



DISTRIBUTION TRANSFORMER TESTING

Cooper Power Systems tests its distribution transformers at two different stages of manufacture 1) prototype or design level to ensure compliance with industry standards and 2) production level tests are performed on 100% of our transformers to ensure conformance with our quality product standards and that the customer receives a product that meets or exceeds their specifications and requirements.

PROTOTYPE OR DESIGN LEVEL

Temperature rise (ANSI C57.12.90)
Sound Level (NEMA TR-1)

Short Circuit (ANSI C57.12.90)
Impulse tests (ANSI C57.12.90)

PRODUCTIONS LEVEL – in accordance with ANSI C57.12.90

Ratio – ensures the winding ratio is correct including all the possible tap settings.

Polarity – ensures the correct voltage connection (including additive or subtractive).

Full wave impulse – simulates a lightning strike (1.2 x 50 microsecond wave), verifying the BIL rating. (per ANSI procedure)

High potential – ensures strength of the major insulation from coil to core, HV to LV winding and proper clearance from all leads to any grounded surface.

Overexcitation – ensures strength of turn-to-turn and layer-to-layer insulation.

Percent impedance, core loss, winding loss, excitation current – performed at rated voltage and current as each test requires to ensure accuracy and provides requested results to customers.

Leak test – each tank is pressurized in order to check for leaks at welds and bushings.

100% testing of our distribution transformers – helping our customers attain quality products that meet or exceed their specifications and requirements which is evident through a low field failure rate and product reliability.