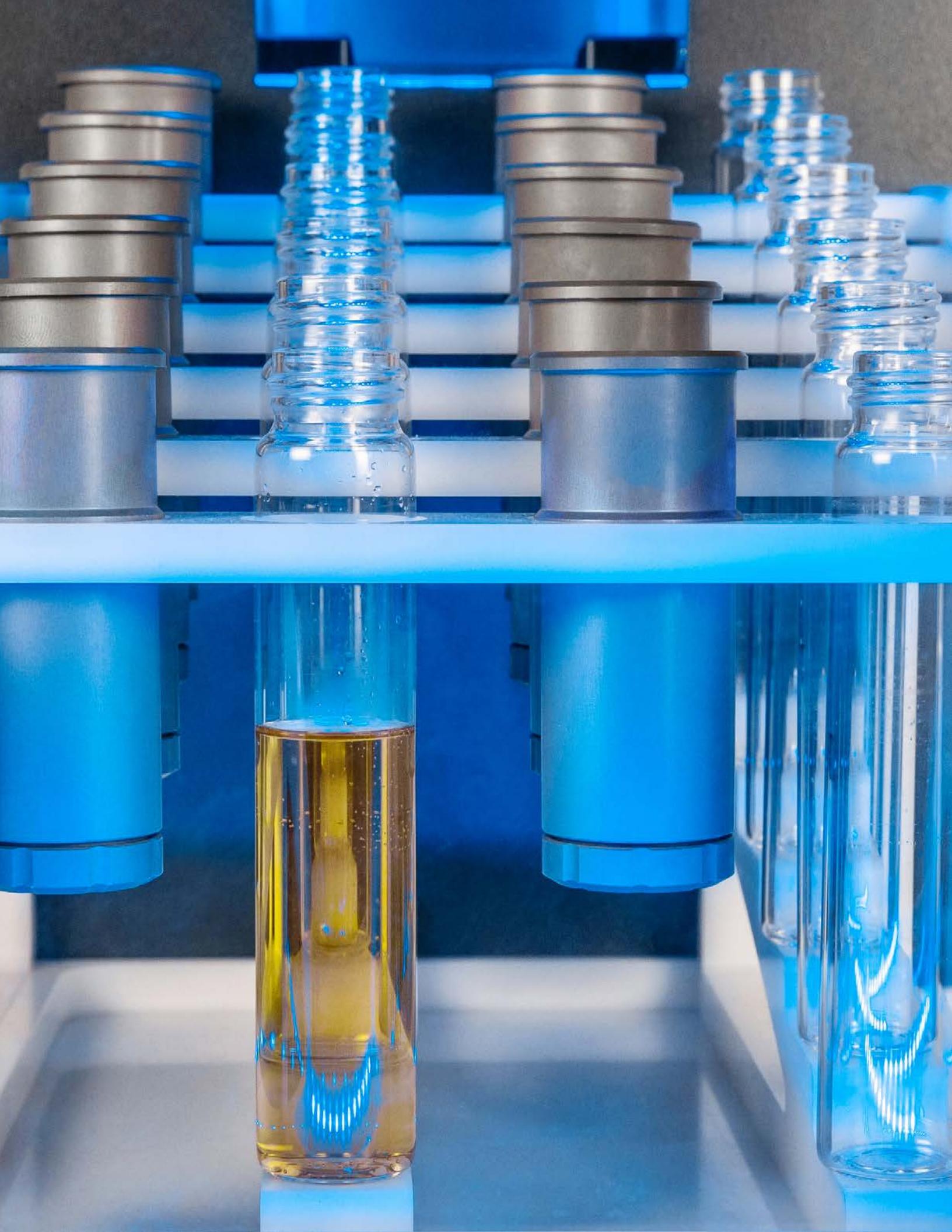




CEM

EDGE®

Automated Solvent Extraction System



Automates PFE and dSPE Technologies

The EDGE® is an automated solvent extraction system that's faster than Soxhlet, more automated than QuEChERS, and simpler than other solvent extraction systems. It meets the requirements of US EPA Method 3545A. Extract a wide range of samples and sizes at least 3 times faster than other pressurized fluid extractors, including filtering, cooling, and washing. The EDGE has revolutionized the extraction process for sample preparation.



