

IR

Custom Infrared PdM Solutions

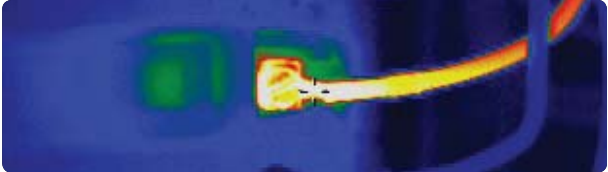
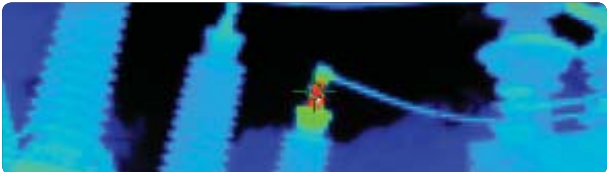

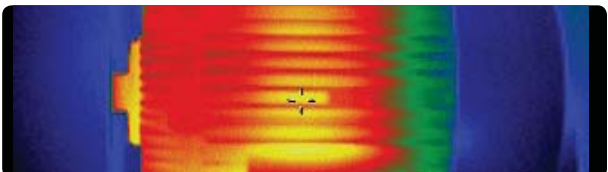

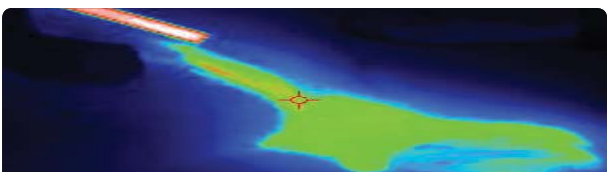
Infrared Inspection
Specialists

sales 513/460-4110
email info@trendformers.com

office 513/831-7020
fax 513/831-9627
mail PO Box 44055
Cincinnati, OH 45244

IR

Custom IR PdM Solutions

Electrical	
High Voltage	
Process Equipment	
Uptime™ PdM Program	
On-site Training Courses	
Consulting Engineering	

TrendFormers, Inc. is an Ohio based professional engineering firm specializing in infrared (IR) inspections of manufacturing facilities and commercial buildings of all sizes. Incorporated in 2004, TrendFormers was founded by a group of highly experienced and credentialed professional engineers, thermographers and technicians.

With a client base that includes Procter & Gamble, The Kroger Company, US Playing Card, Campbell-Hausfeld, Federated Department Stores, The Carew Tower building, Sonoco Consumer Products, Kellogg and the Cincinnati Northern KY airport we are rapidly becoming recognized as the Midwest's number one provider of this effective predictive maintenance service.

Please take few minutes to review this brochure or visit us at trendformers.com to learn more about the important PdM and training services offered by TrendFormers. Then call for an appointment with one of our thermographer/sales representatives for a review of your current predictive maintenance program and a price quote.

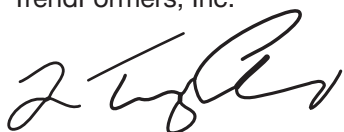
Effectively monitoring temperature trends of mechanical/electrical equipment in order to anticipate problems before they occur, gives you the ability and ample lead time to plan maintenance schedules, take corrective action and make repairs before incurring costly breakdowns or suffering system failures and safety hazards.

- TrendFormers adheres to and promotes nationally recognized standards set forth by ASTM, NFPA, and ASNT.
- TrendFormers thermographers are trained in accordance with ASNT Recommended Practice SNT-TC-1A. TrendFormers promises that each inspection performed will be conducted or directed by a Level II (or higher) certified thermographer on-site at all times.
- TrendFormers offers unique, statistical equipment performance reports using proprietary software designed to track and trend equipment performance over time, against like equipment operating under similar conditions.
- TrendFormers promises the highest level of quality and the best overall value in Predictive Maintenance.

TrendFormers offers flexibility in meeting individual customer requirements. We offer a variety of standard and customer-defined services. We will gladly review your predictive maintenance program needs and provide a proposal detailing how we would meet those needs.

