

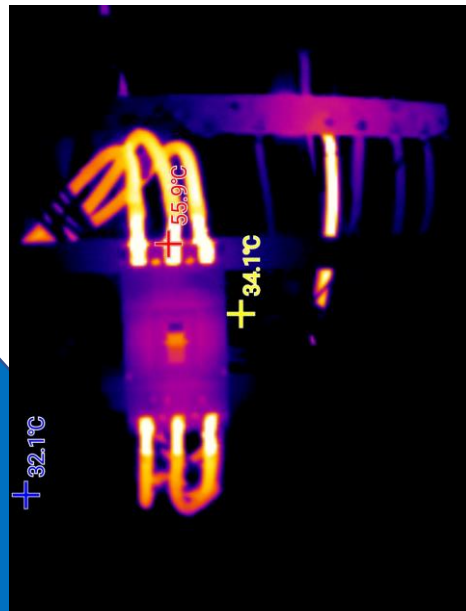
## IR THERMOGRAPHY INSPECTION



### What is Infrared Thermography?

Infrared thermography is a cutting-edge non-destructive testing method that can help your business minimize downtime, avoid costly repairs, and enhance safety. Essential for condition monitoring and predictive maintenance, this technique measures the thermal radiation emitted by various components.

Using an infrared camera, infrared thermography detects the heat and energy released by rotating electromechanical equipment such as motors, pumps, and fans during operation. Since infrared wavelengths are beyond the visible spectrum, the camera converts them into clear images with relative temperature readings.



This powerful technology not only maps temperature levels and variances but also effectively identifies hidden issues like corrosion damage, delamination, voids, and other flaws undetectable to the naked eye. For optimal results, a significant temperature difference between the component and its surroundings is necessary.

## Where Can Infrared Thermography Be Used?

Infrared thermography is a versatile and invaluable tool for assessing asset conditions across various infrastructures in the manufacturing, distribution, and processing industries.

### Electrical Systems

Infrared thermography excels at detecting overloaded circuits and faulty connections by identifying their higher heat signatures. Common issues such as excessive electrical resistance, load imbalances, and improperly sized components are revealed through thermography, allowing for timely maintenance or repairs before they disrupt your production line.

### Fluid Systems

Infrared thermography enables quick inspection of fluid lines for blockages, temperature fluctuations, and insulation gaps. Heat exchangers, valves, and storage tanks can be swiftly scanned to ensure proper operation and fluid levels..

**By allowing technicians to test equipment while it is operational, infrared thermography helps determine necessary maintenance, repairs, or replacements before a critical failure occurs.**

**Let us know your inspection requirements**

**+94 71 8111645**

**+94 77 3233587**

[anurakjaeb@gmail.com](mailto:anurakjaeb@gmail.com)

[anurakjaea@yahoo.com](mailto:anurakjaea@yahoo.com)

### Mechanical Systems

In mechanical applications, particularly motors and rotating assemblies, infrared thermography is crucial for spotting excessive heat caused by friction. This technology helps identify worn bearings and lubrication needs, providing real-time data that offers advanced warnings of potential issues and confirmation of existing damage.

### Electric Motor Testing

A comprehensive motor testing program includes both offline and online testing, and infrared thermography is particularly effective for online assessments. It can evaluate:

- Power quality
- Rotor health
- Power circuit integrity
- Stator condition

