ENTECH INSTRUMENTS

See What's Really There™

2022 CATALOG

Solutions for Chemical Monitoring & Analysis

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President's Letter

Entech Instruments is continuing its tradition of providing the most advanced and accurate sample preparations systems available for headspace and gas sample analysis by GC and GCMS. Our new Multi-Capillary Column Trapping Systems (MCCTS) are transforming the way that gas phase sample preconcentration is performed prior to GC injection, all without the use of liquid nitrogen or even electronic cooling systems. These "fan cooled", extremely robust and reliable multi-stage capillary column traps manage water and CO2 hundreds of times better than any packed trap system. This means much faster release for better chromatography, supporting "faster" GC methods, while also demonstrating far better immunity to contamination when exposed to high concentration samples. Our MCCTS traps have been implemented in a full cryogen free TO15 solution with much faster GC injections and shorter run times than other TO15 systems on the market. Other applications using this revolutionary capillary trapping technology will also soon be announced.

Entech's patent pending Sorbent Pen™ technology takes SPME to the next level by providing enhanced sensitivity, improved quantitation, and greater robustness than its fiber-based predecessor. Sorbent Pens utilize a unique flow through cartridge that forms a seal on a vial allowing a vacuum to be created within the vial. This new technique called VASE (Vacuum Assisted Sorbent Extraction) has been demonstrated to cover the entire range of analytes from the lightest volatile compounds (Freon 12/Vinyl Chloride and others) to very heavy 5-6 ring PAH compounds, while remaining in the headspace to avoid actual contact with the sample matrix. With 50-150x higher phase loading and the use of traditional adsorbents with thousands of times more surface area than SPME, the Sorbent Pen™ can fully extract difficult compounds from complex matrices providing superior sensitivity and reproducibility. Sorbent Pens are also available for performing Diffusive and Active air monitoring, making the Sorbent Pen technique extremely versatile. Our newly released SPR40 -Sample Preparation Rail promises to be a game changer for headspace sample preparation and general thermal desorption methods. Rather than desorbing a TD tube into a completely different instrument with separate traps, transfer lines, and rotary valves to have to clean and maintain, the SPR40 allows thermal desorption of Sorbent Pens directly into a GC or GCMS to allow dramatically improved recovery, consistency, and easy of maintenance. Watch for a new wave of applications coming out in 2019-2020 using the SPR40 Robotic inlet.

Our unmatched Silonite™ surface coatings continue to be perfected, resulting in the most consistent, durable, and inert coatings available for GC inlet systems and for mercury vapor handling without surface interactions. Silonite™ surface treatments play a vital role in achieving our ultimate goal; to provide our customers with complete solutions for "analytical grade" VOC and SVOC handling and inlet systems that can sample, store, and recover virtually all GCMS compatible compounds.

Finally, for US EPA Method TO-15 and China HJ-759, Entech is proud to be the only supplier that manufacturers and supports the complete solution for sampling and analysis of airborne contaminants using Silonite™ coated stainless steel canisters. Entech has assembled an extraordinary and talented team of Chemists and Service Engineers with a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. To our valued customers we would like to say thank you for your patronage through the years and we look forward to servicing your analytical needs for many years to come.

Sincerely,
Daniel B. Cardin – President

Entech Instruments is a leading developer and manufacturer of analytical instrumentation that supports professionals around the world in the Environmental, Industrial Hygiene, Food & Beverage, Product Testing, Forensics, and Clinical Analysis markets.

To provide solutions for such a diverse set of industry applications, Entech has assembled an extraordinary and talented team – a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. We invite you to share your application challenges and requirements so we can create a customized solution just for you.

