MIKRO AIR JET SIEVE®
PARTICLE SIZE ANALYZER

HOSOKAWA MICRON

HOSOKAWA MICRON POWDER SYSTEMS

Process Technologies for tomorrow℠

ACCURATE PARTICLE SIZE ANALYSIS REDEFINED

Experience the latest generation of the Mikro Air Jet Sieve®

THE MIKRO AIR JET SIEVE®—MODEL MAJSx²
is a highly accurate and reliable particle size analyzer designed for determining the particle size distribution of dry powder ranging from 20 µm to 4,750 µm. The Mikro Air Jet Sieve® model MAJSx² is the economical solution to particle size analysis.

FEATURES & BENEFITS:

- Audit trail CFR 21 part 11 registration - password protected
- 12 language options - customizable per user
- Automatic data recording and storage with network capability
- USB backup of analysis
- 20 GB of storage
- Data transfer to CSV file formatting for LIMS systems
- Output graphs available in Linear and Rosin-Rammler formats
- Capable of calculating particle size points at 0.01 to 99.99% using the Rosin-Rammler Law
- Comparative ”overlay” analysis up to 5 stored analysis
- Compatible with multiple balances and most printers
- Programmable vacuum pressure in multiple units
- Automatic differential pressure control
- Wand rotation boost for deagglomeration of difficult materials
- Suitable operation with external USB keyboard and mouse
- Capable of printing over Wi-Fi
- CE certified via Intertek Testing Services
- Adjustable date and time zone for international use
- Suitable for the analysis of Chemical, Mineral, Pharmaceutical, Food, Plastic & Cosmetic materials
- Sample volumes 10 to 100 grams/cycle

DESIGN:

- Pneumatic sieving disperses and deagglomerates the sample while continuously cleaning the test sieve screen.
- Suitable for use with ASTM, ISO, and JIS Certified test sieve screens
- Capacitive Touch screen controls
- User friendly intuitive software
- Universal power 90-240 volt, 50/60 Hz, single phase
- Cast aluminum sieve pan & ducting
- Isolated inlet & outlet air connections
- Ergonomic & user friendly design
- Compact design - 16.5” wide x 10.5” deep x 7.5” tall
- Light weight – only 26 lbs.
- Long life & minimal downtime

ACCESSORIES & OPTIONS:

- Suitable for 200 mm and 203 mm (8 inches) diameter, half height and full height test sieve screens
- Polycarbonate sieve cover, brush and tapping hammer included
- Optional Cyclone for 98% product recovery above 10 µm
- Recommended Vacuum system designed for safe, consistent and reliable performance
- Recommended Electronic balance for accurate & complete particle size analysis
- Optional Factory and On-site Validation Services available upon request

