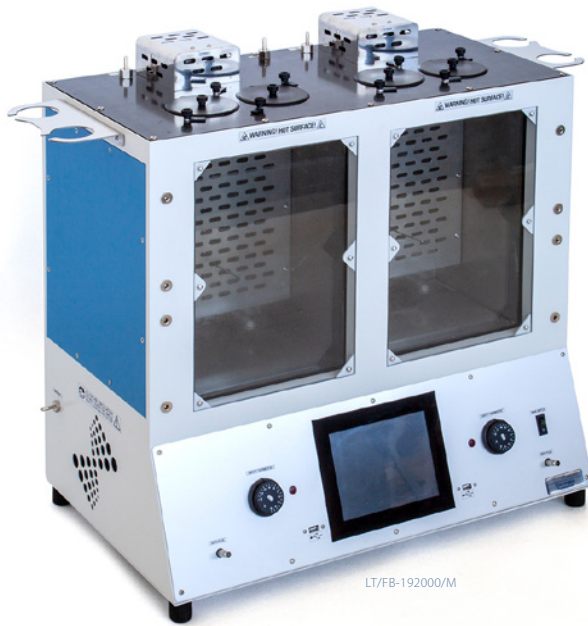
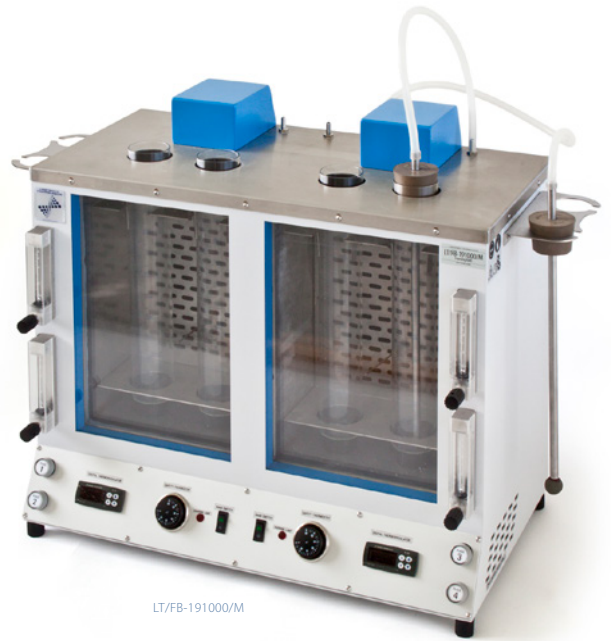




## Foaming Characteristics of Lubricating Oils



LT/FB-192000/M



LT/FB-191000/M

ASTM D892  
DIN 51566  
IP 146

**Foaming Characteristics of Lubricating Oils.**  
This test method covers the determination of the foaming characteristics of lubricating oils at 24°C and 93.5°C. Means of empirically rating the foaming tendency and the stability of the foam are described.

### LT/FB-192000/M

#### Semi-automatic Apparatus for Foaming Characteristics of Lubricating Oils – 4 places

- Bench top instrument with metallic case structure painted with anti-acid products and double chamber insulation, top cover made in stainless steel with four holes for the cylinders accommodation and one hole for control thermometer (not included).
- 2 x independent 25 liters capacity stainless steel baths (one for 24°C and one for more than 93.5°C) equipped with viewing and illuminated windows, two independent motor stirrer grants uniformity and stability of bath temperature.
- Stainless steel grid divide the glassware from the heating and stirring device.
- Air pre-heating system by copper coils immersed in the first bath.
- Lateral stand-by support for stoppers and diffusing assembly.
- Anti-floating and centring system for test cylinders.
- Control unit include 7" Touch screen panel PC with 800 x 480 resolution with dedicated Lin-Tech software able to manage the bath functions:
  - Independent management of 4 places analysis trough the activation of air micro-compressors and counter (time of blowing, waiting time, flow), audible alarm for each intervention of the operator requested.
  - Air flow monitoring system (flow rate) managed digitally and calibrated.
  - Diagnostic panel for temperature calibration, air flow, analysis parameters.
- Removable back panel equipped with drain tap for easily empty and clean the baths.
- Baths are thermo-insulated equipped with tempered glass window inside for easily cleaning the limestone or oils residue, second protection

panel made of plastic material with optical transparency.

- 4 Places Apparatus including: 4 diffuser stones (not certified), 4 rubber stoppers, 4 air diffuser tubes, 4 graduated cylinders.

#### Dimensions

- Width 71 cm
- Depth 40 cm
- Height 67 cm

#### Power Supply

- 115 Vac or 220 Vac
- 50/60 Hz

### LT/FB-191000/M

#### Manual apparatus for Foaming Characteristics of Lubricating Oils – 4 places

- Bench top instrument with metallic case structure painted with anti-acid products and double chamber insulation, top cover made in stainless steel with four holes for the cylinders accommodation and one hole for control thermometer.
- 2 x independent 25 Liters capacity Stainless steel baths (one for 24°C and one for more than 93.5°C) equipped with viewing and illuminated windows, two independent motor stirrer grants uniformity and stability of bath temperature.
- Stainless steel grid divide the glassware from the heating and stirring device.
- Air pre-heating system by copper coils immersed in the first bath.
- Lateral stand-by support for stoppers and diffusing assembly.
- Anti-floating and centring system for test cylinders.
- On the front the 4 flowmeter with regulating knob grant the easy adjustment of the air flow as foreseen by the method.

