



News and Information for Professional Thermographers

Volume 5 Issue 1 January 2016

Director's Message



Since its earliest usage, English has been a dynamic language that is constantly evolving; however, a recent announcement seems to challenge even conventional boundaries.

For the first time ever, the Oxford Dictionaries Word of the Year is a

Upcoming Courses

Level I Certified Infrared

Thermographer®

- Jan 20 21 Fiji*
- Feb 4 − 5 Melbourne*
- Feb 7 11 Abu Dhabi
- Feb 15 16 Ho Chi MinhCity*
- Feb 18 19 Bangkok*
- Feb 22 26 West Windsor
- Feb 29 Mar 1 Singapore*
- Mar 3 4 Kuala Lumpur*
- Mar 10 -11 Auckland*
- Mar 31 Apr 1 Anaheim*
- Apr 3 − 7 Abu Dhabi
- Apr 11 15 Kuala Lumpur

pictograph: Although it is officially called the 'Face with Tears of Joy' emoji, you may know it by other names. There were other strong contenders from a range of fields, but was chosen by Oxford as the 'word' that best reflected the ethos, mood, and preoccupations of 2015.

Similar to English, thermography is a technology that is constantly evolving. The number of applications for thermal imaging continues to expand along with pertinent standards. Presently, the number of products from manufacturers of hardware and software is at an all-time high. Increased public awareness of thermal imaging has raised the expectations of consumers and those who use thermal imaging inhouse.

With these challenges in mind, it is incumbent upon thermographers to keep pace with changes in our industry. As you make plans for the upcoming months, consider taking a refresher course, advancing your training to the next level, or joining us at this month's IR/INFO
Conference.

SuccessIRies 103 -

Starting, Marketing, and Managing an Infrared Consulting Company

As the science of thermography expands, it continues to attract individuals and companies looking for business opportunities. Despite the acceptance of thermography, many companies



struggle or fail at their attempts in offering this proven technology. Success in any consulting business requires a combination of technical and business skills, and thermography is no exception.

• Apr 25 – 29 West Windsor

Level II Certified Infrared

Thermographer®

- Feb 14 18 Abu Dhabi
- Mar 14 18 West Windsor
- Apr 10 14 Abu Dhabi

Level III Certified Infrared

Thermographer®

- Jan 19 Fiji*
- Jun 20 -22 West Windsor
- * Flexible Learning Course

Full 2016 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 17 – 20, 2016 Orlando, FL

Ultrasound World XI

May 10 – 13, 2016 Clearwater, FL

UI Thermal Imaging Conference

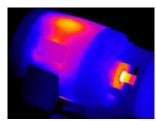
September 19 - 22, 2016

Part of Infraspection Institute's distance learning program,
SuccessIRies 103 is intended for anyone wishing to start an infrared
consulting business or to expand the service offerings of an
established business. This course focuses on the fundamentals
required to start, market, and maintain an infrared consulting company.

This course is designed for beginners and experienced thermographers. Course is 40 minutes long and may be accessed 24/7 from a standard web browser or a smart device.

More Information

Measuring Motor Temperatures



Measuring motor temperature is often a challenge since electric motors differ widely in their design and construction. While many have suggested measuring the motor casing along the stator, this

method does not work well for motors that are fan cooled or exposed to external air currents. For uncooled motors, this approach can produce varying temperature values depending upon the location of the subject temperature readings.

In 1997, a research project led by Infraspection Institute utilized instrumented motors in a controlled environment to determine the effect of excess force on installed motors. One of the primary goals of this research was to identify a location for collecting reliable temperature data.

From our research it was found that measuring the exterior of the motor bellhousing within 1" of the output driveshaft consistently produced temperatures that were within 1 to 2 Celsius degrees of the

San Diego, CA

SMRP Conference

October 17 – 19, 2016

Jacksonville, FL

Links of Interest

IRINFO.ORG

Maintenance & Reliability Topics

NACBI

CITA.ORG

Temperatures.com

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motor windings and the inboard bearing assembly. Temperatures taken at the bellhousing were especially useful for fan-cooled motors since this area was unaffected by convective cooling from the fan.

When measuring motor temperatures, keep the following in mind:

- Make certain that all thermometers are within calibration and used properly
- Motor temperature will vary with load and ambient temperature.
 Be certain to record both along with motor temperature
- Elevated temperatures can be caused by electrical or mechanical defects within the motor and/or defective installations
- Motors having an elevated temperature should be further investigated for cause and repaired or replaced accordingly

More Information

Attend IR/INFO and Get FREE Training

In celebration of IR/INFO's 27th 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 2016 Infraspection Institute Certified Infrared Thermographer® training course.

Special offers may not be combined with any other discount. Training course vouchers must be used by 12/31/16. Tuition vouchers are

transferable to a third party for a \$500 administrative fee.

More Information











