



Trane Building Advantage

# Thermography

Trane Thermography is one of six solutions in the Trane Building Advantage Reliability services portfolio. This non-intrusive technique can help optimize reliability and efficiency.



**Innovation leads to better equipment diagnosis**

Today's competitive environment calls for greater equipment reliability and lower operating costs. Achieving both requires innovative and proven diagnosis along with corresponding solutions that produce real cost savings quickly. When it comes to diagnosis tools, it's hard to beat the effectiveness of Trane Thermography. Trane Thermography is a non-invasive, safe and proven predictive service that detects potential risks in electrical and mechanical equipment. Plus, because your plant can remain up and running, you'll have a clearer picture of where potential breakdowns are hiding, before it's too late.

**Prevent unscheduled downtime**

Think of Trane Thermography as a proactive safeguard. It's a predictive maintenance program that lowers repair costs and limits unscheduled downtime.

**A snapshot of equipment components**

Differences in temperature are key elements in monitoring equipment. As thermography captures an object's heat signature, it creates a two-dimensional color image of the equipment components. That image will then be used to compare a good component to a problematic one and detect any potential risks. Thermal imagers can also store heat signatures for comparison and upload images to a database.



**Applications and results**

Trane Thermography is perfect for electrical inspections – as well as mechanical inspections. For example, as electrical connections become loose, there is resistance to current that can cause an increase in temperature, which means energy is wasted generating heat. As a result, components can fail, causing unplanned outages and even injuries. Through Trane Thermography, however, potential hazards the human eye can't see become crystal clear.

**Trane thermography process**

**Step one: Detection**

A Trane technician takes thermal images of your equipment component with an infrared camera to detect and identify potential electrical and mechanical problems that can't be seen by the naked eye. There's no downtime or work stoppage required during the control phase.

**Step two: Diagnosis**

After reviewing the thermal images, the Trane technician will give you a detailed report with any anomalies that were detected. The causes behind those anomalies will be analyzed and Trane will suggest ways to correct and improve the reliability of your systems along with recommendations for repair.

**Step three: Prevention**

Depending on the repairs needed, our qualified Trane technicians will offer the solutions to fix the problem(s) on site, before any failures occur that could have a financial impact on your bottom line. This includes resolving safety issues, which can create hazardous working conditions and cause injuries.

**Picture perfect analysis**

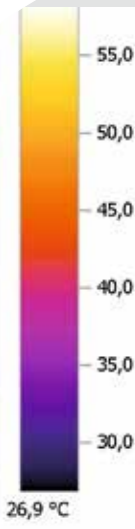
When it comes to predictive maintenance, thermography has become a preferred choice among building owners, managers and operating engineers. It's easy to understand why. With no downtime or interruptions required, instant imaging and picture perfect analysis, Trane Thermography is the ideal way to help keep your plant running safely and reliably.



You see electrical contacts.



We see loose connections and overheated contacts.





# Trane Services

The real expertise of a manufacturer



- Systems approach
- Dependable installations
- Energy saving solutions
- Operating cost optimization
- Chiller plant management solutions
- Chilled water production solutions.

At Trane, we are committed to providing a comprehensive portfolio of HVAC solutions throughout your system lifecycle.



## Breakdown resolution

No one plans for breakdowns, but when they happen you need the right partner. Our expert Service Engineers use the latest diagnostic tools to guide you through your options to Repair, Renew, Replace or ReThink.



## Secure operations

At every point during the lifetime of your equipment - installation, commissioning, maintenance or breakdown - Trane can offer an effective solution with commissioning, first-aid kits and service agreements.



## System upgrade

Trane Building Advantage

Trane is committed to bringing the latest technological advantages to our customers through a wide portfolio of solutions which increase the Efficiency, Reliability and Sustainability of their HVAC plants. Our Service Engineers use their expertise together with the latest diagnostic tools to future-proof your system and make it "better than before".



## Equipment rental

For special events, exceptional needs or when you want to ReThink HVAC management, Trane Rental Services have the right solution. With our extensive fleet of equipment, we can perfectly match your temporary heating and cooling requirements.



## Contact us

With over 1000 of the best trained sales engineers and service technicians in the industry, Trane is in the best position to serve your needs. Just call us and we will help you configure the Trane Free Cooling solution for your HVAC system.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.eu](http://trane.eu) or [tranetechnologies.com](http://tranetechnologies.com).