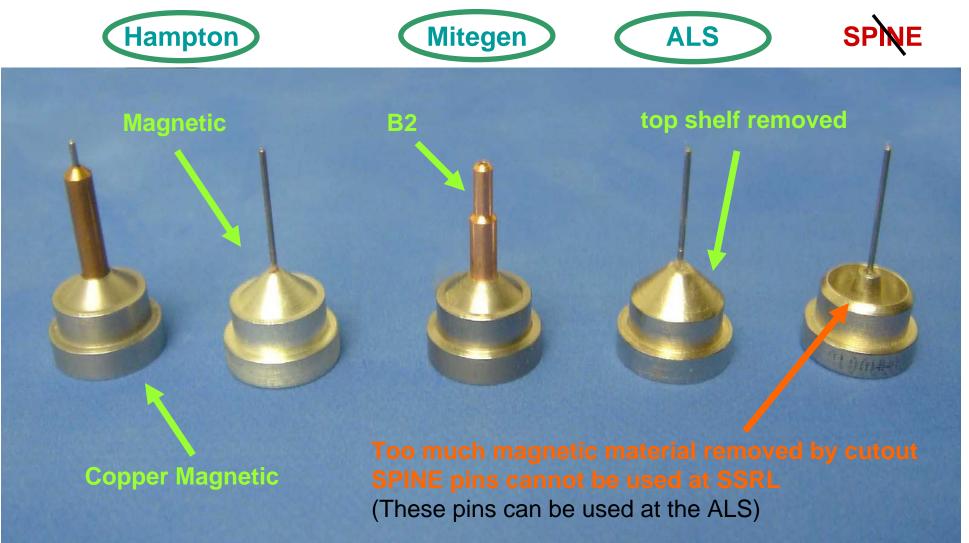
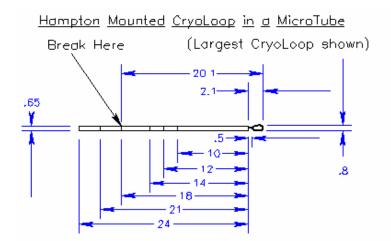
Preparing Your Sample Pin



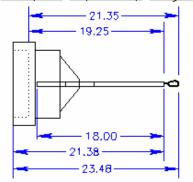
Which sample pins are compatible?

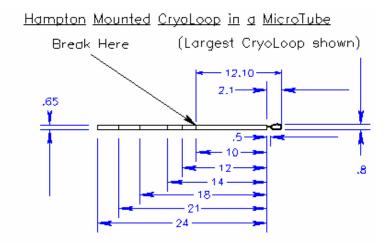


What length pin should I use?

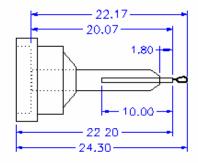


Hampton CrystalCap Magnetic





Hampton 18mm CrystalCap Copper Magnetic

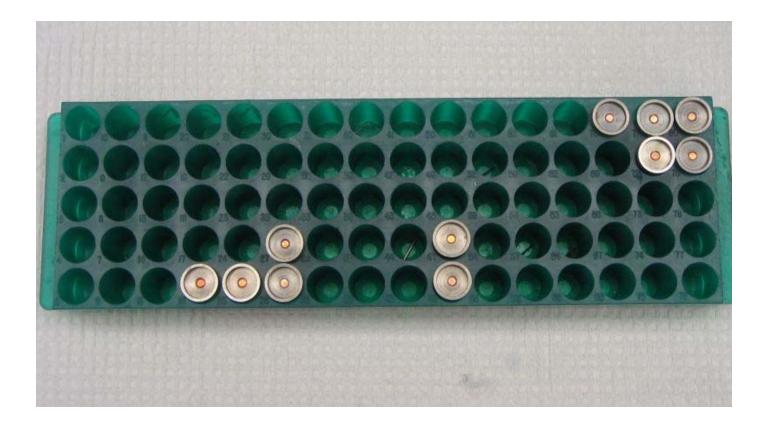


Broken or Lost Micro-tubes

Broken micro-tubes are usually a result of mishandling sample pins in preparation for reuse. In particular pins should not be piled together in container when washing and drying them.

To wash pins, place them individually on magnetic tray. Hang the tray upside down to dry the pins.

Store Pins in a Safe Place



Broken or Lost Micro-tubes





Avoid Lost Micro-tubes



Which Glue is Best?



Super Glue



Super Glue Gel



Duco Cement



5-minute Epoxy



24-hour Epoxy

Glue Test 1

19 pins with glued micro-tubes were loaded into a cassette

6 cycles of the following steps were performed:

- Mount/dismount under liquid nitrogen using SAM
- Remove cassette / warm to room temperature
- Repeat

Remove Pins / Check for Failures:

No Failures

Glue Test 2

After shaking pins in a tub of water to simulate washing:

Glue 5-min Epoxy 24-hour Epoxy Super Glue Gel Duco Cement Super Glue

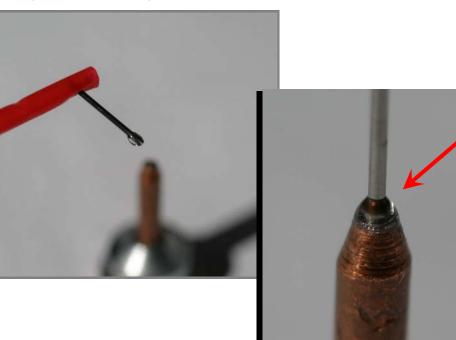
Failures 0/19 0/19 1/19 5/19 (~26%) 7/19 (~37%)

Failures for Super Glue

Only Use Epoxy! a back pane NET WT. 29 **Super Glue** Super Glue Gel **Duco Cement** EPOXI-PATCH EPOYL DA ide to Concrete Stone, Wood, Glass, Metal, etc. Fills gaps. Contains NO SOLVENTS. 24-hour Epoxy **5-minute Epoxy**

How much epoxy should I use?

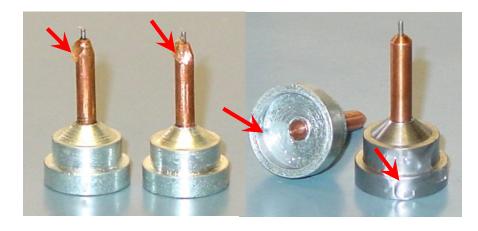
Only use epoxy



Aim for an even seal without a lot of excess epoxy

Inspect your sample pins

Watch-out for excess glue or grease spilled on pins



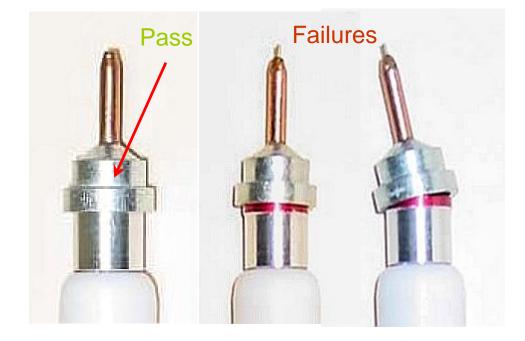
Do not use pins with the wrong form-factor



Look for corrosion

Test your sample pins





Where do I get sample pins?

Buy compatible sample pins and mounts online:

- 1. www.hamptonresearch.com
- 2. www.mitegen.com
- 3. www.crystalpositioningsystems.com

