

Franklin Tester FT-1

The Franklin tester FT-1 is designed to measure the surface insulation resistivity of electrical steel sheet according to the ASTM Standard A717 and IS:649. This test method is suitable for quality control in the application of insulation coating.

For ease of testing FT-1 automatically set 300 PSI pressure on the sample by the inbuilt hydraulic unit and it is capable to set the desired test temperature of the platform. Then the regulated supply of 0.5V gets on and the current flowing through the insulation get measured. The calculated insulation resistivity then directly visible on display as well as on thermal printed report.

In Detailed report FT-1 provides

1. Total current flowing through all test pins
2. Individual current flowing through each pin
3. Pre Set Temperature of Platform
4. Single surface insulation resistivity in Ω/cm^2

Fully Automatic Testing Method



Key Features

- Fully Automatic & Manual Test Method
- Ammeter with Zero burden Resistance
- 7" TFT graphics Display
- USB connectivity with Computer
- Parameter setting by keypad
- Thermal Report print
- Mini / Detailed Report
- Automatic 300Psi Pressure Setting
- LED Indication & Buzzer
- Total & Individual current result of all test pins

Technical Specification

Input Power	= AC 230V / 110V, 50/60Hz
Power Supply	= 0.5V (1mV Resolution)
Accuracy of Setting	= $\pm 0.1\%$
Accuracy of Ammeter	= $\pm 0.1\%$
Temperature Range	= Up to 150° Celsius
Test Head	= 10 Pins
Sample Size	= 60mm x 150mm



Operation Theory

This test method covers a means of testing the surface insulation resistivity of single strip of flat-rolled electrical steel under predetermined conditions of voltage, pressure, and temperature.



Ten stainless steel contacts of fixed area are applied to one of the surfaces of the specimen at 300PSI Pressure and electrical contact is made with the base metal by two drills. The effectiveness of the surface insulation is then indicated by a measurement of average electrical current flowing between the contacts and the base metal under specified applied voltage. This measurement can be used directly as an indicator of insulation quality or may be converted to an apparent surface insulation resistivity as displayed in result

Scope of Measurements

Surface insulation resistivity is evaluated from a dc current that can range from 0 (perfect insulator) to 1 A (perfect conductor).

Warranty

1 year against Manufacturing defects.