



EMCEE

Emcee Model 1143 MICRO-FILTER ANALYZER

MICRO

(ASTM Standard Test Methods D6426 and D6824)

FILTER

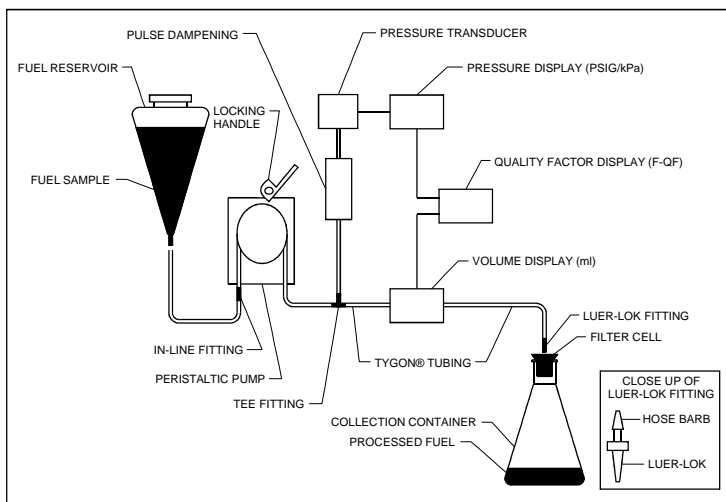
ANALYZER

convenient
reliable
method to
determine
the
filterability
of fuels

- Approved for Middle Distillate Fuels (ASTM D6426 and aviation turbine fuels (ASTM D6824)
- Use of a peristaltic pump and fuel compatible Tygon tubing facilitates ease of maintenance
- Completely self-contained with a universal power supply
- Portable, rugged, lightweight construction
- Cost effective- Fifteen minutes or less per test
- Utilizes expendable standard porosity filters
- Pressure sensitive push button array for simplified test selection and operation
- Digital displays- Pressure, Volume and Filterability Quality Factor (F-QF)
- Ease of calibration

APPLICATIONS

This test method is intended for use in the laboratory or field in evaluating distillate fuel cleanliness. A change in filtration performance after storage, pretreatment, or commingling can be indicative of changes in fuel condition. Causes of poor filterability in industrial/refinery filters include fuel degradation products, contaminants picked up during storage or transfer, incompatibility of commingled fuels, or interaction of the fuel with the filter media. Any of these could correlate with orifice or filter system plugging, or both.



Theory of Operation – A sample is passed at a constant rate (20 mL/min) through a standard porosity filter medium. The pressure drop across the filter and the volume of filtrate are monitored. The test is concluded either when the pressure drop across the filter exceeds 105 kPa (15 psi) or when 300 mL have passed through the filter. The final pressure and volume are displayed. Using the final pressure and volume a third value, filterability quality factor (F-QF), is calculated and displayed. The F-QF has a range from 0 to 100 where higher values indicate less particulate contamination.