

## SCIENTIFIC INSTRUMENT SERVICES, INC.

## **Assembly and Manufacture**

IS has extensive experience in the assembly of scientific instruments and components. From sub-assemblies to complete instruments SIS can provide electromechanical assembly to your specifications.

SIS routinely assembles various types of controllers including temperature controllers, process controllers and motion control devices. From our own patented

Short Path Thermal Desorption systems and

AutoProbe systems to customer sub-assemblies we utilize the finest components and experienced personnel to provide reliable controllers and assemblies.



- TIG Welding
- High Temperature Brazing
  - Helium Leak Detection
    - Ceramic and Glass to Metal Seals
      - Electromechanical Assembly

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IS specializes in precision tungsten inert gas (TIG) welding of small parts used in mass spectrometers and other scientific instrumentation. We have built custom vacuum chambers, machined and then welded custom flanges, welded components such as metal bellows to manufacture transfer lines and other assemblies, and have constructed custom sampling chambers. We also routinely utilize high temperature silver brazing techniques to assemble small components. Helium leak testing is conducted to insure that welded components meet the requirements for vacuum use.



SIS also has experience in the manufacture of components from ceramic, quartz and glass. Components such as sample vials for mass spectrometer direct insertion probes, filament bases and glass to metal seals are common items that we work with every day.





We have the capability to make glass or ceramic to metal seals for a variety of applications including filament assemblies and miniature instrument parts. Other commonly manufactured components include gaskets made from gold and platinum, temperature sensors, heaters and custom sampling chambers.