

AS 400 control – Sieving on One Level

The RETSCH AS 400 control is used for sieving dry goods with test sieves up to 400 mm in diameter. The uniform, horizontal circular sieving motion produces a sharp separation of the sample fractions. Fine and coarse-grained goods from areas such as milling, brewing, chemical industry, quarries, soil testing, woodworking and plastics industry, can be exactly separated with the AS 400 control. This particular sieving motion is preferably used for long or fibrous, needle-shaped or flat materials due to their horizontal orientation. For the testing of plastics (grainy molding materials), the standard DIN 53 477 stipulates exactly this circular sieving motion.

The AS 400 control can be used as test instrument for the quality control according to DIN EN ISO 9000 ff. Due to the controlled drive which is independent of the power frequency the AS 400 control yields reproducible results worldwide. The speed and sieving time are set, displayed and monitored digitally. The instrument is supplied with a test certificate and can be recalibrated.

If desired, the rotation direction can be set to alternate in the interval. A memory for 9 sieving programs facilitates routine analyses. The AS 400 control has an integrated interface for controlling all sieving parameters via the EasySieve® software.

The AS 400 control is a robust device, which meets highest requirements due to its superior technology. The base plate can take very high loads due to 4 eccentric guides. With the option to install clamping devices for sieves with diameters from 100 mm to 400 mm (4" to 16") the AS 400 is suitable for a wide range of applications. With the proven clamping device "comfort" the sieve stack can be fastened conveniently with two simple steps. For occasional sieving processes we recommend the inexpensive clamp "standard".

The clamping devices of AS 200 and AS 300 can be used with the AS 400 for clamping sieve stacks with diameters of 100 mm, 150 mm, 200/203 mm and 305/315 mm.



Horizontal Sieve Shaker AS 400 control with clamping device "comfort" and sieve stack

Benefits

- Circular sieving motion according to DIN 53477
- For sieves up to 400 mm Ø
- Measuring range 45 µm to 63 mm
- Easy operation, ergonomic design
- Free digital selection of process parameters (time, speed, interval)
- Memory for 9 Standard Operating Procedures (SOPs)
- Test materials monitoring according to DIN EN ISO 9000 ff

Video on www.retsch.com/as400

Accessories and Options

- Clamping devices
- Test sieves
- Sieving aids
- IQ/OQ documentation
- Software EasySieve®
- Sample dividers
- Ultrasonic baths and dryers



IQ/OQ documentation and sieving aids for AS 400



AS 400 at a Glance

Horizontal Sieve Shaker



Model

AS 400 control

Applications	fractioning, particle size determination
Feed material	powders, bulk materials

Performance data

Measuring range*	45 µm – 63 mm
Max. batch / feed capacity	5 kg
Max. number of fractions**	7/9/17
Max. mass of sieve stack	15 kg
Adjustment of sieving parameters	
Speed	digital, 50 – 300 min ⁻¹
Time	digital, 1 – 99 min
Interval operation	1 – 10 min
Storable Standard Operating Procedures (SOPs)	9
Sieving motion	horizontal circular motion
Suitable for wet sieving	–
Serial interface	✓
Including test certificate / can be calibrated	✓

Technical data

Suitable sieve diameters	100 mm – 400 mm
Height of sieve stack	up to 450 mm
W x H x D	540 x 260 x 507 mm
Net weight	approx. 70 kg
More information on	www.retsch.com/as400

* depending on feed material and used sieve set

** depending on the used sieve heights

Typical Sample Materials

The horizontal circular sieving motion of the AS 400 control is perfectly suitable for the separation of materials such as construction materials, wood chips, compost, flour, milled grain, grainy molding materials, seeds and many more.



Wood chips



Flour

AS 200 tap – Mechanizing Hand Sieving

The RETSCH AS 200 tap is suitable for dry sieving with test sieves of 200 mm or 8" diameter. The combination of horizontal, circular sieving motions with vertical taps reproduces the principle of hand sieving. The uniform mechanical action ensures reliable and reproducible measurement results.

This special type of sieving motion used by the AS 200 tap is specified in various standards for particle size analysis of materials such as activated carbon, diamonds, spices, metal powders, abrasives or cement.

Operating the AS 200 tap is exceptionally easy and safe. The integrated clamping device allows for sieve stacks with up to 7 or 13 fractions, depending on the height of the sieve frame. The sieving time is set from 1 to 99 minutes via a digital display.

The number of rotations and taps is fixed; the tapping motion can be deactivated, if required. A safety switch and an anti-trap protection provide maximum safety. Thanks to an integrated interface, the AS 200 tap can be controlled with the evaluation software EasySieve®.

Benefits

- Sieving with circular motion and vertical taps according to standards
- Measuring range 20 µm to 25 mm
- For 200 mm / 8" sieves
- Sieve stack up to 350 mm
- Digital time setting
- Integrated interface
- Suitable for dry sieving

Video on www.retsch.com/as200tap

Tap Sieve Shaker AS 200
tap with sieve stack



Horizontal Circular Sieving
Motion with Taps

Accessories and Options

The AS 200 tap is a robust and maintenance-free sieve shaker. The compact sound-enclosure cabinet helps to substantially reduce noise emission and ensures CE conformity.

