperture size of 6.3 mm

*Clear and precise labeling

of the sieves with full traceability based on individualized laser engraving

*Electropolished

inside and outside

*Optimized profile

of the sieve frame prevents accumulation of cleaning liquid or material residues, no hollow spaces which need to be sealed (no epoxy).

*O-ring

between two test sieves for quiet operation and perfect sealing

**advantages for both, 200mm / 8" brass and stainless steel sieves

* advantages for 200mm / 8" stainless steel sieves

Manufactured to exceptional standards of quality

Each Endecotts sieve is individually made under the most stringent quality control procedures using only the finest materials. They are manufactured in accordance with ISO 9001:2015. Certificate of Registration FM 24761 is available upon request or on Endecotts website.

The wire cloth is checked at every stage of manufacture with optical measuring instruments. The final inspection is a precision measurement of apertures, and sieve frame dimensions. Once we are satisfied that the sieve meets our exacting standards we issue an Endecotts Certificate of Compliance.

The company has an exceptional reputation as the manufacturer 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.

Major Industries using Test Sieves

Industry	Application
Construction	Quality control analysis and grading of soils, aggregate, minerals, cement, etc.
General Laboratories	Miscellaneous application of particle analysis and determination of particle size, powder process industries, etc.
Chemical and Pharmaceutical	Oil exploration (analysis of minute fossils), fuels, explosives, drugs, medical & pharmaceutical applications (powders etc.)
Mining	Quarries (gravel and sand), coal mines (air pollution control), grading and particle size determination. Diamond mines, grading of diamonds and industrial diamonds.
Agriculture/Food	Confectionery and food manufacture, miscellaneous applications including kernels, etc.
Education	Schools, universities (training of techniques in particle size analysis and determination of particle size), geological etc.
Research	Research establishments engaged in original and general research. Various applications.
Engineering	Steel manufacturing organisations, foundries, iron works, etc. (determination of particle size of sand moulds, grading of coke, etc.)
Abrasive Grain Industries	Producers of precision materials for abrasive applications, i.e. grinding wheels and sandpaper.

The widest range of test sieves available

Made to International Standards

Endecotts laboratory test sieves and sample analysis equipment are used worldwide. Be it industrial sieve, laboratory test sieves, heavy engineering, mining or pharmaceuticals, Endecotts have the widest range of sieves available and are renowned for quality, durability and precision. Endecotts test sieves meet National and International Standards ISO 3310 and ASTM E11.

Endecotts manufacture a wide range of sieve types, standard and special including:

- Woven wire mesh sieves
- Perforated plate sieves
- Microplate sieves
- Full and half height sieves
- Extra depth sieves
- Wet washing sieves

and a lot more

Endecotts test sieves can be supplied to 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 5.1, table 1 of ISO 3310-1 and ASTM E11 respectively. Each sieve is supplied with an Inspection Certificate stating separately the values for the average aperture in both the warp and weft direction of the wirecloth.

Calibrated Test Sieves
Test sieves inspected and calibrated in accordance with procedures listed in clause 5.1, table 1 of ISO3310-1 and ASTM E11 respectively. 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.

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.

What to look for in a precision test sieve

Sieves can often look alike, but take a closer look and you will 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 re-order.

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

Certificates of Compliance
Supplied with every test sieve

Sieve diameters and frame materials

Diameter	Full Height	Half Height	Extra depth	Frame Material
3"	1 ¼"	-	-	Stainless Steel
8"	2"	1"	4", 8"	Stainless Steel / Brass
12"	3"	1 ½"		Stainless Steel
18"	3 ½"	-	-	Stainless Steel
100 mm	40 mm	-	-	Stainless Steel
200 mm	50 mm	25 mm	100 mm, 200 mm	Stainless Steel / Brass
300 mm	75 mm	40 mm	-	Stainless Steel / Brass
400 mm	65 mm	-	-	Stainless Steel
450 mm	100 mm	-	300 mm	Stainless Steel

Endecotts' Finest: 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 100, 200, 300, 400 and 450 mm or in 3, 8, 12 or 18 inches.

They can be supplied with aperture sizes ranging from 125 mm down to 20 microns in full or half height versions. Woven wire mesh sieves are available in frame materials of either stainless steel or brass (400 and 450 mm only available in stainless steel).

Advantages

- Precision frame (ensures consistent nestability)
- Precise aperture (in accordance with ISO 3310, ASTM E11 or other specifications)
- Made to International Standards
- Natural fillet (free flowing of sample)
- Totally sealed (no crevice to lose material)
- Evenly tensioned mesh ensures accurate analysis
- Safe edge (big radius makes it comfortable to handle)
- Serial number (ensures full traceability)

