

Mechanical Applications

Two-day IR specialty course*

This is a 16-hour course that will give practicing thermographers an in-depth understanding of applied thermography focused on a wide variety of in-plant mechanical systems, including motors, rotating equipment, fluid systems, storage systems, high temperature applications and mobile equipment. Review of case studies, interpretation of thermal images and root-cause failure discussions form the basis of this class.

*Level I or extensive thermographic experience is a recommended pre-requisite for this course.

Course outline

- Introductions and course overview
- “Think Thermally®” about mechanical systems
- A review of the qualities of good data
- Safety considerations
- Rotating equipment
 - Bearings, couplings, belts, gears and brakes
- Prime movers
 - Electric motors, gas engines and turbines
- Gas/vacuum systems
 - Compressors vacuum pumps, fans, filters, valves and leaks
- Liquid/slurry systems
 - Pumps, hydraulics, filters, valves, leaks, blockages and buildups
- Solid systems
 - Conveyors, crushers and mixers
- Storage systems
 - Tank levels, thermoclines, sludge detection and storage piles
- Robot systems
- Vehicle systems

- Assignment review
- Energy systems
 - Steam systems, steam traps, heat exchangers, condensers, heaters and boilers
 - Refractory, insulation and combustion environments
- Equipment base lining
- Recording parameters
- Data analysis
 - Software tools, reporting and the importance of trending
- Other technologies
- Program implementation and inspection methodologies
- Review and discussion/course test

For more information go to www.fluke.com/infraredtraining or contact your local authorized Fluke representative.

Fluke authorized training is provided by our partner,



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