CIA
CRYO Industries of America, Inc.

HELIUM-3 PRO

Helium-3 'The Pro'	Sample in Vacuum
Base Temperature	300 mK
Hold Time at Base Temperature	24 Hours
Temperature Range	Base Temperature to 80 K
Thermometers	Cernox - Charcoal & Condenser RuO2 (1K) - Sample Si diode or Platinum RTD - to monitor sample cooldown
Helium-3 Regeneration Time	30 min typ.
Sample Mount Diameter	1.37 inch 34.9 mm
Sample Environment	Vacuum (std) with Liquid/vapor Top Load Port 0.21 in dia. clear [5.3 mm] (Port epoxy sealed with NPT fitting)
Experimental Access Vacuum Seal	Quick connect IVC with tapered grease seal
POT digital level monitor	No
Wire Anchors	Kapton flex circuits + 4K extendable copper post
Charcoal Cooling Method	Both dynamic and static exchange gas
Experimental Wiring	5 twisted pairs (10) wires for Customer use
Materials of Construction	Non magnetic [Insert and all main temperature sensors compatible with use in high magnetic fields]

Sample in vacuum 3He refrigerator

Nanotechnology has created the demand. So, we set up our most popular Helium-3 insert on the CNC, to provide you with the lowest priced helium-3 system available anywhere.

The reason cryostat systems can be expensive is due to the fact that many are made in single (1) quantities. Volume saves manufacturing costs (money)!

The **'Pro'** is a Production (volume) manufactured He-3 insert. This saves up to 40% or more when compared with similar systems and we pass the savings on to you! Why delay your experiments two months or more waiting to get more money?

Q & A 'The Pro'

Q. What is the difference between the Pro and the standard He-3 insert?
A. Nothing, they are the same cryostat except the std has extra accessories, can be fully customized. and is tweaked after testing.

Q. Can I customize The Pro?
A. No, except for the length.

Q. What is the base temperature?
A. The Pro system is individually tested to make sure that it reaches a base temperature less than 300 mK.
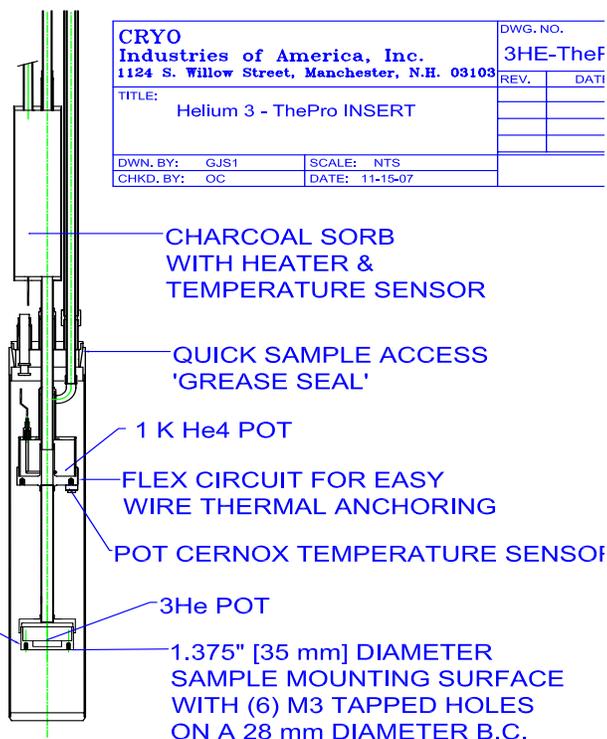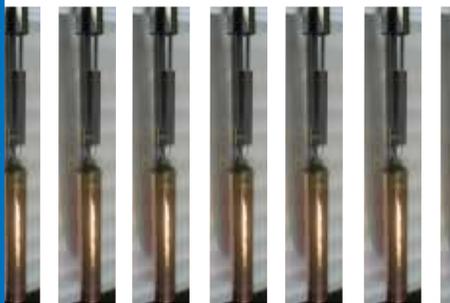
CRYO Industries of America, Inc.
1124 S. Willow Street, Manchester, N.H. 03103

DWG. NO. 3HE-TheP

TITLE: Helium 3 - ThePro INSERT

DWN. BY: GJS1
CHKD. BY: OC
SCALE: NTS
DATE: 11-15-07

CHARCOAL SORB WITH HEATER & TEMPERATURE SENSOR

QUICK SAMPLE ACCESS 'GREASE SEAL'

1 K He4 POT

FLEX CIRCUIT FOR EASY WIRE THERMAL ANCHORING

POT CERNOX TEMPERATURE SENSOR

3He POT

RuO2 & Si DIODE TEMPERATURE SENSORS

1.375" [35 mm] DIAMETER SAMPLE MOUNTING SURFACE WITH (6) M3 TAPPED HOLES ON A 28 mm DIAMETER B.C.