AEROSOL GENERATOR WITH VERTICAL ELUTRIATOR STACK

AIRPREP™

by INNOVAPREP®

Step into optimized aerosolized dispersion with the PITT-AG

CONTROLS EMITTED PARTICLE SIZE
using elutriation

EFFICIENT PARTICLE GENERATION
of airborne particulates, bacteria, pollen, molds, fungal spores, viruses and more

CUSTOMIZABLE (OR FLEXIBLE DESIGN)
Highly adjustable, dry dispersion using a fluidized bed

Flexible design allows customization

Fluidized bed with vertical elutriator

EXCEPTIONALLY EFFICIENT SAMPLE GENERATION | BROAD DISPERSION RATE

PITT-AG Aerosol Generator

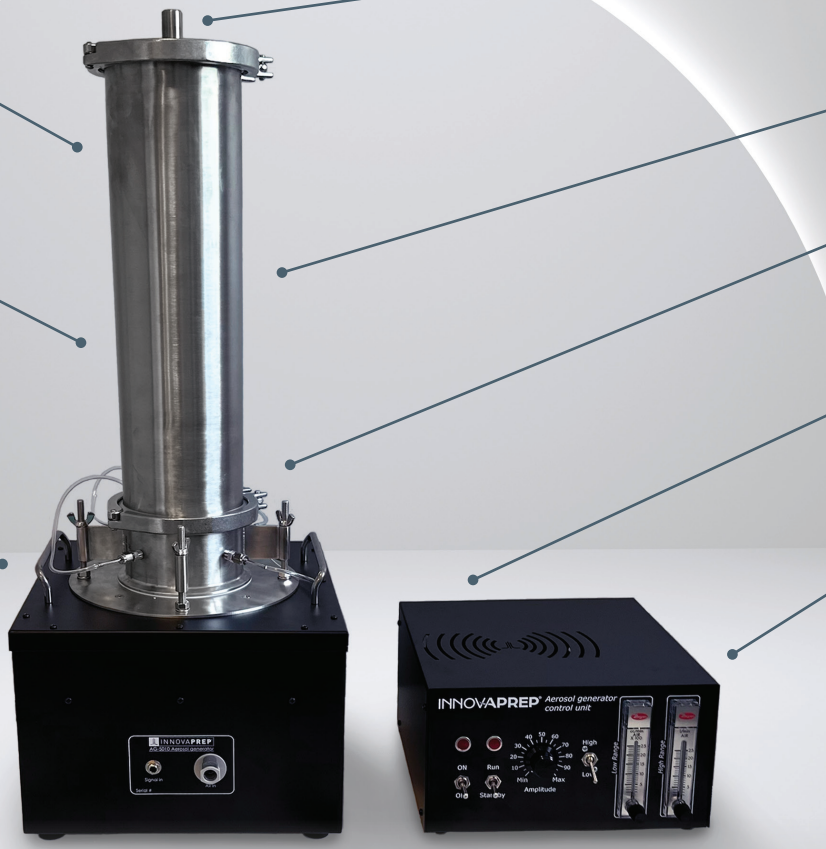
INCLUDED FEATURES

Rugged and dependable industrial grade construction

Versatile umbilical attachments on the Control Unit allow for convenient placement in your lab

Suitable for extended use

Completely sealed sample section can be used in positive or negative pressure systems



PITT-AG

Workflow

CONNECT
Connect air and controls to the PITT-AG.

LOAD
Load material for dispersion. Test dust can be easily loaded into system.

DISSEMINATE
Choose amplitude and flow rate

Note: Flammable or volatile substances should never be aerosolized using the PITT-AG.

Load Step: Test dust can be easily loaded into system.

