Newsletter Archive – November 2016





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Director's Message



Keeping it simple is a principle for effective communications. When it comes to infrared thermography, oversimplification can be detrimental when it leads to confusion or misunderstandings.

Upcoming Courses

Level I Certified Infrared

Thermographer®

- Nov 15 16 Kuala Lumpur*
- Nov 21 25 Melbourne*
- Nov 28 Dec 2 Trinidad
- Nov 29 30 Perth*
- Dec 5 9 West Windsor
- Dec 5 9 Kuala Lumpur
- Feb 7 8 Brisbane*
- Feb 13 17 West Windsor
- Mar 6 10 Melbourne
- Mar 30 31 Auckland*

In trying to explain the operation of thermal imagers, many will frequently state that infrared imagers sense temperatures across the surface of objects. While this may allow a layperson to grasp the concept of infrared equipment operation, it can foster a basic misunderstanding that can lead to significant diagnostic errors.

Infrared imagers do not sense temperature. Rather, they directly sense infrared energy radiated from the surface of an object. Using sophisticated on-board computers, radiant energy is converted to a monochrome or multi-colored image that represents the apparent thermal patterns across an object's surface.

Emissivity is the most significant characteristic influencing the amount of energy radiated by an object. Emissivity is a dynamic phenomenon that is influenced by many factors; the relative amount of energy radiated by an object is described by its emittance.

Emittance is a number between 0 and 1 that numerically expresses how well an object radiates infrared energy when compared to a blackbody at the same wavelength and temperature. The emittance of an object will vary with temperature, shape and surface condition. In thermography, emittance can be further influenced by viewing angle and the spectral response of the imager or radiometer utilized.

In order to ensure accuracy, it is imperative for a thermographer to understand the concepts of radiance and the principles of non-contact temperature measurement. Anything that affects emissivity will influence both qualitative and quantitative data.

Level II Certified Infrared

Thermographer®

- Dec 5 9 Trinidad
- Mar 27 31 West Windsor

Level III Certified Infrared Thermographer®

- Dec 7 9 Melbourne*
- * Flexible Learning Course

Full 2016 - 2017 Schedule

Upcoming Conferences

Infraspection Institute invites you to see us at the following upcoming conferences. Be sure to stop by and say Hello!

IR/INFO Conference

January 22 – 25, 2017 Orlando, FL

Ultrasound World XIII

May 9 – 12, 2017 Clearwater, FL

UI Thermal Imaging Conference

October 1 -4 2017

Training Scholarships for US Veterans

In 2012, Infraspection Institute established the Christopher Seffrin Memorial Scholarship for Veterans as a tribute to those who have served our country. As we observe Veteran's Day this month,



Infraspection Institute extends a heartfelt Thank You to our service members and invites you to take advantage of the benefits of this unique training opportunity.

The Christopher Seffrin Memorial Scholarship is open to all US veterans who have served a minimum of four years in the US Armed Forces and have been honorably discharged. Scholarships are funded by Infraspection Institute and may only be applied to courses purchased through the Infraspection Institute website.

Scholarships do not apply to refresher courses and may not be combined with any other discount. Qualified applicants are limited to one scholarship per qualifying course in which they are enrolled up to a maximum of three courses.

Scholarships of up to \$500 are available for Infraspection Institute

Certified Infrared Thermographer training courses and Level I, II, and

III thermography courses available through Infraspection's Distance

Learning program

More Information

San Antonio, TX

SMRP Conference

October 16 – 19, 2016

Kansas City, MO

Links of Interest

IRINFO.ORG

Maintenance & Reliability Topics

NACBI

CITA.ORG

Temperatures.com

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on LinkedIn



Infraspection Institute has announced the release of updated versions of its popular series of Standards for infrared thermography. All eleven Standards have been revised to keep abreast of technological and industry changes.

Jim Seffrin, Director of Infraspection Institute, states, "We are very excited about the release of our updated standards. The past several months have seen significant changes within the infrared inspection industry especially in the area of thermal imaging equipment. The 2016 version of our Standards addresses these changes and provides clear and concise procedures for the proper use of thermal imaging equipment and outlines best practices for infrared inspections."

Recognizing the need for standardized procedures, Infraspection Institute began publishing guidelines for thermography in 1993. Since their initial publication, Infraspection Institute guidelines have been adopted by hundreds of companies worldwide and incorporated into documents published by recognized standards organizations such as the American Society for Testing and Materials (ASTM) and the International Organization for Standardization (ISO). Beginning in 2007, Infraspection Institute guidelines were updated and renamed as standards to reflect their industry-wide acceptance and the best practices they embody.

Seffrin adds, "The advent of low cost infrared imaging equipment has made the technology available to nearly everyone; however, not all imaging systems are capable of producing accurate results. In revising our Standards, we set out to place consumer needs first by

establishing minimum requirements for thermal imaging equipment and updating inspection requirements, as appropriate. The 2016 edition of the Infraspection Standards is a 'must-have' for anyone who specifies, performs, or oversees infrared inspections."

More Information

Attend IR/INFO and Get FREE Training

In celebration of IR/INFO's 28th anniversary, Infraspection Institute are pleased to announce a special offer combining the world's most respected infrared training and certification program with the industry's original technical conference.



Attend IR/INFO and receive a tuition voucher for up to 100% discount on a 2017 Infraspection Institute Certified Infrared Thermographer® training course.

Special offers may not be combined with any other discount. Training course vouchers must be used by 12/31/17. Tuition vouchers are transferable to a third party for a \$500 administrative fee.

More Information



