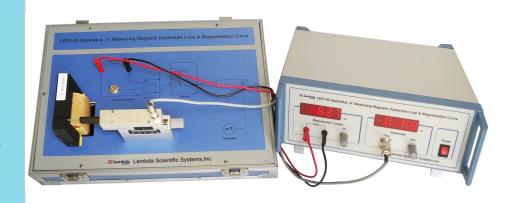
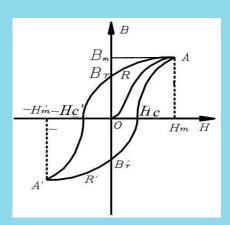


Construct, Conduct & Comprehend Physics Experiments

## LEEI-42 Apparatus of Magnetic Hysteresis Loop & Magnetization Curve

- Rectangular sample with small gap
- Easy to use, stable and reliable
- Affordable





Magnetic hysteresis loop and magnetization curve present the basic magnetic characteristics of magnetic materials. A large number of ferromagnetic materials with various properties have been applied in industry, transportation, communications, electricity and electronics, and other fields.

This experimental apparatus is designed with the following features:

- 1. Use of a high-precision digital Tesla meter for high measurement accuracy
- 2. Demagnetizing process at the time of measuring DC magnetic properties of materials
- 3. Measurement of magnetic field intensity distribution in a gap
- 4. Two different magnetic materials provided as specimens

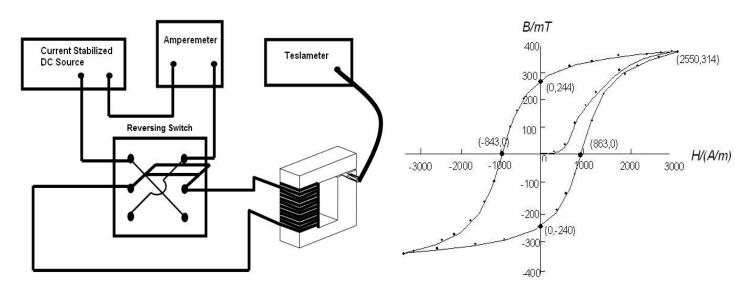


## **Experimental Contents**

- 1. Measure magnetic induction intensity of residual magnetism in sample with Teslameter; acquire the relationship between magnetic induction intensity *B* and position *X* of the sample; and determine the range of uniform magnetic field in *X* direction.
- 2. Learn to demagnetize a magnetic sample and measure the initial magnetization curve.
- 3. At magnetic saturation, conduct magnetic exercise to the sample, and measure magnetic hysteresis loop.
- 4. Learn to apply Ampere's circuit law in magnetic measurement.

## Parts & Specifications

| Constant current source   | 4-1/2 digit, range: 0 ~ 600 mA, adjustable                                 |
|---------------------------|--|
| Magnetic material samples | 2 pcs, rectangular bar, section length: 2.0 cm; width: 2.0 cm; gap: 2.0 mm |
| Digital Teslameter        | 4-1/2 digit, range: 0 ~ 2 T, resolution: 0.1 mT, with Hall probe           |



Schematic of experimental configuration

Saturated hysteresis loop & initial magnetization curve

Note: above product information is subject to change without notice.

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