Calibration/Conformance

Background

When IRISYS introduced the IRI 2010, the main objective was to maintain its policy of achieving low prices, making the imager affordable. One of the main costs in manufacture is calibrating and specifying the accuracy of the imager. In order to reduce this cost IRISYS decided to concentrate on the key aspect for the user in the main application area. This is predictive maintenance. The primary requirement is to identify hot spots and get an indication of temperature rise over ambient, or a comparative temperature rise with a similar component. With a sensitivity of less than ~0.3K and a measurement accuracy of ±2Deg.C or ±2%(whichever is the greater) the IRISYS imager is suitable for this application allowing good detection of hot spot and temp. rises.

Calibration

As a result of the accuracy of measurement and the sensitivity of the camera; majority of customers do not require a calibration certificate. The camera is supplied with a certificate of conformance.
A calibration certificate is a more detailed document that lists actual measurements made, and references it back to national standards. Producing a Calibration certificate is a labour intensive task and therefore adds significant costs to the camera. However those organisations that require a calibration certificate can order one, when purchasing a camera.

Annual Calibration

We would recommend that the IRI 2010 is checked annually or once every two years. This could be done in stages.

(a) Calibration check.

(b) and if necessary a Re-calibration.
At present any instrument requiring re-calibration will need to be returned to IRISYS.

(c) Request a calibration certificate, if supplied with one originally.

S. Sandhu.
20th Nov 2009