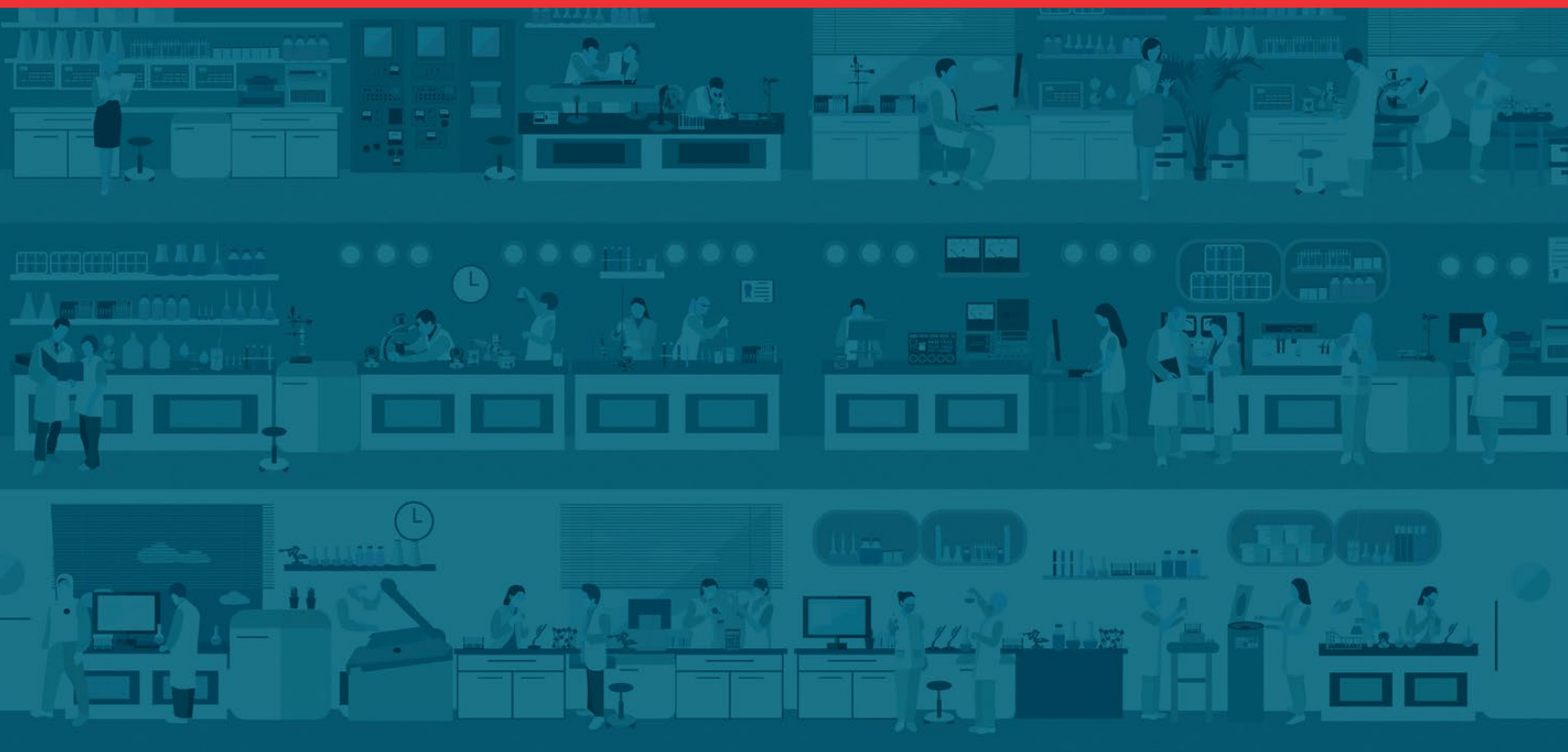


thermo scientific



Automate all your large-volume,  
solid-phase extractions

Dionex AutoTrace 280 SPE Instrument

**ThermoFisher**  
SCIENTIFIC

# Automated SPE is your game changer



The Thermo Scientific™ Dionex™ AutoTrace™ 280 Solid-Phase Extraction (SPE) instrument and the Thermo Scientific™ Dionex™ AutoTrace™ 280 PFAS SPE instrument automate tedious solid-phase extractions and alleviate the workflow bottlenecks of manual sample preparation. Automated SPE enables you to experience greater productivity and throughput in every aspect of your solid-phase extraction processes. Get ready to see your time and dollars being better spent than ever before.

