Cleanroom Management International

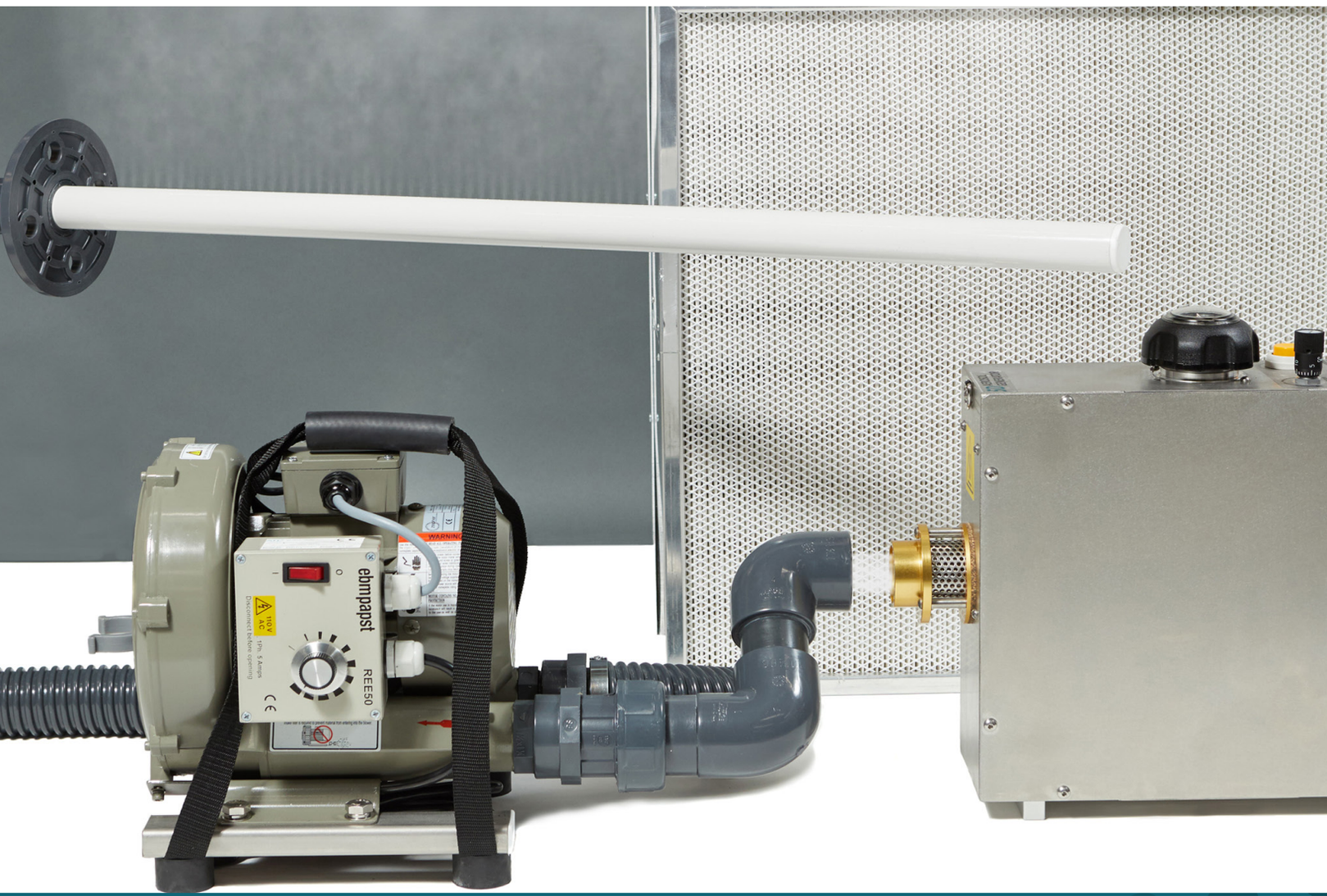
We care for your compliance

Aerosol Injection & Conditioning

Filter Leak Test Accessories

Air Techniques INTERNATIONAL

ATI's **Aerosol Injection & Conditioning systems** are designed to deliver the precise aerosol required for your filter testing needs.



Applications

- Cleanroom Certification
- Pharmaceutical/Nuclear Cleanroom Testing
- Bio-Safety Cabinets
- Clean Air Cabinets
- Isolators

Benefits

Deliver the precise aerosol required by:

- providing the force needed to inject aerosol into positively-pressurized ducts
- diluting or splitting the aerosol for low-volume tests
- providing uniform mixing.