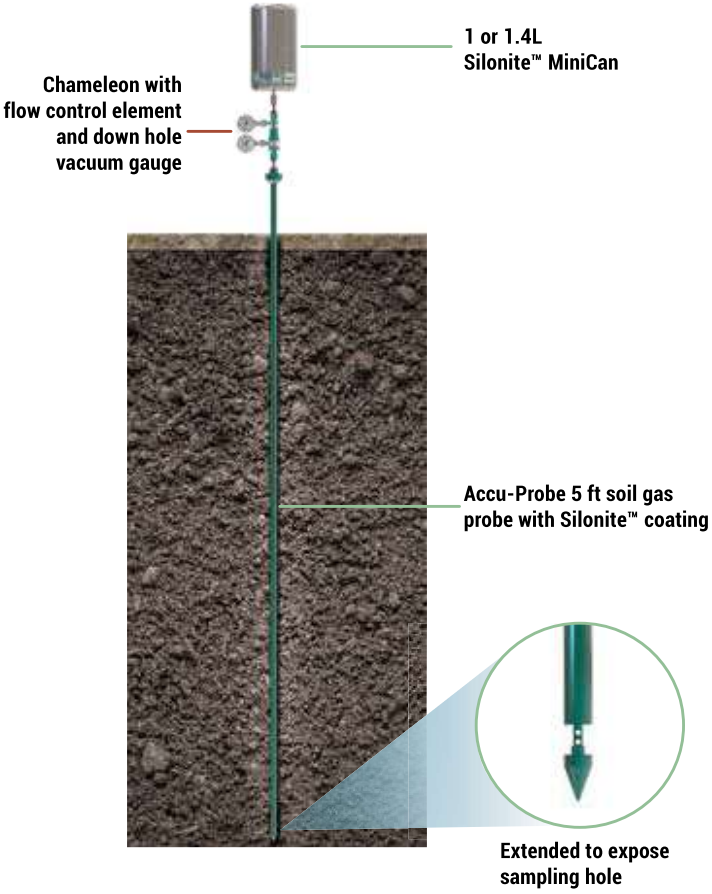
~ The Entech Team

Shallow Probe Sampling

Collect samples from a depth of 5 feet to determine levels of equilibrated soil gas. Gases at 5 ft are well equilibrated with the surrounding soil, therefore measurements taken at this depth tend to be more accurate than surface sampling. A unique approach developed by Entech utilizes a fixed drill bit and gas inlet holes which prevent the introduction of soil into the problem simply through controlling the hole geometry and using a plastic internal tube that is pulled out after probe insertion. The elimination of moving parts found on other probes substantially improves ruggedness and reliability in the field. A powerful cordless or corded drill makes the process of probe introduction easy, and running the drill in reverse removes the probe without the need for heavy jacks as in other designs. Further leak prevention is made using a special cap designed by Entech when sampling through dirt or grass, or using Bentonite when sampling through concrete or asphalt to completely along the outside of the probe to the surface.

The Accu-Probe 5 ft Soil Gas Probe

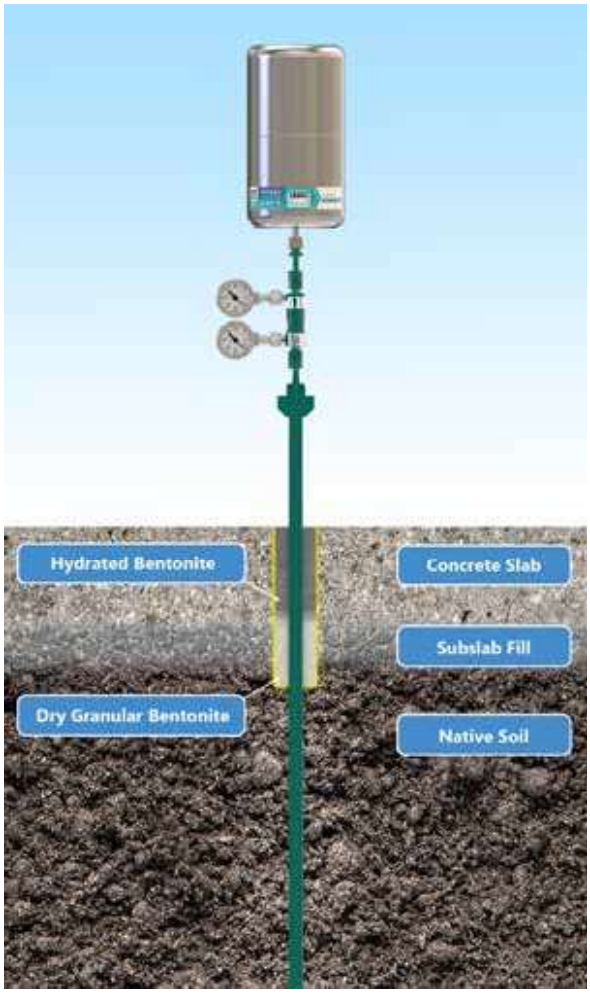
Non-fouling Design with Unique Surface Seal



- Easily adapts to the Chameleon for controlled soil gas sampling.
- Surface sealing cap ensures that collected gas is all soil gas.
- Silonite™ coated stainless for complete recovery of soil gas VOCs with no flow path contamination.

