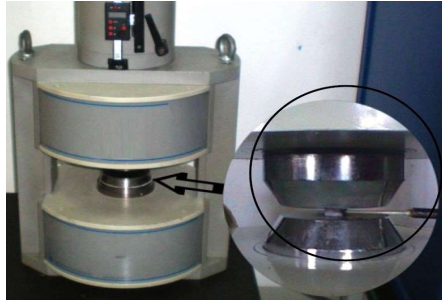


ADVANCE BH LOOP TRACER SYSTEM



ABOUT THE SYSTEM

The BH Hysteresis tester is designed and developed by our company to cater the needs of researchers working in the study of advanced magnetic materials. The system measures magnetic loops at different frequencies for soft, hard, and other smart magnetic materials. The sample is generally cylindrical in shape (like a disk). Depending on the B coil used, the size can range from 25-35mm dia and 10mm thick. The sample is placed in a strong magnetic field of 2000 KA/m squared. An electrical AC signal of different frequencies is applied via a bipolar magnetic power supply. A magnetisation output signal is read simultaneously in the measurement coil using a high-speed data collection system. A plot between (B vs. H) and (J vs H) is seen along with many other industry standard parameters on the advanced BH loop tracer software.

- Hysteresis Frequency Range: **0.1Hz –10Hz**
- Resolution: **18 Bit**
- Hysteresis Accuracy: **0.5%**
- Max Data Points: **32768**
- Field Strength: **2000 KA/m**
- Max gauss at 2mm: **24 K Oe**
- Pole Diameter: **100 mm**
- 2 External Input $\pm 10V$ range as low as **20 mV** with **1uV** resolution
- Measurement: **2,4 quadrants**

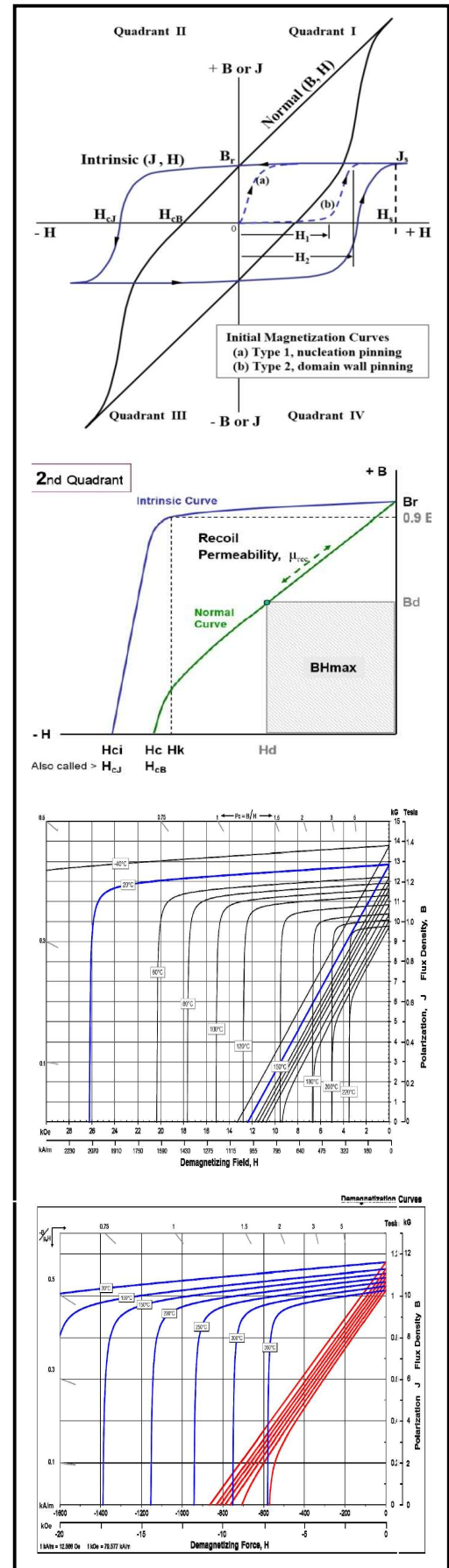
MODEL: 0.1BH 10HZ

Various tests performed by this model:

- | | |
|--------------------|-------------|
| - BH Curve | - Hs, Js |
| - JH Curve | - Bd, Hd |
| - Remanence Br, Jr | - c |
| - Hcb, Hcj | - DC Poling |
| - BH Max | - HK/Hc |

Test options available in other models:

- BH, JH loop at different temperatures
- Calculative MH transformation from BH and JH



ADVANCE BH LOOP TRACER SYSTEM

TECHNICAL SPECIFICATION

MODEL	0.1BH 10HZ
Field	200KA/m 20 K Oe @ 2mm
Measurement Frequency Range	0.1Hz to 10Hz
Field Frequency Range Large Signal	0.1Hz to 10 Hz
Wave Form Generator	16 Bit
ADC Resolution	18 Bit Resolution
Minimum field Resolution	10 Gauss
Minimum step size	100 Gauss
Maximum Hysteresis Frequency	10Hz
Minimum Hysteresis Frequency	0.1Hz
Measurement	Demagnetisation and complete hysteresis
Measurement Cycle time	100 Sec
Electromagnet	H Frame
Pole Size	100 mm
Maximum Pole gap	50 mm
Placing	Vertical
Cooling	Air Cooled
Power Supply	Four Quadrants
Voltage	80 V
Current	8 Amp
Control	Auto/Manual
Interface	USB
Input Power	220-240V 5 Amp
Cabinet	19 Inches Rack Mountable
Material	Aluminium Non-Magnetic
Flux Measurement	B Coil
Diameter	35mm
Number of Turn	4-5
Correction Coil	Inbuilt
J Factor	Auto Calibrated
Standard Sample	Ni 35 mm Disk Provided
Calibration	Calibration Certificate Provided
H Field measuring	Tesla Meter
Range	0- 20 K Oe
Probe	Hall Element
Current	2 mA
Accuracy	10 Gauss

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