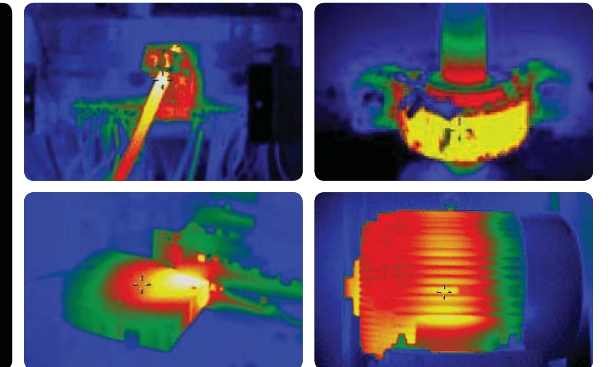
We appreciate and value the opportunity to spend a few minutes meeting with you in person to address any questions. Please call our office at 513-831-7020 or sales at 513-460-4110 to schedule an appointment.

Best regards,
TrendFormers, Inc.



L. Terry Clausing, P.E., President
ASNT Level III NDT Infrared Testing Methods

Infrared Inspection Specialists



- Infrared Predictive Maintenance
- Equipment Inventory & Bar Coding
- Electrical Inspections & Data Archiving
- Comparative trending of Process Equipment with TrendFormers Uptime™
- Stay ahead of downtime with frequent inspections
- Automatically compare similar equipment across processes

L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Services & Support

Build a full service, effective predictive maintenance program overseen by ASNT Level III, Terry Clausing, PE.

- Electrical
 - Inspections compliant with NFPA 70E & ASTM standards
- High Voltage (>600 Volts)
 - Satisfy insurance & OSHA requirements for IR Inspections
- Process Equipment
 - Increase reliability through detailed comparative analysis
- TrendFormers Uptime™ PdM Program
 - Statistical Analysis specific to your unique application
- On-site Training Courses
 - Designed & presented by ASNT Level III, Terry Clausing, PE
- Consulting Engineering
 - Thermal, spectral, moisture analysis and research projects.

Infrared Inspection Specialists

sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



TrendFormers
A Professional Engineering Firm
www.trendformers.com



Electrical Inspections

Industrial / Commercial Power
Facilities, Operations & Controls

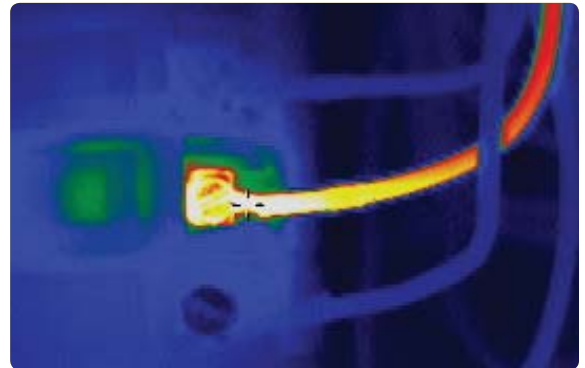
- Experienced, Trained & Certified Professional Thermographers
- Satisfy OSHA & Insurance Requirements
- NFPA 70E compliant inspections
- Historical Data Archiving
- All reports presented in print & on CD
- Reports reviewed by a Professional Engineer

Services & Support

TrendFormers IR Electrical Inspections comply with all NFPA & OSHA safety and documentation requirements.

- ✓ Comprehensive inspection & inventory of all power distribution
 - Satisfies OSHA & insurance guidelines for annual IR inspection
 - Fast report turnaround ensures actionable data
 - Archived inspection data (no need to keep binders)
 - Printed & digital reports on CD
- ✓ Exception Reporting
 - Locate immediate problem areas such as poor connections or unbalanced loads
 - Corrections are re-scanned within 30 days at no additional charge
 - Printed & digital reports on CD

Infrared Inspection Specialists



L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Infrared Inspection Specialists