Fastest Technique Available



Unlimited Applications
with One Technology



Q-Cup® Sample Holders are
Easy to Assemble and Clean

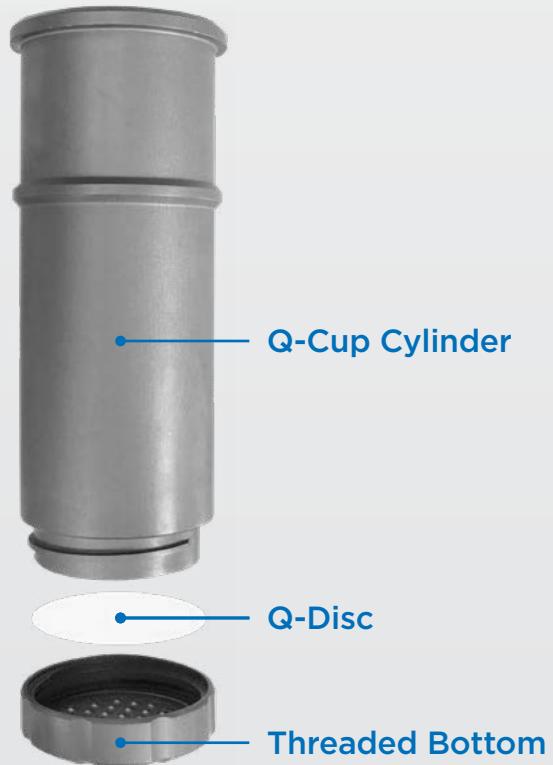
Q-Cup Sample Holder

A Simple Solution to a Complicated Problem

The aluminum Q-Cup sample holder consists of three easy-to-assemble pieces:

- Q-Cup Cylinder
- Q-Disc
- Threaded Bottom

The open top creates a dispersive effect, which promotes rapid extraction and filtration. The disposable Q-Discs® completely filter your sample prior to analysis. No additional steps are required. The simple design lends itself to easy cleaning.



EDGE Rack

Load Your Samples in Seconds

Once the samples are placed in the Q-Cups, the Q-Cups are loaded into the rack, along with the collection vials. Next, the rack is loaded into the EDGE. The samples are then ready for the automated extraction process.



Sample Types

The patented Q-Cup technology offers simple and fast solvent extraction for a variety of applications including:



Environmental



Food



Cannabis



Pharmaceutical



Consumer Products



Polymers

Benefits

Flexible

Get Better Results with One Instrument

- Dispersive Solid Phase Extraction
- Pressurized Fluid Extraction
- Supported Liquid Extraction

No need for multiple systems for different samples. EDGE is the answer for all extractions, made possible by Q-Cup technology. No matter your technique, you'll extract a particle-free solution, ready for analysis.



Compact

Its Small Size is A Big Advantage

The EDGE is only 14.25" wide. That's about the width of an analytical balance. You can have multiple EDGE systems placed side-by-side on one bench top.



Press Play and Walk Away

Program up to 12 samples, using the integrated touchscreen and intuitive software, and EDGE takes care of the rest. Every sample is extracted, filtered, and cooled using either a preprogrammed One Touch® method, or your own custom method.

The Process

1 Select a Method

After a rack of Q-Cups containing samples are loaded into the EDGE, simply select the proper method, program the number of samples, and hit “Start”.

