

# Precision Test Sieves | Sieve Shakers



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# 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, coffee or agricultural products, 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.



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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.

For easy sample handling throughout the entire sieving operation, Endecotts also supply sample preparation equipment (e.g. dryers) as well as a set of different samplers and sample dividers.

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



### Precision Test 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 9001:2008. 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 every National and International Standard

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 every national and international standard including ISO and ASTM.

### Any sieve you need

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
- Air jet sieves
- Extra depth sieves
- Wet washing sieves and a lot more

If you cannot find the desired sieve in our product range, let us know and we will look to accommodate your specific requests!



# 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 5.2 and table 4 of ISO 3310-1 and BS 410-1. 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 5.2 and table 4 of ISO 3310-1 and BS 410-1. 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.

#### **Mid Point Sieves**

Test sieves with the sieving medium specification tolerances reduced by 30%. Each sieve is supplied with a Calibration Certificate giving the range of tolerances and measurements taken.

#### **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...."

#### **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.



**Certificate of Compliance** Supplied with every test sieve



# Sieve diameters and frame materials

Diameter	Full Height	Half Height	Frame Material		
3"	1 1⁄4"	1"	Stainless Steel / Brass		
8"	2"	1"	Stainless Steel / Brass		
12"	3"	1"	Stainless Steel / Brass		
18"	3 1⁄2"	-	Sainless Steel		
38 mm	19 mm	-	Stainless Steel / Brass		
100 mm	40 mm	20 mm	Stainless Steel / Brass		
150 mm	38 mm	-	Sainless Steel		
200 mm	50 mm	25 mm	Stainless Steel / Brass		
250 mm	60 mm	-	Sainless Steel		
300 mm	75 mm	40 mm	Stainless Steel / Brass		
315 mm	75 mm	-	Stainless Steel		
350 mm	60 mm	-	Stainless Steel		
400 mm	65 mm	-	Stainless Steel		
450 mm	100 mm	-	Stainless Steel		

# Endecotts

### **Precision Test Sieves**

# 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 38, 100, 150, 200, 250, 300, 315, 350, 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 (315, 350, 400 and 450 mm only available in stainless steel).

#### Advantages

- Precision frame (ensures consistent nestability)
- Precise aperture (in accordance with ISO 3310, ASTM or other specifications)
- Available to every national and international standard
- 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

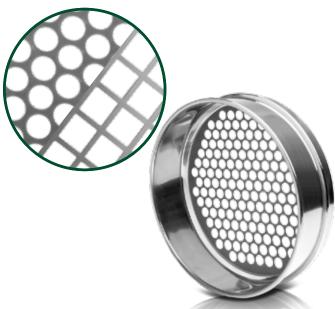
### International Test Sieve Series

ISO 3310-1 <b>ISO</b> <b>Nominal Aperture Sizes</b>						
125.00 mm		5.60 mm		250 µm	53 µm	
112.00 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 1/2	6.30 mm	1⁄4	250 µm	No.60	
75.00 mm	3	5.60 mm	No. 3 ½	212 µm	No.70	
63.00 mm	2 1/2	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 3⁄4	2.80 mm	No. 7	106 µm	No.140	
37.50 mm	1 1/2	2.36 mm	No. 8	90 µm	No.170	
31.50 mm	1 1⁄4	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	3⁄4	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	1/2	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, 315, 350, 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. Other materials and sizes can be produced to order.

## **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 round or square 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 / BS410-2

#### 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 Aj	perture Sizes for 10	00 mm Diameter	Sieves [µm]		
75	40	20	5		
60	30	15			
50	25	10			
Nominal Aj	perture Sizes for 2	-	Sieves [µm]		
Nominal Aj 200		-	Sieves [µm] 5		
	perture Sizes for 2	00 mm Diameter			
200	perture Sizes for 20	00 mm Diameter 1			
200 190	<b>perture Sizes for 2</b> 160 150	00 mm Diameter 1 15 12			

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# **Specials**

### **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 300 mm and 3", 8" or 12" with the complete range of woven wire mesh or perforated plate sieving media. Other height options are also available.

### **Extra Depth Sieves**

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

### **Air Jet Sieves**

The "Premium" air jet sieves are specially designed for the use with the new Endecotts Air Sizer 200 and air jet sieving machines of other brands. They are only available in 8" diameter stainless steel frames.