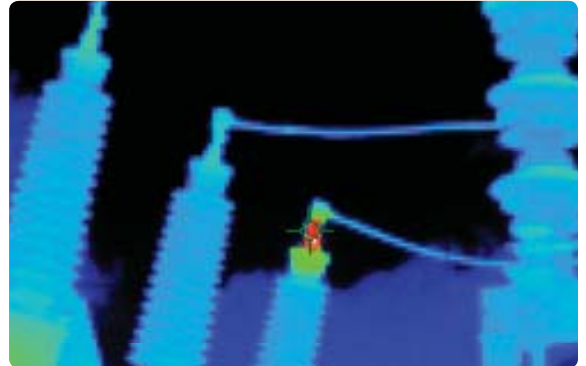
sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



Electrical High Voltage

600V + Switch Gear and Transformers
NFPA 70E Compliant



- Experienced, Trained & Certified Professional Thermographers
- Satisfy OSHA & Insurance Requirements
- NFPA 70E compliant inspections
- Historical Data Archiving
- All reports presented in print & on CD
- Reports reviewed by a Professional Engineer

L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Services & Support

TrendFormers IR Electrical Inspections comply with all NFPA & OSHA safety and documentation requirements.

- ✓ Comprehensive inspection & inventory of all power distribution
 - Satisfies OSHA & insurance guidelines for annual IR inspection
 - Fast report turnaround ensures actionable data
 - Archived inspection data (no need to keep binders)
 - Printed & digital reports on CD
- ✓ Exception Reporting
 - Locate immediate problem areas such as poor connections or unbalanced loads
 - Corrections are re-scanned within 30 days at no additional charge
 - Printed & digital reports on CD

Infrared Inspection
Specialists

sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



Equipment Inspections

Boilers, Refractory, Steam Traps,
Piping & Process Equipment

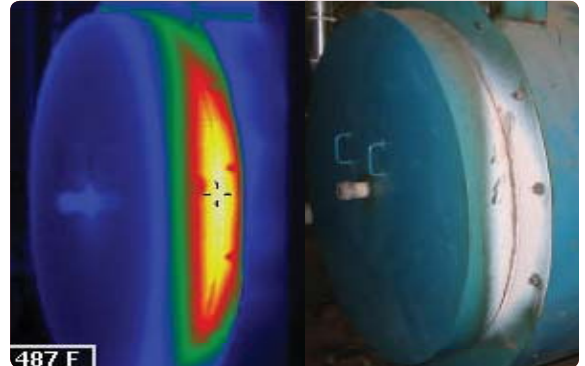
- ▶ Experienced, trained & certified in NDT and PdM infrared test methods
- ▶ Identify pending problems in an array of equipment, from insulation and refractory failure to blocked steam lines and failed steam traps
- ▶ Inspect motors, bearings, belts & drives for excessive heat signatures
- ▶ Perform critical repairs during scheduled downtime instead of running to failure

Services & Support

TrendFormers IR Equipment Inspections provide critical documentation of pending failure & successful repair.

- ✔ Comprehensive inspection & inventory of process equipment
 - Identify critical problems with trended historical data
 - Archived inspection data (no need to keep binders)
 - Fast report turnaround ensures actionable data
 - Printed & digital reports on CD
- ✔ Exception Reporting
 - Locate immediate problems in process equipment such as motors, gear drives, bearings and belts
 - Corrections are re-scanned within 30 days at no additional charge
 - Printed & digital reports on CD

Infrared Inspection Specialists



L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Infrared Inspection Specialists

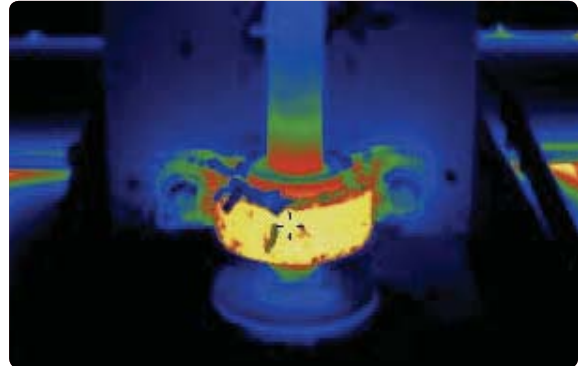
sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



TrendFormers Uptime™

Statistical Trend Analysis



- Infrared Predictive Maintenance
- Comparative trending of Process Equipment with TrendFormers Uptime™
- Stay ahead of unscheduled downtime with TrendFormers Uptime Data Reviews
- Automatically compare similar equipment across processes
- A single finding will easily save the lifetime cost of service

L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Services & Support

Build a full service, effective predictive maintenance program overseen by ASNT Level III, Terry Clausing, PE.

