

EDGE®

Automated Extraction System





Automates the technologies of PFE and dSPE.

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



Fastest Technique Available



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



Small Footprint



Unlimited Applications with One Technology

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.

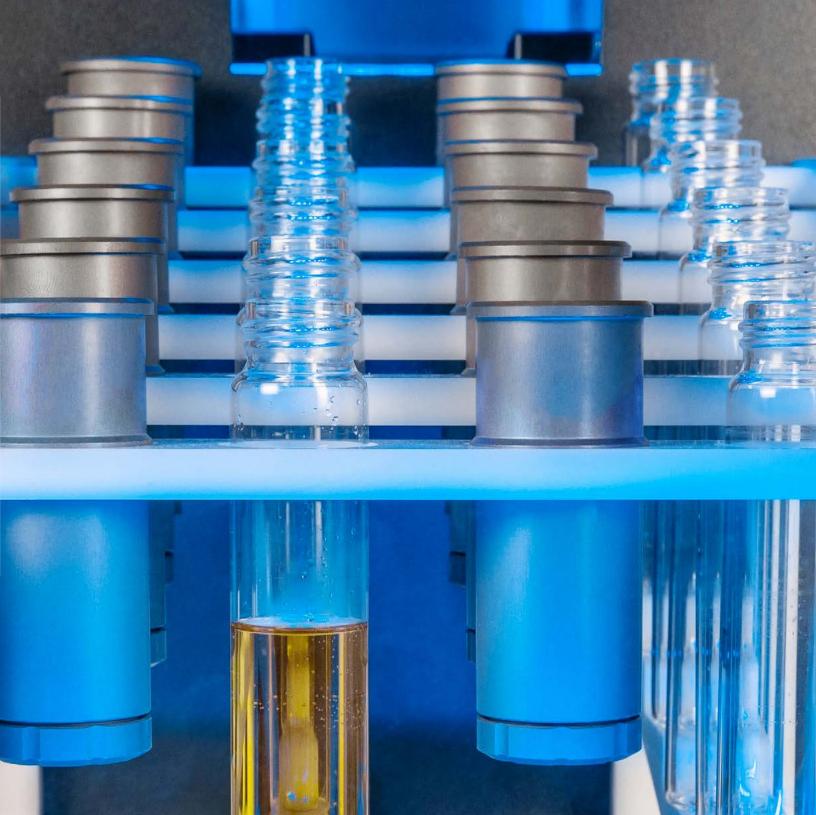


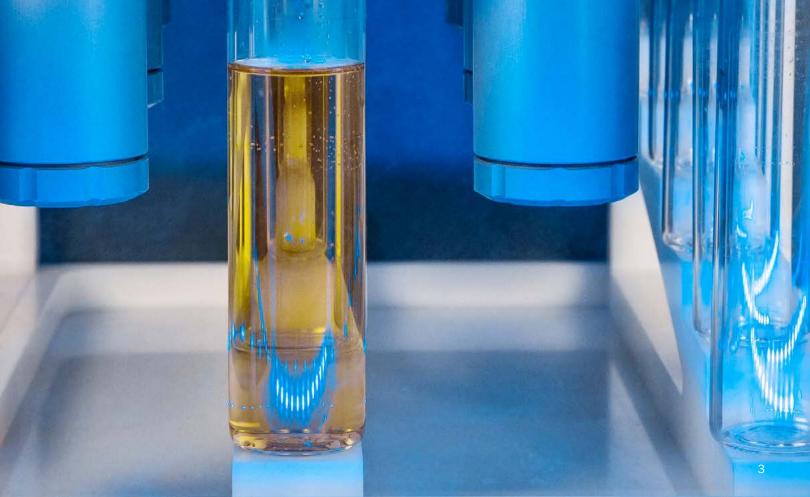


EDGE Rack

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 glass collection vials. Next, the rack is loaded into the EDGE. The samples are then ready for the automated extraction process.





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.



Method Options



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 run using either a preprogrammed One Touch® method, or with your own custom method.

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

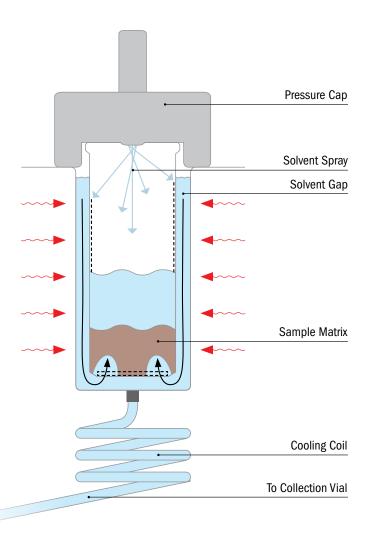
The Q-Cup is automatically loaded into the chamber by the autosampler. The pressure cap then creates a pressurized seal on the top of the Q-Cup.

Matrix is Extracted

Solvent is first added through the bottom to fill the gap between the chamber and Q-Cup, this aids in heat transfer. Then, solvent is added through the top of the Q-Cup to wet the sample. As the chamber walls are heated, the pressure in the gap increases. This overcomes the pressure inside the Q-Cup, forcing 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.



Q-Dry Solvent Evaporator

The Q-Dry is a standalone solvent evaporator that's compatible with both the 40 mL and 60 mL EDGE collection vials. Sample transfer isn't necessary, which will save time and reduce your solvent consumption. The temperature can be set on a timer. The nitrogen flow can be easily adjusted.

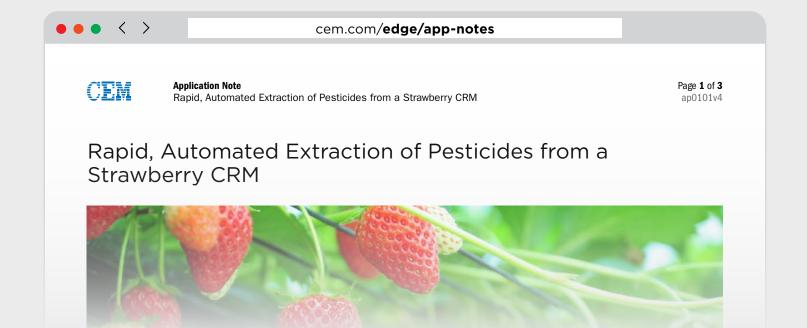


You get more than an instrument.

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/edge/app-notes to download EDGE application notes.





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