

We are offering thermographic inspection services throughout the region and would like to let you know about this service we provide.

There are some fantastic images below that may highlight the need for this type inspection at your company.

Thermal Imaging is an effective predictive/preventive tool to help identify issues prior to failure, where failures can be unacceptably expensive.

Thermal inspections are a non-contact, non-destructive method of looking at equipment to find heat generating anomalies. Upon identification, will allow technicians to schedule replacement or rectification of defective components prior to failure and at a time when the plant is not in operation. Utilising this technology can produce;

- **Improved safety**
- **Reduced maintenance costs**
- **Increased system reliability**
- **Improved system efficiency**
- **Reduced lost production and downtime due to outages**

Companies normally carry out thermal inspections in regular intervals for critical equipment processes. The cost of these inspections and the peace of mind these inspections provide in relation to the cost of downtime is minimal.

As well as routine thermal inspections, often thermal Inspections are carried out before and after plant shutdowns, the reason for this is twofold. Firstly, the inspection prior to the shutdown provides information of what heat generating anomalies are there prior to components being disrupted, and secondly what anomalies are there if any after components have been refurbished.

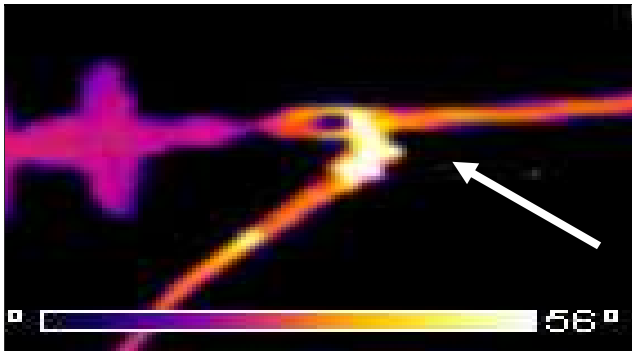
Thermographic inspections also highlight anomalies such as misalignment, faulty or loose electrical connections and components at the commissioning stage of a shutdown, this will also give a baseline measurement for all future inspections of those components.

These anomalies can be easily located with the state of the art equipment and in conjunction with a report, will allow the plant technician to take the appropriate action to rectify an issue.

The success of this approach is leading to safer, more reliable work places.

Below are some explanations of images in various process plants. These images may highlight where we may be able to identify potential issues at your facility.

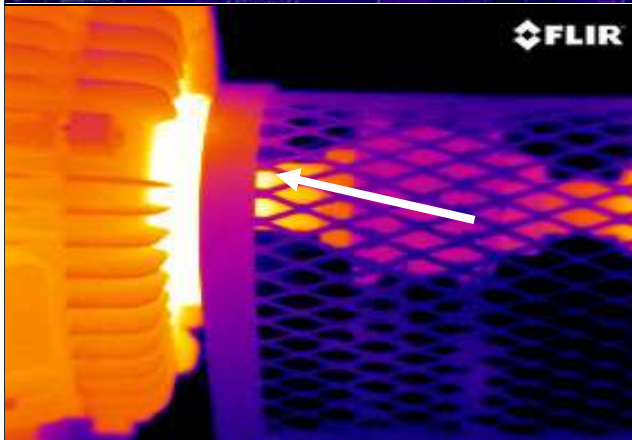
Thermographic Imaging



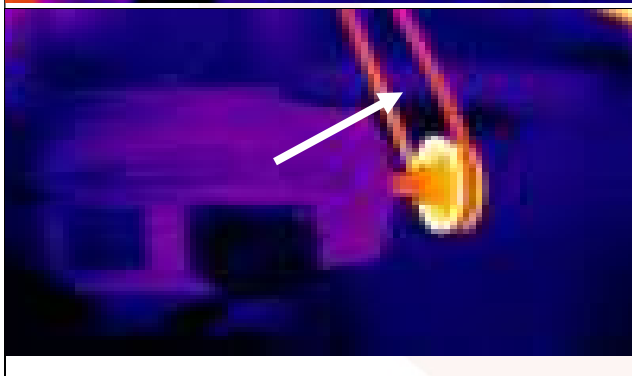
A bad connection on a transmission line shows up as a clear hot spot in the infrared image. A bad connection results in increased resistance and the current flow generates excessive temperature that can easily be detected with infrared thermography. If not attended to this connection has the potential to break, resulting in loss of power.



