PINE
Partner for Test & Measurement
Equipment Services and Data Solutions

Ambient High Volume Samplers
Air/Gas Monitoring

Thermo Anderson

Thermo Andersen TSP Sampler

Pine Item #51112

TSP MASS FLOW CONTROLLED:

All Andersen High Volume Air Samplers feature accurate collection of total suspended particulates exceeding EPA specifications. Air flow through a mass flow controlled system is maintained at a constant rate by an electronic probe which automatically adjusts the speed of the sampler to correct for variations in voltage temperature, pressure and filter loading.

Adjustable over a range from 20 SCFM to 60 SCFM the air flow is controlled at constant standard conditions of 25 degrees C temperature and 760 mm Hg pressure within plus or minus 1 SCFM. By maintaining an exact air flow rate through the sampler, the average concentration measured is extremely accurate and reliable.

A typical Andersen TSP high volume air sampler incorporates a pressure recorder (G105) or a well-type manometer (G8WT) for flow verification. An elapsed time indicator (G901) is calibrated in hours, tenths, and hundredths meeting Federal Register specifications Vol 47 No. 234. Andersen sampling systems simplify all phases of the sampling process. Initial calibration requires no disassembly of the system.

APPLICATIONS:

- VOC Sampling
- Airborne Pesticides
- Outdoor environmental monitoring
- Perimeter Monitoring
- EPA Method TO-4a and TO-9A

TSP MASS FLOW CONTROLLED:

The Volumetric Flow Controller (VFC) is a dimensional venturi device used to control gas flow. When applied to a high volume air sampler, this flow control principal incorporates a smooth-wall venturi orifice that gradually opens to a recovery section. Vacuum is provided by a motor downstream of the venturi.

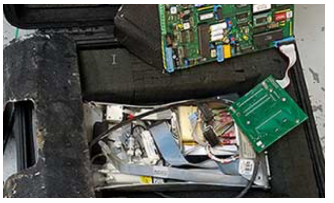
Over 95% of the energy lost in differential pressures across the restricting orifice is recovered in this design.

Flow control is accomplished by occluding or restricting and thus accelerating the air flow through the venturi. At some point in the flow stream, the air velocity will equal the acoustic velocity or speed of sound, and critical flow will be achieved. As long as downstream changes are small, all conditions at the venturi (including the flow rate) are determined by upstream conditions.

Local Delivery Pick-up

In-Stock Equipment

Repair & Calibration



Rental Protection Plan