



**Global Risk
Consultants®**

Infrared Thermographic Surveys

Dedication in providing services to
address today's challenges

TÜV SÜD Global Risk Consultants (GRC) was the first major loss prevention consulting organization to recognize the value of Infrared Thermography and has been delivering these services for over 30 years.

Infrared Thermography is an effective, nondestructive inspection technique that can pinpoint anomalies in complex electrical and mechanical systems within industrial manufacturing, commercial, institutional, and all industry classes.

The untimely shutdown of electrical utilities, primary or secondary distribution equipment, machinery, mechanical systems, etc. often results in lost production, higher operating costs, dissatisfied customers, lost market share and profits, and critical disruption to business. Furthermore, long lead times on critical equipment could further exacerbate delays.

Implementing a sound infrared thermographic, predictive/

preventive, and risk-based program is potentially the single most important preventive measure. Conservative estimates point to an average savings of \$15 derived from each \$1 invested in such program.

TÜV SÜD GRC Thermographer credentials include American Society of Nondestructive Testing (ASNT) ASNT-TC-1A standard certification, with an average of 10 to 20 years of experience in the business. Utilizing the latest techniques and technologies, TÜV SÜD GRC is able to identify potential loss exposures in electrical systems, mechanical systems, motors and gearboxes, boilers and insulated vessels, critical machinery, and other mission-critical equipment. In addition to strong electrical backgrounds, TÜV SÜD GRC's Thermographers are qualified and trained in their home countries to internationally recognized FLIR ITC (ISO-18436) Level I, II and III standards.

With our extensive experience in infrared thermographic imaging programs, TÜV SÜD GRC assists clients in a wide



array of industries, including:

- Industrial Manufacturing (all SIC industry classifications)
- Food & Grain
- Power Generation
- Mining
- Financial
- Transportation
- Municipal & Institutional Operations
- Communications
- Retail
- Insurance Services
- And many more...

Advantages of the TÜV SÜD GRC Infrared Thermographic Survey Program

- Databasing of findings for benchmarking
- Consistent and standardized global technical expertise and work product
- State-of-the-art infrared thermal imagers, ultrasonic equipment, tablets, and digital cameras
- Reports, including all images and findings, are delivered to the local facility management team within 24 to 72 hours, with ability to deliver at closing conference in specific situations
- Airborne, structure-borne ultrasonic examination/testing on high, medium, and strategic low-voltage electrical systems, as well as other strategic applications

Ultrasonic Testing

In addition to Infrared Thermography, our consultants use airborne- and structure-borne Ultrasonic Examination (testing) as a complementary tool to infrared. Airborne

ultrasonic detection is an excellent technology for identifying critical loss exposures, such as arcing, destructive corona or tracking, as well as partial discharge and mechanical looseness. Such exposures produce detectable ultrasound that warns of impending failure, conditions that are not detectable using infrared thermal imaging.

Airbourne Ultrasonic surveys may be performed on a variety of equipment, including:

- Open-access/enclosed High and Medium
- Voltage electrical equipment
- Transformers
- Overhead transmission & distribution lines
- Critical low-voltage switchgear
- Insulators
- Key electric motor bearings
- Compressed air systems
- Other applications

About TÜV SÜD

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in assessment, testing, inspection, auditing, certification, training and knowledge services. Represented in over 1,000 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East, Africa and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

Related services

- Fire Protection Engineering
- Boiler & Machinery Engineering
- Natural Hazards Analysis
- Jurisdictional Boiler & Pressure Vessel Inspections
- Loss Control Training
- Property Valuation
- Arc Flash Assessments
- Process Safety Management
- Business Continuity Planning
- Code & Project Services