Endecotts

Particle Analysis Equipment of Outstanding Quality

Manufacturing the world's finest particle analysis equipment

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

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

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

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

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

The same outstanding quality in sampling equipment

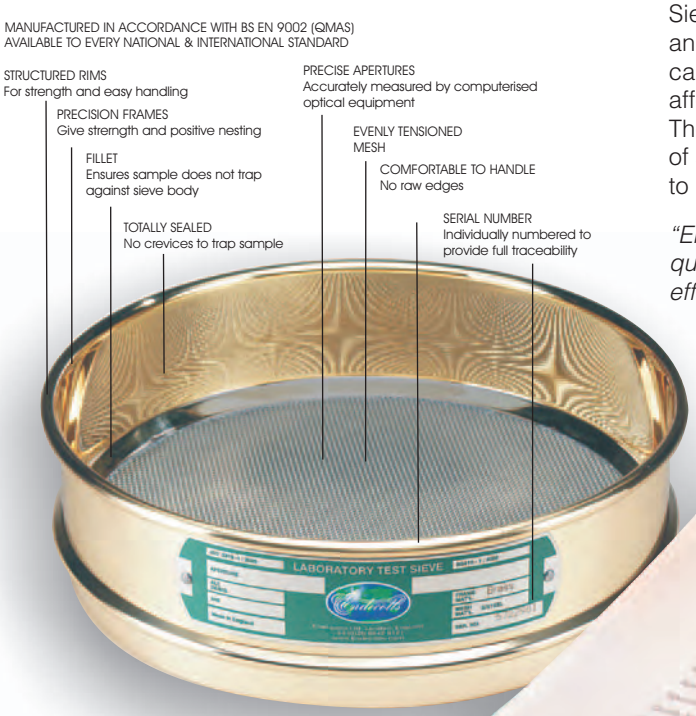
Endecotts have developed a wide range of shakers suitable for all types of sieving and samples. Careful consideration has gone into the design to ensure the correct movement of the sample across the sieve apertures.

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

Endecotts

PARTICLE ANALYSIS EQUIPMENT
OF OUTSTANDING QUALITY

What to look for in a precision test sieve



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

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

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

Certified Test Sieves

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

Inspected Test Sieves

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

Calibrated Test Sieves

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

Matched Sieves

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

Mid Point Sieves

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

Re-Inspection Service

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

See Calibration Samples page 5

A precision instrument makes the analysis accurate

The widest range of test sie

made to every National and International Standard

Woven Wire Mesh Sieves

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

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

Perforated Plate

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

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

Half Height Sieves

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

Microplate Sieves

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

Wet Washing Sieves

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

Extra Depth Sieves

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

eves available

Sieves

Grid Sieves

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

Air-Jet Sieves

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

Grain Sieves

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

Lids & Receivers

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

Pocket Sieve Set

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

they're the perfect measuring instrument

SPECIFICATIONS

A table of the most widely used specifications

International Test Sieve Series ISO 3310

British StandardSieve Series BS410

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

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

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

Sieve Diameters and Frame Materials

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

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

Br - Brass SS - Stainless Steel

Other materials and sizes available on request.

American Standard Sieve Series ASTM E11

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

Sieve Diameters and Frame Materials

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

CALIBRATION SAMPLES

For accurate test sieve calibration

What are calibration samples?

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

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

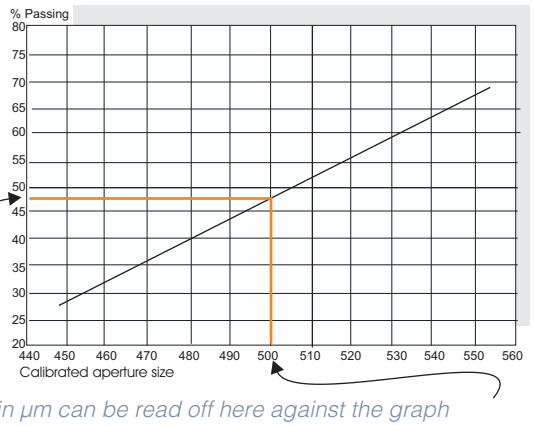
Endecotts glass calibration samples will enable you to calibrate your test sieves to an accuracy of approx 1µm. Because the microspheres pass over virtually the total surface of the sieve more apertures are examined than with any other method, making it one of the most accurate methods of sieve calibration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

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

Accurately calibrate test sieves in a matter of minutes

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

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



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

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

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

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

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

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