Endecotts Standard Woven Wire Mesh Sieves are available in these sizes

International Test Sieve Series

ISO 3310-1
Nominal Aperture Sizes

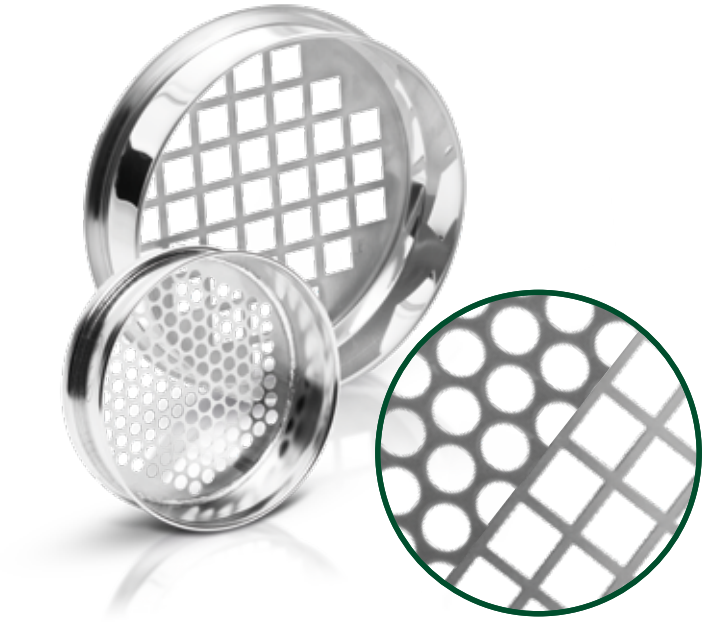
125.00 mm	26.50 mm	5.60 mm	1.18 mm	250 µm	53 µm
112.00 mm	25.00 mm	5.00 mm	1.12 mm	224 µm	50 µm
106.00 mm	22.40 mm	4.75 mm	1.00 mm	212 µm	45 µm
100.00 mm	20.00 mm	4.50 mm	900 µm	200 µm	40 µm
90.00 mm	19.00 mm	4.00 mm	850 µm	180 µm	38 µm
80.00 mm	18.00 mm	3.55 mm	800 µm	160 µm	36 µm
75.00 mm	16.00 mm	3.35 mm	710 µm	150 µm	32 µm
71.00 mm	14.00 mm	3.15 mm	630 µm	140 µm	25 µm
63.00 mm	13.20 mm	2.80 mm	600 µm	125 µm	20 µm
56.00 mm	12.50 mm	2.50 mm	560 µm	112 µm	
53.00 mm	11.20 mm	2.36 mm	500 µm	106 µm	
50.00 mm	10.00 mm	2.24 mm	450 µm	100 µm	
45.00 mm	9.50 mm	2.00 mm	425 µm	90 µm	
40.00 mm	9.00 mm	1.80 mm	400 µm	80 µm	
37.50 mm	8.00 mm	1.70 mm	355 µm	75 µm	
35.50 mm	7.10 mm	1.60 mm	315 µm	71 µm	
31.50 mm	6.70 mm	1.40 mm	300 µm	63 µm	
28.00 mm	6.30 mm	1.25 mm	280 µm	56 µm	

American Standard Sieve Series

ASTM E11
Sieve Designation

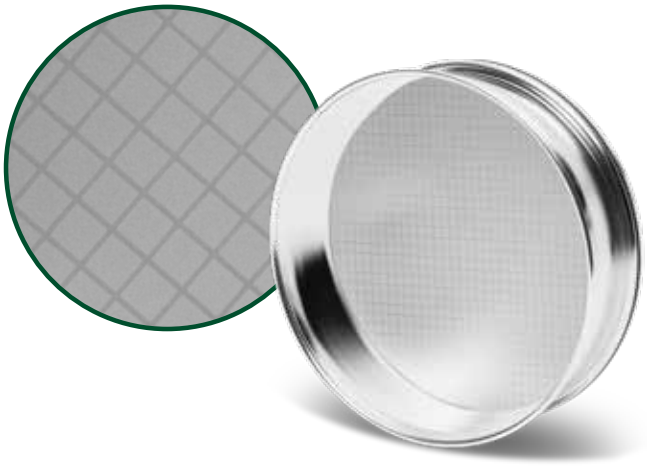
Standard	Altern.	Standard	Altern.	Standard	Altern.
125.00 mm	5.00	9.50 mm	3/8	425 µm	No.40
106.00 mm	4.24	8.00 mm	5/16	355 µm	No.45
100.00 mm	4	6.70 mm	0.265	300 µm	No.50
90.00 mm	3 ½	6.30 mm	¼	250 µm	No.60
75.00 mm	3	5.60 mm	No. 3 ½	212 µm	No.70
63.00 mm	2 ½	4.75 mm	No. 4	180 µm	No.80
53.00 mm	2.12	4.00 mm	No. 5	150 µm	No.100
50.00 mm	2	3.35 mm	No. 6	125 µm	No.120
45.00 mm	1 ¾	2.80 mm	No. 7	106 µm	No.140
37.50 mm	1 ½	2.36 mm	No. 8	90 µm	No.170
31.50 mm	1 ¼	2.00 mm	No.10	75 µm	No.200
26.50 mm	1.06	1.70 mm	No.12	63 µm	No.230
25.00 mm	1	1.40 mm	No.14	53 µm	No.270
22.40 mm	7/8	1.18 mm	No.16	45 µm	No.325
19.00 mm	¾	1.00 mm	No.18	38 µm	No.400
16.00 mm	5/8	850 µm	No.20	32 µm	No. 450
13.20 mm	0.530	710 µm	No.25	25 µm	No. 500
12.50 mm	½	600 µm	No.30	20 µm	No. 635
11.20 mm	7/16	500 µm	No.35		

Perforated Plate Sieves



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, 400 and 450 mm. Aperture sizes range from 125 mm to 4 mm in square hole and 125 mm to 1 mm in round hole. Perforated plate sieves can be supplied in frame materials of brass or stainless steel. They are manufactured to the highest engineering standards to ensure quality and accuracy.
Perforated plate sieves are available to every national and international standard.