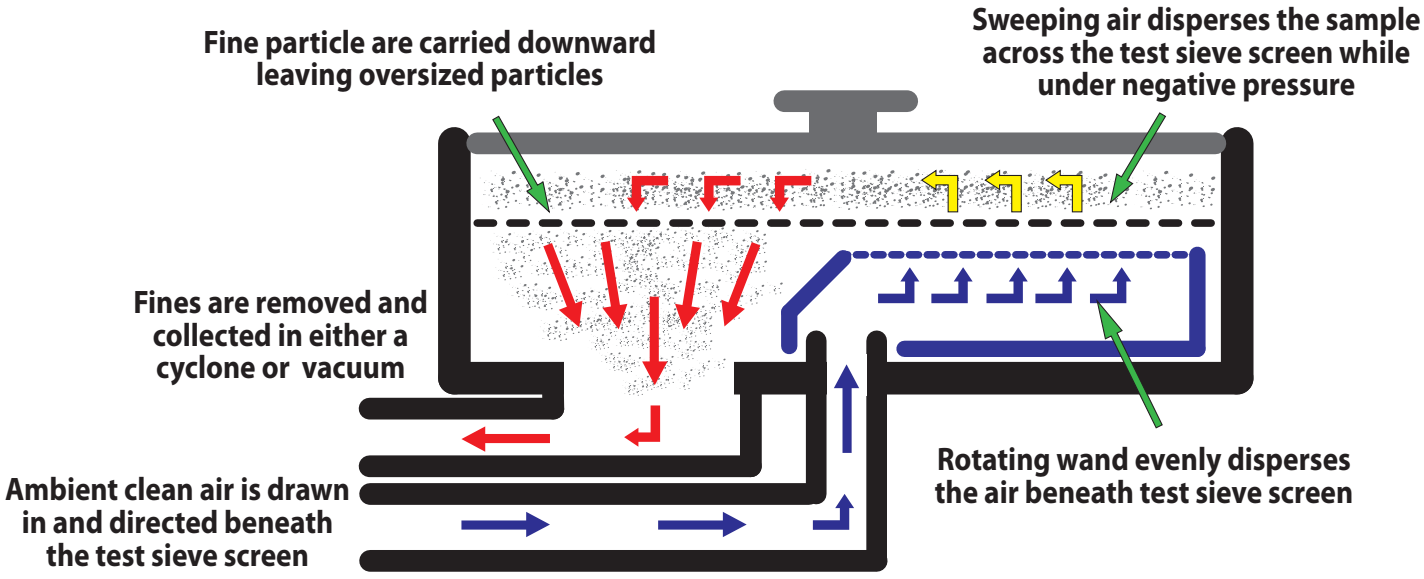
SUITABLE FOR CHEMICAL, MINERAL, COSMETIC, FOOD & PHARMACEUTICAL APPLICATIONS

OPERATION

The Mikro Air Jet Sieve® model MAJSx² is easy to operate to quickly determine the particle size of a powdered sample with a short series of sieve test screens. The system utilizes the pneumatic sieving principle that enhances the accuracy and reproducibility of particle size analysis. Use of this device has become a preferred method for such tasks as quality assurance of incoming raw materials, process control, and the confirmation of final product specifications.

While negative pressure airflow draws all the particles below a defined particle size down through a sieve screen, a positive airflow is introduced upwards through a rotating wand. This positive airflow deagglomerates and disperses the undersized particles allowing them to pass through the sieve screen to be collected.

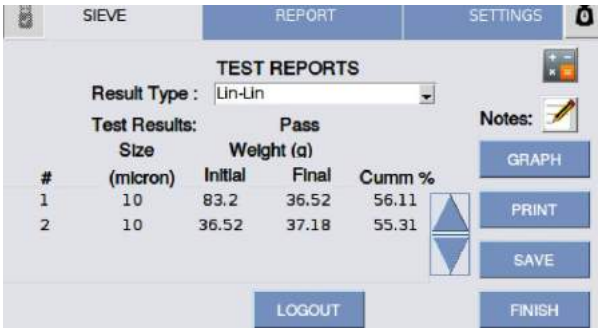
Standard MAJSx² "Basic" model setup with OPTIONAL Cyclone



SIMPLE & EASY OPERATION

CONTROLS & TOUCH SCREEN PLC

The MAJSx² features a touch screen integrated computer with intuitive instructions. The Advanced Mikro Air Jet Sieve® model MAJSx² automatically calculates particle size and data that can be archived and compared.



BODY

The Mikro Air Jet Sieve® model MAJSx² is ergonomically designed to make particle analysis more efficient than ever. Constructed in durable cast aluminum, the MAJSx² frame is lightweight and has a high polish finish, yet is tough enough to withstand frequent use in harsh environments.

WAND

The wand is a rotating slotted nozzle that directs incoming air to continuously sweep the test sieve screen dispersing the sample while dislodging any trapped particles. Additionally, it produces a smooth, constant air flow preventing sample agglomeration.

Specific wand heights to accommodate different test sieve screen frames

BALANCES

Accurate sieve screen weighing is critical in determining particle size. Hosokawa can provide reliable and proven balances with your particle size analyzer that can be integrated into the process.

VACUUMS

Hosokawa Micron Powder Systems encourages customers to purchase and utilize industrial vacuums recommended by Hosokawa. The vacuums recommended are specifically selected to ensure performance and repeatable results.

CYCLONE

The Hosokawa High Efficiency Cyclone, model VME 2.1 is a laboratory scale particle collection device, often paired with the Mikro Air Jet Sieve® model MAJSx². In order to recover up to 98% of materials above 10 µm, the cyclone must be installed between the MAJSx² discharge and the vacuum inlet. This option allows users to collect materials after particle sizing for collection or further analysis. The cyclone is constructed in 316 stainless steel and is supplied with a glass collection jar. It has been designed for easy cleaning and inspection.

