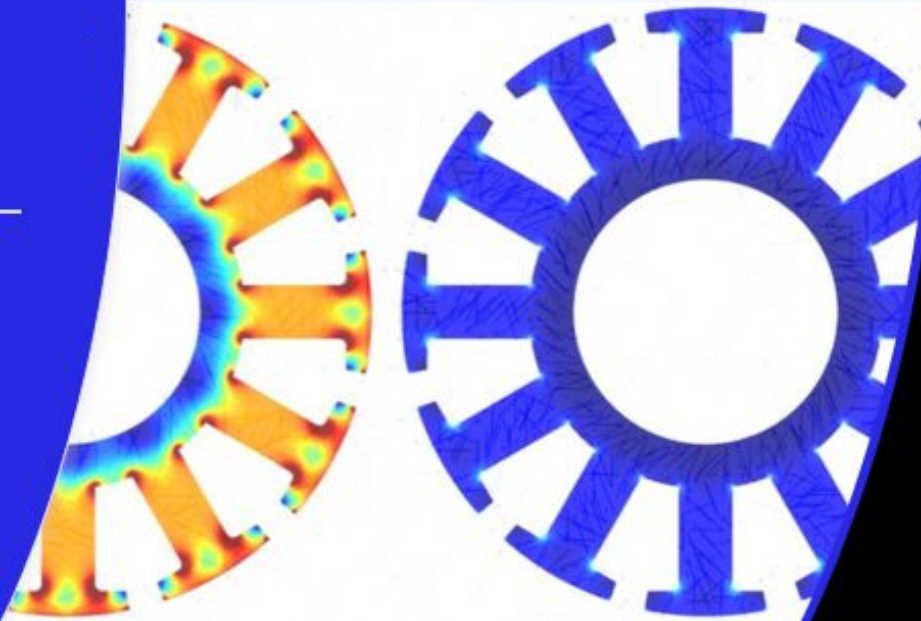


**Advanced
Magnetic
Characterization**
Bralco Advanced
Materials



AC Magnetometer

key Features:

The following are the key features of the instrument. The following measurements are feasible with our new AC magnetometer. Experiment is conducted at room temperature with frequency range of 40 Hz to 20KHz.

- B-H curve (Hysteresis loop)

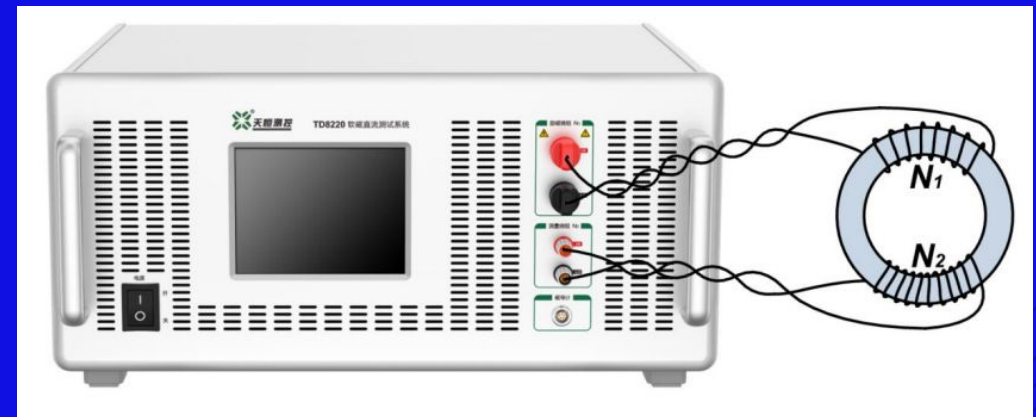
Possible curve parameters @ given test point :

Measurable parameter: B_m , P_s , H_c , B_r , μ_m , J_m , H_m .

Sample preparation requirement:

Following are the required geometric form of soft magnetic powder core

- Ring shape.
- U Shape.
- E Shape.



DC Magnetometer

key Features:

The following are the key features of the instrument. The following measurements are feasible with our new DC magnetometer. Experiment is conducted at room temperature only.

- Initial B-H curve.
- Hysteresis loop.
- Permeability curve (B vs H & μ vs H).

Possible curve parameters @ given test point :

Measurable parameter: B_m , B_r , H_c , H_i , H_m , H_s , μ_i , μ_m ,

Sample preparation requirement:

We can test in below geometric form of soft magnetic powder cores

- Ring shape.
- U Shape.
- E Shape.



Vibrating Sample Magnetometer (VSM)

System Overview

VSM 250 model Room temperature

Max central field 2.4T

VSM Specifications

- Magnetic moment measurement range @ 35mm pole gap - 10^{-3} emu to 300 emu
- Sensitivity: 5×10^{-5} emu
- Relative accuracy @ 3emu is less than $\pm 1\%$
- Largest Measurable Moment: 300 emu

Typical Applications

Magnetic characteristics @ RT – Magnetization curve, B-H & MH loops and Demagnetization curve.

Magnetic parameters – Saturation magnetic moment, Saturation magnetization, specific saturation magnetization, Residual magnetic moment, Residual magnetization, coercivity, Intrinsic coercivity, Rectangle coefficient, Maximum magnetic energy product, magnetic permeability including initial permeability and hysteresis loop area.

Sample form factor

We can test in below geometric form for soft and hard magnetic materials.

- Bulk material.
- Powder.
- Thin film.
- Liquid.



Magnetic Force Measurement

System Overview

- Magnet-magnet
- Magnet-metal plate
- Magnet-metal shield-metal plate

Specifications

Sensitivity for length and mass are 0.01 mm and 0.001 mg

Typical Applications

Push-Pull testing force – Force vs distance.



CONTACT US:

BRALCO ADVANCED MATERIALS PTE LTD

#03-66, 81 Ayer Rajah Crescent, JTC Launchpad

Singapore-139967

Email: team@bralcoadvancedmaterials.com

Phone: +65 69800689