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 100 mm or 200 mm diameter. Available with unique self clearing apertures sizes from 75 to 5 microns. Microplate sieves are supplied with either square (standard) or round (on request) holes.
Other aperture sizes, sieve diameters and sieve depths can be supplied as required. It is recommended that microplate sieves are used in conjunction with a liquid medium to assist the passage of extremely fine particles through the apertures. In certain cases where this is not possible it is often found that a compatible shaker can speed up the analysis, while maintaining a high degree of accuracy.

Endecotts standard lids & receivers can be used with the microplate sieves.

Perforated Plate Series ISO 3310-2

Nominal Aperture Sizes Round & Square Holes [mm]					
125.00	71.00	37.50	20.00	11.20	6.30
112.00	63.00	35.50	19.00	10.00	5.60
106.00	56.00	31.50	18.00	9.50	5.00
100.00	53.00	28.00	16.00	9.00	4.75
90.00	50.00	26.50	14.00	8.00	4.50
80.00	45.00	25.00	13.20	7.10	4.00
75.00	40.00	22.40	12.50	6.70	

Nominal Aperture Sizes Round Hole Only [mm]					
3.55	2.80	2.24	1.70	1.25	1.00
3.35	2.50	2.00	1.60	1.18	
3.15	2.36	1.80	1.40	1.12	

Microplate Sieves ISO 3310-3

Nominal Aperture Sizes [µm]			
200	100	50	20
180	90	45	16
160	80	40	10
140	71	36	5
125	63	32	
112	56	25	

Specials

Diamond Sieves

Endecotts Diamond Sieves are high precision measuring instruments specially manufactured to meet the strict requirements of the diamond industry. They are produced from stainless steel and offer a rapid and extremely accurate method of sizing.

Diamond sieves are available in stainless steel bodies of 200 mm or 8" in full or half height. These can be nested for ease of use.

Fixed plates are available in a range of aperture sizes.

Half Height Sieves

Where smaller quantities of sample are being analysed half height sieves are often used. These are available in diameters of 200 or 300 mm and 8" or 12" with the complete range of woven wire mesh or perforated plate sieving media. Other height options are also available.

Diamond Sieves			
Plate Size	Hole Diameter [mm]	Plate Size	Hole Diameter [mm]
1	1.092	11	3.454
2	1.321	12	4.089
3	1.473	13	4.521
4	1.753	14	4.750
5	1.829	15	5.410
6	2.159	17	5.740
7	2.464	19	6.350
8	2.515	21	7.925
9	2.845	23	10.312
10	3.277		

Extra Deep and Wet Washing Sieves

Extensively used by the construction and cement industries. These extra deep sieves are made to International Standards. Made from steel with woven wire mesh or perforated plate. Available in the below sizes.

Note: 200 mm / 8" stainless steel use spacer rings as per image.

Extra Deep & Wet Washing Sieves

Aperture sizes: 125 mm - 20 µm

ASTM (diameter x depth)
8" x 4 "
8" x 8"
200 mm x 100 mm
200 mm x 200 mm
450 mm x 300 mm
ISO (diameter x depth)
8" x 4"
8" x 8"
200 mm x 100 mm
200 mm x 200 mm
450 mm x 300 mm

Lids & Receivers

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

MODERN & REVOLUTIONARY

What to look for in a good sieve shaker

One of the most important characteristics of a good sieve shaker is to deliver reliable and reproducible sieving results at any time. Furthermore it should reach an ultimate end point in the shortest sieving time possible in order to save valuable working hours.

In order to provide a long, trouble free life the construction of a sieve shaker is very important. An electromagnetic drive, for example, has the distinct advantage of no mechanical parts that might need servicing or replacing.

Other useful features that can increase performance, shorten sieving time or simply make life easy are: **amplitude control, continuous or intermittent vibration control, timer, correct and consistent clamping pressure, anti-vibration feet and low noise level.**
Endecotts sieve shakers are therefore designed and engineered around the key features listed above, ensuring that the design performance provides the optimum sieving action to the sieves to give rapid accurate results.

As a manufacturer of test sieves we understand how sieves and shakers interrelate. This knowledge is intrinsic in every model.

