

Air Jet Sieving Machine JS1100

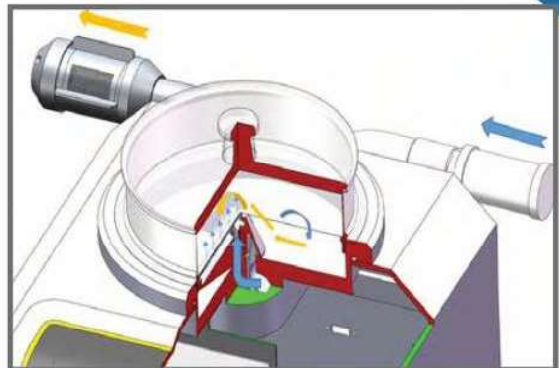


Air Jet Sieving Machine JS 1100 is one of the best solution to separate and deagglomerate particles for sieve cuts of powdered material. Equipped with special designed nozzle by adjustable rotate speed & option to store up to 9 SOPs & QUICK START Mode and the automatic vacuum regulator (accessory), ensures reproducible sieving result.

The Air Jet Sieving Machine JS 1100 is particularly suitable for low density and low particle size materials which tend to agglomerate. It is used with sieves of 5 microns mesh size and up. The procedure is very gentle on the material as no mechanical sieving aids are required.

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.

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



Working Principle

When JS 1100 connected with vacuum cleaner, strong air flow generated by negative pressure sprays on the sample Particles on sieve mesh through the nozzle (placed beneath sieve).

Vacuum cleaner or cyclone sucks the sample particles smaller than mesh size through the air flow. The air flow contributes to deagglomeration and purifying of sieve mesh.

Applications: Separation, Fractioning, Particle size determination

Typical Sample: Pharmaceutical Material, Chemical products, Soil, Medicinal herbs, Yeast cell, Cocoa, Food, Grain, Oil, Fruit, Salt, Slag, Silicate, Glass, Ceramic and Cement clinker

Feed Material: Powders

Features & advantages

- Air Jet Technology for dispersion and Deagglomeration
- Unique Nozzle Movement design Function for better reproducibility minimize the sieving time and effort of cleaning and increases the Life of the sieves used
- Built-In Graphical 5" Colour LED Touchscreen Display
- Digitally controlled Adjustment of all process parameters (Time 001 - 999 min, Vacuum 20 - 99 mbar / 0.3 – 1.45 psi, Speed digital controlled, 5-55 min-1 (nozzle))
- Quick & Efficient Procedure; Measuring range 5 μm to 5 mm
- Fitted with standard sieves in dia. of 203 mm (8" ϕ) or 200mm (Fit with adapter)
- 9 Standard Operating Procedures (SOP's) memory
- Quick Start Mode is used to start the sieving process under standard conditions without entering parameters.
- Digital controlled Variable Nozzle speed, 5-55 min-1
- Options of Automatic Vacuum regulation permanently monitors the air jet and keeps it at a constant rate. This increases the reproducibility of the sieve analysis.
- Option of Cyclone accessory for Sample retrieval; Collection of two fractions possible by use of cyclone
- Air Jet produced by powerful industrial vacuum cleaner
- Optional Screening Software to perform data processing and analysis, screening evaluation & Documentation of Results
- RS232 Interface for Smart Screen Software
- Balance Interface through PC Smart Screen Software



UNIQUE NOZZLE MOVEMENT DESIGN

The Unique Nozzle movement design of the JS 1100 has proven to be a very helpful feature to maintain the performance of the sieve and, subsequently, the reproducibility of results and to minimize time and effort for cleaning. **This function lets the nozzle move according to the principle “Two steps forward, One step back” which means the nozzle first moves forward by 20° and then backwards by 10°** instead of rotating continuously. The result is a change in the air flow direction through the sieve and near-mesh particles are blown from the gauze as no material lying on the sieve surface obstructs the air jet.



Technical Data	
Measuring range	5 μ m to 5mm
Sieving motion	Dispersion by Air Jet
Display	Built-In 5" Touch Screen
Control Parameters	Digital controlled (Time, Vacuum & Speed)
Max. loading	0.3g-100g
Feed Material	Powders
Max. no. of fractions	1 (2 with cyclone)
Speed	Digital Controlled, 5-55 min-1 (nozzle) with unique nozzle movement design
Sieving Time	00:01 – 99:59 (min:sec)
Interval Operation Time	00:01 – 99:59 (min:sec)
Applied to dry sieving	Yes
RS232 interface	Yes
Analysis sieves dia.	203mm/200mm(with adapter)
Vacuum cleaner	20 – 99 mbar / 0.3 – 1.45 psi
Storable SOPs	9 or QUCIK START mode
Standards	CE
Protection	IP54
Noise Level	\leq 60 dB
Interface	RS232 Communication Interface
Rated power	220V, 50Hz
Accessories (Optional)	Automatic Vacuum Regulation, Cyclone & Industrial Vacuum Cleaner
Software (Optional)	Smart Screen Software, Computer Control, Data Recording and Analysis, Evaluation & Documentation of Results (Incl. adapter RS232-USB, cable, Weighing Balance)
Dimensions (W x L x H) mm	370 x 460 x 420
Weight	20 Kg

