CRYO INDUSTRIES OF AMERICA, INC

MicroMag Compact 'Tabletop' Superconducting Magnet System

Unique Design Features:

- 2 or 5 Tesla magnetic field in a Room Temperature Bore (RTB)
- Compact tabletop RTB design mates to microscopy cryostat!



You select the Magnet Field: 5 or 2 Tesla!



'Micromag' Microscopy Magnet System

Micromag provides a 2 or 5 Tesla magnetic field in a Room Temperature Bore (RTB). A compact table top design that mates to the microscopy cryostat and offers high efficiency, easy of operation, ultra low vibration and is also available in a cryogen free design.

The Micromag can be separated from the microscopy cryostat providing independent operation and a high magnetic field in a 1.875" [47.6 mm] for use with many other different experiments. An EZ install 'sample extender kit' is available to position the sample in the center of the magnetic field.

Easy to operate and 'Performance by Design'. Open the flow valve; insert the transfer line into a storage dewar and cooling commences. Efficient detachable stainless steel flexible transfer line connects the microscopy WORKSTATION to a storage (transport) dewar. Incorporated in the system is our XE insulating technology for the highest in efficiency.

The magnetic bore can be orientated horizontally or vertically.

A versatile design allows magnet and microscopy cryostat to be used together or independently. The magnetic field can be added to the microscopy cryostat now or later. Select a 2 Tesla or 5 Tesla superconducting magnet field!

- Large Magnetic Field
 Select 5 Tesla or 2 Tesla
- Large Room Temperature Bore (1.87" [47.6 mm]
- Integrates directly to standard microscopy cryostat
- Demounts from the sample microscopy cryostat and is capable of independent operation for other experimental applications.
- Magnet cryostat does not need to be physically coupled to sample cryostat.
- The magnetic filed and magnet bore can be orientated horizontally or vertically, relative to the floor.
- Full sample cryostat operating temperature range
 3.2 K to 325 K

| Sample Temperature Range | 3.2 K to 325 K up to 500K optional |
|-----------------------------|---|
| Cool down time | ~ 4 hours |
| Helium Consumption | 1.0 l/hr vertical 1.3 l/h horizontal 1.0 l/h horizontal with gas flow pump |
| Weight | 10 kg |
| | |



Below: Room Temperature Bore Microscopy Style together with Microscopy Cryostat with Sample Extension in different configurations.





Above: Operates with bore in vertical or horizontal operation. Room Temperature Bore fits over microscopy cryostat with sample extender kit installed

Right: Extender kit for standard microscopy cryostat- for positioning sample in the center of the magnetic field.





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MODEL XE102 ROOM TEMPERATURE BORE SUPERCONDUCTING MAGNET SYSTEM



MODEL XE102 EXTENDED SAMPLE OPTICAL

MICROSCOPY WORKSTATION





CRYO Industries of America, Inc. 'performance by design'

We have products to support you in:

- Spectroscopy
- Optical
- Materials Characterization
- Mossbauer
- VSM
- Magneto-Optical
- Photoluminescence
- Tunable Laser Diodes
- Ultra-low Temperature
- IR Detectors

- Focal Plane Arrays
- Cryogenic Radiometer
- X-Ray Diffraction
- High Tc Superconductors
- Hall Effect
- Diamond Cell
- ESR/EPR
- NMR/MRI
- Microscopy
- STM/AFM

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