Our new line of laboratory and heavy duty sieve shakers:

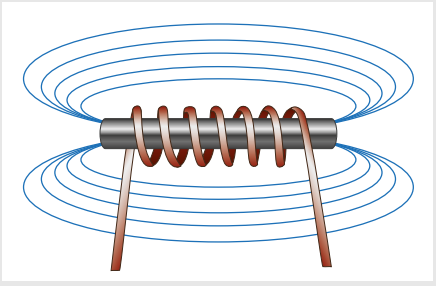
precise & efficient,
easy to operate,
featuring a fresh look

Laboratory

	Air Sizer 200	Minor 200
Range:	20 µm - 4 mm	38 µm to 125 mm
Drive / sieving motion:	dispersion by air jet	electromagnetic
Amplitude / Speed:	5 - 55 rpm (nozzle speed)	~ 1.6 mm (depending on loading), fixed
Sieve diameter:	200 mm / 8" standard sieves	100 mm / 200 mm, 3" / 8"

Features

Electromagnetic Drive



An electromagnetic drive produces an ideal throwing motion that disperses material equally over the whole sieving surface. Furthermore it is virtually maintenance-free and extremely quiet in operation.

3D Performance

Vertical vibration is generated by the on/off frequency of the electromagnetic drive. However, vertical vibration is not enough to impart the correct movement for sieving. The shaker also needs to twist the sieve stack - this rotating action ensures the sample passes over the full surface of the sieve and the maximum number of apertures to give rapid accurate results

Wet Sieving Conversion Kits

A wet sieving kit includes a top clamping plate with a Perspex cover and spray rose, watertight O-ring seals and a stainless steel receiver with drainage spout. O-ring seals may also be ordered separately.

Available for: Octagon 200, Octagon 200CL, EFL 300, Titan 450.

Laboratory

Heavy Duty

Octagon 200	Octagon 200CL	EFL 300	Titan 450
20 µm to 125 mm	20 µm to 125 mm	20 µm to 125 mm	20 µm to 125 mm
electromagnetic 3D	electromagnetic 3D	electromagnetic 3D	electromagnetic 3D
0 - 3 mm, digital setting in 10 steps	0 - 3 mm, digital setting in 0.1 mm steps, "Closed Loop" amplitude control	0 - 2 mm, digital setting in 10 steps	0 - 2 mm, digital setting in 10 steps
100 mm / 200 mm, 3" / 8"	100 mm / 200 mm, 3" / 8"	100 / 150 / 200 / 250 / 300 / 315 mm, 3" / 8" / 12"	250 / 300 / 315 / 350 / 400 / 450 mm, 12" / 18"

Anti-Vibration Feet

Anti-Vibration Feet maintain optimum performance and avoid shaker 'walking'.

Unique Clamping

Endecotts shakers are fitted with a unique clamping device enabling the clamp plate to be fitted in seconds. It also ensures the clamp plate secures the sieves with consistent pressure to provide consistent results and longer sieve life.

Extensive Control

Most Endecotts shakers are fitted with a high degree of control over all shaker functions - a feature extremely useful for many materials and in many industries.

Air Sizer 200

The Air Sizer 200 is ideal for sieving very fine dry particles, which require efficient dispersion and deagglomeration via air jet technology (e.g. electrostatic material).

It is also the perfect instrument to quickly provide sieving of powdered materials. There is also a Cyclone available for the Air Sizer 200 as an optional extra to allow for recovery of undersized particles.

The Air Sizer 200 is compatible with our 8" and 200 mm standard sieves.

Advantages

- Advanced air jet technology for fine particles, usable for dry material of 20 µm upwards
- Adjustable nozzle speed, 5 - 55 rpm
- Extremely efficient & fast sieving times
- Sieving action keeps apertures clear
- Air flow fluidises and helps to separate sample
- Ideal for electrostatic materials
- Pre filter unit & industrial vacuum available as accessories
- Maintenance-free

Specifications	Air Sizer 200
Range	20 µm - ~ 4 mm
Drive / sieving motion	dispersion by air jet
Number of fractions	1
Speed	5 - 55 rpm (nozzle speed)
Time display	digital, 0:10-99:50 min:sec
Vacuum	20 - 99 mbar
Suitable for dry sieving	yes
Suitable for wet sieving	-
Sieve diameter	suitable for 8" or 200 mm sieves
Max. height of sieve stack	1 sieve
Accessories	pre filter unit / industrial vacuum optional cyclone unit
Model	benchtop
Protection code	IP 40
Electrical supply	100 - 240 V , 50/60Hz
Power connection	1 - phase
W x H x D	450 x 235 x 435 mm
Net weight	~ 16 kg

Function

An Endecotts sieve of the appropriate aperture size is placed in the airtight mounting plate bracket and a lid is placed on top of the sieve.
Vacuum is applied to the chamber beneath the sieve drawing air out of the sieve through the apertures and carrying with it any undersize particles.
To create a continuous flow, positive pressure air is drawn into the sieve through a channel in a rotating arm placed immediately below the microplate or sieve mesh. The incoming air creates a wave within the sample helping to fluidise the sample and clear any blocked apertures. Any undersize sample is discharged into the vacuum unit.

Minor 200

The Minor 200 has been developed and manufactured to combine low cost with the benefits of a well-designed and engineered shaker. It incorporates many features usually found only on larger, more expensive models.

