



Volume 5 Issue 6 June 2016

Director's Message



Thermal anomalies are not always as obvious as one might expect. Often, subtle thermal differences can be indicative of major problems.

Because infrared thermography is a visual inspection technique, its effectiveness relies on the observation skills of the thermographer. Like

Upcoming Courses

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Thermographer®

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- Jun 6 10 Melbourne
- Jun 15 16 Auckland*
- Jul 18 22 West Windsor
- Jul 18 22 San Jose
- Jul 25 29 Montreal
- Jul 27 28 Adelaide*
- Aug 7 11 Abu Dhabi
- Aug 22 26 Kuala Lumpur
- Aug 31 Sep 1 Melbourne*
- Sep 5 6 Clark Quay*
- Sep 8 9 Kuala Lumpur*
- Sep 19 20 Bangkok*

any visual inspection technique, a thermographer must actively concentrate on the imagery displayed by their thermal imager.

Contrary to popular belief, humans are not inherently effective observers. Because humans tend to be casual in their observations, they frequently overlook subtleties. Whenever imaging, a thermographer's eyes should always visually scan the monitor left to right and up and down while asking him/herself the following three questions:

- What am I seeing?
- Why am I seeing this?
- Is this normal/reportable?

While this approach may sound cumbersome at first, this practice will soon become instinctive and can help prevent you from overlooking the subtle thermal patterns that can be indicative of serious problems.

Tips for Purchasing a Thermal Imager

As infrared thermography gains wider acceptance, its usage is increasing.

Meanwhile, the task of selecting an imager is becoming more difficult. Presently, there is a



wide selection of equipment available from a record number of manufacturers. With some manufacturers offering several variants of camera models, there are more choices than ever before.

Procuring an imager is a challenge for many reasons: initial purchase price can easily run into the tens of thousands of dollars, no imager is capable of performing all imaging applications, imager performance varies widely, performance specs are not always available or comparable, and making an incorrect purchase can be costly.

- Sep 22 23 Manila*
- Sep 19 23 West Windsor
- Sep 19 23 Brisbane

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Thermographer®

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- Sep 26 30 West Windsor

Level III Certified Infrared

Thermographer®

- Jun 20 22 West Windsor
- Oct 3 5 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!

UI Thermal Imaging Conference

September 18 – 21, 2016 San Diego, CA

SMRP Conference

October 17 – 19, 2016

Jacksonville, FL

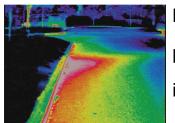
Purchasing an imager should be done by assessing your company's present and future needs, obtaining and comparing manufacturer specifications, and taking time to thoroughly evaluate the imager in the workplace where it will be used. Prior to purchase, the imager and its manufacturer should be carefully evaluated in the following areas:

- Ascertain imagers objective and performance specifications
- Obtain service and warranty information
- Evaluate imager for subjective characteristics
- Consider equipment value

Lastly, when considering pre-owned equipment, it is often a good idea to have a title search conducted prior to purchase to ensure that the equipment is free of liens.

More Information

Detecting Underground Pipe Leaks



Leaks are a common problem with underground piping systems. Under the correct conditions, infrared thermography can help to detect evidence of leaks from buried piping systems that

carry hot or cold product.

When a leak develops in a buried piping system, fluid is lost to the surrounding earth. If a leak from a heated or cooled piping system is sufficiently large, a temperature change will occur at the surface of the ground in the vicinity of the pipe leak.

Leaks from buried piping are generally characterized by amorphously shaped thermal anomalies that appear along the pathway of the subject piping system. The ability to detect a pipe leak will be

IR/INFO Conference

January 22 – 25, 2017 Orlando, FL

Ultrasound World XIII

May 9 – 12, 2017 Clearwater, FL

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to: pipe operating temperature, pipe system construction, burial depth, amount of loss, soil type and moisture content, and ground cover.

Infrared inspections of buried piping systems are best performed late at night with calm wind conditions. Inspections may be performed on foot, from a motor vehicle, or from an aircraft. Performing the inspection late at night will eliminate the effects of solar loading and solar reflection.

During the inspection, the thermal imager is maneuvered over the pathway of the pipeline. Well-defined straight lines that correspond to the location of the buried lines generally indicate a healthy piping system. Amorphously shaped thermal anomalies that cannot be explained in terms of piping system construction or features may be indicative of pipe leaks and should be marked and subsequently investigated for cause.

More Information

Call for Papers for IR/INFO 2017

Infraspection Institute is pleased to announce that its annual Advanced Training Conference,
Technical Symposium and Technology Expo,
IR/INFO 2017, will be held January 22 – 25, 2017



in Orlando, Florida. Now in its 28th year, IR/INFO features four days of networking, learning, and fun in a relaxed, yet professional, family atmosphere.

Infraspection Institute is presently seeking papers and presenters for IR/INFO 2017. Invited topics include, but are not limited to: safety, emerging applications, building sciences, related NDT, case histories,

as well as tips and tricks.

Presentations are typically 25 minutes with 5 minutes for Q & A time with the audience. All papers and presentations will be published in the IR/INFO Proceedings. The deadline for abstract submissions is July 31.

Submit an Abstract











