

Model LTT

Reference Sampler Leak Test Tools



Innovative Leak Test Cassettes for EPA Reference Method PM Samplers

Anyone who has ever tried to troubleshoot a leaking cassette-type FRM particulate sampler in the field knows how much of an ordeal it can be to quickly locate and remedy the source of an air leak, especially during daily sampling.

Our model LTT is a kit of three innovative leak test tools that every site tech or operator of FRM particulate samplers should have. This kit works with any PM_{2.5} *Reference Method* or other particulate sampler that uses the standard EPA-pattern 47mm white Delrin® filter cassettes, or the molded “blue polycarbonate” equivalents. This kit pays for itself in saved time and effort.

The standard EPA recommended leak test procedure involves installing a standard cassette, blocking the main sampler inlet, pumping down the flow system to a partial vacuum, then monitoring the vacuum loss over a time period of several minutes. If the leak test fails, the cause of the leak could be located anywhere in the entire flow path.

The “open” tool in this kit is single piece of Delrin® machined with the outside profile and exact thickness of a standard loaded filter cassette assembly. A hole in the open tool allows the whole flow system to equilibrate to the same vacuum. This tool is placed into the sampler and the standard leak test is repeated. If the leak is no longer present, then the tech knows that the normal filter cassette was the source of the leak.

If the leak is still present with the open tool installed, the tech installs the second “closed” tool, and tries the test again. If the leak is no longer present, then the tech knows that the leak is located somewhere *above* the cassette holder, usually at the cyclone or Impactor. If the leak is still present, the tech knows that the leak is located at some component *downstream* of the cassette holder.

The third tool in the kit is one of our standard 47mm filter cassettes, pre-loaded with a rubber membrane of the same thickness as a standard filter disc. This tool meets the exact EPA specifications of the *Internal, filter bypass leakage* test specs in 40 CFR. Although this tool essentially serves the same function as the solid closed tool, it is included for audit situations where strict adherence to the CFR or EPA guidance documents may be desired.

- Manufactured 100% in the USA by our experienced machinists and technicians.
- Guaranteed to fit all 16.7 L/min PM₁₀ and PM_{2.5} FRM particulate samplers that use standard EPA-pattern 47mm filter cassettes. The chamfered inside profile also fits the filter holder on samplers that use “blue polycarbonate” filter cassettes.
- Quantity discounts for OEM applications. OEM product labeling available.
- One year warranty against defects in materials or workmanship.

PARTS:

Part Number	Description
LTT	Reference Sampler Leak Test Tool Kit, 3-Piece

Delrin® is a trademark of DuPont.



FEATURES

Precision Machined
Exceeds EPA PM_{2.5} FRM
Leak Check Specs
Slashes Leak Location Time
Made in the USA
Instruction Sheet Included

APPLICATIONS

PM_{2.5} FRM Sampler Audits
OEM Arrangements



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