It is ideal for the use in laboratories and plants since it is compact and genuinely portable (weighing only 16 kg). The sieve stack is held firmly in position by a clamping belt system. Removing it allows the whole unit to be stored in a space less than 200 mm high.
There are no rotating parts in the Minor 200 - consequently it is quiet in operation and maintenance free.

Advantages

- Electromagnetic drive for quiet and virtually maintenance free operation
- Compact & portable
- Requires only small storage space due to small footprint and easily removable clamping belt system (included)
- Easy to use
- Different voltages available
- Complies with the requirements of AASHTO T 27

Specifications	Minor 200
Range:	38 µm to 125 mm
Drive / sieving motion	electromagnetic
Max. batch / feed capacity	3 kg
Max. number of sieves	8 full height / 16 half height (200 mm or 8" sieves)
Amplitude	~ 1.6 mm*, fixed
Time display	analog, 0 - 60 min
Interval operation	-
Suitable for dry sieving	yes
Suitable for wet sieving	-
Serial interface	-
Sieve diameter	100 / 200 mm, 3" / 8"
Max. height of sieve stack	-
Clamping device	clamping belt system (included)
Model	benchtop
Protection code	IP 20
Electrical supply	different voltages available
Power connection	1-phase
Ø x H	262 x 126 mm
Net weight	~ 16 kg

* depending on loading

Octagon 200

The sieve shaker Octagon 200 is suitable for all sieving tasks in laboratories as well as onsite and provides optimum sieving action for fast and reproducible results.

It is robust, compact and sufficiently lightweight to be portable. Its electromagnetic drive combined with a 3D sieving motion ensures excellent separation efficiency in a short amount of time.
A digital display as well as a quick-release clamping system make operation very easy and straightforward.

Advantages

- Easy-to-use sieve clamping system
- Accepts up to 8 full height 200 mm or 8" diameter sieves
- Dry and wet sieving
- 10 amplitude settings & digital timer
- 3D sieving motion allows for high separation efficiency and non blinding sieving action
- Different voltages available
- No mechanical moving parts
- Compact & portable
- Complies with the requirements of AASHTO T 27

Specifications	Octagon 200
Range	20 µm to 125 mm
Drive / sieving motion	electromagnetic 3D
Max. batch / feed capacity	3 kg
Max. number of sieves	8 full height / 16 half height (200 mm or 8" sieves)
Amplitude	0 - 3 mm, digital setting in 10 steps
Time display	digital, 0:10-99:50 min:sec
Interval operation	yes (one mode)
Suitable for dry sieving	yes
Suitable for wet sieving	yes
Serial interface	-
Sieve diameter	100 / 200 mm, 3" / 8"
Max. height of sieve stack	450 mm
Clamping device	quick-release clamping system (included)
Model	benchtop
Protection code	IP 54
Electrical supply	different voltages available
Power connection	1 - phase
W x H x D	418 x 232 x 435 mm
Net weight	~ 35 kg

Octagon 200CL

The Octagon 200CL for precise, reproducible and error-free sieving processes competes with the most advanced sieve shakers in the world.

Several unique features have been developed specifically for this machine, including the "**Closed Loop**" amplitude control for ultimate reproducibility.
The Octagon 200CL is designed to work with Endecotts' SieveWare, the new software for easy evaluation and documentation of the sieving process.

Advantages

- "Closed Loop" total amplitude control ensures reproducible sieving
- Digital controls for easy and reliable operation
- Easy-to-use sieve clamping system
- Accepts up to 8 full height 200 mm or 8" diameter sieves
- Suitable for dry and wet sieving
- 3D sieving motion allows for high separation efficiency and non blinding sieving action
- Full compatibility with new SieveWare evaluation and control software via USB Port (printed or digital protocols)
- Voltage-independent
- No mechanical moving parts
- Compact & portable
- Complies with the requirements of AASHTO T 27

Specifications	Octagon 200 CL
Range	20 µm to 125 mm
Drive / sieving motion	electromagnetic 3D
Max. batch / feed capacity	3 kg
Max. number of sieves	8 full height / 16 half height (200 mm or 8" sieves)
Amplitude	0 - 3 mm, digital setting in 0.1 mm steps, "Closed Loop" amplitude control
Time display	digital, 0:10-99:50 min:sec
Interval operation	yes (two modes)
Suitable for dry sieving	yes
Suitable for wet sieving	yes
Serial interface	yes (USB)
Sieve diameter	100 / 200 mm, 3" / 8"
Max. height of sieve stack	450 mm
Clamping device	quick-release clamping system (included)
Model	benchtop
Protection code	IP 54
Electrical supply	Electrical supply 100-240 V, 50/60 Hz
Power connection	1 - phase
W x H x D	418 x 232 x 435 mm
Net weight	~ 35 kg

EFL 300

The EFL 300 is the refined and improved version of our well-proven sieve shaker for sieve diameters of up to 300 mm. It now features a new, more powerful and low noise drive concept while at the same time being exceptionally robust and reliable - a real workhorse!

