

Probe Inlet System

The SIS™ Probe Inlet System mounts on the GC/MS Transfer line port on the Agilent 5973 & 5975 MSD to permit the quick and easy introduction of the SIS 1/4" diameter direct probe through the MSD Vacuum manifold and into the MSD source. It incorporates an indexed dual guide rod system that accurately guides the probe through the vacuum system valves. The guide rods are indexed at three positions in addition to the fully inserted and fully extracted positions.

Load - fully extended - probe load position

Stop 1 - at the first vacuum seal - to permit the rough pump-out of the probe inlet seals

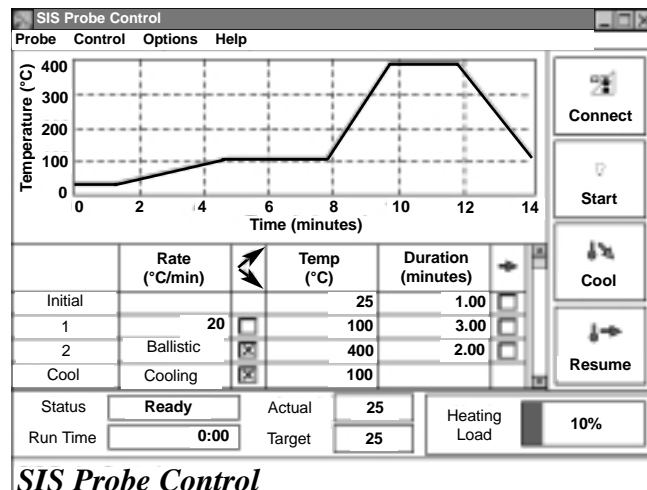
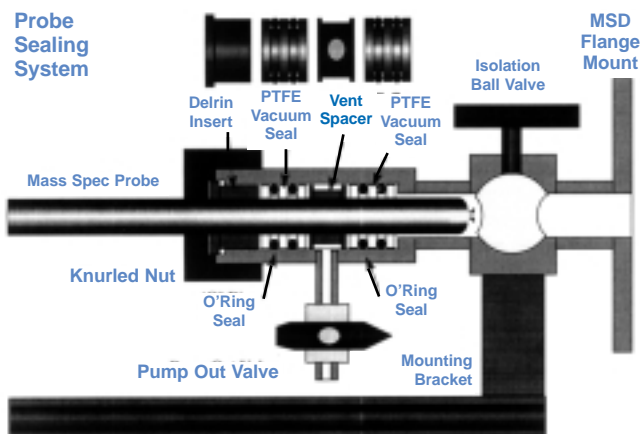
Stop 2 - at the second vacuum seal - to enable the user to open the isolation valve

Stop 3 - 1 cm from the source - cooling position after the sample is finished

Run - fully inserted - sample analysis Run position

After the probe locks in at one of the indexed stop positions, the lock release lever is pulled up to enable the probe to be inserted to the next indexed position. This accurate positioning and locking of the probe in set positions prevents closing the isolation valve on the probe (which would score or bend the probe rod).

The probe sealing system consists of the SIS dual PTFE sealing system which will provide for excellent vacuum sealing around the probe rod along with long seal life. If the seals need to be replaced a seal extraction tool is included to enable the quick removal and replacement of the seals without venting the MSD. The 1/4" turn ball isolation valve permits the introduction of the probe through this valve and into the MSD source.



SIS Probe Control

PC Window for the Control of the SIS Direct Probe for the Agilent 5973 & 5975 MSD

The user interface for the control and monitoring of the direct probe for the Agilent 5973 & 5975 probe is via software on the PC. This window is fully integrated with the Agilent ChemStation™ software. The PC software controls the direct probe electronics console via an RS232 interface to download the values entered through the PC window to control the actual temperature of the probe. The probe can be operated in the ballistic mode with ramp rates greater than 500° per minute. In the programmable mode the user inputs the ramp rate, the final temperature and the duration time (hold time). Temperature program rates up to 400° per minute can be used to control the temperature of the probe between 25 and 450 °C. Up to 25 levels of programmable ramping steps are permitted through this PC interface. A visual graphic presentation of the temperature profile indicates the ramp and hold temperatures as a function of time. In addition to the status portion of the screen shows the probe status, time of analysis, the target and actual probe temperatures and the power requirements to heat the probe (Heating Load). Controls are also present to permit the start and cool down (stop) of the probe from the PC window. These start and stop manual controls are also available on the front of the electronics console. In addition to heating the probe, the probe is automatically cooled at the end of the sample analysis using compressed air controlled by a solenoid valve in the direct probe electronics console. This will cool the probe to enable the removal of the probe through the vacuum sealing system.

The probe inlet system (**Part #HPP7**) includes the direct probe, the probe inlet, probe controller, software, vacuum pump, tools and other accessories.

Ordering Information

| Part No. | Description | Price |
|----------|----------------------------|-------|
| HPP7 | Probe Inlet System | |
| S12A | Flared Sample Vials, 100 | |
| S12C | Flared Sample Vials, 500 | |
| S12B | Flared Sample Vials, 1000 | |
| HPP7007 | Replacement Inlet Seal Set | |