Corona Point Assemblies
STS manufacture Corona Point detectors which are used in our 800 Series simulators and in other applications where the detection of electron capturing materials is required. These include halogenated and unsaturated molecules.
These Corona Discharge detectors can be made with Platinium or Tungsten wire and we fabricate from 10 or 20 micron wire by spot welding to plated brass pins. These detectors have a PTFE support for the pin and a stainless steel protective tube surrounding the wire, providing both mechanical protection and an air flow path.

We are happy to consider manufacture of products using other designs, materials of construction and assembly techniques, to your specification.

As well as use in CD detection systems, Corona Points are also used as ionisation sources in mass spectrometers, time of flight spectrometers and similar instruments. In both CD and spectrometer applications, the wire is only held by one end and its straightness and length are critical factors to the instrument’s performance.
We control these dimensions to very close limits, ensuring high performance from the instruments in which they are used.

Wire Wound Components
Many scientific and industrial instruments use components which consist of a fine wire, wound with precision onto a former. Platinum resistance thermometers, resistors, shunts and micro electrical heaters all have this type of construction.
STS can manufacture these devices in most metals, to close tolerances and in small batch sizes for research, prototype work or small batch production.

Strain Gauges
We manufacture wire wound strain gauges, using our customer’s specifications and their materials, or alternatively we can provide a service of manufacture of former, provision of wire and assembly.
We work with wire down to 10 microns and can produce assemblies in research, prototype or manufacturing batch scale, all to tightly controlled manufacturing specification and delivery schedules.