



Some examples of ASTM standards:

ASTM D-5642
Referenced documents
inside this standard
ASTM D-149
ASTM D-1676
ASTM D-1711

ASTM D-3455
Referenced documents
inside this standard
ASTM D-877
ASTM D-924
ASTM D-971
ASTM D-974
ASTM D-1500
ASTM D-2413
ASTM D-3487

ASTM D-882
ASTM D-149
ASTM D-2305
ASTM D-732

Some examples of IEEE standards:

IEEE 1043
IEEE 117
IEEE 1776
IEEE C57.12.60

Some examples of IEC standards:

IEC 60034-18
IEC 60695
IEC 60343

Some examples of UL standards:

UL 1446
UL 749



ELTEK Labs – Expanding Service to Our Customers

For nearly 30 years, ELTEK International Laboratories has earned and maintained the reputation of being the worldwide experts in electrical insulation materials (EIM) and electrical insulation systems (EIS) testing.

ELTEK Labs' customer base includes many Fortune 500 companies, as well as countless innovative and dynamic small businesses of the worldwide electro-technical industry.

Among our clients are material manufacturers, electric motor, transformer and generator manufacturers, and distributor manufacturers.

We conduct testing for all segments of the industry, including household appliances, electronics, the nuclear power industry, the automotive industry, and alternative energy-related companies. When it comes to experience, no one surpasses ELTEK Labs.

ELTEK Labs has conducted more Electrical Insulation Systems (EIS) and Component Compatibility Testing (CCT) than all other laboratories worldwide combined.

ELTEK Labs is proud to be a Third Party Testing Laboratory for internationally recognized Certifying Bodies. ELTEK Labs runs programs for international companies large and small and is always developing new services to satisfy the rapidly changing world market.

ELTEK can handle the technical/testing part of our customers' needs as well as the administrative duties specific to the certification process with certification bodies from around the world.

ELTEK is located in St. Charles (a suburb of St. Louis), Missouri, USA, yet our reach is worldwide. ELTEK complies with ISO 17025 as the foundation of our Quality Management System and laboratory operations.

Our collaborative approach to project development – as well as our decades of experience – make ELTEK International Laboratories the only electrical insulation testing lab you need.

Capabilities

The ELTEK Labs facility consists of six linked laboratories that work independently, yet share a common goal in providing accurate data to our clients.

Our six labs, located all under one roof in St. Charles, MO, are:

1. Material Properties Lab
2. Long Term Thermal Aging / Relative Thermal Index – Thermal Index Lab
3. Component (Chemical) Compatibility Lab
4. Electrical Insulation Systems Lab (EIS)
5. Photovoltaic (PV) Lab
6. Calibration and Manufacturing Lab

All test programs are run according to either nationally or internationally recognized standards, many of which we have had a part in the development process.



ELTEK Labs facility in St. Charles, MO, U.S.A.

A Broad Range of Test Capabilities

ELTEK Labs has conducted more Electrical Insulation Systems (EIS) and Component Compatibility Testing (CCT) than all other laboratories worldwide combined. ELTEK Labs is proud to be a Third-Party Testing Laboratory for internationally recognized certifying bodies. ELTEK Labs evaluates all types of materials used in the electrical industry.

From wire insulation, impregnating resins and insulating varnishes, injection molding resins, oils, gasket materials, flexible composite sheets, from the first material to be in contact with the conductor to the last layer of the outermost component of any insulation system, ELTEK Labs can evaluate it.

Number One in the world for EIS testing to IEEE, UL, IEC, NEMA and military standards, ELTEK Labs is your one-stop shop. Whether evaluating for submerged applications, refrigerant applications, or automotive applications, we have the experience to take care of your projects.

Exposure to temperatures as low as -40°C to as high as 350°C – we can meet your project requirements. Exposure to various environments of vapors, liquids, applied voltages under water, wet, dry, high humidity – we run these programs for the entire industry.

Electrical Testing

A range of High Voltage test equipment provides a wide range of voltage breakdown capabilities.

- Up to 150,000 VAC
- Impulse testing: IEEE and IEC waveform of 1.2/50 μs for impulses up to 48kV; positive, negative or alternating polarity. Each of these test units can be used for testing all types of materials to ASTM, NEMA, IEEE, IEC, ISO and many other Standards.

Thermal Exposures

Thermal Aging and Exposure:

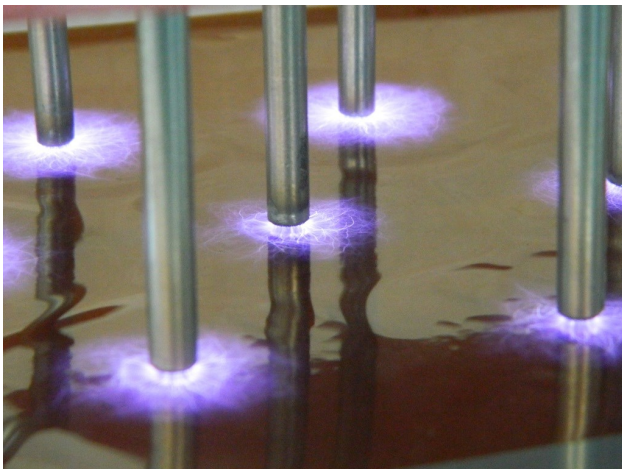
- More than 100 laboratory grade ovens with operating temperatures up to 350°C
- Three sizes of ovens
- Ovens capable of Voltage Endurance testing and Multifactor testing designs

Cold Exposure:

- Three chambers with capability down to -40°C .

Humidity and Condensation

- Five chambers with capability for up to 100% RH with visible condensation.
- Desiccators and Norlake equipment for other conditions.



Corona Resistance Testing (IEC 60343)



ELTEK's 150,000 VAC "Big Phenix" Transformer

Physical Properties

- Tensile Strength
- Flexural Strength
- Compressive Strength
- Impact Strength



www.ELTEKlabs.com