The EFL 300 is very versatile. The heavy electric motor is replaced by the electromagnetic system found in all modern sieve shakers. Its lighter form means that it can be either floor standing or even bench mounted making it suitable for both, laboratory and industrial environments. Sieving parameters are set by the remote control unit. Its functions are logical and very simple to operate.

Advantages

- Heavy duty shaker
- Electromagnetic drive
- Quick release clamping system ensures consistent clamping pressure
- Low noise level
- Floor or table-mounted
- Fitted with anti-vibration feet
- Suitable for wet or dry sieving
- AASHTO T 27 compliant

Specifications	EFL 300
Range	20 µm to 125 mm
Drive / sieving motion	electromagnetic 3D
Max. batch / feed capacity	6 kg
Max. number of sieves	6 full height / 12 half height (300 mm sieves)
Amplitude	0 - 2 mm, digital setting in 10 steps
Time display	digital, 0:10-99:50 min:sec (external unit)
Suitable for dry sieving	yes
Suitable for wet sieving	yes
Sieve diameter	100 / 150 / 200 / 250 / 300 / 315 mm 3" / 8" / 12"
Clamping device	quick-release clamping system (included)
Model	floor or benchtop
Protection code	IP 54
Electrical supply	different voltages available
Power connection	1 - phase
Ø x H	427 x 240 mm
Net weight	~ 47 kg

Titan 450

The name says it all: The Titan 450 is Endecotts' most powerful sieve shaker! It is built for large sieve diameters and can take up to 7 x 450 mm test sieves!

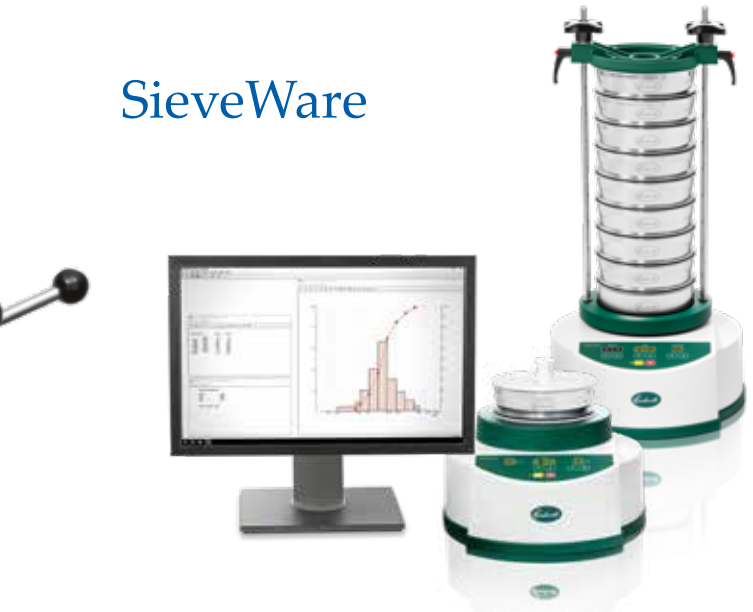
The Endecotts Titan 450 is a vibrating shaker that is used to carry out sieve tests in conjunction with sieve stacks for particle sizing of various material samples.
It is based on an electromagnetic drive, with special carbon fibre springs that are set at a calculated angle to provide a horizontal twist, as well as a vertical movement to carry out efficient sieve tests.
The Titan 450 has a remote control unit that houses a digital controller to vary the vibration, process time and intermittent settings.

Advantages

- Electromagnetic drive for quiet and virtually maintenance free operation
- No mechanical moving parts
- Digital controls for easy and reliable operation via external interface
- Compatible with various diameter sieve sizes
- Suitable for wet or dry sieving
- AASHTO T 27 compliant

Specifications	Titan 450
Range	20 µm to 125 mm
Drive / sieving motion	electromagnetic 3D
Max. batch / feed capacity	20 kg
Max. number of sieves	7 full height, capacity increases with half height sieves
Amplitude	0 - 2 mm, digital setting in 10 steps
Time display	digital, 0:10-99:50 min:sec (external unit)
Suitable for dry sieving	yes
Suitable for wet sieving	yes
Sieve diameter	250 / 300 / 315 / 350 / 400 / 450 mm 12" / 18"
Clamping device	turn and twist clamping system (included)
Model	floor
Protection code	IP 54
Electrical supply	different voltages available
Power connection	1 - phase
Ø x H	606 x 230 mm
Net weight	~ 140 kg

SieveWare



SieveWare, the software for particle size analyses, exceeds manual evaluation in many aspects, due to the fact that the software is able to automatically control the necessary measurement and weighing procedures – from the registration of the weight of the sieve up to the evaluation of the data.

All available parameters as well as the characteristics, which may have to be calculated, can be entered.

The program accepts automatic and manual data entries from both scale and sieve systems. The Octagon 200CL can be automatically controlled with SieveWare via USB communication.

SieveWare calculates all common particle distributions as well as the characteristic values of the particle size, thus making it possible to present the results in standard presentation forms, such as tables and charts. Cumulative throughput or residual values, distribution density and histograms can be included in the standard particle size distributions.

