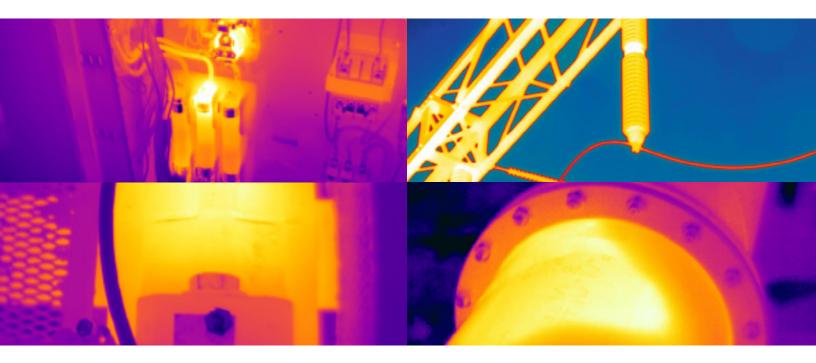


Infrared Thermography Inspection



There are many applications for Infrared Thermography, some of which include: internal and external furnace scanning, electrical scanning (MCC, lighting panels, switchgear, etc.), mechanical assets (bearings, motor cases, rollers, etc.), and any process component that is temperature dependent (heaters, heat tracing, piping, storage tank levels, refrigeration, distribution racks, etc).

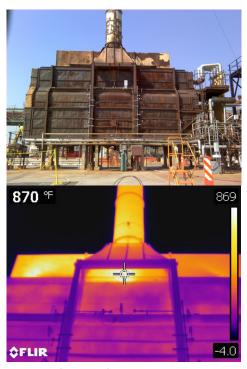
Properly functioning refractory is critical to efficient furnace operations. It is also vital to temperature-dependent processes – such as cryogenic/cold transport applications (LNG), distillation, steel processing, smelting, etc.

When a process has a non-uniform temperature profile, it can induce stresses in the parent material and drastically reduce service life of the asset causing operational issues and hazards with process controls.

Operations personnel assume that installed refractory and other vessel/piping lining is in place and properly functioning if no exterior damage is visible, however this is not always the case. An infrared image of the asset can tell a completely different story.

Making critical process decisions relies on accurate data. Acuren's thermography scanning process delivers infrared images that provide a clear indication of where the issue may lie.

Utilizing a trained thermographer with a calibrated infrared imager and documented procedure results in consistent, accurate data collection and interpretation. Infrared Thermography can be a useful tool when troubleshooting process issues as well as trending refractory degradation over time. Handheld 'point and shoot' temperature devices can be very misleading and are often used improperly by untrained personnel.



Refractory failure on a heater

ACUREN'S INFRARED INSPECTION CAPABILITIES

Expertise

100% of Reports are reviewed by a Senior Thermographer

Rapid Response

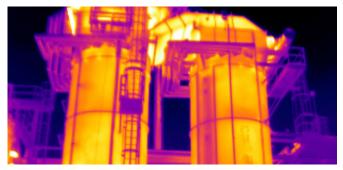
 Qualified personnel and equipment available nationwide –
4-hour response available for high volume clients on rapid response plan

Quality Results

Professional reporting with value added observations – 'not just an image'

Refractory Inspection Benefits

- A detailed assessment of refractory condition while a unit is in service
- Recommendations for management of refractory 'gaps' or issues between outages (i.e. – steam application to 'cool' an area on a heater)
- Can be used for hot or cold applications any temperature dependent process (heaters, piping, storage tanks, distillation columns, refrigeration, distribution racks, etc.)



Scanning for thermal abnormalities to detect refractory failure

WHY ACUREN?

- Over 30 years of experience in internal furnace scanning
- Turnkey Service provider: Multiple level 3 thermographers, PhD Refractory Specialists, API 936 Inspectors, Professional Engineers and a full suite of NDE services available to supplement infrared findings

Acuren can also support traditional infrared operations including our full suite services available to supplement infrared findings.

Electrical

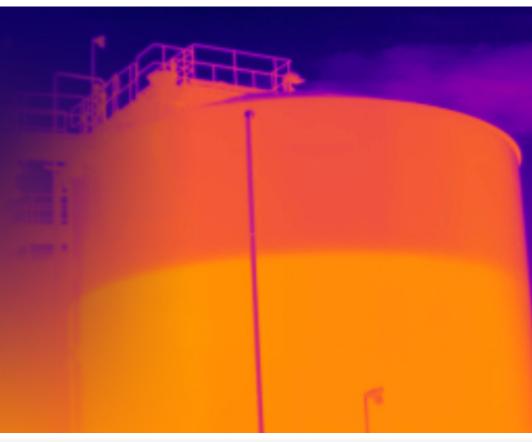
- Switchgear/Motor Control Centers
- Transmission & Distribution

Mechanical

- Routine Condition Monitoring
- Bearing Health

Investigation

- Hot spot identification
- Roof Scans
- Heat Loss
- Steam Trap Surveys
- Tank Levels/Sludge Level Identification
- Body Temperature Screening



A HIGHER LEVEL OF RELIABILITY®

CONTACT OUR INFRARED THERMOGRAPHY EXPERTS TODAY

1-800-218-7450



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