ATI's Filter Leak Test Accessories are uniquely designed to significantly reduce the time and expense of certifying clean rooms.

Positive Injection Pump

Inject aerosol with variable speed control

The Positive Injection Pump (PIP) provides the user with a safe and reliable system for directing aerosol from a Thermal or Laskin Nozzle Generator through a tube into the injection point. Speed control allows for regulation of the discharge velocity, which is essential when introducing aerosol through apertures of various size. **The Positive Injection Pump (PIP) with adjustable swan neck inlet works best with the ATI family of aerosol generators.**

- Aerosol is available up to 20 meters (65 feet) from the PIP for hard to reach places
- PIP Power provides enhanced mixing by injecting against or across the normal system airflow
- Available speed control allows precise control of the sparge pipe aerosol curtain
- Aerosol is drawn into the PIP under vacuum so no need for a physical connection!
- Able to introduce aerosol to an injection point up to 100 mbar (40" WC)
- Easily connect to Sparge Pipes or Aerosol Splitters

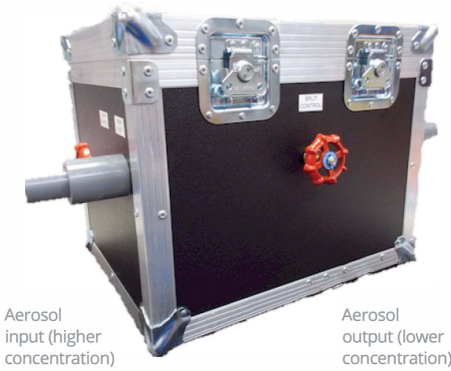
Aerosol Splitter

Ideal for low flow aerosol challenges

Improves the testing of low volume flow HEPA filters, where aerosol generator output is high.

- Provides a steady, adjustable, low-volume aerosol at a concentration of 10-100 mg/m³.
- Filters excess aerosol
- Ideal for isolators and installations with low airflows
- Works with PIPs, Laskin and thermal aerosol generators

Filtered aerosol bleed-off (not seen – other side of box)



Aerosol input (higher concentration)

Aerosol output (lower concentration)

Sparge Pipe Kit

Aerosol mixing for short distances

Improves the testing of clean air cabinets, Safety Cabinets, Isolators, and any installed HEPA filter where the distance between the point of aerosol injection and the filter is short, and upstream challenge measurement shows poor mixing.

- Deliver evenly-mixed challenge aerosols less than 1 meter (3 ft) from the filter face
- Extensive kit includes 20 pipes with up to 5 different lengths, single and double drilled providing extreme flexibility

Tubing

Large bore flexible tubing provides connections for:

- PIP, Laskin and Thermal Aerosol Generators
- Aerosol injection ports
- Aerosol Splitter and Sparge Pipes

AEROSOL INJECTION & CONDITIONING PART NUMBERS

Positive Injection Pump (PIP) (110v)	Aerosol Positive Injection Pump (PIP), 110v with speed control	SPB-2-110V-SC
Positive Injection Pump (PIP) (220v)	Aerosol Positive Injection Pump (PIP), 220v with speed control	SPB-2-220V-SC
PIP case	Transport case for PIP	999-005-a
Sparge Pipe Kit	Sparge Pipe Kit, with kit bag	630-703
Aerosol Mixing Splitter System	Aerosol Mixing Splitter System	DOP1350
Aerosol Diluter D10	Aerosol Diluters - 10:1	TDL0-1211
Aerosol Diluter D100	Aerosol Diluters - 100:1	TDL0-1212
Diffusion Drying Assembly DD250	Diffusion Dryer Assembly DD250	9300150
Tubing	Tubing for PIP, 5D adaptor and Aerosol Injection port, 51mm x 10m	700-203B
Tubing	Tubing for Laskin style Generator, 32mm x 5m	700-201-5

Aerosol Diluter

Dilutes aerosol to measurable levels for particle counters.

Installed between the aerosol source and a particle counter, diluters minimize pressure drop and aerosol loss while preventing saturation of the particle counter.

- Compatible with any 1 cfm particle counter
- Minimizes pressure drops and aerosol loss
- Available in 10:1 and 100:1 dilution ratio configurations
- Can be plumbed in series for alternate dilution configurations
- Ideal for isolators and installations with low airflows
- Works with any type of aerosol challenge, including PSL, PAO, DOP and NaCl.

ATI Air Techniques INTERNATIONAL

Protecting People, Products & Critical Infrastructure

CE RoHS 2 Compliant

ISO 9001:2008

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