

THE
All-In-One
Sieving
Machines



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FOR SIEVING SPECIALISTS

THE NEW AIR JET SIEVING MACHINES AS 200 JET PRO & AS 200 JET PHARMA

With the AS 200 jet pro and the GMP-conform AS 200 jet pharma, laboratory teams get a space-saving and user-friendly all-in-one sieving machine. Sieve, weigh, and evaluate with a single device!

THE NEW AIR JET SIEVING MACHINES AS 200 JET PRO | PHARMA

VERSATILITY AND AUTONOMY

WITH THE AS 200 JET PRO AND THE GMP-CONFORM AS 200 JET PHARMA, LABORATORY TEAMS GET A SPACE-SAVING AND USER-FRIENDLY ALL-IN-ONE SIEVING MACHINE.

Sieve, weigh, and evaluate with a single device: Combining state-of-the-art air jet sieving with a built-in balance ensures precise and reliable sieve analysis in the shortest amount of time. The integrated software via touch display ensures smart processes with maximum ease of use.

- | User and audit trail management (optional in the pharma version)
- | Easy access to all operating parameters
- | Space saving device with a small footprint (460 x 288 x 305 mm)
- | Integrated balance
- | Onboard computer and clear 10-inch user interface
- | LAN and USB interface



ROBUST AND SUPER PRECISE: THE INTEGRATED BALANCE

The balance, which has been integrated into the machine design for the first time, is extremely robust – and patented! You can even use a rubber hammer to loosen any material that sticks to the lid during sieving without affecting the accuracy of the balance.

The integration of the balance not only saves additional space in your laboratory but also reduces errors. There is no need to transfer material between the sieving machine and an external balance, which effectively prevents material loss. Thanks to a high weighing readability of 0.01 g, all necessary data are recorded precisely during sieving, and the respective particle size is evaluated using the integrated software.

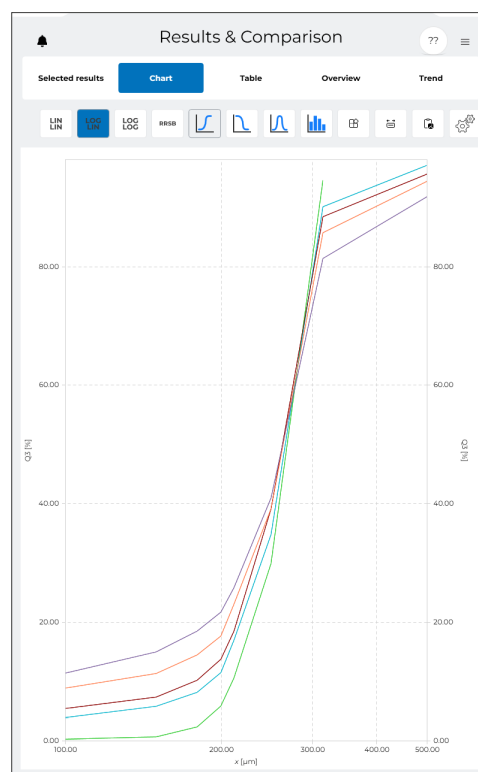
NATIVE SOFTWARE INTEGRATION – YOUR DIGITAL ASSISTANT IN THE LABORATORY

Thanks to native software integration, you always have control over the entire process chain via an intuitive touch display:

- | Sieve Management
- | Parameter and Method Setup
- | Sieve Analysis
- | Weighing
- | Data Evaluation & Reporting via USB or LAN connection
- | Optional User Management (in the pharma version)

STEP BY STEP TO THE DESIRED RESULT

With the integrated software, you can easily perform both simple routine sieving and complex distribution analyses: and display all results immediately afterwards in both graphical and tabular form.



Display of results in graph

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ADDITIONAL FEATURES AND SAMPLE MATERIALS



CYCLONE FOR OPTIMAL SAMPLE RECOVERY

With the optional high-performance cyclone, even extremely fine particles can be recovered without significant pressure loss during the sieving process. In addition, the use of a cyclone helps to extend the service life of the vacuum cleaner filter.



USE YOUR EXISTING EXTERNAL BALANCE

Optionally, you can easily connect your existing, qualified balance as an external device via USB. The internal software already offers factory-installed connection options for the most common balances.



ADVANCED DATA TRANSFER

Data can be transferred from the AS 200 jet pro AS 200 jet pharma to your Laboratory Information Management System (LIMS) via a network connection.

TYPICAL SAMPLE MATERIALS

RETSCH's Air Jet Sieving Machines AS 200 jet pro / pharma are ideally suited for separation, fractioning and particle size determination of cement, pharmaceutical materials, ceramics, chemical products, cosmetics, food, minerals, pigments, plastics, powder coating, rubber, toner particles and washing powder.



pharmaceuticals



plastics



coal



cement & minerals

EXCLUSIVE FEATURES OF THE AS 200 JET PHARMA MODEL



The AS 200 jet pharma variant offers all the functions you need to meet the requirements of modern particle size analysis in accordance with GMP guidelines.

The system meets the software validation requirements according to

- | ISPE GAMP 5
- | FDA 21 CFR Part 11
- | EC GMP Annex 11

The user management ensures complete transparency and security through the optional assignment of hierarchical access rights and passwords, as well as the setup of legally compliant e-signatures. To make it even easier to meet internal or GMP requirements, a comprehensive documentation package is available as an option:

- | Qualification Master Plan (QMP)
- | Risk Analysis (FMEA)
- | Installation Qualification (IQ)
- | Operational Qualification (OQ)

The documents are customized for your company and make initial setup easier.



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AT A GLANCE (full data on www.retsched.com/as200jetpro)

AS 200 jet pro | pharma

Measuring range*	10 µm - ~ 4 mm
Typical batch / feed capacity	0.3 - 100 g
Nozzle speed	5 - 80 min ⁻¹
Vacuum	2,000 - 6,500 Pa / 20 - 65 mbar / 0.3 - 0.95 psi
Connectivity	2 x USB, Ethernet
W x H x D	516 x 180 x 404 mm

General Software Features

Parameter units changeable	mm / µm / mesh / inch g/kg s/min
SOPs	Yes, integrated in methods, more than 40
LIMS	LIMS ready
Teamviewer online support	Yes
Automatic storage of results	Yes, in instrument, auto report function, PDF document or to printer
Results shown, as table or graphs	Yes
Different diagram types (linear or logar.)	Yes, log/lin, log/log, lin/lin for x and y axis
Different diagram types	Cumulative, RRSB, Histogram, density, residual distribution
Calculation of individual dx values	More than 10
Label naming	ISO (q3/Q3/1-Q3/p3) or descriptive (density/total distribution/residual distribution/percent)
Overlay of results	Yes, up to 10
Highest precision thanks to	Sieve check function, Plausibility test, Weighing-Assistant and Weigh-In-Tolerance, Calculation option for density, Filter function for sieve series, Trend analysis for sieves and methods, Backweigh-Tolerance
Standard balance driver	Yes, balance management for external balances, communication protocols for specific balances Kern, Sartorius, Mettler are stored.
Connectivity	Connection to barcode scanners, printer, mouse and keyboard, external balance

Additional features in AS 200 jet pharma model

Software validation	ISPE GAMP 5, EC GMP Annex 11 conform, AuditTrail acc. to FDA 21 CFR part 11
User management	Yes, free configurable levels, individual rights option for each user
Role and password management	Yes
Audit-trail with E-signature	Yes
Enforce audit trail comments	Yes
User list and daily report can be generated	Yes
Restore	Yes

*depending on feed material and instrument configuration/ settings



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