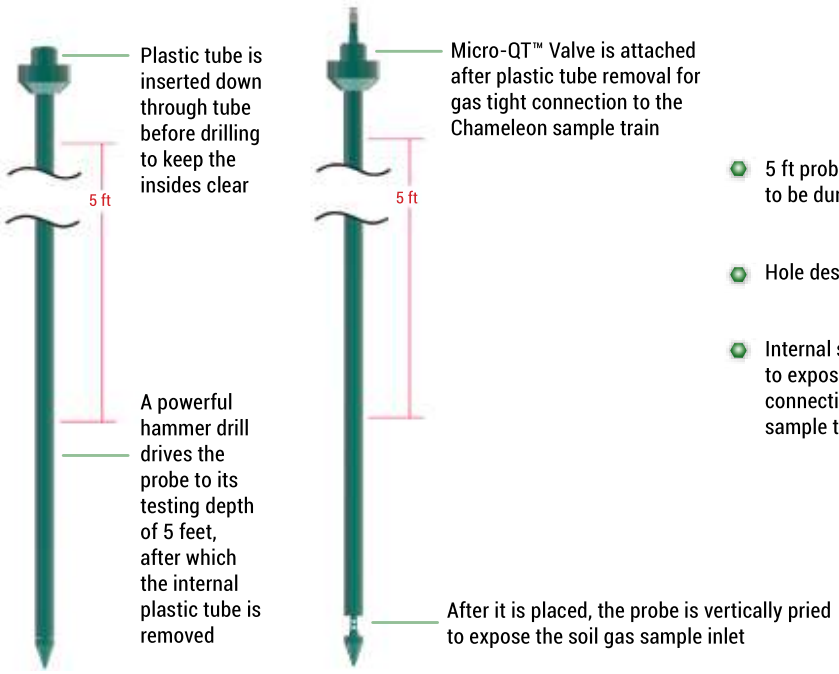
Advantages over other technology:

- No hammering or punching of probe through the soil.
- Simple installation and removal.
- Sample does not flow through plastic tubing!! Far more accurate recovery of VOCs.
- Sample train (Chameleon) is 100% Silonite™ coated.
- Canister connects directly to probe. Shortest path length of any probe sampler.
- All probes are Silonite™ coated as standard.



The Accu-Probe 5 ft Soil Gas Probe

5 ft Sampling Probes with Superior Gas Sampling Inlet



- 5 ft probe gas introduction has been designed to be durable and reliable.
- Hole design sheds away dirt, rather than collecting it.
- Internal sleeve is simply pulled out after drilling to expose open, Silonite™ coated flow path for connection of Micro-QT™ Valve, Chameleon sample train, and 1L Silonite™ MiniCan.

Accu-Probe 5 ft Soil Gas Probe Sampling Kit

Description	Unit	Part #
Accu-Probe Soil Gas Probe Kit - 50cc/min (600cc, 1L, or 1.4L Cans sold separately)	EA	**SG-AP-50-Kit**
Accu-Probe 5 ft soil gas probe	EA	SG-AP-60
50cc/min Chameleon with FQT on Inlet/Outlet. Includes down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-QQ-050
50cc plastic preflush syringe	EA	07-20050
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018

Accu-Probe 5 Ft Soil Gas Probe Sampling Kit w/ Tracer Gas Shroud

Description	Unit	Part #
Accu-Probe Soil Gas Probe Kit - 50cc/min (600cc, 1L, or 1.4L Cans sold separately)	EA	**SG-AP-SHR-50-Kit**
Accu-Probe 5 ft soil gas probe	EA	SG-AP-60
50cc/min Chameleon Shroud Sample Train. Includes 3 way valve, magnetic latch, & down-hole gauge for measuring vacuum below ground soil	EA	SG-CHAM-TC-050-S
50cc plastic preflush syringe	EA	07-20050
Tracer Gas Shroud for Butane or Helium	EA	SG-He-Shroud
⅛" Silonite Line from Probe to 3-Way, with FMQT and ⅛" to ¼" Tube Adapters	EA	SG-SHR-APVI
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018

Individual Parts	Unit	Part #
Accu-Probe 5ft soil gas probe	EA	SG-AP-60
Probe Cap to block ambient air - for Soft Soil	EA	SG-AP-CAP
600mL MiniCan with Micro-QT™ Valve	EA	29-MC600QT
1L Silonite MiniCan	EA	29-MC10LQT
Helium Analyzer (0.1-100%)	EA	SG-He-Analyzer
16 Gauge Sub-Slab Dispensing Needle	5pk	07-20018