Isotech has the solutions for temperature calibration

David Southworth, VP Sales and Marketing of Isothermal Technology Ltd, explains how improvements in measurement might save hundreds of thousands of pounds each year

Isotech can provide small handheld heat sources through to devices that can accommodate large sensors. Isotech equipment can be provided with UKAS calibration certificates (pictured below)

It has been claimed that temperature is the second most measured parameter, only time is measured more often. Some measurements are non-critical, for example, if the car dashboard display for the outside temperature is in error it is not going to be of great consequence. In other areas good quality measurements may be critical, such as in a medical setting, where poor measurements could have life-threatening consequences.

In power generation, being able to make accurate measurements can save energy. Even a small improvement in measurement might save hundreds of thousands of pounds each year.

Confidence in temperature calibration

A complete measuring system will comprise both a sensor and a measuring instrument. An instrument can be calibrated by electrical simulation but temperature sensors need to be calibrated over their operating range using a stable heat source. It is common for the drift in sensors to be larger than the drift of measuring instruments.

Calibrating the measuring system

Portable heat sources allow sensor and measuring instruments to be calibrated from -100°C to 1,300°C. Isothermal Technology Ltd (Isotech) can provide small handheld sources through to devices capable of accommodating large sensors.

Low uncertainty calibration of thermometers

Not all sensors can be calibrated on-site, some will need to be sent to a laboratory with equipment offering a larger volume, wider temperature range, or greater accuracy.

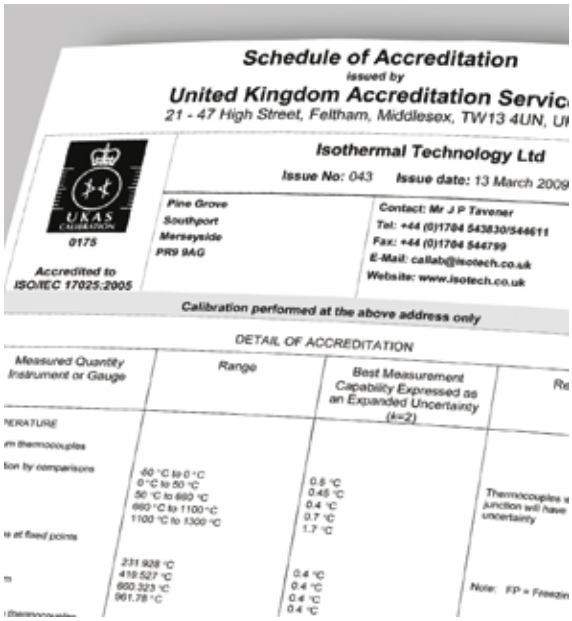
How can calibration be trusted?

Isotech equipment can be provided with UKAS calibration certificates from our accredited laboratory. Accreditation "is a formal, third-party recognition of competence to perform specific tasks". For more details, go to http://www.ukas.com

How Isotech can help?

Isotech has more than 30 years' experience – from calibrating low-cost temperature sensors to providing primary temperature standards for national metrology institutes. We are happy to share our knowledge and experience. In addition to individual enquiries, we have technical articles on the website and can provide in-house and on-site temperature training courses.

isotech.co.uk


Schedule of Accreditation
issued by
United Kingdom Accreditation Servic
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, U
Isothermal Technology Ltd
Issue No: 043 Issue date: 13 March 2009
UKAS CALIBRATION
0175
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Accredited to ISO/IEC 17025:2005
Calibration performed at the above address only
DETAIL OF ACCREDITATION
Measured Quantity
Instrument or Gauge
Range
Best Measurement Capability Expressed as an Expanded Uncertainty (k=2)
-50 °C to 0 °C
0 °C to 50 °C
50 °C to 660 °C
660 °C to 1100 °C
1100 °C to 1300 °C
0.5 °C
0.45 °C
0.4 °C
0.7 °C
1.7 °C
231.928 °C
419.527 °C
660.323 °C
961.78 °C
0.4 °C
0.4 °C
0.4 °C
0.4 °C