

## Nova 1005 Thermoplastic Cut-Through Tester



### Features:

- Meets NEMA and JIS Specifications
- RS-232 (Output only)
- Test Five (5) Specimens
- Interchangeable Test Weights
- Temperature Ramp (2°C/Min. & 5°C/Min.)
- Variable Specimen Test Voltages:  
12-30 VAC & 90-130 VAC
- Test Temperature: Ambient to 500° C
- Test Wire Sizes:  
44 AWG - 12 AWG (0.05 mm – 2 mm)
- Optional steel Ball tip load post for testing  
rectangular wires up to 1/4" x 1/2" (6 mm x 12 mm)
- Optional Fixtures for JIS Ring Method
- 240 VAC / 10 Amps at 50/60 Hz

The Nova 1005 Thermoplastic Cut-Through Tester meets the NEMA-MW1000 and the JIS C3003 specifications. The tester determines the magnet wire insulation capacity to resist thermoplastic flow (softening) under the influence of temperature, load (pressure), and time. The Nova 1005 is of a modular design and consists of the controller and the specimen test oven with air circulation for even temperature distribution.

The microprocessor-based controller controls the temperature ramp of the oven and monitors for specimen failure. The controller is equipped with a single board computer, 16 line x 20 character LCD backlit display, keypad, digital temperature monitor, function switches, and RS-232 output port. The specimen test can be set from 12 -130 volts AC. The test temperature rate of rise can be set at 2°C or 5°C per minute. The start ramp temperature and stop test temperature are programmable from the keypad. A constant test temperature feature is also available.

The specimen test oven is constructed of stainless steel. The standard oven can test up to five specimens, with air circulation in the test chamber for even heating, interchangeable test weights, and interchangeable test load tip. A safety switch is incorporated into the oven cover for operator safety. The standard 5 specimen oven will test round magnet wire sizes 44 AWG to 12 AWG (0.05 mm to 2 mm). An optional steel ball load tip is available for testing rectangular wires up to 1/4" x 1/2" (6 mm x 12 mm).

### Dimensions:

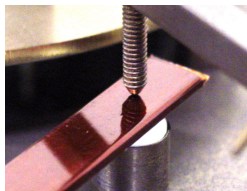
Controller - 53 cm W x 36 cm D x 20 cm H

5-Specimen Oven - 36cm W x 36cm D x 51cm H

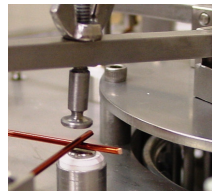
### Options:

Load tip for Rectangular Wires

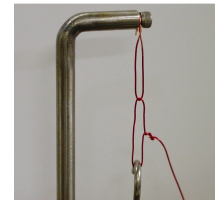
Fixtures for JIS Ring Method



1.6 mm steel ball load tip  
on rectangular wire



Crossing Method



Ring Method

Design and specifications subject to change without prior notification

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