

Spe-ed™ Pilot and Production Scale Systems



**Applied
Separations**

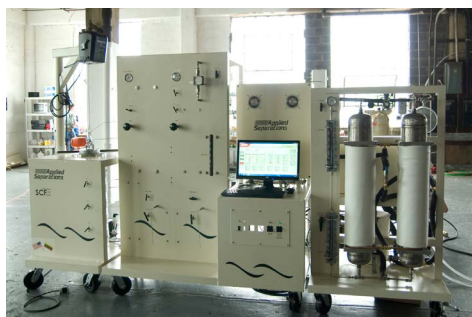
www.appliedseparations.com

Pilot Systems

Multipurpose, Expandable SFE Pilot System

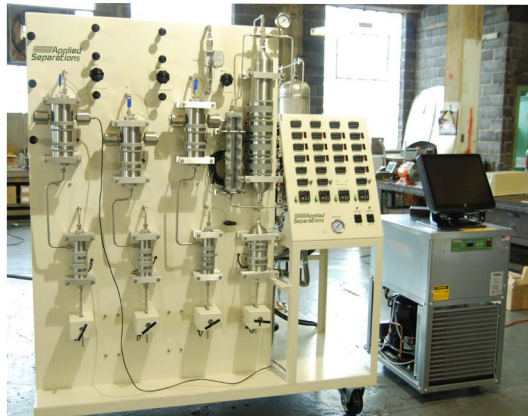
Applied Separations, Inc. offers SCF systems in any size and configuration. Although the size of a pilot system versus a production system is arbitrary, customarily, Applied Separations designates pilot systems as having extraction/reaction vessels from 5 liters to 80 liters. Greater than 80 liters, we consider production scale.

Applied Separations, Inc. will work with you one-on-one to design your custom, multipurpose, movable pilot plant/small production system. The system may be as straight forward as a manual system having one extractor vessel and venting to atmosphere to an automated system having multiple extraction/reaction vessels with multiple separators, recycling the CO₂.



Manufacturing
Supercritical Systems
for 30 years

Numerous System Options
...too many to list, but here are a few...



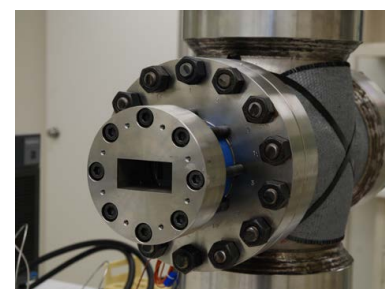
- Temperatures ambient to 650° C
- Pressures from low to very high, more than 2000 BAR
- Single or multiple separators
- Particle formation... organic/inorganic
- Counter-current Columns
- Automated control, Automated closures
- View cells, video interface
- Manual or sophisticated automated software
- Crossover networks
- Supercritical water
- Supercritical propane and other gases and liquids
- Beaming Microwave through SCF pressure vessels
- Ultrasonic interfaces
- In-vessel UV/Vis measurements
- Cleanroom environments... medical or IC
- Specialty basket designs

Pilot Systems

Multipurpose, Expandable SFE Pilot System

Some Uses for SCF Technologies

- Aerogel Drying
- Medical Implant Cleaning
- Metal Injection Molding/Powder Injection Molding
- Extractions of Natural Products
- Critical Cleaning
- Textile Dyeing
- Essential Oils - Flavors and Fragrances
- Nanoparticles
- Coatings
- Electronic Cleaning
- Enzymatic Reactions
- Reactions
- Foods
- Hydrogenation
- Impregnations
- Pharmaceuticals
- Subcritical Water
- Polyolefin Fractionation
- Critical Point Drying
- Archeological Artifact Drying



Custom Large Scale Systems

Not all laboratories are the same, and neither are all projects. We can help you customize our systems to meet your needs. Production scale systems from Applied Separations offer all the same options and advantages of the Pilot Scale systems.

Computer control/Automation

Applied Separations offers you a completely computer controlled/automated system for use in your laboratory. Ask us how our automated technology can help you.



Custom Large Scale Systems

