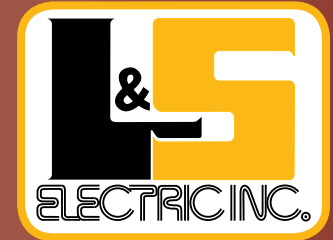


Digital Thermography



Dedicated People, Quality
Products, and Above All, Service.

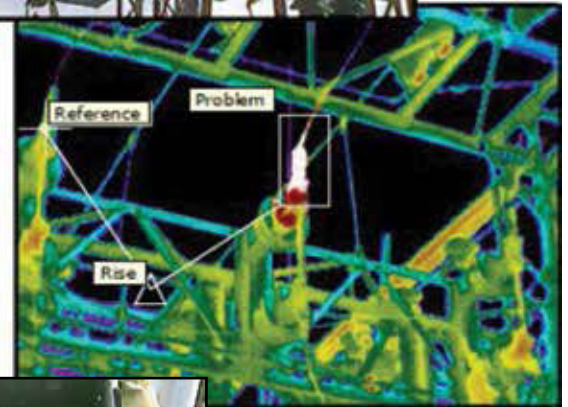
Our reports include an equipment list that records all areas scanned: problem equipment is highlighted. We provide a “Key to Severity” list with general recommendations and classifications for various temperature rises. The thermographic test point section includes photographs and a thermographic image of each problem area with specific details. The pictures opposite are an example of a typical color print report.

Reports are Customized as Required. Your report can Include the Following:

- Areas of an image within a specific temperature band
- Specific temperature points displayed on the image
- A graphical representation of temperatures
- Identification of specific points
- A temperature display superimposed over the image

IR Video: Real-Time Analysis

IR Video allows you to see your equipment heat up and cool down in real time. The object of IR Video is to witness the process: for example, within 10 seconds you're able to see a discernible temperature change, something that an IR still photo can't do!



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763.780.3234 or 800.290.9320

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715.359.0551 or 877.258.5128

Thermographic Inspection Applications

Power Distribution

- High Tension Line, Splices
- Substations
- Transformers

Disconnects

Buss Connections

- Relays
- Breakers

Fuse Clips

- All Control Connections
- Motor Control Centers
- Starters
- Connectors and Contacts
- Fuse Clips
- Buss Stabs

Enclosed Buss Runs

- Bolted Connections
- Conductor Fatigue
- Miscellaneous
- Generator Windings, Brush Riggings
- Feeders
- Breakers

Voltage Regulators, Relays

- Heat Exchangers
- Flat Roof Building Analysis
- Locate Moisture Areas
- Verify Contractor Workmanship
- Identify Weak, Stressed Areas
- Identify Flashing Leaks, Seam Joints

Building Energy Analysis

- Verify Insulation Weakness, Walls, Ceilings
- Locate Settled Insulation in Walls
- Verify Product Performance, Heat Loss
- Verify Contract Workmanship Performance
- Locate Air Infiltration Area
- Verify Window, Door Performance

Verify Energy Loss Through Foundations

- Locate Wet Insulation
- Determine Solar Loading

- Ventilation Performance
- Heat Loss from Ducts, Steam Hot Water Systems
- Miscellaneous General Inspections
- Mechanical, Bearings, Friction

Gears, Drive Belts, Lubrication Needs

- Shafts, Welds, Castings, Molds
- Fire Inspections, Search and Rescue

Aerial Inspection, Roof, Electrical, Underground, Steam

- Security, Surveillance Intrusion
- Tanks, Vessels, Product Inspections
- Grain Elevators, Tank Cars, Products, Storage

Thermographic Analysis Program

L&S Electric has experienced factory trained technicians to provide you with extensive analysis of a wide variety of equipment.

State of the Art Equipment

- Long wave system, which is less susceptible to reflections, allowing accurate temperature measurement in adverse environments
- Temperature measurements from -10 °C to +1500 °C with $\pm 0.1^\circ\text{C}$ accuracy.
- Scanning distances of up to 60 feet.

On-Site Report

- Provides immediate preliminary analysis.
- Details potential hazardous problems.

Formal Report Includes Descriptions of:

- **EQUIPMENT LIST:** Indicates each piece of equipment that has been scanned.
- **PROBLEM/RECOMMENDATIONS SECTION:** Summarizes all problems found and the recommended action to repair.
- **INDIVIDUAL TEST POINT SECTION:** Identifies each problem test point by equipment name and location. Gives a description of the problem, its temperature and severity, and then states a recommended action for repair. Also included are a thermographic image and a normal photograph with arrows pointing out the problem areas.