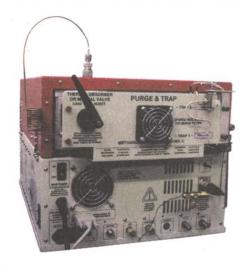
Thermal Desorber



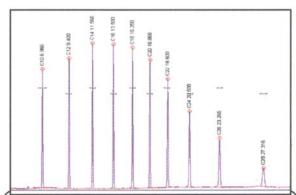
- Volatile & Semivolatile compounds in Solid Matrices
- Mounts in the Valve Oven on the 8610C GC
- · High Temperature & High Sensitivity
- Manually Actuated 10-port Valve
- No solvent extraction required
- Simple to Use

The SRI Thermal Desorber accessory permits volatile and semivolatile compounds in soil, or other solid matrices, to be injected and analyzed with little or no sample preparation, and with very high sensitivity.

With the Thermal Desorber, no solvent extraction is required. This is a major convenience for field operations, and helps save on costs. Little operator skill is needed, and 4-10 analyses can be run per hour, depending on specific requirements.

Up to one gram of soil is loaded into a reusable glass tube, and secured in place with plugs of glass wool. The tube is then inserted into the hot (275°C) thermal desorber fitting, which is mounted in the heated valve oven compartment of the 8610C GC.





This chromatogram is from a GC with a Thermal Desorber and an FID detector. Synthetic diesel range samples like this are used to verify complete desorption. Sample: 2000ng synthetic diesel range organics desorbed from soil.

Because of the large sample size—up to 1 gram, an analyte present in the soil at 1ppm desorbs 1000 nanograms onto the GC column. This results in detection limits in the ppb range for most compounds. Sandy soil can typically be desorbed with no sample preparation at all. Clay soil is first mixed with sodium sulfate granules to break the clay into a fine powder coating the granules, then the clay and sodium sulfate mix is desorbed.