All measured data can be printed, saved and exported as tables and charts.

Advantages

- Automatic registration, evaluation and administration of measurement data
- Logical, self-explanatory interface
- Measurement protocol in accordance with different standards
- Complex transformation into charts and tables
- Data link to different measurement instruments
- Automatic detection and configuration of common analytical scales
- Comprehensive data export
- Comprehensive help texts & detailed manual

SieveWare	
General Information	
Operating system platform	**Windows®**
ASTM and Tyler Mesh	x
Password protection for sieve analysis	x
Serial no. for sieves	x
Sieve analysis with	
▪ nominal mesh size	x
▪ actual mesh size	x
Automatic simultaneous data transfer	x
Administration of measurement data	unlimited
Data import and export	x
PDF manual on USB	x
Measurement protocol (according to DIN 66165)	x
Language selection English/German	x
Tables	
Throughput values Q3 (x)	x
Residual values (1-Q3(x))	x
Fraction p3	x
Fraction Δm (proportional masses)	x
Distribution density q3(x)	x
log. distribution density q3*(x)	x
Actual mesh size	x
Diagram	
Combined representation of several analyses	x
Curve representation	x
Graphic presentation	
▪ x-axis	lin, log
▪ y-axis	lin, log, RRSB
Windowing (Zoom)	x
Cumulative curve (throughput) Q3 (x)	x
Residual curve (1-Q3 (x))	x
Fraction p3/histogram	x
Lin. Division density q3(x)	x
Log. Division density q3*(x)	x
Trend analysis	x
Limit value graph with specifications limits	x
2 representation possibilities (including right y-axis)	x
Reference particles (registration of external particle size division)	x
Parameters	
Fineness parameters, 3 values Q3 (x)	x
Quantile particle size, 3 values x (Q3)	x
RRSB parameters	x
Sauter mean diameter X St	x
Splinter value	x
Specific surface	
▪ volume related Sv	x
▪ mass related Sm	x
Unequal grade of granularity	x
AFS particle fineness No.	x

Calibration Samples

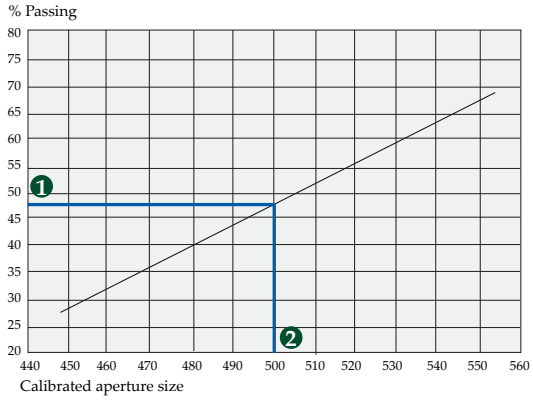
For accurate test sieve calibration

Test sieve calibration samples supplied by Endecotts are microspheres formed of soda-lime glass that range from 3.35 mm 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 to an accuracy of approx. 1 µm. The microspheres pass over almost, the total surface of the sieve enabling more apertures to be examined than with any other method. Consequently, calibration samples are one of the most accurate methods of sieve calibration available.

The glass microspheres are calibrated by an external laboratory who are recognised as one of the leading particle analysis laboratories by the BCR, and by 20 other leading European particle size analysis laboratories.

Traceable to the National Physical Laboratory

The table on the right lists the nominal aperture size of a specific sieve and the appropriate Calibration Sample required.
The samples are supplied in 'Single Use' vials complete with calibration certificate.



How to accurately calibrate test sieves in a matter of minutes

1) Select the calibration sample size that matches the aperture size of the sieve.
2) Place a weighed sample on the sieve under test and shake for 2 minutes.
3) Weigh the sample again and calculate the percentage passing through the sieve.
4) Simply read off the percentage passing along the graph supplied with every Calibration Sample. ❶
5) The mean average aperture size in microns can be read off against the graph. ❷