## The Dionex AutoTrace 280 SPE instruments

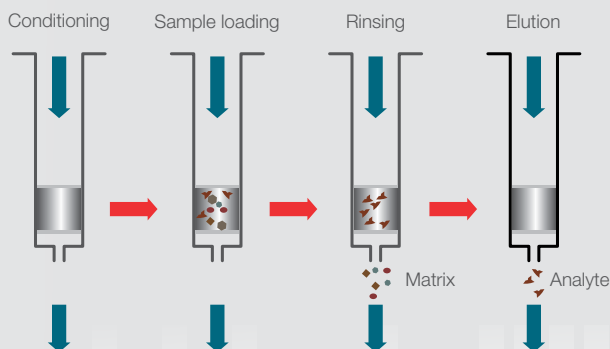
Features	Benefits
Automated sample loading of liquids onto SPE cartridges	Allows unattended operation
Automated eluting of SPE cartridges with organic solvent	Allows unattended operation
Closed systems with fan to vent solvent vapors	Conserves valuable hood space since a fume hood is not required
SPE technology for liquid-liquid extraction	Reduces solvent usage and elimination of glassware for reduced operational cost
Positive pressure loading and elution of samples and solvents	Provides constant flow of liquids through SPE cartridges for improved analytical precision

# Save time, steps, solvent and labor automating large volume, solid-phase extractions

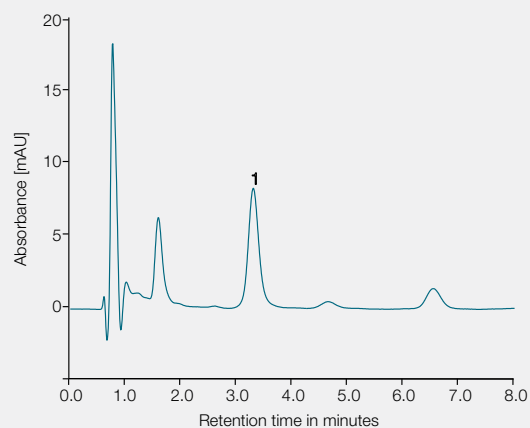
The Dionex AutoTrace 280 SPE instruments isolate large sample trace organics (20 mL–4 L) in water or organic matrices processing up to 6 samples in 2–3 hours with only 15 minutes of operator involvement. All four steps of SPE (conditioning, loading, rinsing, and eluting)—totally automatic. The compounds of interest are trapped on SPE sorbents (cartridge or disk format), then eluted with strong organic or aqueous solvents to generate an extract ready for analysis. Powerful pumps (no check valves) provide constant flow technology that ensures the Dionex AutoTrace 280 SPE instruments and the Thermo Scientific™ Dionex™ ASE™ 150/350 Accelerated Solvent Extractor systems will deliver high reproducibility and productivity in even the most difficult samples.

## Sample preparation benefits you can measure

- Minimize operation intervention through total automation of all four SPE steps
- Sharpen analytical precision with positive pressure loading and elution of samples and solvents
- Lower solvent consumption while greatly improving recovery and reproducibility
- Gain operation flexibility (cartridges or 47 mm disks) plus choice of five solvents and six different collection vial racks
- Optimize overall sample throughput productivity while reducing cost of each analysis



Dionex AutoTrace 280 SPE instruments perform all four steps in solid-phase extraction automatically.



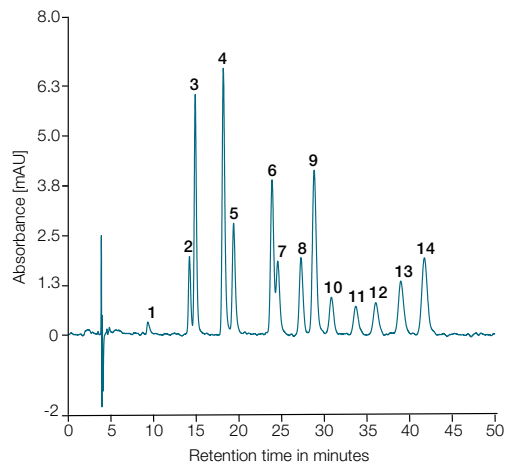
Sample Prep: AutoTrace 280 instrument, 6 mL Barrel, 200 mg HRPFS Resin  
Sample: 100 mL 0.033% soap in Sunnysvale tap water loaded onto the AutoTrace 280 instrument, and eluted in 5 mL of Acetonitrile or methanol  
Flow Rate: 10 mL/min  
Elution Solvent: Acetonitrile or MeOH  
Analytical Finish:  
Column: Acclaim 120, 2 × 50 mm  
Flow Rate: 0.21 mL/min  
Eluent: 65/35 acetonitrile/water  
Detection: UV 254 nm  
Peaks: Analyte Concentration  
1. Triclosan 10 mg/L

