

FALEX THERMAL FOULING TESTER (FT²)

The Only Instrument Available for SAE ARP 5996!

Used in Standard Test Methods

SAE ARP 5996 Evaluation of Coking Propensity of Aviation Lubricants



The Falex Thermal Fouling Tester (FT²) is the first instrument designed specifically for the SAE ARP 5996 Evaluation of Coking Propensity of Aviation Lubricants Using the Single Phase Flow Technique.

The FT² is the ultimate in ease of operation and provides user flexible programmability with extensive customizable safety and shutdown protocols. The FT²'s enhanced hotspot determination and profile automation routines assure the highest precision for your critical turbine oil analysis laboratory.

A lubricant sample is passed over a pressurized, tube-in-shell heat exchanger for a set time period. The specimen tube, made of 316 stainless steel, is weighed before and after the test to determine the amount of coking propensity exhibited by the test lubricant.

- » An integrated Peltier cooling system saves valuable bench space and provides consistent cooling temperatures for each test
- » Automatic tube temperature profiles reduce operator time and improve test precision
- » A redundant safety system keeps the unit self-sufficient in case of leak, mishap or power outage
- » High-Speed data acquisition of all critical thermocouples and system outputs
- » Hermetically-sealed gear pump for leak-free longevity and pulse-dampened flow
- » Customizable test parameters for additional points of research

Falex FT² SAE Technical Data

Operation

Sample volume	100 mL to 1 L
Tube temperature range	300 °C to 450 °C
Heated reservoir range	100 °C to 210°C
Units of temperature	°C, °F

Fluid flow rate	0.55 to 10 mL/min
Test duration	2.5 to 500 hours
Pressure	0 to 200 psi
Units of pressure	kPa, PSI

Data Management

Display	Real time on screen trend data
Results download	Hot spot profile, Test data
File type	.csv

Interface

User Interface	12" LCD can be used with gloves, USB, keyboard and mouse
Data input/output	USB (5), Ethernet (2)
Printer options	USB, Ethernet

Calibration

Temperature	2-point temperature calibration
Pressure	2-point pressure calibration

Power Requirements

Voltage x 2	115V 60Hz or 230V 50/60 Hz
Plug Type	1 NEMA 5-20 or NEMA 6-15

Utility Requirements

Pressure	Nitrogen or Air
----------	-----------------

Physical

Dimensions	30" x 30" x 22"
Weight	175 lbs. (without options)

Ordering Information

Part Number Description

450-001-001	Falex Thermal Fouling Tester (FT ²), (SAE) 115 V, 50/60 Hz
450-001-002	Falex Thermal Fouling Tester (FT ²), (SAE) 230 V, 50/60 Hz

System Options

450-109-006	Remote Emergency Stop
-------------	-----------------------

Consumables and Spare Parts

400-018-003	Insulation Bushing Set (2 pairs)
450-041-005	Tube Holder (dual tube)
450-050-006	Drip Assembly (customer should also buy 620-011-010 O-Ring kit)
450-097-003	O-Ring kit for 20 tests Includes O-Rings for reservoir lid (1 ea., 620-238-003) heater tubes (45 ea., 620-008-005) and tubing connections (220 ea., 620-006-003)
450-097-006	O-Ring Kit, Sight Glass
450-099-001	Heater Tube Holder Assembly
450-106-006	Heater Jacket (Bolted Flange)
450-109-004	Thermocouple Assembly-inlet/outlet
450-105-014	Reservoir (1,000ml Bolted Flange) with sight glass assembly
620-006-004	O-Ring, tubing (100 ea. of 620-006-003)
620-008-006	O-Ring, heater tube (23 ea. of 620-008-005)
620-210-001	Pre-Filter O-Ring (5/bag)
520-238-005	O-Ring, reservoir lid (5 ea. of 620-238-003)
648-400-005	Box of Prefilters (25/box)
648-400-007	Hex Socket Wrench
648-400-009	Ceramic Insulator Removal Tool
648-450-001	Heater Tube Cleaning Brush
650-009-061	Thermocouple, Heater Tube

Heater Tube Specimens

400-560-003	Heater Tube, 316 Stainless Steel (12/box)
-------------	---

Falex Corporation follows a policy of continuous product improvement. Specifications are subject to change without notice.

Distributed by:

