

## **Description:**

Agilent/HP Filaments can be repaired by S.I.S. We will completely clean the assembly and replace the rhenium filament wire. This is not an exchange program. Your filaments are repaired and returned to you. For a complete description of this repair service see the section on [Mass Spectrometer Filament Repair and Manufacture](#).

Return Authorization numbers are not required.

**Standard Filament Repairs.** All Agilent CI filaments can be repaired with the standard Rhenium wire that was used on all the original Agilent filaments. This is our standard filament repair. However they can also be repaired with SISAlloy® wire or Yttria coated SISAlloy for improved filament performance as described below.

**SISAlloy Filament Repair.** All Agilent 5975 4 coil filament can only be repaired by SIS using the new Rhenium alloy (SISAlloy®) developed by SIS. SISAlloy® is an alloy of pure rhenium doped with a small concentration of Yttria. The Yttria improves the strength of the Rhenium. The electrical characteristics of SISAlloy are identical to pure rhenium, however the filament has less tendency to sag, thereby improving filament performance.

**Yttria Coated SISAlloy Filaments.** In addition the SISAlloy filament wire can be coated with Yttria for improved filament performance. Filaments coated with yttria emit electrons at a lower filament current and therefore they run cooler. This results in longer filament life by 2 to 3 times. See the review articles hyper-linked above for details on these processes.

## **Procedure:**

### **Standard Procedures for the Repair of Filaments**

- Inspected upon arrival at our facilities
- Cleaned completely
- Damaged or broken parts repaired or replaced
- New filament aligned & spotwelded in place
- Not an exchange program. Your filaments are replaced and returned to you.

For a complete description of this repair service see the section on [Mass Spectrometer Filament Repair and Manufacture](#).

## **New Filaments:**

SIS is the world's leading manufacturer of mass spectrometer filaments Using our experience in repairing many different types of mass spectrometer filaments, Scientific Instrument Services, Inc. has redesigned several of these filaments to provide filaments that are less expensive for our customers, are more durable and have a longer life, and are easier to rebuild and clean. For a list of New Mass Spectrometer Filaments manufactured by SIS see the section entitled - [New Mass Spectrometer Filaments from SIS](#)

## **Shipping Instructions:**

### **Package filaments carefully when sending them in for repair**

Most filament glass parts and ceramic insulators are very fragile and are easily damaged during shipment. Therefore, please package all filaments carefully to avoid damage during

shipment. We recommend that you package the filaments personally. Filaments should be packaged in a box at least 6 inches square using packing peanuts or bubble pack as cushioning. We recommend shipping by UPS or Federal Express for best handling.

## **Extra Info**

### **Other Filament Repairs**

In addition to the filaments described herein, we can repair many other filaments. If your filament is not described, [contact us](#) and we will see if we have repaired it before. If not we will be glad to repair it for you. In these cases, any information that you can provide such as a description of the filament design or construction, composition and size of the filament material, or drawings of the filament would be greatly appreciated. If possible, send us a filament for repair with at least a small piece of the original filament material intact. We will need some of this filament material to determine its dimensions and composition. Normal delivery on these special requests is 3 to 4 weeks when done for the first time. Subsequent deliveries will be 2 to 3 weeks.

**PRICES FOR FILAMENT REPAIRS.** Scientific Instrument Services continues to offer superior quality repairs at low prices. We have continued to expand our shop facilities and strive to improve our methods, techniques and materials. For the best prices, ship filaments to us in larger lots. This reduces the cost of handling and processing orders, thereby allowing us to pass the savings on to you. Filaments and heaters from various manufacturers can be combined to obtain the best prices.

Filaments from various manufacturers and models can be combined to obtain the best prices.

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