**Thermo Scientific™ Acclaim™ 120 column, Thermo Scientific™ Dionex™ SolEx™ SPE HRPFS cartridge, and the Dionex AutoTrace 280 instrument for automated sample preparation.**

## Get maximum sample performance from SPE preparation

Current analytical methods that may require SPE preparation include GC, GC-MS, LC, and LC-MS, and cover the following sample matrices:

- Per- and polyfluoroalkyl substances
- Pesticides (OCPs, OPPs, diquats, and urea ionic pesticides)
- Pollutants (phenols, PCBs, nitrosamines, and dioxins)
- Personal care products (pharmaceuticals, steroids, and endocrine disruptors)
- Total petroleum hydrocarbons (DRO)
- Explosive residues
- Beverages and flavor components



Sample Prep: AutoTrace 280 instrument, 6 mL Barrel, 500 mg HRPHS Resin  
 Column: Acclaim Explosives E2 column, 3 µm  
 3.0 x 250 mm  
 Mobile Phase: 48/52 v/v Methanol/Water  
 Temperature: 25 °C  
 Flow Rate: 0.3 mL/min  
 Inj. Volume: 5 µL  
 Detection: UV at 254 nm  
 Peaks: (EPA 8330 mix, 2 ppm each)

1. HMX	8. 2,6-Dinitrotoluene
2. RDX	9. 2,4-Dinitrotoluene
3. 1,3,5- trinitrobenzene	10. 2-Nitrotoluene
4. 1,3-Dinitrobenzene	11. 4-Nitrotoluene
5. Nitrobenzene	12. 3-Nitrotoluene
6. 2,4,6-trinitrobenzene	13. 4-Amino-2,6-Dinitrotoluene
7. Tetryl	14. 2-Amino-4,6-Dinitrotoluene

**Separation of 14 explosives in U.S. EPA Method 8330 on the Thermo Scientific™ Acclaim™ Explosives E2 column, SolEx SPE HRPHS cartridge, and the Dionex AutoTrace 280 instrument for automated sample preparation.**

## Drinking water applications

U.S. EPA Method	Analytes	Analytical methods
EPA 505	Organohalide Pesticides and PCB	GC
EPA 506	Phthalates and Adipate Esters	GC-PID
EPA 507	Nitrogen- and Phosphorus-Containing Pesticides	GC-NPD
EPA 521	Nitrosamines	GC-MS/MS
EPA 525.2	Semivolatile Organic Compounds (SVOC)	GC-MS
EPA 525.3	Semivolatile Organic Compounds (SVOC)	GC-MS
EPA 533 and 537.1	Per- and Polyfluorinated Alkyl Substances	LC-MS/MS
EPA 535	Acetic Herbicides	LC-MS/MS
EPA 539	Hormones	LC-MS/MS
EPA 547	Glyphosate	LC/MS

## Wastewater applications

U.S. EPA Method	Analytes	Analytical methods
EPA 608	Organochlorine Pesticides (PCB)	GC
EPA 625	Semivolatile Organic Compounds (SVOC)	GC-MS
EPA 1613	Dioxins and Furans	GC-MS
EPA 1694	Pharmaceuticals and Personal Care Products	LC-MS/MS

# The Dionex AutoTrace 280

Designed with special materials to run PFAS SPE methods, such as U.S. EPA Methods 533 and 537.1 and eliminate instrument background contributions



