

## About Sieves

"It's features like these which count."

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



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.

At every stage of manufacture each sieve is individually inspected by optical projection including the very latest computer based optical measuring equipment.

With so many features it is hardly surprising Endecotts test sieves are specified by more laboratories worldwide.

## Types of Laboratory Sieve

### Certified Sieves

These are the most widely used test sieves and are manufactured to a National or International Specification. Each is supplied with a Certificate of Conformity and individually numbered to provide full traceability.



**Certified Sieve**



**Certificate of Conformity**

### Calibrated Sieves

These sieves are calibrated in accordance with the specification. Each sieve is supplied with a calibration test certificate giving the range of tolerances and measurements taken.

## Matched and Calibrated Sieves

A combination of Matched and Calibrated Sieves. Each is supplied with a calibration test certificate marked "matched with sieve serial No...."

## Mid Point Sieves

Test sieves with a more precise sieving medium where specification tolerances are reduced by 30% where attainable. Each sieve is supplied with a test certificate giving the range of tolerances and measurements taken.

## Re-Certification Service

Sieves may be re-examined and re-inspected in accordance with the appropriate specification. Complying sieves are issued with a Certificate of Re-Inspection.

## Woven Wire Mesh Sieves



Endecotts woven wire mesh sieves are the most widely used test sieves for all types of laboratory 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, as well as 3, 8, 12 or 18 inches.

They can be supplied with aperture sizes ranging from 125mm down to 20 microns and in full or half height versions.

Woven wire mesh sieves are available in frame materials of either brass or stainless steel with larger diameter sieves also available in plated steel. Other materials and sizes can be produced to order.

Endecotts woven wire mesh sieves are available to every national and international standard.

## 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 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 either brass or plated steel, and all are manufactured to the highest engineering standards to ensure quality and accuracy. Other materials and sizes can be produced to order.

Endecotts perforated plate sieves are available to every national and international standard.

## GRID SIEVES

### For flakiness testing of aggregates

Manufactured in accordance with EN 933-3:1997

300 mm x 300 mm

- Fully compliant to EN 933-3:1997 (amended Feb 04)

Made entirely of Stainless Steel

- Lightweight Construction
- Strong and Anti-corrosive
- Durable



Part No	Slot Width	Particle size fraction	Net Weight Unpacked
Gird-40.00	40 mm	80 mm – 63 mm	1.7 kg
Grid-31.50	31.5 mm	63 mm – 50 mm	1.8 kg
Grid-25.00	25 mm	50 mm – 40 mm	1.9 kg
Grid-20.00	20 mm	40 mm – 31.5 mm	2 kg
Grid-16.00	16 mm	31.5 mm – 25 mm	2.1 kg
Grid-12.50	12.5 mm	25 mm – 20 mm	2.2 kg
Grid-10.0	10 mm	20 mm – 16 mm	2.3 kg

Grid-8.00	8 mm	16 mm – 12.5 mm	2.5 kg
Grid-6.30	6.3 mm	12.5 mm 10 mm	2.6 kg
Grid-5.00	5 mm	10 mm – 8 mm	2.8 kg
Grid-4.00	4 mm	8 mm – 6.3 mm	2.9 kg
Grid-3.15	3.15 mm	6.3 mm – 5 mm	3.1 kg
Grid-2.50	2.5 mm	5 mm – 4 mm	3.2 kg

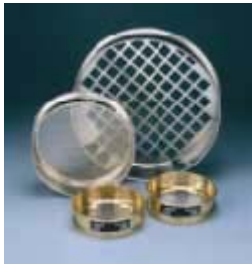
**Test Sieves required to comply with  
EN 933, Parts 2 & 3**

Only sieves with square apertures to be used  
 Sieve apertures less than 4 mm to be woven wire to ISO 3310-1  
 Sieve apertures 4 mm and greater to be SHPP to ISO 3310-2



Woven Wire Sieves  
 EN 933-2 Test Sieve Series  
 Sieve Diameters either 200 mm, 300 mm or 450 mm  
 Brass or S/St Frames

63 µm	125 µm	250 µm	500 µm
1 mm	2 mm		



Perforated Plate Sieves  
 EN 933-2 Test Sieve Series  
 Sieve Diameters either 200 mm, 300 mm or 450 mm  
 The following table includes those apertures required for  
 Flakiness Index to EN 933-3 - Brass or S/St Frames

125 mm	80 mm	63 mm	50 mm
40 mm	31.5 mm	25 mm	20 mm
16 mm	12.5 mm	10 mm	8 mm
6.3 mm	5 mm	4 mm	



EN 933-2, Specification Sizes  
 Test Sieves for Particle Shape Flakiness Index  
 EN 933-3:1997  
 Grid Sieves  
 Sieve Frames 300 mm x 300 mm - S/Steel Frames

40 mm	31.5 mm	25 mm	20 mm
16 mm	12.5 mm	10 mm	8 mm
6.3 mm	5 mm	4 mm	3.15 mm
2.5 mm			

Other aperture sizes may be required,  
primarily R20 Series from ISO 565

Methods for the determination of particle size  
distribution are to be found in EN 933-1:1997

### Test sieves for all types of applications

#### Half Height Sieves



Where smaller quantities of sample are being analysed half height sieves are often used. These are available in diameters of 38, 100, 150, 200, 250, 300, 315, 350, 400 and 450mm, as well as 3, 8, 12 or 18 inches with the complete range of woven wire mesh or perforated plate sieving mediums.

