

## Consultancy in Thermography Analysis

Vibrotech Trainers & Consultants Pvt Ltd, Chennai, **ISO 9001:2008, OHSAS 18001:2007 & ISO/IEC 17025 : 2005 Certified Company** have been providing cost effective solutions in the field of Predictive Maintenance through **Thermography** apart from **Vibration Analysis, Diagnostic Studies & In-situ Dynamic Balancing services.**

### What is Infrared Thermography

Thermography is temperature mapping of a surface / point. As the name suggests, infrared thermography is based on Infrared (IR) technique. The principle underlying this technique is that every object emits certain amount of IR energy and the intensity of this IR radiation is a function of temperature. In an electromagnetic spectrum the IR region ranges from 0.8 micron to 1000 micron wavelength. The wavelength of IR spectrum is more than that of a visible spectrum. The IR energy which can directly represent the surface temperature can be detected and quantified using IR imaging / scanning camera / system.

### Advantages of IR Thermography Analysis

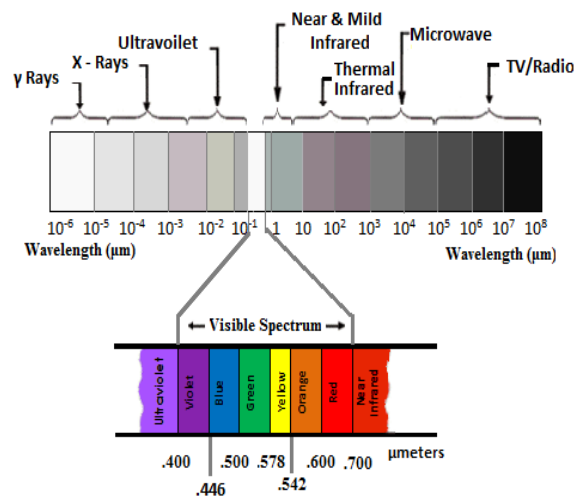
It is a non-contact type technique providing safe, Fast, Reliable & accurate results. A large surface area can be scanned with ease to identify high / hot spots / loose connections, etc.

Thermal imaging is presented in visual & digital form for comparison along with software back-up for image processing and analysis. Experience in monitoring is a added advantage though not necessary.

**Studies by the Federal Energy Management Program (FEMP) estimates, an effective Predictive Maintenance program can provide savings of 30 % to 40 % over reactive maintenance.**

### Where it can be used

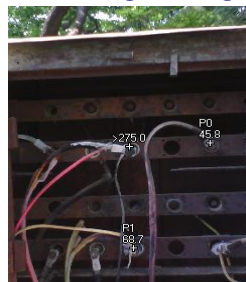
Bearings, Electric motors, Steam systems, Loose or corroded electrical connections, Moisture in building envelopes, Test and measurements for electrical fire prevention, Transformers, Panel Boards, etc.



**Infra Red image**



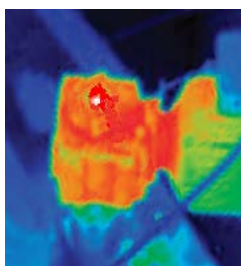
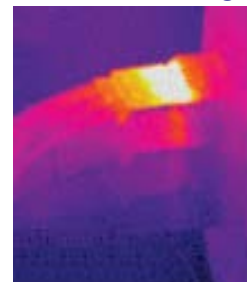
**Visible Light image**



**Visible Light image**



**Infra Red image**



### Vibrotech IR Thermography Analysis Services

**Our Engineering Service Division with specially trained and experienced engineers, who are working under the guidance of specialized Expert Committee have served the Indian Industries with proven results in predictive maintenance services. With these expertises, our Service Division is breaking the barriers in solving all types of Machinery problems.**

For Further Details contact:

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Official Representative in India:

Vibration Institute - USA (for ISO CAT I, II & III Vibration Analyst Course & Certification)

VMI International AB - SWEDEN (Instruments measuring Rotating & Reciprocating Machine Vibration)

Vibraquipa S.L.U. - SPAIN (Instruments measuring Ground, Building & Structure Vibration)