## Dionex AutoTrace 280 PFAS SPE instrument overview

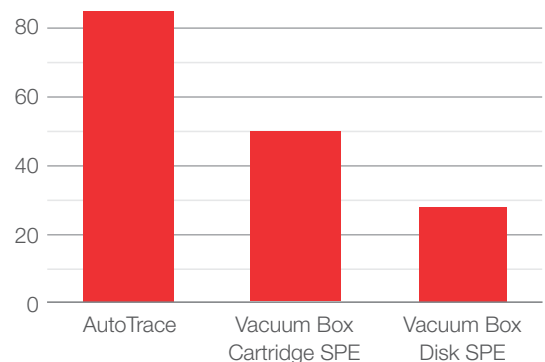
- Designed to automate SPE for U.S. EPA Method 533 and U.S. EPA Method 537.1
- Greatly reduces background contamination with non-fluoropolymer-based tubing, valves, and filters
- Saves time and labor ensuring high reproducibility and productivity for PFAS sample preparation
- Extracts analytes of interest from large volume aqueous samples easily and efficiently
- Processes ground, surface, and wastewater samples
- Processes up to six samples with minimal user interaction
- Automates eliminates errors in the manual process
- Positive pressure loading and elution ensures accurate flow rate control improving analytical precision
- Accomplishes SPE without the need to learn new software

## Surpass traditional techniques and save in a variety of matrices

The Dionex AutoTrace 280 instrument's automated system reduces more than half of the preparation costs in analyses of:

- Drinking water
- Wastewater
- Ground or surface water
- Beverages

Automation provides lower cost of analysis by reducing the amount of time required for extraction. More than half of the sample preparation cost for a typical vacuum manifold extraction is from operator labor. The Dionex AutoTrace 280 instruments provide unattended operation, significantly reducing the cost of analysis.



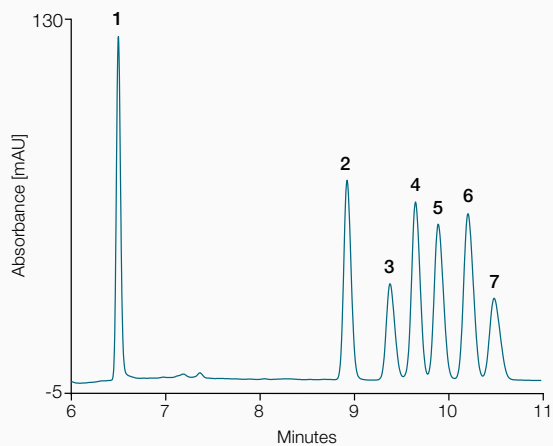
Percent savings when compared to traditional liquid-liquid techniques such as separatory funnel.





## Instrument operation

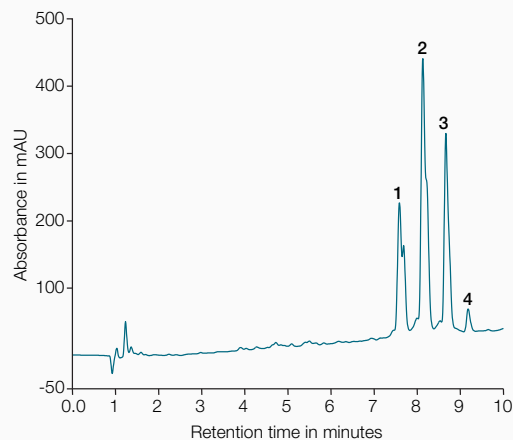
The Dionex AutoTrace 280 instruments automate the SPE process. First, the sample cartridges or disks are conditioned with solvent or buffer. Next, the liquid or water samples are pumped from the sample container through the SPE cartridges or disks. As the sample passes through the SPE material, analytes of interest are adsorbed and the liquid goes to aqueous waste. The SPE material is then rinsed to remove possible interferences. Finally, the analytes of interest are eluted from the SPE material with a strong solvent and collected.



Sample Prep: AutoTrace 280 instrument, 6 mL Barrel, 500 mg HRPHS Resin  
 Column: Acclaim RSLC 120 C18 column, 2.1 x 150 mm  
 Mobile Phase: A: Water  
 B: Acetonitrile  
 Gradient: 10–54% B (0–4 min)  
 54% B (4–12 min)  
 100% B (12–16 min)  
 10% B (16–20 min)  
 Flow Rate: 0.20 mL/min  
 Inj. Volume: 2 µL  
 Column Temp.: 20 °C  
 Detection: UV, 214 nm  
 Sample: Standard mix, 50 mg/L each

Peaks:

