

NON-DESTRUCTIVE TESTING METHODS AT A COMPETITIVE PRICE

20+ Years of Power Distribution Knowledge

**CurrenTechnologies is an electrical non-destructive testing company based in Caldwell, Idaho.
Our travel territory includes most of the Western United States.**

August 2021 Q & A with John G., General Manager, CurrenTechnologies

Q - What is electrical non-destructive testing?

The testing of electrical equipment such as electrical contacts, switch boards, transformers, motors etc. without dismantling.

Q - When should electrical non-destructive testing be done?

- Testing should be performed on new electrical installations
- Remodeled electrical
- When new equipment is added
- Per manufacturers specifications
- Maintenance testing should be done every three to five years

Q - Why should electrical non-destructive testing be performed?

- Avoidance of lost revenue from down time because of equipment failure due to overloads to the electrical system.
- Nuisance tripping
- To inspect for loose wiring which can result in fires.
- To make sure the electrical can withstand the power draw of equipment.
- Aging equipment pulls more power resulting in breaker malfunction.

Q - Why hire a Non-Destructive testing company, isn't this something that an electrician can perform?

New construction specifications generally recommend an independent third party perform all testing. CurrenTechnologies technicians are NICET Certified, and we operate under NETA standards. We calibrate all field equipment traceable in an unbroken chain to NIST standards every six months, equipment that is specific to testing.

A recent article in EC&M reported the following:

Properly maintaining equipment is a must unless we are willing to place equipment reliability and employee safety in jeopardy. Equipment manufacturers will include instructions with the equipment purchased. These instructions normally contain important information such as equipment operation, alarm recognition, technical specifications, and maintenance actions/intervals. If the maintenance actions are not completed at the intervals set forth by the manufacturer (at minimum), then the equipment must be considered not to be within normal operating condition. See **Photo 2**, **Photo 3**, and **Photo 4** (on page 57) for examples of the consequences of poor maintenance protocols. Reference NFPA 70E Sec. 205.3 and NFPA 70B, *Recommended Practice for Electrical Equipment Maintenance*, for further information on the maintaining of electrical equipment. Within the equipment instructions supplied by the manufacturer is information on how to interact with the equipment. This could include how to perform specific actions and/or personal protective equipment recommended when operating the equipment. Within the instructions may be a requirement stating that only trained and qualified employees should perform specific actions on the equipment. Failure to adhere to these instructions can result in an increased risk to employees.

<https://www.ecmweb.com>

CHECK LIST ✓

REMEMBER.....

Things may appear to be working fine but, that doesn't mean they actually are. Just like a vehicle needs oil changes, your electrical (equipment) needs maintenance.

1. Have you had maintenance testing completed within the last 5 years?
2. Was your electrical equipment acceptance tested when installed?
3. Did you add any equipment, at any time? If yes, did you have an infrared inspection completed?
4. Call CurrenTechnologies for help understanding what you need or to schedule your electrical maintenance!