2 Autosampler Loads Sample

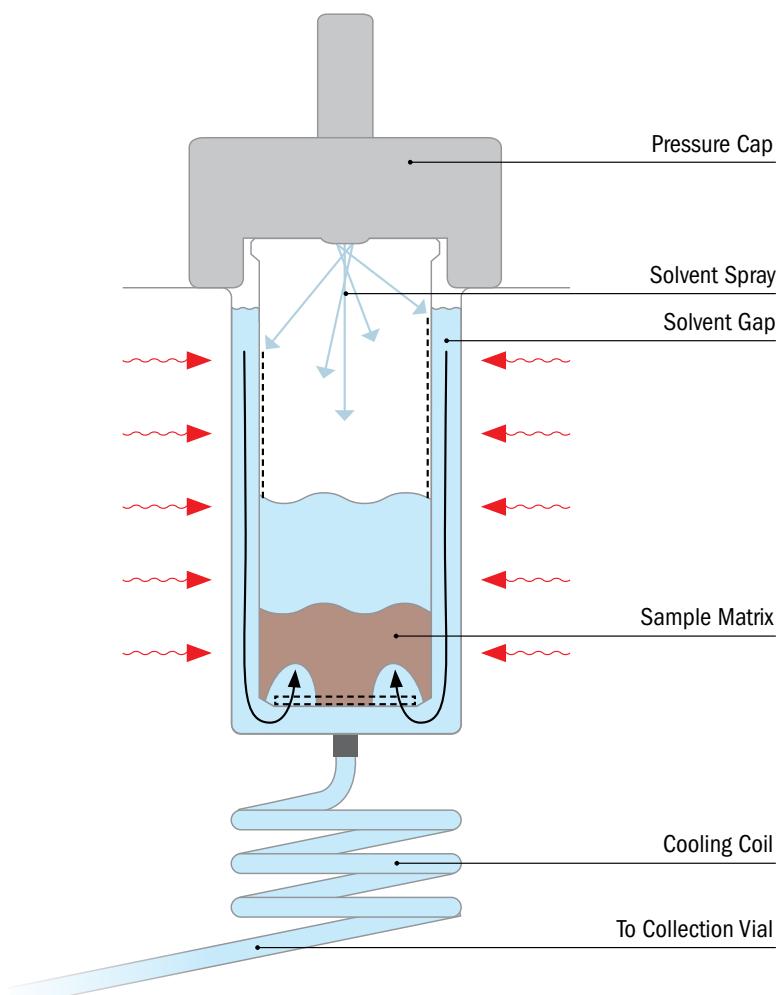
The Q-Cup is automatically loaded into the chamber by the autosampler. The pressure cap then creates a pressurized seal on the top of the Q-Cup.

3 Matrix is Extracted

Solvent is added to the Q-Cup automatically, as outlined in the method, wetting the sample. As the chamber walls are heated, the pressure increases inside the Q-Cup and forces the solvent to disperse into the sample.

4 Extract is Collected

Once the sample reaches temperature, the solvent is dispensed through the Q-Disc, the cooling coil, and into a collection vial.





EDGE Rack

Removable rack that holds 12 Q-Cup sample holders and 12 glass collection vials. Available for 40 mL, and 60 mL vials, or 50 mL centrifuge tubes.



Glass Collection Vials

Pre-sterilized and capped vials that fit into the EDGE rack. Available in 40 mL and 60 mL clear or amber, and 40 mL clear graduated.



Q-Cup

The Q-Cup sample holder consists of 2 easy-to-assemble pieces for use in the EDGE. Thin-walled, aluminum design for optimum heat transfer and containment of up to 30 g of sample, or 40 mL of solvent.



Q-Disc

The Q-Discs are disposable filtration discs that provide final filtration of the extract, prior to analysis. Various types of discs are available for different applications and analysis techniques.



Q-Screen® Kit

Q-Screens are inserted on top of the sample within the Q-Cup. A tool (included) is used to insert the reusable stainless steel screens to keep the sample firmly packed within the Q-Cup.



You get more than an instrument.

When you own a CEM instrument, you have access to a whole team of scientists and engineers that are ready to support you. We are here to make sure you succeed.

Application Notes

Go to **cem.com/solvent-extraction-applications** to download extraction application notes.



Application Note

Extraction of Semi-Volatile Organic Compounds from Soil

Page 1 of 4
ap0107v7

Extraction of Semi-Volatile Organic Compounds from Soil





We Simplify Science

cem.com



United States Headquarters: +1 (704) 821-7015 | info@cem.com
For distributors and subsidiaries in other regions, visit cem.com/contact