



Cesit Ingegneria S.P.A.
www.cesit.net

Commissioning and Diagnostics

Transformer Services

The electricity market has changed radically in recent years, obliging power generation and distribution companies to adopt extremely high standards of quality, reliability and efficiency of all electrical components. Cesit Ingegneria S.P.A. is the ideal partner of major manufacturers of electricity transformers and power generators, distributors and users, for the maintenance and diagnostics of their power, measuring and protection transformers. Cesit Ingegneria S.P.A. has a pool of highly qualified personnel with many years' experience gained at Italy's major utility companies, and an extensive fleet of state-of-the-art instrumentation.

Cesit Ingegneria S.P.A. is capable of supporting Customers with a series of specialist electrical measurements and visual inspections. Evaluation of the results, information about the history and operating state of the transformer, together with good knowledge of the product technology enable Customers to target their maintenance operations more effectively.

Assembly

- Assembly and finishing of transformers, autotransformers, reactors, CTs and VTs
- Packaging of materials
- Transport of accessories and handling

Roll-out & Start-up

- Pre-commissioning
- Commissioning

Replacement and handling

- Removal and refitting of transformers, autotransformers, reactors, CTs and VTs
- Preparation for shipment
- Removal and refitting of fire-safety systems
- Removal and refitting of sound-absorbing panels and enclosures, and refurbishment of hardstandings

Maintenance and inspection

- Oil treatment and degassing
- Gasket production
- Anti-corrosion cleaning and maintenance
- Radiator replacement
- Fitting of valves and gate valves
- Replacement of accessories (thermometers, Buchholz relays, etc.)
- Modernisation of cooling units
- Replacement of on-load tap changers
- Oil changes for on-load tap changers

Instrumental testing and inspection of transformers and autotransformers

- Dielectric strength of transformer oil
- Dissolved gas analysis (DGA) of transformer oil
- Transformation ratio measurement
- Measurement of winding resistance
- Measurement of core, armature and winding insulation resistance
- Measurement of short-circuit impedance
- Measurement of short-circuit inductance
- Measurement of no-load current consumption
- Sweep Frequency Response Analysis (SFRA)
- Measurement of the capacity and loss angle of bushing insulators
- Measurement of permeability of winding insulation paper

Instrumental testing and inspection of CTs and VTs

- Primary injection up to 5,000 A and 24,000V
- Polarity testing
- Insulation measurement
- Transformation ratio measurement
- Angle error measurement
- Winding resistance measurement
- Magnetisation curve measurement