The "Standard" air jet sieves are available in 200 mm or 8" diameter in brass or stainless steel frames.

Both styles of air jet sieves are available



### 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.

### 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 450 mm as well as 3, 8, 12 or 18 inches. Half height receivers are also available.





Precision Test Sieves and Sieve Shakers | www.endecotts.com | 09

# **Coffee Sieves**



These sieves are specially designed for the coffee industry and used for grading coffee beans. They are manufactured with brass or stainless steel frames of 8" or 200 mm and fitted with round hole, stainless steel perforated plate.

A complete range is available in standard measurements. Other specifications and designations are also available.

Diamond	Sieves
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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.

Fixed plate 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.

Coffee Sieves					
64th inch	Classification	Central America and Mexico	Columbia	Africa and India	
20/64	Very large	Superior	Supremo	AA	
19.5/64	Very large	Superior	Supremo	AA	
19/64	Very large	Superior	Supremo	AA	
18.5/64	Large	Superior	Supremo	AA	
18/64	Large	Superior	Supremo	А	
17/64	Large	Superior	Excelso	А	
16/64	Medium	Segundas	Excelso	В	
15/64	Medium	Segundas	Excelso	В	
14/64	Small	Terceras	Excelso	С	
13/64	Shells	Caracol	Excelso	PB	
12/64	Shells	Caracol	Excelso	PB	
11/64	Shells	Caracolli	Excelso	PB	
10/64	Shells	Caracolli	Excelso	PB	
9/64	Shells	Caracolillo	Excelso	PB	
8/64	Shells	Caracolillo	Excelso	PB	

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	1.783	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				

# **Grid Sieves**

**Grain Sieves** 



Used to determine the flakiness index of aggregates. Endecotts grid sieves are manufactured to fully conform to the requirements of EN 933-3. The 300 x 300 mm sieves are made entirely of stainless steel and are strong, durable and anticorrosive. They can be supplied as a single item or as a set. The receiver is ordered separately.

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Endecotts Grain Sieves are specially manufactured to meet the requirements of ISO 5223.

They are used by Government Intervention Boards and similar organisations worldwide for testing grains and cereals. They are available in 200 mm diameter brass or stainless steel frames in full or half height depths with stainless steel slotted plate. Slot sizes as table below.

Grid Sieves EN 933		
Slot Width [mm]	Particle Size Fraction [mm]	
50.0	100 - 80	
40.0	80 - 63	
31.5	63 - 50	
25.0	50 - 40	
20.0	40.0 - 31.5	
16.0	31.5 - 25.0	
12.5	25 - 20	
10.0	20 - 16	
8.0	16.0 - 12.5	
6.3	12.5 - 10.0	
5.0	10 - 8	
4.0	8.0 - 6.3	
3.15	6.3 - 5.0	
2.5	5 - 4	

	Grain Sieves ISO 5223	
Slot Size [mm]	Sieve Height	Plate Material
3.55 x 20.0	Full or Half	Stainless Steel
2.50 x 20.0	Full or Half	Stainless Steel
2.24 x 20.0	Full or Half	Stainless Steel
2.20 x 20.0	Full or Half	Stainless Steel
2.00 x 20.0	Full or Half	Stainless Steel
1.90 x 20.0	Full or Half	Stainless Steel
1.80 x 20.0	Full or Half	Stainless Steel
1.70 x 20.0	Full or Half	Stainless Steel
1.00 x 20.0	Full or Half	Stainless Steel
Slot widths of 2.25 mm are available on request		

Sieve Shakers

# 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.

# MODERN & REVOLUTIONARY

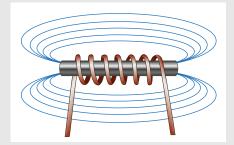
Our new line of laboratory and heavy duty sieve shakers: precise & efficient, easy to operate, featuring a fresh look



	Air Sizer 200	Minor 200
Range:	20 µm - 4 mm	20 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:	203 mm / 8" premium air jet 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 40 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. Laboratory Sieve Shakers

# Air Sizer 200

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

It is also the perfect instrument to quickly provide sieving of powdered materials.

