



## Low Temperatures Viscometer Bath



LT/VB-44000/M -45000/M

ASTM D445  
ASTM D2532  
ASTM D2983  
ASTM D5133

Viscosity change after standing at low temperature of aircraft turbine lubricants. Covers the determination of the kinematic viscosity of aircraft turbine lubricants at low temperature and the percent change of viscosity after a 3 and a 72h standing period at low temperature.

Low temperature, low shear rate, viscosity/temperature dependence of lubricating oils using a temperature scanning-technique. This test method covers the measurement of the apparent viscosity of engine oil at low temperatures.

### LT/VB-44000/M Bench top laboratory liquid bath for low temperatures

- Bench top instrument with metallic case structure painted with anti-acid products and double chamber insulation.
- Stainless steel bath with liquid capacity about 18 litres.
- Over-temperature light and heating cut-off manually settable.
- Double stage motor compressors system CFC free able to cool down the bath to -40°C
- Bath cover with 5 test positions, 51 mm diameter.
- Cooling fan for electronic parts, stirrer motor grant homogeneity/uniformity.
- Managed by a Touch Screen Panel PC by means of the Lab-Link software running in Windows® ambient:
  - TFT/LCD 8" high resolution;
  - 2 × Usb ports for peripheral connection;
  - Switchable temperature from °C to °F.
- Power consumption: 2100 Watt.
- Power supply: 220 Vac 50/60 Hz.

### LT/VB-45000/M Bench top laboratory liquid bath for low temperatures

- Bench top instrument with metallic case structure painted with anti-acid products and double chamber insulation.
- Stainless steel bath with liquid capacity about 18 litres.
- Over-temperature light and heating cut-off manually settable.
- Double stage motor compressors system CFC free able to cool down the bath to -70°C.
- Bath cover with 5 test positions, 51 mm diameter.
- Cooling fan for electronic parts, stirrer motor grant homogeneity/uniformity.
- Managed by a Touch Screen Panel PC by means of the Lab-Link software running in Windows® ambient:
  - TFT/LCD 8" high resolution;
  - 2 × Usb ports for peripheral connection;
  - Switchable temperature from °C to °F.
- Power consumption: 2300 Watt.
- Power supply: 220 Vac 50/60 Hz.



## Low Temperatures Viscometer Bath



LT/VB-47000/M

### LT/VB-47000/M

#### Digital viscometer bath for low temperatures ASTM D2983

- Liquid bath with heating / cooling coil.
- Bath cover with 6 on-line holes.
- Light and resistant structure fitted with front squared window and light.
- Cooling is controlled by a motor compressor with ecological gas CFC free.
- Support for Brookfield head.
- Heating is provided by an electric immersion stainless steel heater.
- Integrated touch screen panel pc for control bath:
  - TFT/LCD 8";
  - Resolution 1024 x 768 and 256 k colours;
  - 2 x USB Port;
- PID with over temperature alarm and PT100A probe.
- LabLink software running in Windows® ambient.
- Motor stirrer.
- Power supply: 220Vac 50/60Hz.
- Cord cable 220Vac.
- User manual.
- Temperatures: in °C / °F.
- Cooling capacity: from ambient temperature up to -75 °C.

### LT/VB-47445/M

#### Digital viscometer bath for low temperatures ASTM D2983, D445, D2532

- Liquid bath with heating / cooling coil.
- Bath cover with 5 on-line holes for capillary accommodation and reduction rings for test cell ASTM D2532 / D2932.
- Light and resistant structure fitted with front squared window and light.
- Cooling is controlled by a motor compressor with ecological gas CFC free.

- Support for Brookfield head.
- Heating is provided by an electric immersion stainless steel heater.
- Integrated touch screen panel pc for control bath:
  - TFT/LCD 8";
  - resolution 1024 x 768 and 256 k colours;
  - 2 x USB port.
- PID with over temperature alarm and PT100A probe.
- LabLink software running in Windows® ambient.
- Motor stirrer.
- Power supply: 220 Vac 50/60 Hz.
- Temperatures in °C / °F.
- Cooling capacity: from ambient temperature up to -75 °C.

#### Accessories for ASTM D2532 / D2983

- LAB-100-472: test cells made in glass, pack of 6 pcs.
- LAB-100-473: cell cover made in glass, pack of 6 pcs.
- LAB-100-474: test cells stoppers made in PTFE with hole for spindle introduction, pack of 6 pcs.
- LAB-100-475: spindle clips for hold the spindle during the conditioning time, pack of 6 pcs.
- LAB-100-476: metal forceps for hold stopper, pack of 6 pcs.
- T-AS122C: thermometer ASTM 122C -45°C...-35°C div. 0.1°C
- T-AS123C: thermometer ASTM 123C -35°C...-25°C div. 0.1°C
- T-AS124C: thermometer ASTM 124C -25°C...-15°C div. 0.1°C
- T-AS125C: thermometer ASTM 125C -15°C...-5°C div. 0.1°C
- LAB-100-371/C: propylene glycol, Kinematic viscosity ~44 mm<sup>2</sup>/s at 25°C, can of 25 litres, for cooling

#### Accessories for ASTM D445

- LAB-100-373 T&O: viscometer holders PTFE for Cannon-Fenske, pack of 5 pcs.
- LAB-100-374: viscometer holders in metal for Ubbelohde/BS
- LAB-100-371/C: Propylene Glycol – Kinematic viscosity ~44 mm<sup>2</sup>/s at 25°C, can of 25 litres – for cooling
- T-AS72C: thermometer ASTM 72C -19.4°C...-16.6°C div. 0.05°C
- T-AS73C: thermometer ASTM 73C -41.4°C...-38.5°C div. 0.05°C
- T-AS74C: thermometer ASTM 74C -55.4°C...-52.6°C div. 0.05°C

#### Spare parts

- LAB-100-472: test cells - pack of 12 pcs.
- LAB-100-473: cells cover
- LAB-100-474: test stoppers
- LAB-140-006: PT100 probe
- LAB-110-012: heater
- LAB-160-015: digital thermoregulator
- LAB-150-015: static relay