Innovative temperature adjusted IVD sampler

Minitubes introduces an innovative temperature regulated sampler for automated In Vitro Diagnostic testing.

Philippe Poncin will present this new design at the AACC's OEM Lecture Series on July 21, 2009.

Automatic IVD testing often requires heating the sample and reagent. Current solutions use heated liquid jackets or a resistive device over a copper tube attached to the probe. Both designs generate bulky high cost probes unable to precisely control the probe tip temperature, thus limiting small volume testing.

Minitubes patented design is using a resistive coating over an insulating layer covering a classic metal tubing, which overcomes the traditional heating probes limitations:

- Very small volumes can be heated by coating down to the probe tip.
- Testing rate is increased by the very low thermal inertia.
- Its very simple joint free design facilitates level detection and minimizes electrical failures.
- Probes can be easily replaced by laboratory operators.
- Liquid blending may be integrated within the probe through vibration, saving a mixing station.

Different layers has been discussed and experimental data has been presented, showing the heating performance on a prototype probe.