- ✓ Comprehensive TrendFormers Uptime™ Inspections
 - A proprietary statistical approach to your PdM Program
 - TrendFormers professionals will customize an effective IR Predictive Maintenance program for your unique application
 - Frequent data collection ensures statistically beneficial data for comparison against the TrendFormers Uptime™ Database
 - Fast report turnaround ensures actionable data
 - Data Archiving eliminates the need to store printed reports

Infrared Inspection Specialists

sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



Training Courses

SNT-TC-1A Thermography Training
On-site Level I, II & III classes

- ▶ Training programs developed by ASNT NDT/PdM Level III Terry Clausing, PE
- ▶ On-site Level I, II & III courses
- ▶ On-site application specific training
- ▶ Team management guidance
- ▶ Inspection route setup guidance
- ▶ Hands-on “Learn it, do it, show it” style prepares attendees to instruct others.

Services & Support

TrendFormers IR Training Courses offered on-site

- ✔ Level I Thermography (Courses 101 & 102)
 - Develop an understanding of heat transfer with special emphasis on radiometry
 - Thermal/infrared camera operations and PPE review
 - Thermal/infrared applications and qualitative methods
- ✔ Level II Thermography (Courses 201 & 202)
 - Understand advanced heat transfer concepts as they apply to the infrared spectrum
 - Intermediate infrared camera operations emphasizing temperature measurement
 - Intermediate to advanced application specific training
- ▶ Level III Thermography Certification Training (Please call)

Infrared Inspection Specialists



L. Terry Clausing, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Infrared Inspection Specialists

sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244



Consulting Engineering

Thermal, Spectral & Moisture Analysis
ASNT Level III expert witness

- ▶ Experienced, Trained & Certified Professional Engineering Firm
- ▶ Infrared Temperature & Moisture Measurement
- ▶ Thermal analysis and profiling of manufacturing processes & products
- ▶ Thermal analysis of industrial ovens, freezers and insulation systems
- ▶ Thermal uniformity in manufacturing processes

Services & Support

Highly Credentialed Consulting Engineering

- ✔ Consulting Engineering
 - Discuss your specific needs with a Professional Engineer
 - Analysis and reporting is performed in accordance with published ASTM & ASNT standards
 - Documentation available in print, digital PDF and Infrared Video
 - Fast report turnaround time

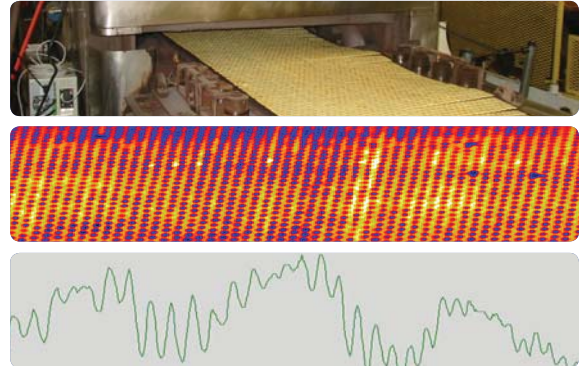
- ✔ Expert Witness

- TrendFormers President, Terry Clausung, regularly assists with legal cases involving temperature & moisture measurement.

Please call Terry Clausung for detailed information on TrendFormers Consulting Engineering services

513/ 831-7020

Infrared Inspection Specialists



L. Terry Clausung, PE
President, TrendFormers, Inc.
ASNT NDT Level III Thermal/IR Test Methods

ANSI/ASTM
Chairman, Sub-Committee E07.10.04
Infrared Non-destructive Testing Methods

Infrared Inspection Specialists

sales 513/ 460-4110
email info@trendformers.com

office 513/ 831-7020
fax 513/ 831-9627
mail PO Box 44055
Cincinnati, OH 45244

