

## Repair of Mass Spectrometer Filaments & Heaters

Most mass spectrometer filaments and heaters can be repaired and restored to a like-new condition by proper cleaning methods and by the replacement of the filament ribbon or wire and heater coils. Scientific Instrument Services, Inc.™ repairs all of the filaments shown in the following pages plus many others not shown or listed in the tables.



- Inspected upon arrival at our facilities
- Filaments are thoroughly cleaned
- Damaged or broken parts repaired or replaced
- New filament aligned & spotwelded in place
- This is not an exchange program. Your filaments are repaired and returned to you.

### Filament and Heater Repairs

We take pride in our workmanship and constantly strive to improve the quality and performance of our repaired filaments. We appreciate any feedback and suggestions from our customers. Scientific Instrument Services, Inc.™ has been repairing filaments for all models of mass spectrometers commercially for 30 years. In that time we have rebuilt tens of thousands of filaments. We are constantly improving our techniques and adding new equipment, tensioning and alignment jigs, and methodology to our shops to provide the best possible filament repair. In the following pages the descriptions of the repair services we provide on various manufacturers' filaments are described. See our web site for complete details.

**NEW FILAMENTS:** Using our experience in repairing different types of mass spectrometer filaments, Scientific Instrument Services, Inc.™ has redesigned many of these filaments to provide filaments that are less expensive, more durable, longer lasting, and are easier to rebuild and clean. These filaments are fully described in the section of this catalog immediately following the filament repairs.

**OTHER FILAMENT REPAIRS:** In addition to the filaments described herein, we can repair many other filaments. If your filament is not described in this catalog, give us a call. 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.

**NEW - YTTRIA AND THORIA COATED FILAMENTS:** SIS can now coat your repaired filament with either Thoria or Yttria. Several manufacturers have used these filaments with anticipated increase in filament emission at lower filament temperatures resulting in longer filament life. If you would like to experiment with these styles of filaments in your mass spectrometers, we can coat most styles of filaments. An application note on Yttria and Thoria coated filaments is on our web site at: <http://www.sisweb.com/reference/appnote/app-92.htm>

When "Thermo" is indicated, it is intended to imply "Thermo Fisher Scientific Corp"

### FILAMENT AND HEATER REPAIR PRICES

Part No.	Description	Quantity
FILREP	Standard Filament Repair	1
FILREPA	Filament Repair with Yttria/Rhenium Alloy	1
FILREPY†	Filament Repair with Yttria Coating	1
FILREPT**	Filament Repair with Thoria Coating	1
FILREPX	X-Ray Generator Filaments for Rigaku and Siemens	1
FILREP44S	Heater Repair for MAT 44S	1
FILREPQ	Perkin Elmer Q-Mass Filament Repair	1

**QUANTITY DISCOUNTS - 5% DISCOUNT ON 6 OR MORE FILAMENTS** - Save when you send 6 or more filaments at one time. Filaments from various manufacturers can be combined to obtain the best prices.

\*Note: Thoria coated filaments must be handled carefully, since thorium oxide is considered to be hazardous. Do not inhale or ingest the dust or fumes from these filaments. Wash hands thoroughly after handling these filaments.

† Price is per wire or coil (e.g. - If filament base holds two coils the cost is \$150.00 per coil or wire)

### Return Authorization Numbers Are Not Required

**EMERGENCY REPAIRS:** Emergency repairs can be completed and shipped out within 24 hours of receipt of your parts and purchase order. Parts can be shipped via Federal Express, if required. **Rush charges may be incurred.**

**SHIPPING INSTRUCTIONS:** Most 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.

**PRICES FOR FILAMENT REPAIRS:** All filament and heater prices are listed in the table above. 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. Other repairs of parts for the various mass spectrometers are described in the sections of this catalog on the Thermo, Agilent Technologies, and Varian parts and service.