MEASURES POWDERS 20 - 4,750 µm

SIEVE SCREENS

Hosokawa Micron Powder Systems offers a wide selection of stainless steel test sieve screens ranging from #635 (20 µm) up to #4 (4,750 µm). The test sieve screens have a die stamped frame and are supplied with a certificate of conformance and a certified histogram, meeting ASTM-E11 standards. The test sieve screens are manufactured with highly accurate, inspection grade sieve cloth and are guaranteed to be at least 99.5% accurate down to 20 µm. All test sieve screens are individually packed and supplied with a sealing O-ring.

Hosokawa Micron Powder Systems

200 mm Diameter Air Jet Test Sieve Screens

Test Sieve Designation			Part Number	Test Sieve Designation			Part Number
Standard No.	Metric Alternative	US Alternative		Standard No.	Metric Alternative	US Alternative	
5	5	N/A	M343558	N/A	315	N/A	Contact Factory
10	10	N/A	M343631	355	355	45	M390-003820-CERT
15	10	N/A	M343559	400	400	N/A	M343466
20	20	635	M390-1023702-CRT	425	425	40	M390-003821-CERT
25/27	25	500	M390-1023701-CRT	N/A	450	N/A	Contact Factory
32	32	450	M390-1023700-CRT	500	500	35	M390-003822-CERT
N/A	36	N/A	Contact Factory	N/A	560	N/A	Contact Factory
38	38	400	M390-003807-CERT	600	600	30	M390-003823-CERT
N/A	40	N/A	Contact Factory	N/A	630	N/A	Contact Factory
45	45	325	M390-003808-CERT	710	710	25	M390-003824-CERT
N/A	50	N/A	M343635	N/A	800	N/A	Contact Factory
53	53	270	M390-003809-CERT	850	850	20	M390-003825-CERT
N/A	56	N/A	Contact Factory	N/A	900	N/A	Contact Factory
63	63	230	M390-003810-CERT	1000	1000	18	M390-003826-CERT
N/A	71	N/A	Contact Factory	N/A	1120	N/A	Contact Factory
75	75	200	M390-003811-CERT	1180	1180	16	M390-003827-CERT
N/A	80	N/A	M343623	N/A	1250	N/A	Contact Factory
90	90	170	M390-003812-CERT	1400	1400	14	M390-005217-CERT
N/A	100	N/A	M343634	N/A	1600	N/A	Contact Factory
106	106	140	M390-003813-CERT	1700	1700	12	M390-004998-CERT
N/A	112	N/A	Contact Factory	N/A	1800	N/A	Contact Factory
125	125	120	M390-003814-CERT	2000	2000	10	M390-003828-CERT
N/A	140	N/A	Contact Factory	N/A	2240	N/A	Contact Factory
150	150	100	M390-003815-CERT	2360	2360	8	M390-005347-CERT
N/A	160	N/A	M343636	N/A	2500	N/A	Contact Factory
180	180	80	M390-003816-CERT	2800	2800	7	Contact Factory
N/A	200	N/A	M343413	N/A	3150	N/A	Contact Factory
212	212	70	M390-003817-CERT	3350	3350	6	M390-860052-CERT
N/A	224	N/A	Contact Factory	N/A	3550	N/A	Contact Factory
250	250	60	M390-003818-CERT	4750	4000	4	M390-004999-CERT
N/A	280	N/A	Contact Factory	N/A	3550	N/A	Contact Factory
300	300	50	M390-003819-CERT	4750	4000	4	M390-004999-CERT

AVAILABLE UPON REQUEST:

- Metric Alternative Certified Test Sieve Screens (ISO 3310) are supplied with a Certificate of Conformance and a Certified Histogram

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DESIGNED, MANUFACTURED AND ASSEMBLED IN THE USA

Hosokawa developed Air Jet Sieving technology in the early 1960's to quickly determine particle sizes for dry powders. Our Air Jet Sieves are designed, manufactured and assembled in the USA and come with our pledge of performance and guaranteed dependability. Hosokawa's Air Jet Sieves have the reputation for accuracy and reliability with thousands of installations worldwide.

ANY QUESTIONS?
WE WILL BE GLAD TO ANSWER THEM!

HOSOKAWA MICRON POWDER SYSTEMS

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