#### Microplate Sieves

For very fine particle size analysis Endecotts produce a range of microplate sieves made from electro-etched nickel plate in stainless steel frames of 100mm diameter. Available with unique self clearing apertures in sizes from 75 to 5 microns.



#### Wet Washing Sieves



For samples that need to be separated with the help of wet washing. Available in 8 inches diameter by 4 or 8 inches deep, or their metric equivalents, 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 plated steel with woven wire mesh or perforated sieving mediums.



### 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 worldwide for testing grains and cereals. Available in 200mm diameter brass frames with plated mild steel slotted plate and a range of aperture sizes as specified in ISO 5223.



### Lids & Receivers



Lids, receiving pans and intermediate receiving pans are available in brass, stainless steel or plated 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 a sieve brush and belt pouch.



### Sieve Brush & Analysis Graph Paper



Double ended sieve brushes specially designed for cleaning sieves with one end coarse bristles and the other fine. Graph paper for the rapid analysis of sieve test data. Pad contains 25 sheets printed on semi-transparent detail paper to allow direct comparison of graphs.

### Sample Dividers

These hand held sample dividers will subdivide material samples into smaller portions while retaining the characteristics of the original sample.

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



## Wet Sieving Kit



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

## Specifications

*A table of the most widely used Test Sieve specifications*

International Standard		British Standard
ISO 3310 Series		BS 410 Series
<b>Wire Mesh Series</b> <b>ISO-3310-1:2000</b> <b>BS410-1:2000</b> <b>Nominal Aperture Sizes</b> <b>mm</b>	<b>Wire Mesh Series</b> <b>ISO 3310-1:2000</b> <b>BS410-1:2000</b> <b>Nominal Aperture Sizes</b> <b>µm</b>	<b>Perforated Plate Series</b> <b>ISO-3310-2:1999</b> <b>BS410-2:2000</b> <b>Nominal Aperture Sizes</b> <b>mm</b> <b>Round &amp; Square Holes</b>
125	900	125
112	850	112
106	800	106
100	710	100
90	630	90
80	600	80
75	560	75
71	500	71
63	450	63
56	425	56
53	400	53
50	355	50
45	315	45
40	300	40
37.5	280	37.5
35.5	250	35.5
31.5	224	31.5
28	212	28
26.5	200	26.5
25	180	25
		22.4
		20

22.4
20
19
18
16
14
13.2
12.5
11.2
10
9.5
9
8
7.1
6.7
6.3
5.6
5
4.75
4.5
4
3.55
3.35
3.15
2.8
2.5
2.36
2.24
2
1.8
1.7
1.6
1.4
1.25
1.18
1.12
1

160
150
140
125
112
106
100
90
80
75
71
63
56
53
50
45
40
38
36
32
25
20

19
18
16
14
13.2
12.5
11.2
10
9.5
9
8
7.1
6.7
6.3
5.6
5
4.75
4.5
4
Round Hole Only
3.55
3.35
3.15
2.8
2.5
2.36
2.24
2
1.8
1.7
1.6
1.4
1.25
1.18
1.12
1

Sieve Diameter and Frame Materials			BS410-1:2000	
ISO 3310-1:2000				
Diameter	Height	Plate	Depth to Mesh or	Frame Material
38 mm	Full		19 mm	Bs or SS
100 mm	Full		40 mm	Br or SS
100 mm	Half		20 mm	Br or SS

150 mm	Full	38 mm	SS
200 mm	Full	50 mm	Br or SS
200 mm	Half	25 mm	BR or SS
250 mm	Full	60 mm	SS
300 mm	Full	75 mm	Br or SS
300 mm	Half	40 mm	Br or SS
315 mm	Full	75 mm	SS
350 mm	Full	60 mm	Br or SS
400 mm	Full	65 mm	Br or SS
450 mm	Full	100 mm	SS

**Br - Brass SS - Stainless Steel**

**American Standard**  
**ASTM E11-01**

<b>Wire Mesh Series</b>	
<b>Designation</b>	
<b>Standard mm</b>	<b>Alternative</b>
125	5.00"
106	4.24"
100	4"
90	3 1/2"
75	3"
63	2 1/2"
53	2.12"
50	2"
45	1 3/4"
37.5	1 1/2"
31.5	1 1/4"
26.5	1.06"
25	1"
22.4	7/8"
19	3/4"
16	5/8"
13.2	0.530"
12.5	1/2"
11.2	7/16"
9.5	3/8"
8	5/16"
6.7	0.265"
6.3	1/4"
5.6	No.3 1/2
4.75	No.4
4	No.5
3.35	No.6
2.8	No.7
2.36	No.8
2	No.10
1.7	No.12
1.4	No.14
1.18	No.16

1	No.18
<b>µm</b>	
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

<b>Sieve Diameter and Frame Materials</b>			
<b>ASTM E11-01</b>			
<b>Diameter</b>	<b>Height</b>	<b>Depth to</b>	<b>Frame</b>
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
18 in	Full	3½ in	SS

**Br - Brass SS - Stainless Steel**

The International Standards ISO 3310 parts one and two are adopted by a number of National Standards bodies. eg:

	ISO 3310-1	ISO 3310-2
UK	BS 410-1	BS410-2
Germany	DIN ISO 3310-1	DIN ISO 3310-2
France	NF ISO 3310-1	NF ISO 3310-2
Japan	JIS Z 8801-1	JIS Z 8801-2

This list is not exhaustive, however, with a few exceptions, the International Standard is likely to meet most requirements.