

Agilent MSD Replacement Parts

Agilent 5973/75 Heater and Temperature Sensor

Source Heater and Temperature Sensor

SIS part number SIS60104 is a direct replacement for the Agilent source temperature sensor (p/n G1099-60104) and HPC5 is a direct replacement for the heater cartridge on the 5973/75 source block. Both of these units come complete with insulated electrical leads and pin connectors to plug directly into the feedthrough connector on the source chamber. These units both perform identical to the OEM's but at a fraction of the cost.



Quad Heater and Temperature Sensor

The heater and temperature sensors for the quad are also available from SIS. Both of these units are nearly identical to the source heater and temperature sensor, except that the leads are longer. Both of these units come complete with insulated electrical leads and pin connectors to plug in directly to the feedthrough connector on the source chamber. These units both perform identical to the OEM's but at a fraction of the cost.



Foreline Gauge Assembly for the Agilent 5973/75

The Foreline Gauge assembly (p/n SISG109960545) is a direct replacement for the manufacturers assembly (p/n G1099-60545) at less than half the price. It is used to measure foreline pressure for the diffusion pump models of the 5973A, 5973N, and the 5975B/C MSD's. The assembly comes complete with the Foreline gauge tube and the aluminum vacuum adaptor. The gauge is vacuum-sealed into the aluminum vacuum adaptor for a leak tight permanent seal.

The foreline gauge tube is also available without the aluminum vacuum adaptor (p/n 275071). However the threads on the aluminum vacuum adaptor are usually destroyed when the old gauge is removed. It is therefore recommended that the assembly be replaced as a whole unit.



Part No.	Mfg Part No.	Description	Price Ea.
SIS60104	G1099-60104	Source Temperature Sensor, Agilent 5973/75	
HPC5		Source Heater, Agilent 5973/75	
SIS60104QUAD		Quad Temperature Sensor, Agilent 5973/75	
HPC5QUAD		Quad Heater, Agilent 5973/75	
SISG109960545	G1099-60545	Foreline Gauge Assembly, Agilent 5973/75	



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Agilent MSD Repair Services

NEW - Long Life Yttria Coated Filament Repairs - FILREPYA

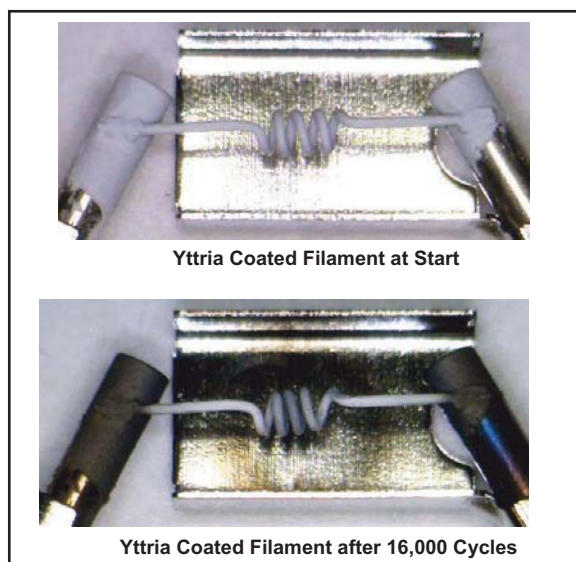
SIS can now repair the Agilent MSD filaments with Yttria coated rhenium alloy wires and coils to replace the standard rhenium uncoated filaments. SIS repairs your filaments with our non-sagging rhenium alloy filament (SISAlloy[®]) material. We then electrically coat the filament with a thin film of Yttria Oxide. The result is a filament that does not sag due to the rhenium alloy filament material and the yttria oxide coated filament operates at a lower filament temperature to produce long life filaments. Using these Yttria coated filaments, users have experienced filament lifetime increases of 2 to 3 times the life as compared to the standard uncoated rhenium filaments.

Advantages of the New Rhenium Alloy - Yttria Coated Filaments

- Rhenium Alloy Filaments have less tendency to warp
- Yttria produces electrons at less filament current
- Filament runs cooler (up to 500 degrees cooler)
- Filament lifetimes increase by 2 to 3 times
- Yttria coating protects the filament from oxidation
- Yttria is environmentally safer than Thoria

Yttria coated filaments have been used in the vacuum tube industry for more than 50 years. Yttria has a lower work function than rhenium or tungsten. Therefore these filaments emit electrons at lower filament current and therefore lower filament operating temperature. This results in increased filament life. In addition the thin oxide coating on the filament surface protects the filament wire from oxidation or chemical attack. This is why the Yttria coated filaments are used extensively for leak detector filaments.

The Agilent 5973/5975 filaments studied have demonstrated to typically last 2 to 3 times longer than standard plain rhenium filaments. In addition by using SISAlloy[®] instead of pure rhenium, filament warping is reduced thereby improving filament performance and lifetime. A pure rhenium filament lasts about 4,500 cycles in our studies before it burns out, but at 16,000 cycles the yttria coated filament was still operating.

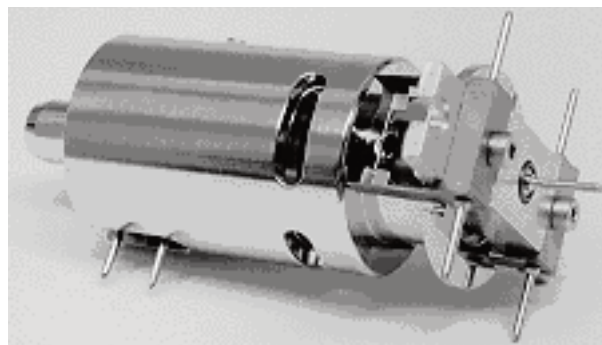


Source Cleaning for the Agilent 5973/75 with Yttria Coated Filament

SIS can clean your MSD sources and repair both filaments with our new Yttria coated filament described above for only \$50.00 more than our standard source cleaning.

Your source is cleaned by completely disassembling the source and thoroughly cleaning and polishing all the components. The source is solvent cleaned and then washed and baked out in our high purity heated ultrasonic cleaning system to assure an ultra vacuum clean source assembly. Both of your old filament blocks are bead-blasted, cleaned and repaired with the 4 coil SISAlloy[®] filament coil and then coated with the Yttria oxide film.

We still offer our standard source cleaning with the repair of the Agilent filament with a 2 coil rhenium (uncoated) filament repair.



Part No.	Description	Price Ea.
FILREPYA	Yttria Coated Filament Repair	
REP100Y	Source Cleaning with Yttria Coated Filament Repair, Agilent 5973/75	
REP100	Source Cleaning with Standard 2 coil Rhenium filament Repair, Agilent 5973/75	



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