

NEWSLETTER

Tamson Instruments



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Testing Properties of EV Materials

The transportation industry is evolving towards electric vehicles (EV). EV have fewer moving parts, incorporate different materials, and operate under conditions that are different than those of internal combustion engine (ICE) vehicles. Developing and testing fluids and coolants engineered to meet the new requirements for EV are critical to provide protection and assurance.

Already, new specifications are balloted by international standardization bodies for fully formulated coolants for use in fuel cell (FCV), battery electric (BEV), and hybrid vehicles with new specifications for physical, chemical and performance requirements. Tamson has developed several new apparatus to meet testing requirements including:

- ASTM D1384 Test Method for Corrosion Test for Engine Coolants in Glassware
- ASTM D8040 Standard Test Method for Corrosion Test for Heat Transfer Fluids in Glassware
- New corrosion test being developed concurrently that test metals found in FCV and BEV.
- CEC L-109-14 Oxidation Test for Engine Oils Operating in the Presence of Biodiesel Fuels
- CEC L-48-00 Oxidation stability of Lubricating Oils used in Automotive Transmissions by Artificial Ageing.



ASTM D1384 bath

Digital mass flow meter

Digital Mass Flow Meter (DMFM) for ASTM D892 Foam Apparatus available.

We are excited to inform you that it is now optional to use a digital mass flow meter instead of analogue flow meters in Tamson foaming apparatus. These meters are suited for precise measurement of flow ranges between 10...200 ml/min. The DMFM has a graphical OLED display which is clearly visible at wide angles. It allows easy reading of the actual flow both digital and graphical as a bar graph. A high quality needle valve offers smooth and fine adjustment of the gas flow. Please download our latest [specification sheet](#) from our website or contact our sales team.

New TT3B Digital Contact Thermometer (DCT)

The thermometer uses a detachable PT100 probe with a silicone cable connected to the housing. The DCT is easily placed on the workbench. Upright using a foldable bracket or laid down horizontally. The thermometer can be connected to a PC with an USB cable. Up to 16 sessions can be logged using internal memory. When connected to a PC these measurements are easily retrieved and stored in a database. It also is possible to use the PC software to display and store the measured temperature. The data is stored in a database and can be foreseen with a data-time stamp, operator and a memo text. Export is possible as CSV, JPG, PDF or PNG.

Primary benefits of the new TT3B DCT:

- Temperature range -40°C .. +140°C,
- Three decimal readout,
- Accuracy $\pm 0.02^\circ\text{C}$ ($\pm 0.01^\circ\text{C}$ on request),
- Works calibration certificate under ISO 9001-2015. Traceable to national standard,
- Free PC software,
- Data logging 8 hrs. @ 1sec. sampling rate,
- Battery operated. Rechargeable NiCad. 50 Hours on a charge or permanent using the 9V mains adapter



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