



When using a particle counter for filter integrity testing, filters and filter systems must be challenged with an excess of six million particles per cubic foot of air (2.1×10^8 per cubic meter). Most particle counters are capable of only counting up to 100,000 particles per cubic foot of air before experiencing significant coincidence counting (counting two or more small particles as one larger particle). It is necessary to know the filter aerosol challenge concentration in order to properly quantify defects. Thus a reliable aerosol dilution device is required.

Milholland & Associates NIST traceable aerosol diluters have been refined and proven in over 20 years of actual cleanroom testing. They are designed specifically for low concentrations of Poly Alpha Olefin (PAO) or Polystyrene (PSL) microsphere aerosols and use capillary flow as the principle of operation. The units are very durable and drift free. They do not rely on electronics, mass flow meters, transducers or orifices.

Inquire about custom dilution ratios and OEM devices. We have provided two stage devices with dilution factors of up to 400,000:1, units with pressure transducers for computer interfacing, custom diluters for 2.0 cfm particle counters, units compatible with VHP and Chlorine Dioxide sterilization, and other custom configurations. Contact us with your specific needs.

Model AD Aerosol Diluters



Features and Benefits

- Magnehelic gauge for easy dilution factor recognition
- Rugged polypropylene case
- Bev-A-Line sample tubing for low tubing particle losses (4 meters included)
- No electrical power required on standard models. Can also be equipped with a pressure transducer.
- Diluter compensates for flows deviating slightly from 1cfm (28.3lpm)
- Remote filter allows for extended use in high concentration applications

Technical Specifications

- For use with 1.0cfm (28.3lpm) flow particle counters that can overcome a 20 cm w.g. inlet resistance.
- 4" Magnehelic gauge
- Dimensions: 11.5" L x 9.7" W x 7.3" D
- Weight: 5.8lbs (2.6kg)
- Sample inlet tubing - 1/4"OD x 11/64"ID x 2 meters
- Outlet tubing - 3/8"OD x 1/4"ID (1/2"OD x 3/8" ID configurations available)