ENISAVE SOLUTIONS (Pty) Ltd Est. 2012

ENI-SCAN THERMAL INFRARED SERVICES

Infrared Surveying Specialists

Santam Insurance good and proper

itc Certified FLIR

Thermal Infrared Imaging

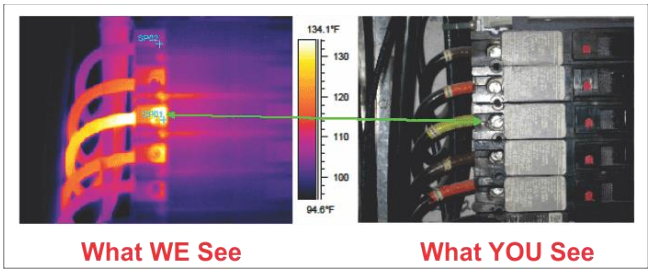
What is Thermal Imaging

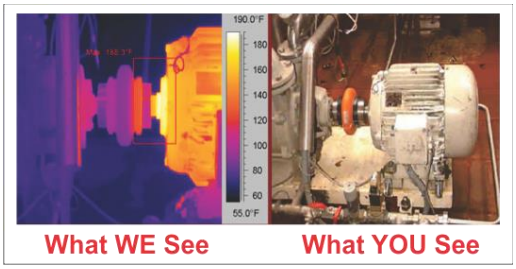
Thermal Infrared Imaging or Infrared Thermography is an extremely powerful method of proactively monitoring and troubleshooting electrical, mechanical and structural systems which may have problems that remain undetected using standard visual inspection and diagnostic techniques. Quite simply, problems that cannot be seen with the naked eye are clearly visible using thermal imaging.

How Does It Work?

Thermography operates by accurately measuring the infrared or heat energy of any target objects surface, producing a detailed visual image showing its temperature profile in contrast with its immediate surrounding area. Excessive heat output is a key signature that a mechanical or electrical system or component may be close to the point of failure or has the potential to cause a serious health and safety issue such as injury to staff or fire risk.

As thermal imaging is a totally non-invasive investigative process and operates without physical contact, it provides a quick and cost-effective means to evaluate a systems' or building's operating integrity and is increasingly used an effective tool for predictive maintenance and retrospective checking of repairs to confirm the quality and integrity of remedial work.





Services We Offer

***Enisave Solutions (Pty) Ltd** offer a range of services that are tailored to individual requirements:*
Working closely with your own operational or maintenance staff, we will identify key structural, electrical and mechanical Systems to be thermally surveyed and a series of detailed Infrared and visual pictures will be taken.

We recommend that surveys are done under normal load and operating conditions to give more accurate and realistic measurements. The resulting images will undergo detailed analysis and interpretation by a ES Thermographer and a customised report will be produced which will confirm the findings of the survey and where appropriate identify areas for follow-up investigation.

Why Infrared Scanning?

Conditions detectable by an Infrared Inspection

- Loose/deteriorated connections
- Overloads
- Open circuits
- Unbalanced loads
- Inductive heating
- Harmonics
- Defective equipment

Benefits of Infrared Inspection

- Reduce unscheduled down time
- Increase equipment life
- No service interruption during inspection
- Lower risks
- Lower repair costs
- Increase profits
- Prevent catastrophic failures
- Lower insurance premiums due to reduced losses

Benefits of Thermal Imaging

There are many benefits of using thermal imaging for a wide range of building, electrical and mechanical applications. The key benefits include:

- ***It reduces down time:*** *There is no need to shutdown operational systems during a thermal audit allowing production to continue as normal*
- ***It saves money:*** *By early detection of faulty systems or components, remedial work can be planned and conducted before more serious problems or damage occurs which may cause long and unexpected interruptions to vital operational systems.*
- ***It is fast and accurate:*** *Thermal surveys can quickly scan and measure the temperature distribution of entire surfaces of machinery and electrical equipment under normal load conditions quickly and accurately with no need for lengthy preparation or pre-inspection work.*
- ***It is a totally non-invasive process:*** *Thermal Imaging is non-destructive and involves no physical contact and consequently there is no potential for damage to the systems or equipment undergoing thermal surveys*
- ***It reduces the potential for serious health and safety issues to occur:*** *Early detection of problems will reduce the potential for injury to staff and risk of fire*
- ***It has revolutionised predictive maintenance inspection programs:*** *By detecting problems and scheduling repairs before a major failure occurs, productivity, profitability and workplace safety are all increased.*

Enisave Solutions (Pty) Ltd ©2024