1. Estriol	5. Equilin
2. Estradiol	6. Estrone
3. Testosterone	7. Androstenedione
4. Ethynylestradiol	



Sample Prep: AutoTrace 280 instrument, 6 mL Barrel, 200 mg SAX Resin  
 Sample: 0.005% LAS, 20 mL  
 Column: Acclaim Surfactant Plus column, 3 µm, 3.0 x 100 mm

Eluent: A: Acetonitrile  
 B: 0.1 M Ammonium Acetate, pH 5

Gradient: 25% A (0–6 min)  
 80% A (6–10 min)

Temperature: 30 °C  
 Flow Rate: 0.6 mL/min  
 Inj. Volume: 5 µL  
 Detection: UV at 225 nm  
 Peaks: Linear alkylbenzene sulfonate (LAS)

**Hormones in tap water using the Thermo Scientific™ Acclaim™ RSLC C18 column, SolEx SPE HRPHS cartridge, and the Dionex AutoTrace 280 instrument for automated sample preparation.**

**Linear alkylbenzene sulfonate in wastewater using the Acclaim RSLC C18 column, SolEx SPE HRPHS cartridge, and the Dionex AutoTrace 280 instrument for automated sample preparation.**

# Solid-phase extraction cartridges

## Dionex AutoTrace 280 SPE instruments are compatible with any 1, 3 or 6 mL cartridge

Thermo Scientific Dionex AutoTrace family of cartridges gives you the versatility to perform analyses on a wide variety of chemistries. Sample extraction has never been easier allowing you to select the exact cartridge to fit the application at each phase specifications.

### SoIEx SPE cartridges

The barrel-format cartridges are designed for compatibility with the Dionex AutoTrace 280 SPE instruments. The barrel cartridges have luer-slip outlets that are compatible with the 1 mL, 3 mL and 6 mL volumes plunger assembly of the Dionex AutoTrace 280 SPE instruments and include silica, carbon, and polymeric stationary phase chemistries.

### Silica-Based SPE cartridges (C8 & C18)

The 1 mL cartridges contain 0.1 g of packing; the 3 mL cartridges contain 0.5 g of packing; and the 6 mL cartridges contain 1 g of packing. The C18 material is available as endcapped or uncapped silica to provide the selectivity required by various applications. The C8 and C18 chemistries are two of the most commonly used sorbent types for SPE and are used for concentration of pesticides, herbicides, hydrocarbons, and other organic contaminants from water as approved by the U.S. EPA.

### Carbon-Based SPE cartridges (activated & graphitized)

The activated carbon or charcoal SPE cartridges can be used for the extraction of nitrosamines in drinking water (U.S. EPA Method 521) and for extraction of 1,4-dioxane in drinking water (U.S. EPA Method 522). They are available in 6 mL cartridges with 2 g of packing. The graphitized carbon SPE cartridges can be used for the extraction of herbicides from drinking water (U.S. EPA Method 535). They are available in 6 mL cartridges with 0.5 g of packing.

### Polymer-Based SPE cartridges SAX SPE cartridges

The SAX stationary phase is comprised of a 22 µm high surface area divinylbenzene resin particle grafted with an aromatic quaternary ammonium functionality. The ion-exchange capacity is 900 µEq/g and the sites bear a permanent charge. This phase is recommended for the SPE of weak acid anions such as carboxylates. The phase is conditioned to a pH at which the target analytes are charged (about 2 pH units above the pKa). The sample is loaded, the phase washed, and the targets are eluted with solvent and at the pH about 2 pH units below the pKa. The target analytes are eluted as neutral species by reversed phase.

### WAX SPE cartridges

The WAX stationary phase is comprised of a 22 µm medium surface area divinylbenzene resin particle grafted with an amine functionality. The ion-exchange capacity is about 1200 µEq/g. This phase is mixed mode reversed phase and anion exchange. Strong acids are retained at low pH where the amine sites on the resin are charged and therefore capable of ionexchange, and eluted raising the pH and therefore neutralizing the stationary phase. This is the common methodology when the target species are permanently (strongly) charged anions such as sulfonates.

### SCX SPE cartridges

The SCX stationary phase is comprised of a 22 µm high surface area divinylbenzene resin particle grafted with aromatic sulfonic acid groups. The ion-exchange capacity is 700 µEq/g and the phase is mixed mode with both reversed phase and cation exchange functionality. This phase is recommended for the SPE of weak cations such as weak base amines. The strong cation exchange (SCX) phase bears sulfonate ( $\text{SO}_3^-$ ) sites which means it can exchange cations down to a pH <1.