Calibration Samples

Nominal Aperture	Aperture Range	No. of Vials	Nominal Weight
20 µm	15 - 25 µm	5 vials	0.8 g each
25 µm	20 - 32 µm	5 vials	0.8 g each
32 µm	25 - 38 µm	5 vials	1.0 g each
38 µm	32 - 45 µm	5 vials	1.0 g each
45 µm	38 - 53 µm	5 vials	1.0 g each
53 µm	45 - 63 µm	5 vials	1.0 g each
63 µm	53 - 75 µm	5 vials	1.0 g each
75 µm	63 - 90 µm	5 vials	1.0 g each
90 µm	75 - 106 µm	5 vials	1.0 g each
106 µm	90 - 125 µm	5 vials	1.0 g each
125 µm	106 - 150 µm	5 vials	1.0 g each
150 µm	125 - 180 µm	5 vials	1.5 g each
180 µm	150 - 212 µm	5 vials	1.5 g each
212 µm	180 - 250 µm	5 vials	1.5 g each
250 µm	212 - 300 µm	5 vials	2.5 g each
300 µm	250 - 355 µm	5 vials	2.5 g each
355 µm	300 - 425 µm	5 vials	2.5 g each
425 µm	355 - 500 µm	5 vials	2.5 g each
500 µm	425 - 600 µm	5 vials	2.5 g each
600 µm	500 - 710 µm	5 vials	2.5 g each
710 µm	600 - 850 µm	5 vials	2.5 g each
850 µm	710 µm - 1 mm	5 vials	2.5 g each
1 mm	850 µm - 1.18 mm	5 vials	7.0 g each
1.18 mm	1.0 - 1.4 mm	5 vials	10.0 g each
1.4 mm	1.18 - 1.7 mm	5 vials	15.0 g each
1.7 mm	1.4 - 2.0 mm	5 vials	15.0 g each
2 mm	1.7 - 2.36 mm	5 vials	20.0 g each
2.36 mm	2.0 - 2.8 mm	5 vials	20.0 g each
2.8 mm	2.36 - 3.35 mm	5 vials	25.0 g each
3.35 mm	2.84 - 4.0 mm	5 vials	25.0 g each

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.

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 1 mm.

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

Advantages

- It is easy to operate and extremely efficient to use.
- The all stainless steel construction is ergonomically designed to give a long, trouble free life.
- The ultrasonic cleaner is environmentally friendly, operating on 5.7 litres of organic solvent free water. It is equipped with 4 high frequency transducers 35 KHz at 2 x 240 W.
- A sieve up to 200 mm or 8" in diameter is placed in the basket in order to commence with the cleaning procedure.
- The control panel enables the user to set the operating time. Cycle time: 0-15 minutes or continuous.

Specifications	
Suitable for	1 sieve 200 mm x 50 mm, 8" x 2" or smaller
Time setting	0-15 minutes or continuous
Container volume	5.7 litres
Oscillating tank (Dia. x H)	245 x 130 mm
HF continuous maximum output	35 kHz, 2 x 240 W
Power connection:	1-phase
Overall size (Dia. x H):	260 x 260 mm
Net weight	5 kg
Current consumption:	0.5 A

Sieve Accessories

Supporting fast and efficient sieving

Lids & Receivers are available for all sieve diameters Endecotts offers. Make sure to order them with your sieves if required.

Sieve brushes, specially designed for cleaning sieves with medium or large apertures (coarse bristles at one end, fine at the other).

Rubber sieve balls, used to improve the sieving of cohesive material.

Consistometer

The economical, accurate method of checking viscosity

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 0.5 cm intervals.
To ensure accurate reproducibility the instrument is levelled using the adjustment screws and spirit level.

The instrument is sometimes known as a "Bostwick Consistometer".

Advantages

- Levelling screws and spirit level enable accurate set up
- Engraved graduations for accurate results
- Available in 2 versions - Standard or Extended
- Requires up to 100 ml of sample
- Low cost, ease of use

Specifications	Standard Consistometer	Extended Consistometer
Overall length	355 mm	415 mm
Overall width	84 mm	84 mm
Trough length	240 mm	300 mm
Inside / Outside trough width	49.9 / 51.7 mm	49.9 / 51.7 mm
Min. / Max. height	110 / 139 mm	110 / 139 mm
Material	Stainless Steel	Stainless Steel

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 6.35 mm (¼") or 12.7 mm (½").

Advantages

- Stainless steel with slot widths 6.35 mm (¼") or 12.7 mm (½").
- Ideal for free flowing powders.
- Suitable for use with powder chemicals, food stuff, feed and similar granular material.
- Splits sample to analytical proportions.
- Characteristics of original sample maintained.

Endecotts

VISIT OUR WEBSITE

HOME PRODUCTS CONTACT & SERVICE FAQ COMPANY DOWNLOADS

SIEVING?

Have a look at our White Paper to find out more.

Learn more

ENDECOTTS

WHEN PARTICLE SIZE MATTERS

Whether you are looking for test sieves, sieve shakers or sample processing, ENDECOTTS offer the world's finest particle analysis equipment designed and produced in London. ENDECOTTS test sieves meet national and international standards and are supplied to customers around the globe through a network of agents and distributors.

TEST SIEVES

Sieves >
Certificates & Recertification >
Calibration Samples >
Ultrasonic Cleaner >

SIEVING MACHINES

Sieve Shakers >
Air Jet Sizer >
Evaluation Software >

SAMPLE PROCESSING

Consistometer >
Sample Dividers >

SIEVING THE RIGHT WAY

A guidance to the terminology and general information for test sieves and equipment for particle analysis We provide the full package to receive accurate and repeatable results every time! >

ENDECOTTS.COM

WHEN PARTICLE SIZE MATTERS

Endecotts Ltd
9 Lombard Road
London, SW19 3UP
United Kingdom

Telephone: +44 (0)208 542 8121
E-mail: sales@endecotts.com
Web: www.endecotts.com

Endecotts US Customer Service

Toll free number: 855 897 7284
E-mail: customer.service@endecotts-us.com

Subject to technical modification and errors • ZSAL-BRO1 issue 01/2021