Applications

AEROSOLIZED PARTICULATE

DRY POWDER DISPERSIONS

DISEASE MONITORING

Additional Features

Tailorable outlet for test system integration

Remote flow amplitude controls

Controllable Gas Injection and flow control

The aerosol bed can be driven by any audio signal generator

Tool-free disassembly allows swiftft, easy reloading and decontamination

SPECIFICATIONS

- 120V AC, 360W
- Frequency response range: 30-3000 Hz
- Flow rate range: 0.20-25 Lpm
- Maximum compressed air input: 10 PSIG
- 0.02 µm internal air filter
- Diaphragm diameter: 6 inches; 4.75 inch active area

PITT-AG Advantage

RUGGED, EASY TO USE, HIGHLY CONFIGURABLE DESIGN

The PITT-AG by InnovaPrep is an improved PITT-3 type aerosol generator, based upon the original design by Weyel et al. (1984), to create a cotton dust aerosol.

Key Benefits

- Easy remote operation if enclosed in an aerosol chamber.
- Precise Control — Novel air-injection methods to allow concentrations of three or more milligrams per cubic meter to be maintained for extended durations in closed systems.
- Easy Decontamination and Cleaning — Fully enclosed drivers and generators are made from T304 stainless steel.

Customizable Operation

- Diaphragms in latex or thin metal.
- Gaskets available in Teflon or butyl.
- Fleixble Signal generation use almost any computer or audio signal generator to create variable waveforms.

Compatible with Wide Array of Particles

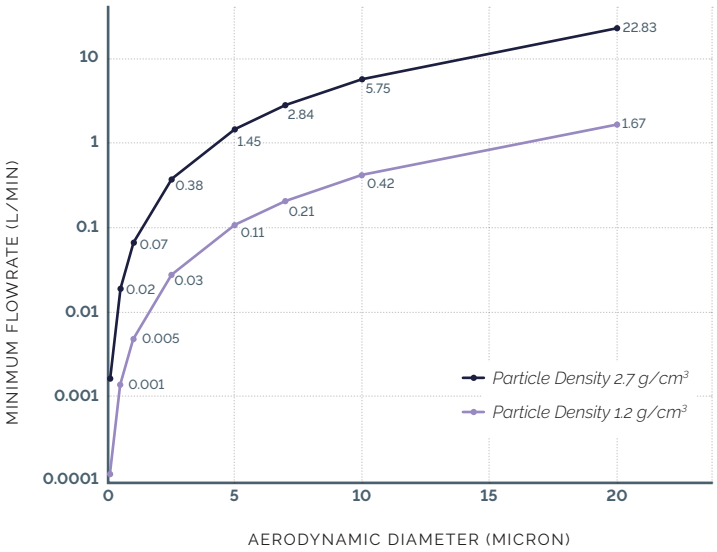
- Input materials like Celite 545, talc, Arizona road dust, fluorescein, grain dust, dry Bacillus globigii spores, and dry polystyrene microspheres allow users to control their particle size distributions.
- Users can aerosolize their own materials or re-aerosolize particles collected from air sampling.

AirPrep PITT-AG for Highly Customizable Aerosol Generation

- Controls cut-off size of disseminated particles
- Alternative to wet dissemination

InnovaPrep's aerosol generator can disseminate a wide range of particle sizes from nanoparticles to course fraction based on user's powder size distributions.

Minimum Flowrate to Disseminate



Note: Data graph was generated using the AG-5025 Aerosol Generator, an earlier version of the PITT-AG aerosol generator. The PITT-AG and AG-5025 are functionally equivalent instruments.

AIRPREP™ by INNOVAPREP

Streamline particle size distribution

InnovaPrep's aerosol generation technology enables you to tailor settings to achieve optimal particle dissemation to meet the needs of your unique use case.

- Weyel, D.A., M. Ellakkani, Y. Alarie, and M. Karol. 1984. An aerosol generator for the resuspension of cotton dust. Toxicol. Appl. Pharmacol. 76:544-547.
- ASTM method E2894-12: Standard Test Method for Applying Aerosolized Bacillus Spores as Dry Inocula to Inanimate Surfaces1
- Harnish, D. et. al., 2014, Standard method for deposition of dry, aerosolized, silica-coated Bacillus spores onto inanimate surfaces, J. Appl. Micro doi:10.1111/jam.12509
- Birch, E. and Bon Ki Ku, 2015, Aerosolization of Carbon Nanotubes Using an Acoustic Generator: Particle Generation and Properties, CDC/NIOSH DART

INNOVAPREP
Sample prep made simple

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