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

Surface Sampling

Surface Flux Sampling

Analyze the soil gases right at the surface by using the Entech Soil Gas Flux Chamber. Simply place the 3L or 7.5L enclosure over the surface, allow the vapors to reach equilibrium, connect the Chameleon Soil Gas Sampler and Silonite™ MiniCan, and collect the equilibrated vapors into the inert Silonite™ MiniCan. This is a great means for looking for sites of maximum contamination and for general site assessment. Add a flow of purified nitrogen through the flux sampler to evaluate rates of outgassing as needed.

- Easy implementation
- No drilling
- Collect results quickly
- No materials left on-site
- Least invasive

Entech 1.4L MiniCan with Chameleon Soil Gas Sampler and Enhancement Enclosure.

Surface Flux Measurement Test Kit

Description	Unit	Part #
3L Flux Chamber Kit (600cc, 1L, or 1.4L Cans sold separately)	EA	**SG-FLX30-50-Kit**
3L Flux Chamber	EA	SG-FLUX-30
50cc/min Chameleon, Female MQT Inlet and Outlet	EA	SG-CHAM-QQ-050
7.5L Flux Chamber Kit (600cc, 1L, or 1.4L Cans sold separately)	EA	**SG-FLX75-50-Kit**
7.5L Flux Chamber	EA	SG-FLUX-75
50cc/min Chameleon, Female MQT Inlet and Outlet	EA	SG-CHAM-QQ-050

Individual Parts	Unit	Part #
600mL MiniCan with Micro-QT™ Valve	EA	29-MC600QT
1L Silonite MiniCan	EA	29-MC10LQT