



Partnering with



INFRARED INSPECTION, AUDITS AND SURVEYS

Each year property claims for losses, in plants across the US, exceed 2 billion dollars. Over 70% of these claims result from electrical failures. An Infrared Inspection can greatly reduce risk and many of these catastrophic losses.

Industry data shows that one in five transformer failures results in a fire. Substation transformer failures are expected to increase 500 percent within the next 15 years¹.

Infrared thermography is an integral part of any Preventive Maintenance Program to avoid electrical catastrophes.

TDS Thermographers are not only infrared certified but they are also skilled electrical specialists.

... they know what to look for and what it means

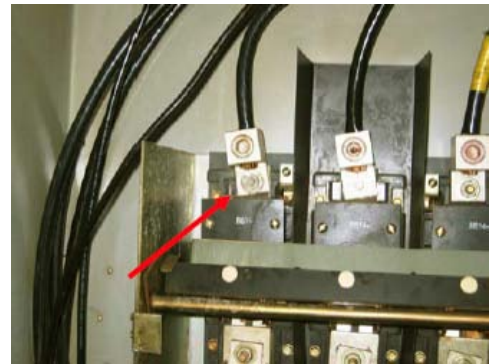
Utilizing infrared scanning on an annual basis for electrical and mechanical systems can reduce failures and downtime, improve reliability of these systems and increase profitability.

Infrared inspections are performed while the plant is running and it is the most cost-effective way to identify fatigue and faulty electrical components.

TDS Infrared Services' reports establish a baseline, of your equipment, from which degradation can be measured on an annual basis.

If you would like to see a sample report; please visit our website at www.technicaldiagnostic.com/infraredsurvey.pdf

The following list shows the replacement costs of the equipment that may be damaged by faulty connections and/or components and gives an indication of the type of savings you can expect from a good infrared inspection program.



**Therm No. 3
Severity – Class 3 @ 81° C** **Left Phase / Line Side
Conductor Termination**

**Air Compressor No. 2
Main Wall Disconnect** **\$6000 Potential Loss**

Industrial Grade Equipment:

400 Amp 480V-3Ø-Fused Disconnect	\$ 1,500.00
400 Amp 480V-3Ø-Distribution Panel	\$ 3,000.00
50 kVA-3Ø-Dry Type Transformer-150° C Rise	\$ 2,500.00
600 Amp 480V-3Ø-Fused Disconnect	\$ 3,000.00
600 Amp 480V-3Ø-Molded Case Breaker	\$ 4,000.00
1200 Amp 480V-3Ø-Molded Case Breaker	\$ 4,800.00
NEMA Size 5 Starter	\$ 6,500.00
600 Amp-15 kV-3Ø-Primary Fused Disconnect	\$ 9,000.00
10 ft. of 3,000 Amp-480V-3Ø-Buss Duct	\$ 12,500.00
3200 Amp-3Ø-Draw-Out Circuit Breaker	\$ 20,000.00
Liquid Filled Distribution Transformer 2,000 kVA, 13,200/480V - 65° C Rise	\$ 50,000.00
Auxillary Transformer	\$ 2.5 Mil
Main Transformer	\$ 10 Mil

Replacement Costs - (estimated)

equipment only; does not include labor and downtime

For complete information contact

John Davis at 940/455-2520
jdavis@technicaldiagnostic.com

or you can visit us on the web at:
www.technicaldiagnostic.com

¹ "Facilities Instructions, Standards, and Techniques Volume 3-32, Transformer Fire Protection," US Department of the Interior, 2005 2 LAFD Weekly Bulletin March 27, 2002 3 "A Transforming Disaster," Fire Chief Magazine Online, 2001 4 "An Analysis of Transformer Failures," The Locomotive, William Bently, Hartford Steam Boiler

Technical Diagnostic Services

15825 Trinity Boulevard • Fort Worth, Texas 76155

Tel: 817/465-9494 • Fax: 817/465-9573

www.technicaldiagnostic.com • info@technicaldiagnostic.com