

# CRYOGENIC SYSTEMS FOR NARROW GAP EXPERIMENTS

CIA offers a complete line of cryogenic equipment that is sure to meet your Narrow Gap experimental needs with designs to fit less than 1.0" gaps and up. Cryogen free, 10K closed cycle system pictured left (a), and Open Cycle, LHe continuous flow cryostat pictured left (b).

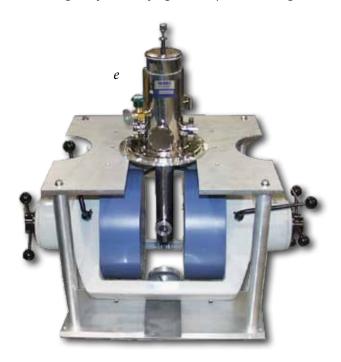
With over 26 years experience in designing, manufacturing and testing of cryogenic systems, CIA is able to custom design a system that meets your specifications!

### **Cryogen Free Narrow Gap Systems**

Cryogen Free Narrow Gap systems can be customized to offer: optical access, tubular designs, 4K or 10K coldheads, sample in vacuum or top-loading sample in exchange gas configurations.

**Cryogen Free Sample in Exchange Gas,** pictured right (c), provides top-loading, quick sample access.

**Cryogen Free Sample in Vacuum,** pictured right (d), are designed for 'cold finger' sample mounting.





# Liquid Helium and Liquid Nitrogen Narrow Gap Systems

CIA offers LHe and LN2 systems with sample in vacuum, sample in exchange gas, or sample in vapor.

The continuous flow LHe cryostat, Model RC102-CFM Microscopy cryostat, *pictured top left (b)*, offers fast cool down, high efficiency, low thermal drift, excellent temperature stability and **ultra low vibration**.

CIA can custom design a narrow gap system, complete with electromagnet and stand, pictured left (e).

### Simple Storage Dewar Mount with Compact Magnet: 2T or 5T

## 'DStat' Directly Cooled Cryostat Insert



Above: DStat Magnet Insert in Strorage Dewar

#### **Efficiency:**

<0.020 l/hr static LHe loss rate ~0.10 l/hr LHe operational

#### **Versatility:**

FITS ANY STORAGE DEWAR

Top Loading easy sample change

**Operating temperature range:** <1.4 K to 325 K (500 K optional)

The DStat is a versatile storage dewar insert (leg is in the dewar and cryostat sits outside on top of the storage dewar). Systems are available with a 2 or 5 Tesla superconducting magnet.

One of the unique features of the Cryo Industries 'DSTAT' is this style of insert allows for **large sample tube sizes**, since the sample zone is outside on top of the dewar.

The DStat is a cost effective alternative to electromagnet systems, and offers higher fields and larger sample space.

