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The Electrotehnical Materials and Environmental Technologies Center offers high quality services by means of the Thermal Endurance Laboratory. Advanced equipments for testing and studying several properties exhibited by the electro insulating materials (thermal endurance, temperature index, compatibility level) were acquired.

- Drying stove;
- Equipment for dielectric rigidity;
- Traction machine;
- Analytical balance;
- Feutron climatic chamber.

LABORATORY TESTING METHODS

- Method for estimating the temperature index value;
- Method for determining the temperature index value for thin insulation conductors;
- Method for determining the compatibility of electro-insulated materials.

Determination of the thermal endurance properties for the following electro-insulating materials

- impregnating compounds and varnish;
- coating varnishes;
- enameled conductors for winding;
- flexible foils and foil based materials;
- insulated flexible tubes;
- flexible materials in various combinations;

Evaluation of the thermal class for insulating systems, regarding the electric rotary machines

Thermal class evaluation consists of accelerated thermal ageing for 3 or more temperatures followed by some functional tests, like: mechanical stress, humidity, electric stress.