

ANALYTICAL SIEVE SHAKERS AS 200

control „g“ - digit - basic



SCREENS WITH 3-D EFFECT

RETSCH analytical sieve shakers are used in the areas of research & development, quality control of raw materials, intermediate products and end products, and in production control.

The AS 200 series with its variants control - digit - basic enables every user to select a suitable device according to his individual requirements, profile and budget.

ADVANTAGES

- Exact, reproducible results according to DIN 66165
- Suitable for monitoring inspection, measuring and test equipment in accordance with ISO 9000, can be re-calibrated (AS 200 control „g“)
- Self-monitoring and control of vibration height (AS 200 control „g“)
- For wet and dry sieving operations
- Acceleration display „g“ (AS 200 control „g“)
- Simple operation, ergonomic design
- Control, monitoring and evaluation of the sieving operation using the Graintest software and a standard PC (AS 200 control „g“)
- Low investment and maintenance costs
- Low-noise and maintenance-free
- Two-year guarantee

PERFORMANCE DATA

Field of application	Grain size determination, separation, fractionation, wet and dry
Sieving material	Powders, bulk goods, suspensions
Measuring range	20 µm to 25 mm
Number of fractions	9 or 17 fractions
Charge quantity	Max. 3 kg
Sieve diameter	100 mm, 150 mm, 200 mm, 203 mm (8")

ANALYTICAL SIEVE SHAKERS AS 200



AS 200 control „g“ with sieve stack and clamping device „deluxe“

AS 200 control „g“



The AS 200 control „g“ meets the highest standards in quality assurance and offers the microprocessor-controlled measuring and control system „AMPLIMATIC“, patented and unique throughout the world, for constant vibration. It can be calibrated, and ensures for the first time 100% reproducibility of sieving results, and not only for one device, but all AS 200 control „g“ units one to another. This provides the prerequisite for monitoring inspection, measuring and test equipment according to ISO 9000.

AS 200 control „g“ also meets all the requirements for a modern laboratory in terms of ergonomics. All sieving parameters – vibration level, time, interval – are set, displayed and monitored digitally. In place of the amplitude, the sieve plate acceleration „g“, which is independent of the mains frequency, can also be set.

Graintest:
PC-based evaluation of grain size analyses under Windows™ user interface



With its integrated interface, the unit can be connected to a PC and driven through the evaluation software Graintest/Sievetest. All sieving parameters are then set and selected on the VDU, changes even being displayed during the sieving operation. With the evaluation program Graintest/Sievetest it is thus possible to monitor the entire sieving process and the subsequent documentation: simply, comfortably and without error.

The AS 200 control „g“ is therefore indispensable for anyone who appreciates precision and user-friendliness and works according to the directives of GLP.

INNOVATIVE TECHNOLOGY WHICH LEAVES NOTHING TO BE DESIRED

AS 200 *digit*



AS 200 digit: the high-performance standard model of the AS series. Its use is to be recommended anywhere where digital time display, interval operation as well as analogue setting and optical monitoring of the vibration height are required.

AS 200 *basic*



AS 200 basic: the inexpensive alternative of the series. It was specially developed for sieving operations to be performed reliably without expensive digital technology and greater user comfort.

CHARACTERISTICS	AS 200 AS 200 AS 200		
	control „g“	digit	basic
ergonomic, user-friendly design	•	•	•
3-dimensional, circular material movement	•	•	•
maintenance-free, quiet electromagnetic drive	•	•	•
suitable for dry and wet sieving	•	•	•
9/17 material fractions (8 Sieves, 50 mm high/16 Sieves, 25 mm high/+bottom)	•	•	•
6-leaf-spring drive for up to 4 kg sieve stack weight and 3 kg material	•	•	•
adjustable rubber feet	•	•	•
option of different clamping devices economy/standard/deluxe	○	○	○
keypad	•	•	
time display, digital	•	•	
interval sieving	•	•	
individual selection of interval time	•		
AMPLIMATIC – microprocessor controlled amplitude	•		
serial interface for PC-control	•		
digital setting of vibration height	•		
digital setting of vibration height „g“	•		
suitable as measuring device acc. to ISO 9000	•		
CE-conformity	•	•	•

● = Standard, ○ = Option

STANDARD SIEVE STACK

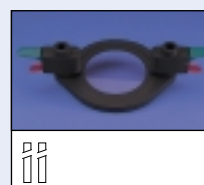
If no special requirements and wishes are known, we recommend a sieve stack with sieves of 200 mm Ø, 50 mm height, according to DIN ISO 3310/1 with the mesh widths 45-63-125-250-500-1000-2000-4000 µm and a corresponding collecting pan.

Of course, RETSCH offers analytical test sieves in all the usual sizes according to international standards.

CLAMPING DEVICES

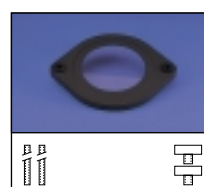
Clamping devices are available for all sieving machines of the AS series, to clamp the sieves securely, quickly and comfortably. The clamping devices, like the test sieves and the collector bottoms, are not supplied with the units. The following are available according to the requirements and financial possibilities:

Clamping device „deluxe“



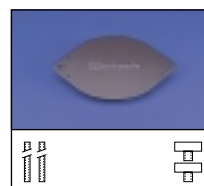
The extremely user-friendly, time-saving quick-action clamping device with clamping cover, integrated Plexiglas window to check the sieving operation, quick-action clamps and two smooth holding rods.

