

MATS-2010SA

Soft Magnetic Material Dynamic Hysteresisgraph System

Model MATS-2010SA



Automatic measurement on hysteresis loop of soft magnetic material under dynamic (AC) condition, accurate measurement on dynamic magnetic characteristic parameters such as amplitude permeability μ_a , loss angle δ , iron loss P_c , remanence B_r and coercive force H_c .

Windows measurement software applied simply. It conforms to China National Standards GB3658 - 83, GB5026 - 85 and GB9632 - 88, industry standard SJ / T10281 - 91 and international standard IEC60404 - 6.

Analog source (bridge), frequency indicator, ammeter, voltmeter and wattmeter are replaced through computer control and high speed A/D sampling, entire testing process automatically completed.

General Features

Software Features

Software Screen

Technical Data

Standard Package

- Testing sample varieties: soft magnetic ferrite, permalloy, amorphous, amorphous and nm crystal.
- Test sample shapes: annular, E and U shapes.
- Test samples with closed magnetic circuit can be directly winded and measured on samples. Sample, magnetizing coil (N1) and measuring coil (N2) form a no-load transformer.
- Non-inductive resistance connected on magnetizing coil loop to determine magnetizing current and magnetic field intensity through the measurement of pressure drop on non inductive resistance.
- Magnetic induction obtained through digital integration of coil measuring voltage, magnetic induction peak value locked through digital feedback, magnetic induction lock precision 0.5%.
- Power source and sampling amplifier integrated into a casing with simple interface: one RS232 interface connected to the computer, two way voltage alarm connected to high speed A/D card.
- Different power sources can be selected according to different test requirements: 1kHz ~ 300kHz or 500kHz, 5kHz or 10kHz ~ 100kHz, or other frequency ranges customized.
- Measuring dynamic hysteresis loop through volammetry and digital integration can accurately measure dynamic magnetic characteristic parameters such as μ_a , δ , P_c , B_r and H_c , and calculate μ' , μ'' , μ_L , μ_R , Q and A_L , etc.

·Automatic and continuous measurement up to 255 testing points, the testing time of every testing point is about 12 seconds, fixed-frequency or fixed Bm optional in multipoint test.