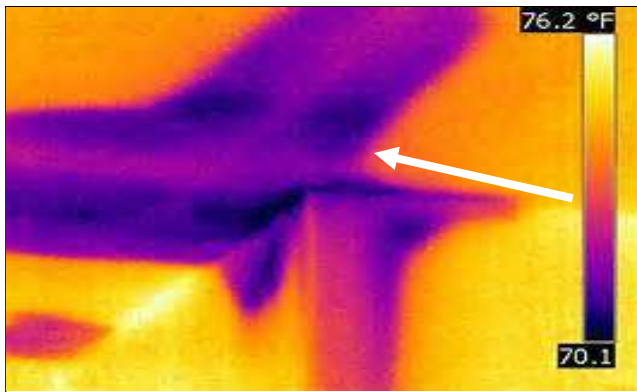
This switchboard inspection was undertaken while the equipment was online and running at normal load. This thermograph indicates a heat generating anomaly, early detection of this loose connection was identified by a rise in temperature found by the thermographer and early detection of this failed component saved the company expensive costs of downtime and lost production.



This Mechanical inspection was undertaken while the equipment was running and clearly indicated a bearing failure. The early detection allowed technicians to further investigate this motor when it was offline, which resulted in replacement of this bearing prior to complete failure. The inspection and early detection of this failed component saved the company downtime costs and losses in production.

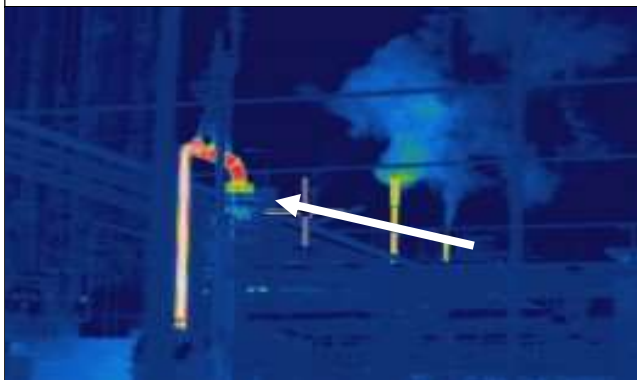


This inspection again was undertaken while the equipment was online, this thermograph was easily identified as a drive pulley misalignment. The inspection and early detection ensured that this was not run to failure and did not disrupt production. This also potentially saved an accident from occurring and reduced further damage that may have been caused if this misalignment went undetected.



This leak investigation was undertaken to identify the extent of water leak in a process facility, further investigation found that the cause of the leak was a contractor installed solar panels on the roof and neglected to weatherproof the fixings in the roof coverings.

Early diagnostics of the issue saved the company further costly damage to the building and saved critical electric process equipment below from catastrophic failure.



This image was taken at a manufacturing plant and found during maintenance, a contractor removed pipe insulation to carry out work and inadvertently failed to replace the insulation when work was completed. This early detection allowed the insulation to be reinstated and reduced the potential for injury and reduced running costs due to the reduction in heat loss.



This image clearly identified a blockage in a system, it was a quick process to identify the location of a blockage and rectify the issue. Thermal inspections can easily detect blockages in fluid or gas systems and is adaptable to many other types of equipment. This technology can also be used to detect fluid levels in sealed units and fluid leaks in storage vessels and pipework.

If you would like to discuss any of this information or if I can be of anymore service, please do not hesitate to contact me.

Our comprehensive quality service – Your peace of mind.

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