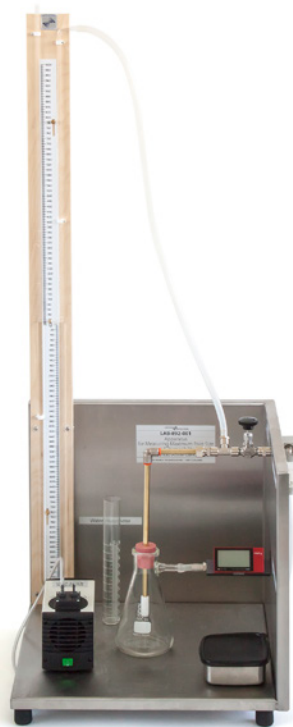




## Foaming Characteristics of Lubricating Oils



LT/FB-190000/M



5232

- Temperature controlled by 2 independent digital thermo-regulator with PID function, over-temperature protection and alarm, temperature displayed with 0,1°C precision thanks to PT100 Class A sensors.
- Stainless steel total immersion heating elements.
- 4 independent blowing pumps, equipped with damper system in order to avoid fluctuation in flow and external independent dryer system.
- Removable back panel equipped with drain tap for easily empty and clean the baths.
- Baths are thermo-insulated equipped with tempered glass window inside for easily cleaning the limestone or oils residue, second protection panel made of plastic material with optical transparency.
- 4 diffuser stones (not certified).
- 4 rubber stoppers.
- 4 air diffuser tubes.
- 4 graduated cylinders.

### Dimensions

- Width 71
- Depth 40
- Height 67

### Power Supply

- 115 Vac or 220 Vac
- 50/60 Hz

### Accessories

#### for LT/FB-191000/M and LT/FB-192000/M

- 7096: Certified diffuser stone.
- 5699: Mott metal cylindrical diffuser, tested and verified, ASTM D6082.
- 1000386: Mass flow meter.
  - Flow mass range from 9 to 450 mL/min.
  - Digital display readout.
  - Connection joints ¼".
  - Power supply, battery or micro-USB power supply.

- Operating pressure 0.2, 11 bar.
- Made in anodized aluminium, Fkm seals.
- Repeatability  $\pm 0.5\%$  of full scale.
- 7635: Desiccant for filters, pack of 700 gr.
- 5232: Apparatus for test maximum diameter / permeability of diffusers.
  - Air compressor with filter.
  - Air regulator and U-tube manometer.
  - Glass calibrated cylinder with delivery tube.
  - Filtering flask wide mouth with rubber stopper and delivery tube.
  - Digital flowmeter 1.2 to 60 nL/min with calibration certificate.
- LAB-892-099: VL Reference liquid.
  - Bottle of 1.0 liter approx.
  - 1 year shelf life.
  - Foam value acc. ASTM D892.

### Spare Parts

#### for LT/FB-191000/M and LT/FB-192000/M

- 7094: Diffuser stone, not certified.
- 1206: Graduated cylinder 1000 ml.
- 7349: Rubber stopper, pack of 2 pcs.
- 3168: PT100 Probe.
- LAB-110-012: Heaters, pack of 2 pcs.
- 5547: Air-Inlet tube.
- 11241: Washer, pack of 2 pcs.
- 7635: Desiccant for filters, 450 g approx.

### LT/FB-190000/M

#### Manual 2 Places - Twin Foaming Bath ASTM D 892

- Bench top heavy glass tempered bath with 25 liters capacity.
- Stainless-steel cover with 2 x holes, 125 mm diameter, for introducing of graduated cylinders.
- One motor stirrer grants uniformity and stability of bath temperature.

- Stainless steel grid divides the glassware from the heating and stirring device.
- Air pre-heating system by copper coils immersed in the first bath.
- Anti-floating and centring system for test cylinders.
- On the front the 2 flowmeter with regulating knob grant the easy adjustment of the air flow as foreseen by the method.
- Temperature controlled by digital thermo-regulator with PID function, over-temperature protection and alarm, temperature displayed with 0,1°C precision thanks to PT100 Class A sensors.
- Stainless steel total immersion heating elements.
- 2 independent blowing pumps with relevant interrupters, equipped with damper system in order to avoid fluctuation in flow.
- 2 x glass graduated cylinder.
- 2 x stoppers.
- 2 x diffuser stone.
- 2 x diffuser tubes.

### Power Supply

- 115 Vac or 220 Vac
- 50/60 Hz

### Temperature Range

- +24° up to +90°C

### Consumption

- 800 Watt

### Spare Parts for LT/FB-190000/M

- 7094: Diffuser Stone, not certified.
- 1206: Graduated cylinder 1000 ml.
- 7349: Rubber stopper, pack of 2 pcs.
- 3168: PT100 Probe.
- 3185: Heaters, pack of 2 pcs.
- 5547: Air-inlet tube.
- 11241: Washer, pack of 2 pcs.