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.

| Specifications      | Sonic Sifter                 |
|---------------------|------------------------------|
| Range               | 5 μm - 5.6 mm                |
| Sieve Diameter      | 3"                           |
| Sieving motion      | sonic energy pulsing         |
| Number of fractions | 1 - 6                        |
| Process time        | 0 - 99.9 min                 |
| Model               | benchtop                     |
| Electrical supply   | different voltages available |
| WxHxD               | 254 mm x 508 mm x 254 mm     |
| Net weight          | ~ 16.8 kg                    |



## Sieves for the Sonic Sifter

| Aperture | Standard<br>Sieves                 | Special<br>Sieves                       | Precision<br>Sieves                        |
|----------|------------------------------------|---|--|
|          | Stainless steel<br>woven wire mesh | Stainless steel<br>woven wire mesh      | Electroformed<br>nickel plate              |
|          | Max six per<br>column              | Double depth<br>Max three per<br>column | Only one<br>sieve per stack<br>recommended |
| 150 µm   | •                                  | -                                       | •  |
| 125 µm   | •                                  | -                                       | •  |
| 106 µm   | •                                  | -                                       | •  |
| 105 µm   | -                                  | -                                       | •  |
| 100 µm   | -                                  | -                                       | •  |
| 95 µm    | -                                  | -                                       | •  |
| 90 µm    | •                                  | -                                       | •  |
| 85 µm    | -                                  | -                                       | •  |
| 80 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     | -                                  | -                                       | •  |