

MATS-2010SD

Soft Magnetic Material Dynamic Hysteresisgraph 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 B_s , remanence B_r , coercive H_c and hysteresis losses P_u .

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

MATS2010 - SMTest

File Edit View Measure Print Help

Static Hysteresis Loop [Basic Magnetization Curve]

Ring RID Other

The Valid Parameter

A: Length of magnetic path
B: Cross-sectional area
C: Volume of the specimen

Type: (New Type)

| A(mm) | B(mm ²) | C(mm ³) | W(g) |
|-------|---------------------|---------------------|------|
| 89.5 | 19.6 | 1754 | 15.1 |

N1: 40 (T) N2: 241 (T)

Plan: (New Plan)

DC Test AC Test

Sim. Shock Tsw: 1 (s)
 M. F. Scan Tsp: 0.2 (s)
 Mag. Curve Hyst. Loop
 μ_i B_s B_r
 μ_m H_c

| Points | H_i (A/m) | H_j (A/m) | H_s (A/m) |
|--------|-------------|-------------|-------------|
| AUTO | 0.08 | 0.42 | 10 |

| FileName | Number | μ_i (k) | μ_m (k) | P_u (J/m ³) | B_s (T) | B_r (T) | H |
|----------|--------|-------------|-------------|---------------------------|-----------|-----------|---|
| A03.dat | 1# | 132.6 | 513.3 | 1.056 | 0.6697 | 0.4609 | |

Sample Wave Hysteresis Loop Magnetization Curve

00000 A
AUTO 01 0.1 1 10

0000 mWb
AUTO 25 0.5 1 2

Testing Print Close