Clamping device „standard“



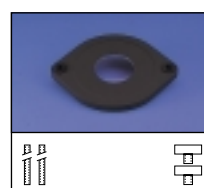
The user-friendly clamping device with two threaded rods, a clamping cover with Plexiglas window and two clamping nuts.

Clamping device „economy“



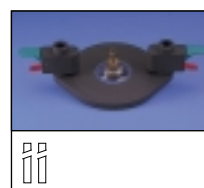
The inexpensive clamping device: two threaded rods, a simple, stainless steel cover and two clamping nuts.

Universal clamping devices



e.g. the „standard“ all-purpose sieve clamping device

The all-purpose sieve clamping devices make it possible to secure test sieves diameters of 100, 150 and 200 mm or (.. They feature a small Plexiglas viewing window. Versions are available for dry and wet sieving.



e.g. the universal wet sieving clamping device „deluxe“

The „standard“ universal clamping device is shipped complete with the cover, two threaded rods and two quick-clamping nuts; the „deluxe“ version includes the quick-clamping cover and two smooth mounting rods.

REFERENCES

ANALYTICAL SIEVE SHAKERS AS 200	Article-No.
Type AS 200 control „g“, 230 V, 50 Hz	30.014.0001
Type AS 200 control „g“, 110 V, 60 Hz	30.014.0004
Type AS 200 digit, 230 V, 50 Hz	30.015.0001
Type AS 200 digit, 110 V, 60 Hz	30.015.0004
Type AS 200 basic, 230 V, 50 Hz	30.016.0001
Type AS 200 basic, 110 V, 60 Hz	30.016.0004

Clamping devices	for test sieves	Article-No.
Clamping device „deluxe“	200/203 mm Ø	32.662.0001
Clamping device „standard“	200/203 mm Ø	32.662.0002
Clamping device „economy“	100/150/200/203 mm Ø	32.662.0003
Universal clamping device „deluxe“	100/150/200/203 mm Ø	32.662.0004
Universal clamping device „standard“	100/150/200/203 mm Ø	32.662.0005
Universal wet sieving clamping device „deluxe“	100/150/200/203 mm Ø	32.662.0006
Universal wet sieving clamping device „standard“	100/150/200/203 mm Ø	32.662.0007

Accessories	Article-No.
Standard sieve stack with test sieves 200 mm Ø, 50 mm high acc. to DIN ISO 3310/1 (45 µm, 63 µm, 125 µm, 250 µm, 500 µm, 1 mm, 2mm, 4 mm, collector bottom)	32.032.1000
Supplementary weights to compensate for low sieve tower masses, 2.100 g (two-part)	02.938.0001
Clamping device for grinding cups for Typ AS 200 basic or digit for use as Vibration Ball Mill	32.643.0008

*Recommended combination: AS 200 control „g“ with clamping device „deluxe“
 „deluxe“ clamping device for anyone who performs a lot of sieving operations
 AS 200 digit with „standard“ or „deluxe“ clamping device
 AS 200 basic with „standard“ or „economy“ clamping device*

For test sieves please refer to the „test sieves“ prospect

For evaluation programs please refer to the „GrainTest/Sievetest“ prospect

NOISE VALUES

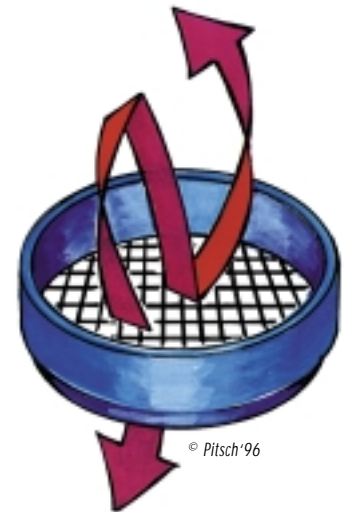
(DIN 45635-31-01, Class 3)

Emission value referenced to workplace

 $L_{pAeq} = 63 \text{ dB (A)}$

Amplitude width:

1.5 mm / 5 test sieves

**AS 200 MECHANICS**

The patented drive causes a 3-dimensional motion of projection which allows the sieving material to move evenly over the entire sieving surface.

High load endurance, extremely quiet running, short sieving times with exact separation are the result of this newly developed electromagnetic drive.

With the accuracy of the mains frequency these units work at 50 Hz with exactly 3000 vibrations per minute (3600 at 60 Hz). The vibration height can be set infinitely from 0 to 3 mm and is displayed digitally with the „control“ „g“ version, monitored using AMPLIMATIC and readjusted if there are any changes.

The housing is fully recyclable.

**WEIGHTS AND MEASURES**

W x H x D	400 x 840 x 347 mm
Weight	app. 30 kg

RETSCH GmbH & Co. KG
 Rheinische Straße 36 · D-42781 Haan
 POB 15 54 · D-42759 Haan
 Tel.: +49 (0) 21 29 / 55 61-0
 Fax.: +49 (0) 21 29 / 87 02
 Internet: <http://www.retsch.de>
 E-Mail: info@retsch.de

RETSCH offers a comprehensive programme of equipment for sample preparation of solids. Just ask for information on our crushers, mills, sample dividers, sieving machines, optical particle sizers, feeders, cleaning and drying devices. You will receive all documents free of charge and without obligation.

Technical modifications reserved

99.014.0003/E
 Printed in Germany 03/99