MAGNETS

Machinery

MATS-2010SD

Soft Magnetic Material Dynamic Hyteresisgraph System

Model MATS-2010SD

Automatic measurement on basic magnetization curve and magnetic hysteresis loop under static state of soft magnetic material, accurate measurement on static magnetic characteristic parameters such as initial permeability μ i, maximum permeability μ m, saturation magnetic induction Bs, remanence Br, coercive Hc and hysteresis losses Pu.

Windows measurement software applied simply. It conforms to China National Standards GB3657 - 83, industry standard SJ / T10281 - 91 and international standard IEC60404 - 4.

In accordance with measuring principle of ballistic method, combine computer control technology, A/D and D/A, replace conventional ballistic galvanometer with electronic integrator, realize analog ballistic method measurement under microcomputer control, can completely eliminate non-instant error caused by ballistic galvanometer in classical ballistic method, with high measurement accuracy, fast speed and good repeatability, can eliminate the influence of various artificial factors, and supply reliable basis for research on material magnetization process.

| General Features | Software Features | Software Screen | Technical Data | Standard Package |

·Testing sample varieties: soft magnetic ferrite, permalloy, amorphous, nm crystal, iron dust core, electrician ferrite and stalloy.

·Testing sample shapes: annular, E and U closing samples, and strip (bar) and chip open samples.

·Closing sample direct winding measurement: sample, magnetizing coil (N1) and measuring coil (N2) form a no-load transformer.

·Measure magnetic field intensity through measuring magnetizing current, magnetic field lock precision as high as 0.1%.

·Adopt electronic integrator to measure magnetic induction, zero drift of integrator can be self-corrected through software.

·Solenoid or permeameter shall be equipped to measure open samples.

·Testing method: simulate ballistic method and magnetic field sweep.

·Adopt analog ballistic method to measure basic magnetization curve, can accurately measure magnetic characteristic parameters on magnetization curve: μ i, μ m, Bs, value μ of any point.

·Adopt analog ballistic method and magnetic field sweep to measure saturation hysteresis loop, can accurately measure magnetic characteristic parameters on hysteresis loop: Bs, Br, Hc and Pu. Special explanation: simulate ballistic method to measure hysteresis loop is an exclusive measuring method of our company, can greatly improve the accuracy of Hc and Br.

·Automatic demagnetisation function before μ i testing, 10Hz AC saturation demagnetisation adopted.

·Testing single parameter can be selected in case of measurement with analog ballistic method to save time, the time of every testing point can be set as 0.1 second ~ 0.9 second.

·The density of testing point can be self-regulated with B speed feedback according to the shape of sample magnetic characteristic curve, curve can be also tested according to the testing point predefined by users.

·Powerful software functions with minimal technical requirements for testing staff.