

News and Information for Professional Thermographers

Volume 8 Issue 3 - March 2019

# **Director's Message**



Humans leave their mark everywhere they go. They leave fingerprints on the things they touch, footprints in the sand where they walk, and personal impressions on those they meet. A less considered type of impression is an 'internet footprint' which is created whenever a person posts to social media or public message boards.

Web posts often make permanent impressions on those who read them. Web posts that are timely, accurate, and professional can serve to help others and create a positive image for their authors. Bad or inappropriate posts can cause permanent damage and even harm one's business. When posting on the net, following a few simple rules or netiquette can help to avoid creating a bad impression in cyberspace.

- Do not post anything you would not (or should not) say in public.
- Always refrain from using foul, profane, or vulgar language.
- Do not badger others or attack their personal beliefs.
- Avoid overexposure. Chronic posting or posting around the clock gives the impression that you have nothing better to do.
- Keep in mind that posts can be viewed worldwide across different languages and cultures. Humor and witticism rarely translate well; sarcasm is often magnified.

Lastly, remember to think before you hit the 'send' button. Online posts often have an unintended permanence and are available for the world to see. Webmasters are rarely under any obligation to remove or edit posts regardless of how unflattering they may be.

## **Onsite Training**

# **Upcoming Courses**

#### <u>Level I Certified Infrared</u> <u>Thermographer</u>®

- Apr 1 5 Melbourne
- Apr 1 5 Kuala Lumpur
- Apr 8 -12 Auckland
- Apr 8 12 West Windsor, NJ
- Apr 22 25 Henderson, NV
- Apr 29 May 3
   Brisbane
- May 13 17 Perth
- May 13 16 Seal Beach, CA
- Jun 24 28 Kuala Lumpur

#### <u>Level II Certified Infrared</u> <u>Thermographer</u>®

 Mar 11 - 15 West Windsor, NJ

#### <u>Level III Certified Infrared</u> <u>Thermographer</u>®

 Mar 18 - 20 West Windsor, NJ

Full 2019 Schedule

**Upcoming Conferences** 

If you have four or more employees who need infrared training and certification, an on-site training class might be right for you. On-site training classes eliminate employee travel expenses and can be scheduled at your convenience. Best of all, on-site training can be customized to meet your company's specific needs!



Since Infraspection Institute do not manufacture or sell infrared equipment, our courses are presented without marketing hype and are relevant to all brands of thermal imagers. Our training courses are taught using a combination of dynamic multi-media presentations, hands-on demonstrations, and one-on-one interaction with students, all of which are designed to maximize each student's learning experience.

Call us today for a free quotation and let us show you how affordable on-site training can be.

#### **More Information**

# **Free Training**



For a limited time, Infraspection Institute is offering two free online training courses. These courses are available through SuccessIRies™ – a series of webbased short courses for thermographers and inspection professionals. SuccessIRies™

courses are available 24/7 via an internet connection and cover a wide variety of topics.

Typically 30 to 60 minutes in length, SuccessIRies<sup>™</sup> are narrated short courses that are the perfect way to keep abreast of the latest developments in the rapidly evolving field of thermography. SuccessIRies<sup>™</sup> also meet continuing education requirements for professional inspectors.

Normally priced at \$79, SuccessIRies™ 101, Infrared Thermography – What's Hot in PdM and SuccessIRies™ 102, Infrared Inspections for Home & Building Inspectors are currently being offered for free. These courses provide an introduction to infrared thermography and how it is applied to a wide variety of applications. Both courses provide an excellent introduction to thermography.

#### **More Information**

## **Measuring Motor Temperatures**

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

#### IDCON Equipment Reliability Training Week

Mar 18 - 22, 2019 Raleigh, NC

#### **Reliable Plant**

Apr 16 - 18, 2019 Cleveland, OH

#### **Ultrasound World**

May 14 - 17, 2019 Clearwater Beach, FL

# Thermal Imaging Conference

October 3 - 6, 2019 Irvine, CA

#### **SMRP Conference**

October 7 - 10, 2019 Louisville, KY

#### **IR/INFO** Conference

January 19 - 22, 2020 San Antonio, TX

# Links of Interest

**IRINFO.ORG** 

**NACBI** 

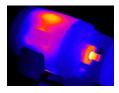
**CITA.ORG** 

#### Temperatures.com

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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 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**

### Join Thermography's Elite



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Thermographer®

