MIC SAS II
Micromeritics® Sub-Sieve AutoSizer II
Air-Permeability Particle Size

MICROMERITICS SUB-SIEVE AUTOSIZER II (MIC SAS II)

Easy-to-Use Automated Functions with Electronically Recorded Data

Developed as a direct and improved successor to the widely used Fisher Model 95 Subsieve Sizer (FSSS), Micromeritics has improved the FSSS's performance by offering easy-to-use automated functions together with electronically recorded data.

The MIC SAS II is designed to generate "Fisher number" results are highly consistent with its predecessor (the Fisher FSSS). This is a crucial point, as the air permeability technique and the FSSS have been used as a benchmark for decades in many industries. Many applications use historical data and quality control standards, and a modern source of comparable, repeatable results is necessary.

Features and Benefits

Quick and Easy Set-up

Simple step-by-step, easy to follow, ensuring that no parameters are overlooked

Fully Automated Analysis

Sample compaction and pressure stability are computer controlled for high repeatability

Security Features

Optional Password Protection ties samples to user IDs and protects configuration parameters from unauthorized changes

Real Time Data Display

Data can be viewed as it is acquired simplifying method development

Fisher Mapping

Optimizes data agreement with customizable Fisher correlation

Report Generation

Automatically creates PDF reports with custom company logos and typestyles

Superior Software

The SAS Software sets a world-wide standard for instrument operation, data acquisition and handling, reporting and systems integration

New Intuituve Touch Pad

Powerful, intuitive touch pad user interface increases productivity and enables easy creation and retrieval of SOPs

ASTM Approval

Fully compliant with ASTM standard B330-12. B330-15 – Metal Powders; C721-15 – Al2O3, SiO2 – Ceramics & E2980 – 15 – General particle size

What is Air-Permeability Particle Sizing?

The air-permeability technique is well established for measurement of the Specific Surface Area (SSA) of a sample powder. The SSA measured by this technique has been found to be a useful parameter in various industries such as pharmaceutical, metal coatings, paints, and even geological samples.

The MIC SAS II utilizes dual pressure transducers to measure pressure drop across a packed bed of powder. By varying the sample height and porosity while controlling the flow rate of air through the sample, the SSA and average particle size can be determined using the Kozney-Carmen equation.
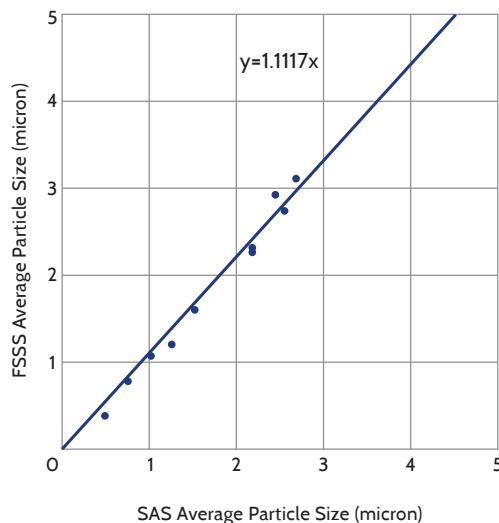
sample height

change in pressure

flow rate
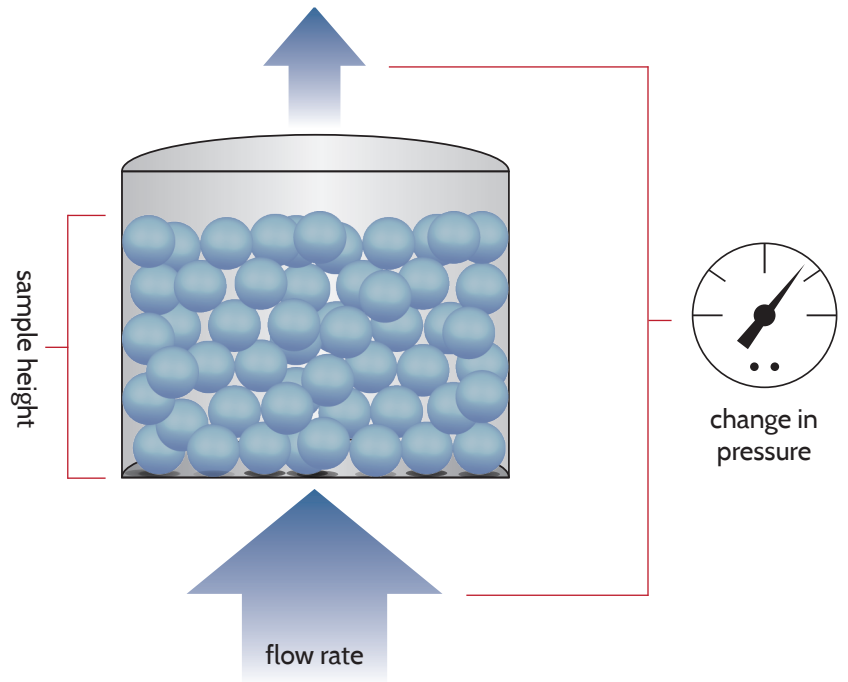
Direct Comparison of SAS & FSSS Results

Comparison of SAS vs Fisher FSSS
Sample = inorganic powders

y=1.0552x

FSSS Average Particle Size (micron)

SAS Average Particle Size (micron)
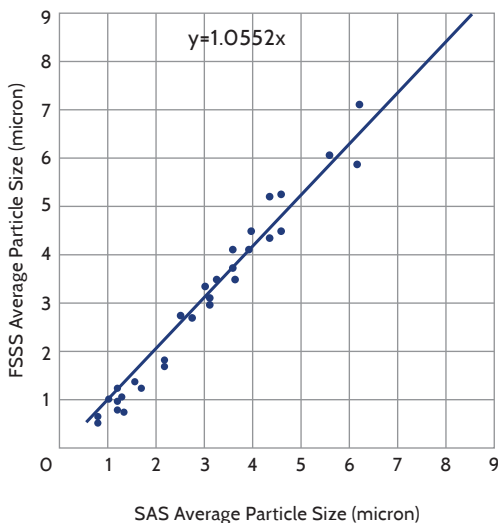
Comparison of SAS vs Fisher FSSS
Sample = organic powders

y=1.1117x

FSSS Average Particle Size (micron)

SAS Average Particle Size (micron)

Comparison trials between the MIC SAS II and Fisher FSSS have been carried out using a variety of samples. The graphs above compare the mean particle size data from the two instruments on powders of different sizes. One plot is based on results for inorganic (mainly tungsten) metal; the second on organic samples (mostly pharmaceuticals). There is exceptional correlation between the two sets of data. Numerous extensive studies have come to the same conclusion.

Specifications

Physical

Height	55 cm (21.7 in)
Width	50 cm (19.7 in)
Depth	38 cm (15 in)
Weight	28 kg (61.7lbs)

Electrical

Voltage	120 – 240 VAC
Frequency	50 – 60 Hz
Current	1A

Particle Size Range

Particle Size Range	0.2 – 75um

Porosity Range

Porosity Range	0.2 – 0.9%

Compression Accuracy

Compression Accuracy	<0.05 mm

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To request a quote or additional product information, visit

www.micromeritics.com

Contact your local Micromeritics sales representative
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