The Air Sizer 200 is only compatible with the "Premium" air jet 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" "premium" air jet sieves
Max. height of sieve stack	1 sieve
Accessories	pre filter unit / industrial vacuum
Model	benchtop
Protection code	IP 40
Electrical supply	100 - 240 V , 50/60Hz
Power connection	1 - phase
WxHxD	450 x 235 x 435 mm
Net weight	~ 16 kg

#### Function

An Endecotts "Premium" air jet 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.

# Endecotts Laboratory Sieve Shakers

# Sonic Sifter

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.

### Advantages

- 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

### Function

The Sonic Sifter sieving action, which can be varied for different densities and textures of material, is unique. A vertical column of air is created 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.

Sonic Sifter
5 μm - 5.6 mm
3"
sonic energy pulsing
1 - 6
0 - 99.9 min
benchtop
different voltages available
254 mm x 508 mm x 254 mm
~ 16.8 kg



### Sieves for the Sonic Sifter

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

# Minor 200

Laboratory Sieve Shakers

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

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.



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#### 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

Minor 200
20 µm to 125 mm
electromagnetic
3 kg
8 full height / 16 half height (200 mm or 8" sieves)
~ 1.6 mm*, fixed
analog, 0 - 60 min
-
yes
-
-
100 / 200 mm, 3" / 8"
-
clamping belt system (included)
benchtop
IP 20
different voltages available
1-phase
262 x 126 mm
~ 16 kg

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
WxHxD	418 x 232 x 435 mm
Net weight	~ 35 kg

\* depending on loading

EXCEPTIONALINY PRECISE & REMABLE

# Endecotts

Laboratory Sieve Shakers

# Octagon 200CL

The new 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.

- "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 RS232 Port (printed or digital protocols)
- Voltage-independent
- No mechanical moving parts
- Compact & portable
- Complies with the requirements of AASHTO T 27

Crasifications	October 200 CI
Specifications Bange	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 (RS232)
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
WxHxD	418 x 232 x 435 mm
Net weight	~ 35 kg







# EFL 300

The new 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.

•

- 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 40 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
ØxH	427 x 240 mm
Net weight	~ 47 kg





# Endecotts Heavy Duty Sieve Shakers

# Titan 450

The name says it all: The new 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.

- 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
ØxH	606 x 230 mm
Net weight	~ 140 kg





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 RS232 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.

- 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				
Windows® interface	Windows <sup>®</sup> 2000/XP/Vista (others on request)			
ASTM and Tyler Mesh	х			
Password protection for sieve analysis	x			
Serial no. for sieves	х			
Sieve analysis with				
• nominal mesh size	х			
<ul> <li>actual mesh size</li> </ul>	х			
Automatic simultaneous data transfer	х			
Administration of measurement data	unlimited			
Data import and export	х			
PDF manual on CD-ROM	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	х			
Fraction $\Delta m$ (proportional masses)	х			
Distribution density q3(x)	x			
log. distribution density q3*(x)	x			
Actual mesh size	x			
Diagram	A			
Combined representation of several analyses	x			
Curve representation	X			
Graphic presentation	Α			
• x-axis	lin, log			
• y-axis	lin, log, RRSB			
Windowing (Zoom)	X			
Cumulative curve (throughput) Q3 (x)	<u> </u>			
Residual curve (1-Q3 (x))	X			
Fraction p3/histogram	X			
Lin. Division density $q_3(x)$	X			
Log. Division density q3*(x)	X			
Trend analysis	X			
Limit value graph with specifications limits	X			
2 representation possibilities (including right y-axis)	х			
Reference particles				
(registration of external particle size division)	Х			
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.	Х			

# **Calibration Samples**

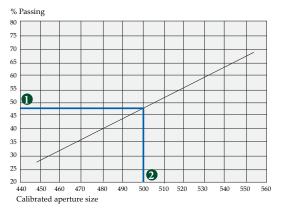
For accurate test sieve calibration

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  $\mu$ m. 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.

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. **1**
- 5) The mean average aperture size in microns can be read off against the graph. (2)



Traceable to the National Physical Laboratory

### **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.



# Endecotts

### Cleaning & Accessories

# Fluid Bed Dryer FBD 2000

Simply the most efficient method of drying samples for analysis

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

#### Advantages

- 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

#### Accessories

Single tubs come in 2 and 5 litre sizes in either stainless steel or glass. A multi-tub unit with 4 x 300 ml 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.



