

**FLUKE®**

# Pump up reliability with infrared in petrochemical

## Keep production on schedule

With the exception of occasional turnarounds, downtime is never an option. Performing quick infrared spot checks can uncover potential failures before they happen, allowing you to make repairs during scheduled shutdowns. Keep the petro pumping by frequently scanning critical equipment and troubleshooting in seconds. Whether it's pumps, valves or electrical connections, Fluke thermal imagers help ensure uninterrupted flow.



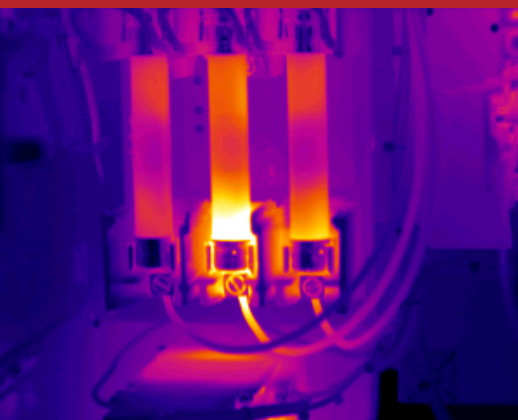
## Troubleshoot faster

Looking for a quicker and easier way to troubleshoot? Traditional troubleshooting using trial and error can be effective but is time consuming and costly. Let's face it; pinpointing an issue within miles of pipeline is no quick task. And in this industry, every second is expensive. Let the varying temperatures of components tell the story. Narrow down and rule out possible problem causes faster by seeing the whole picture with infrared. Next time the control room calls with a problem, reach for infrared first...and skip the headache.

## Exploit the versatility of infrared

Equipment cost has historically forced plant managers to outsource annual infrared inspections, and in many cases, limit the scope of work. Annual scans certainly uncover problems, but leave you hoping for the best until next year. Petrochemical demands reliability, so yearly spot checks just aren't enough. With the line of high performance and affordable thermal imagers from Fluke, it's now possible to have this versatile tool on-site. Take advantage of the year-round versatility by troubleshooting and monitoring:

- Transformers, switches, disconnects and MCCs
- Pumps, motors, compressors and bearings
- Tank and sludge levels
- Level control performance
- Operating temperature
- Valve operation
- Pipe integrity
- Refractory



When evaluating an electrical hot spot, determine whether the heat continues back along the wire toward the load (load related problem) or, in this case, is isolated to the connection (connection-related problem).



Fluke Ti32

Fluke Ti25



Designed,  
manufactured  
and tested in  
the USA

## Quick tips:

### Performing successful IR inspections

#### 1. Be proactive:

Infrared inspections of all major components and connections should be performed at least bi-annually to reduce the need for troubleshooting.

#### 2. Account for solar heating:

When working in strong sunshine, be careful of solar heating as it may mask potential problems.

#### 3. Adjust for emissivity:

Components and materials emit their energy differently. For accurate findings, ensure you are using the proper emissivity setting for the material you are inspecting.

#### 4. Perform qualitative measurements:

Compare your findings with similar components and connections under identical conditions to reveal thermal anomalies.

#### 5. Ensure proper conditions for tank inspection:

For best results, perform tank level inspections in the early morning or late evening when significant temperature changes have typically taken place.

### Training and other resources

For training on electrical, mechanical and process inspections with thermal imagers, visit [www.fluke.com/titraining](http://www.fluke.com/titraining) for webinars, application notes and advanced training.

### Industry associations:

National Petrochemical and Refiners Association—[www.npra.org](http://www.npra.org)

### Experience the Fluke advantage!

Call us today to schedule a demo or test drive at 1-800-760-4523.  
M-F 8:00 AM to 6:00 PM CST

Or to chat LIVE with a sales representative, visit [www.fluke.com/thermography](http://www.fluke.com/thermography) and click “Start Chat”.

**Fluke.** *Not just infrared. Infrared you can use.™*

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Printed in U.S.A. 4/2010 3777603A F-EN-N

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**Above:** Routine infrared inspections will reduce the risk of unscheduled downtime.

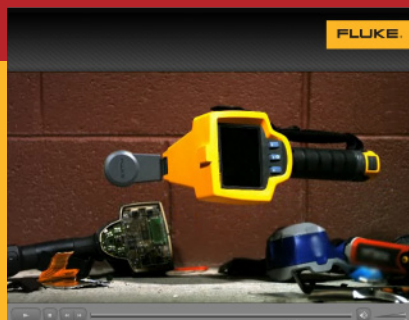
**Right:** Capture a thermal image of your properly working equipment to serve as a benchmark against future thermal scans.



### Fluke makes rugged, reliable tools you can trust.

Need to see to believe? Watch this video of Fluke thermal imagers being put to the test.

[www.fluke.com/rugged](http://www.fluke.com/rugged)



### Fluke IR windows

- Increase safety by reducing the risk of arc flash and serious injury
- Inspect more locations in less time

