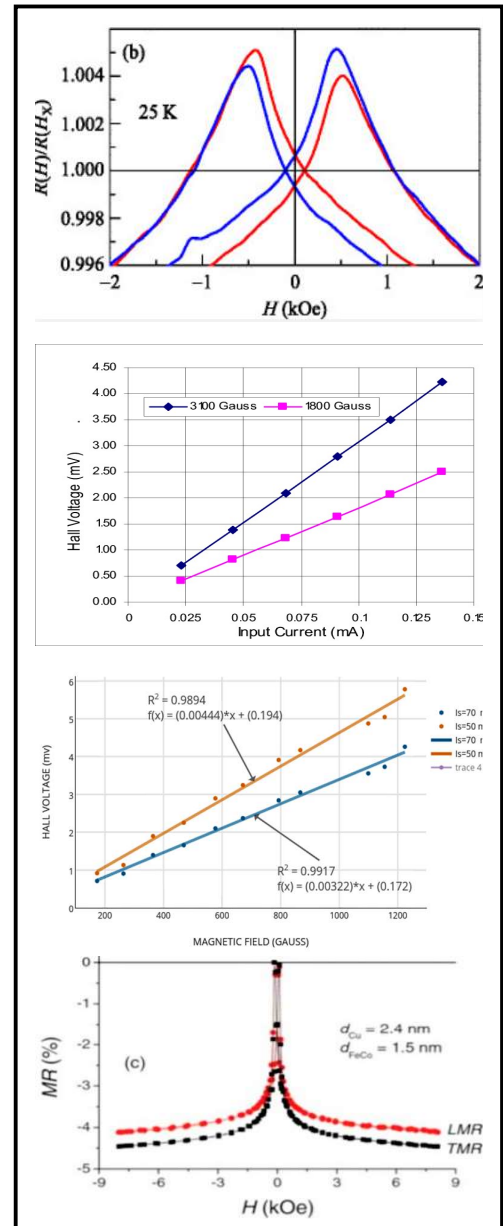


# AC ELECTROMAGNET SYSTEM



## ABOUT THE SYSTEM

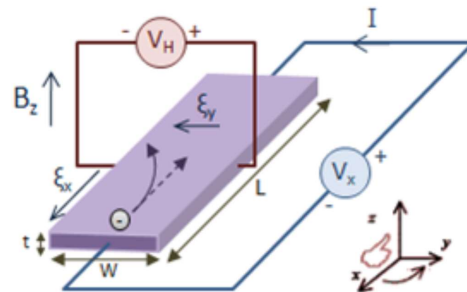
An **electromagnet** is a type of magnet in which the magnetic field is produced by an electric current. Electromagnets usually consist of wire wound into a coil. A current through the wire creates a magnetic field which is concentrated in the hole, denoting the centre of the coil. The magnetic field disappears when the current is turned off. The wire turns are often wound around a magnetic core made from a ferromagnetic or ferrimagnetic material such as iron; the magnetic core concentrates the magnetic flux and makes a more powerful magnet. The main advantage of an electromagnet over a permanent magnet is that the magnetic field can be quickly changed by controlling the amount of electric current in the winding. However, unlike a permanent magnet that needs no power, an electromagnet requires a continuous supply of current to maintain the magnetic field.



## MODEL: AC 500

### Parameters available in this Model

- Current drawn by coil vs field
- Gauss stability vs time
- Set field



# AC ELECTROMAGNET SYSTEM

## TECHNICAL SPECIFICATION

The Advance AC electromagnet system test software perform important functions of the measurement automatically without any human interventions. Following are highlights of important functions:

- Simultaneous measurement of Magnetic field and current.
- Automatic measurement of Voltage/ Current and Temperature rise in coil at magnetic field.
- Representation of data and graphs in automatic scale.
- Online math work for different calculations
- Data in standard ASCII Format exportable to standard software's like excel origin etc.

<b>Electromagnet</b>	<b>200/500/2000</b>
AC Magnetic Field	200/500/2000
Field Resolution	1/5/10 Gauss
Measurement	Four Quadrant
Pole Material	High Cr steel
Shape	U shape
Power supply	200/500/1000 W
Voltage	12V/2/5/10 A
Stability	1%
Ripple	0.1%
<b>Measurement (options)</b>	<b>AC gauss meter</b>
Range	0-1000 gauss
Resolution	1 gauss
Field Accuracy	1 gauss
Temperature coefficient	Chart provided
Basic Accuracy	0.1 %
No of Ranges	1X/2X/10X
<b>Sample Holder</b>	<b>Bulk/Film</b>
Bulk	Yes
Film	Yes
Thick film	Yes
<b>Test Specimen</b>	<b>Two/Four Probe</b>
Sample Dimension	8X8 mm
Thickness (Bulk)	0.1mm to 1mm
Thickness (Film)	10µm to 100µm
<b>*For detailed specification, please refer to respective brochures*</b>	

## MARINE INDIA

Regd Off – A-3/25B Green Apartment Paschim Vihar New Delhi – 110063, INDIA  
Off Works – 7/23 2<sup>nd</sup> Floor Kirti Nagar Industrial Area New Delhi – 110015, INDIA

Ph/Fax: +91 – 11- 41428187, +91 – 9810289961

Email: [sales@marineindia.com](mailto:sales@marineindia.com), [info@marineindia.com](mailto:info@marineindia.com)

[www.marineindia.com](http://www.marineindia.com)