Fluid Bed Dryer
5 kg
115 V or 230 V 50 Hz or 60 Hz
2.6 KVA
260 x 340 x 495 mm
19 kg

### The FBD 2000 offers significant advantages over conventional drying techniques.

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 the 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 2 kW electric heater and can be set to any temperature up to 200 °C.

#### **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 for more aggressive conditions such as sustained high temperature drying. Large bags are suitable for 2 litre and 5 litre

tubs. For multi-tub unit 4 small filter bags are needed.

# 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".

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

# Method of use



A measured sample up to 100 ml is placed in the reservoir behind the gate.



The gate is released by pressing the lock release lever - 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.

- 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

# 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.

### 1/4" Sample Divider

Unit consists of Divider plus 3 receiving boxes		
12 – slots ¼" wide x 2 7/8" long.	6.35 mm wide	
Overall length of Divider body	130 mm	
Overall width of Divider body	133 mm	
Overall height of Divider body	101.5 mm	
Overall length of Divider boxes	98.6 mm	
Overall width of Divider boxes	63.5 mm	
Overall depth of Divider boxes	52.4 mm	
<sup>1</sup> ⁄4" Weight of Unit	1 kg approx.	
Volume	0.3 litres	

### <sup>1</sup>/<sub>2</sub>" Sample Divider Unit consists of Divider plus 3 receiving boxes (with handles) 12 - slots 1/2" wide x 3 15/16" long. 12.7 mm wide Overall length of Divider body 229 mm Overall width of Divider body 216 mm Overall height of Divider body 133.5 mm Overall length of Divider boxes 184.2 mm Overall width of Divider boxes 98.6 mm Overall depth of Divider boxes 120.7 mm 1/4" Weight of Unit 3 kg approx. Volume 1. litres

# Widest Range of Sample Probes



### Sleeve Sampler

Ideal for taking samples of free flowing powders and granules. Samples from depths up 2,500 mm. Robust construction in high quality 316 stainless steel.

Inserting the sampler into the bulk forces sleeve up sample chamber to close opening. At required depth pull the sampler up enough to open the chamber and allow the sample to fill it.

### Tip Sampler

Designed for heavy duty applications. Similar to the sleeve sampler but with an outer tube and inner rod. The 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.

Manufactured in 316 stainless steel in standard nominal lengths of 600 mm, 1000 mm and 1500 mm and is designed for heavy duty applications. A disposable polypropylene version is also available.

### Pocket Sampler

Similar to the Slot Sampler above but with pockets in the inner rod for taking a set of multi level samples from free flowing powders and granules. The sampler is simple to use and comes with a removable tip for thorough cleaning. Manufactured in 316 Stainless Steel.

### Slot Sampler

The Slot Sampler is ideal for taking samples of free flowing powders and granules, even slightly cohesive powders where a large volume of sample is required without the need to retain the distribution from different depths. Produced in high quality 316 stainless steel.

A rotating sleeve is used to open and close slots in a hollow core and fill with sample. The sample can be recovered by simply tipping it out through the open end of the handle of the sampler. A bottle can be fitted to the sampler for easier handling.

Sample can be discharged from the open end of the slot sampler or directly into a sample bottle.

### Powder Lance

Manufactured from high quality 316 stainless steel for the collection of large volume samples 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.

### Sack Bag Sampler

Collection with 200 ml or 500 ml bottles Specially designed with a 'chisel' end to enable samples to be taken through the sides of a sack or bag. Manufactured in 316 Stainless Steel. Choice of collection methods.

Simply pierce the bag using the sampler and allow the required sample volume to flow into the sampler tube.

A bottle adapter can be used to take samples of 250 ml or 500 ml. The open ended version allows as much sample as required to be poured out into a bag or other receptacle. Also available a 500 mm cleaning brush.

### Sample Scoops

Heavy duty sample scoops produced in highest quality 316 stainless steel. Crevice free to reduce contamination and easy to clean.



# Endecotts

Internet





WHEN PARTICLE SIZE MATTERS

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