

UHV Compatible 3D vector magnet system for a synchrotron beam line.

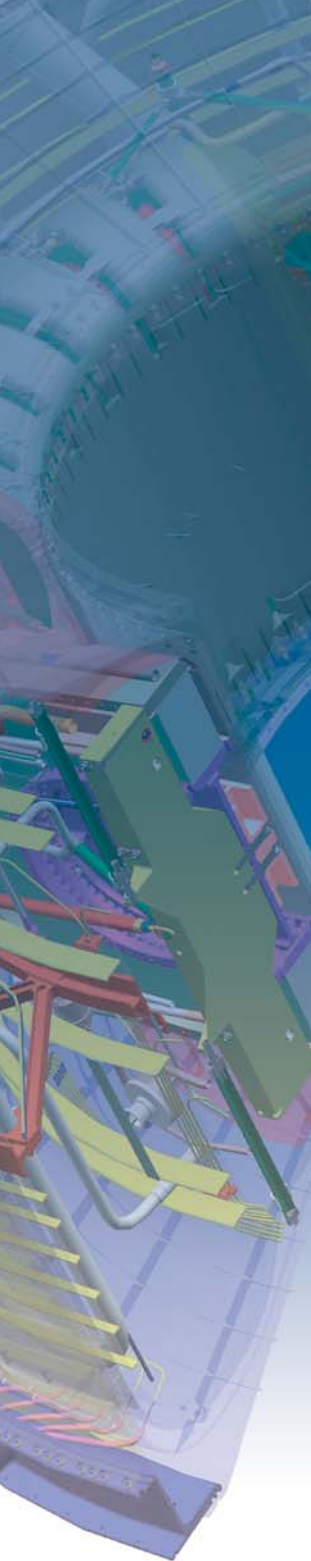
System includes:

- 3D vector magnet system with access in x-, y-, and z- directions.
- UHV compatible liquid Nitrogen shielded liquid Helium cryostat.
- UHV compatible variable temperature insert.
- Sample preparation and transfer mechanism.
- Support stand.
- System electronics.
- LabView® based computer control system.



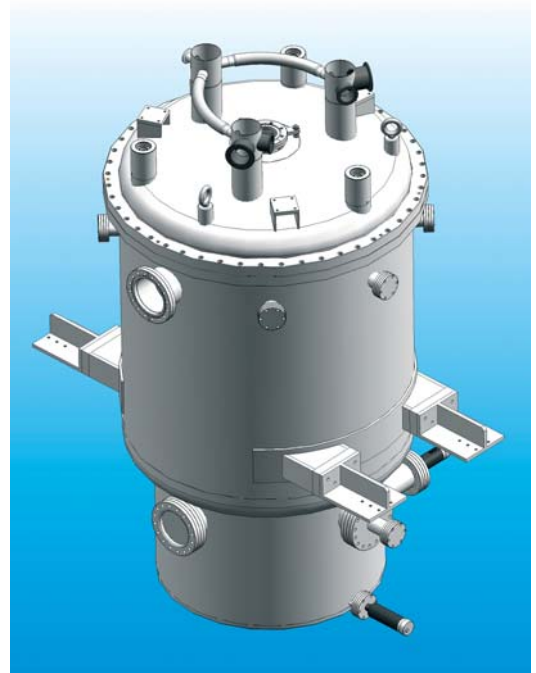
Magnet Specifications:

Maximum Field on major axis at 4.2 K:	6 Tesla
Maximum Field on orthogonal axes at 4.2 K:	2 Tesla
Sweep rate on major axis:	Up to 2T/min.
Magnetic field homogeneity:	~ 1% over 10mm d.s.v.
5 gauss line with all coils at maximum field:	Less than 400cm in all directions
Maximum coil temperature during baking.	100°C



Cryostat Specifications:

Liquid helium hold time: under all operating conditions.	>40 hr
Liquid helium refill volume:	60 litre
Liquid nitrogen hold time: under all operating conditions.	>90 hr
Ultimate pressure after baking.	5×10^{-10} mbar



VTI Specifications:

VTI temperature range:	<2K - 370K
Sample environment:	UHV
Sample exchange:	From below via UHV load lock
Vertical translation range	± 7.5 mm
Rotational range:	$\pm 180^\circ$
Electrical connections to the sample:	4 dc wires from room temperature.

Contact us

You can contact Scientific Magnetics through our website www.scientificmagnetics.com We will be delighted to discuss your requirements for superconducting and cryogenics systems.