Accessories

- Test sieves
- Ball-pan hardness test kit
- Sieving aids
- IQ/OQ documentation
- Software EasySieve®
- Sample dividers
- Ultrasonic baths and dryers



Tap Sieve Shaker AS 200 tap with sound-enclosure cabinet and sieve stack

AS 200 tap at a Glance

Tap Sieve Shaker



Model

AS 200 tap

Applications	fractioning, particle size determination
Feed material	powders, bulk materials

Performance data

Measuring range*	20 µm – 25 mm
Max. batch / feed capacity	3 kg
Max. number of fractions**	7/13
Max. mass of sieve stack	6 kg
Adjustment of sieving parameters	
Speed	fixed, 280 min ⁻¹ , taps: 150 min ⁻¹
Time	digital, 1 – 99 min
Interval operation	–
Storable Standard Operating Procedures (SOPs)	–
Sieving motion	horizontal circular motion with taps
Suitable for wet sieving	–
Serial interface	✓
Including test certificate / can be calibrated	–

Technical data

without sound-enclosure cabinet with sound-enclosure cabinet

Suitable sieve diameters	200 mm / 203 mm (8")	
Height of sieve stack	up to 350 mm	
W x H x D	700 x 650 x 450 mm	735 x 675 x 530 mm
Net weight	approx. 68 kg	approx. 92 kg
More information on	www.retsch.com/as200tap	

* depending on feed material and used sieve set

** depending on the used sieve heights

Typical Sample Materials

Tap sieve shakers are used for sieving a variety of materials including activated carbon, diamonds, spices, metal powders, abrasives cement etc.



Diamonds



Cement

AS 200 jet – Quick and Gentle Quality Control of Fine Powders

The Air Jet Sieving Machine AS 200 jet is particularly suitable for low density and low particle size materials which tend to agglomerate. It is used with sieves of 10 microns mesh size and up. The procedure is very gentle on the material as no mechanical sieving aids are required. The average sieving time is only 2-3 minutes.

The AS 200 jet is specifically designed for test sieves with a diameter of 203 mm/8" (or 200 mm with adapter). The air jet generated by an industrial vacuum cleaner can be adjusted by using the manual vacuum regulation. Optionally, an automatic vacuum regulation is available.

The Open Mesh Function, a procedure which greatly reduces the number of near-mesh particles, provides optimum separation efficiency, excellent reproducibility and a longer service life of the sieves.

Sieving time and nozzle speed are conveniently selected with a single button; the settings are shown in the graphic display. The Quick Start Mode is used to start the sieving process under standard conditions without entering parameters.



Air Jet Sieving Machine AS 200 jet with test sieve



Air Jet Sieving Machine AS 200 jet
with cyclone and sample bottle

Benefits AS 200 jet

- Air jet technology for dispersion and deagglomeration
- Measuring range 10 µm to 4 mm
- Quick, efficient procedure
- Open Mesh Function reduces near-mesh particles
- Digital parameter setting (time, vacuum, speed)
- Quick Start option
- Variable nozzle speed
- Automatic vacuum regulation and cyclone (options)
- Memory for 9 Standard Operating Procedures (SOPs)
- Suitable for RETSCH standard sieves
- Maintenance-free

Video on www.retsch.com/as200jet

Accessories and Options

- **Cyclone with holder and collecting receptacle**
To extend the service life of the filters in the vacuum cleaner and for recovery of the sample fraction passing the sieve, we recommend the use of the optional cyclone. The separation degree and limiting particle size respectively depend on the sample characteristics.
- **Automatic vacuum regulation**
The automatic vacuum regulation permanently monitors the air jet and keeps it at a constant rate. This increases the reproducibility of the sieve analysis.
- **Industrial vacuum cleaner**
- **Test sieves 20 µm and up with stainless steel sieve mesh**
- **Test sieves 10 µm and 15 µm with electroformed sheet (ISO 3310-3)**
- **Adapter and lid for test sieves**
200 mm Ø x 50 mm and 200 mm Ø x 25 mm
- **Sieving aids**
- **IQ/OQ documents**
- **Software EasySieve®**
- **Sample dividers**
- **Ultrasonic baths and dryers**



The delivery scope of the AS 200 jet includes a manual vacuum regulation (1), two sieve lids (2), a sound absorber (3) and a rubber mallet.

Typical Sample Materials

The Air Jet Sieving Machine AS 200 jet is perfectly suitable for particle size analysis of construction materials, spices, catalysts, plastics, flour, pharmaceutical products and many more.

AS 200 jet at a Glance

Air Jet Sieving Machine



Model

AS 200 jet

Applications	fractioning, particle size determination
Feed material	powders, bulk materials

Performance data

Measuring range*	10 µm – 4 mm
Max. batch / feed capacity*	approx. 100 g
Max. number of fractions	1 (2 with cyclone)
Adjustment of sieving parameters	
Nozzle speed	digital, 5–55 min ⁻¹
Time	digital, 00:10–99:59 min
Open Mesh Function	10 min ⁻¹ (fixed), +20°, -10°
Vacuum**	2000–9999 Pa / 20–99 mbar / 0.3–1.45 psi
Storable Standard Operating Procedures (SOPs)	9 plus Quick Start
Sieving motion	dispersion by air jet
Serial interface	✓
Including test certificate / can be calibrated	✓

Technical data

Suitable sieve diameters	RETSCH standard test sieves Ø 200 mm/203 mm (8")
Height of sieve stack	1 sieve 25/50 mm (1"/2")
W x H x D	460 x 288 x 305 mm
Net weight	approx. 14 kg
More information on	www.retsch.com/as200jet

*depending on feed material and used sieve

** using the automatic vacuum regulation