### WCX SPE cartridges

The WCX stationary phase is comprised of a 22 µm medium surface area divinylbenzene resin particle grafted with carboxylate functional groups. The ion-exchange capacity is 1000 µEq/g and the pKa of the weak acid sites is about 4. This phase is recommended for the solid phase extraction of strong (permanently charged) cations such as quaternary ammonium compounds. The phase is conditioned at pH 8 or higher. The phase is washed and the targets are eluted by protonating the stationary phase to carboxylic acid (neutral) thus eliminating the ion-exchange retention mechanism.



## Hydrophilic Reversed Phase Resin (HRPHS) SPE cartridges

The HRPHS stationary phase is a neutral resin comprised of a 22 µm, high-surface area divinylbenzene base particle grafted with polyvinylpyrrolidone polymer. This material has properties of a hydrophilic reversed phase material and

also has specific high-capacity for polyphenolics including humic acids, and azocontaining substances such as azo-dyes. The hydrophilic reversed phase properties allow high recovery of hydrophobic targets.

Cartridge type	Format	Functional group	Example applications
HRPHS	3, 6 mL barrels	Divinylbenzene (DVB)/polyvinylpyrrolidone (PVP, high molecular weight)	General reversed phase, polyphenolics, azo compounds
SAX	3, 6 mL barrels	DVB-quaternary ammonium	Ionizable (weak) anions, carboxylic acids
SCX	3, 6 mL barrels	DVB-sulfonate	Ionizable (weak) cations, amines
WAX	3, 6 mL barrels	DVB-amine	Permanent anions, inorganic and organic, sulfonates, sulfates
WCX	3, 6 mL barrels	DVB-carboxylate	Permanent cations, inorganic and organic, quaternary ammonium
HRP	Online cartridge and RSLC column	DVB-PVP (low)	General neutral organics
C8, C18	1, 3, 6 mL barrels	Bonded silica	Pesticides, herbicides, hydrocarbons
Phthalate-free C8, C18	6 mL barrel	Bonded silica	Trace analysis
Silica	6 mL barrel	Acid-washed unbonded silica	Polar compounds
Activated Carbon	6 mL barrel	Charcoal	Nitrosamines, 1,4-dioxane
Graphitized Carbon	6 mL barrel	Graphitized carbon particles	Herbicides



**Dionex AutoTrace 280 Sample Cleanup Kit**  
(Part number 083614)

## Dionex AutoTrace 280 Sample Cleanup Kit

The Thermo Scientific™ Dionex™ AutoTrace™ 280 Sample Cleanup Kit includes components that enable a user to collect a clean water sample for additional processing. Nitrosamine contaminants, such as N-Nitrosodimethylamine (NDMA), may be present in reagent and Milli-Q® water sources used for the preparation of calibration and check standards as well as laboratory-fortified samples. If residual NDMA is present in these water sources, it may interfere with the analysis.

The Dionex AutoTrace 280 Sample Cleanup Kit can be used to clean the reagent water sample by retaining residual nitrosamine compounds, such as NDMA, on a SPE cartridge sorbent bed and collecting the clean water for use in preparation of calibration check standards and laboratory-fortified blank samples. This kit ensures that the Dionex AutoTrace 280 SPE instrument can be used for the extraction of nitrosamine compounds in water and meets the needs of regulatory methods such as U.S. EPA Method 521.



# Dionex AutoTrace 280 SPE instrument specifications

Review the specification tables below and order your cartridges that best align with your specific analysis requirements and throughput goals.

Key specifications	
Gas regulator and gas gauge range	Output: 0–30 psi (0–1.4 bar)
	Input: 100 psi (6.9 bar) maximum
Net weight	95 lbs. (43.09 kg)
Dimensions (h x w x d)	23 x 25 x 27 in (57 x 63.5 x 69 cm)
	Sample Rack: 8 x 16.5 x 13 in.
Operating system software	24 methods stored in the Dionex AutoTrace software
	Unlimited number of methods stored in PC
Electrical	Voltage: 100, 120, 220, or 240 V ± 10%
	Frequency: 47–63 Hz
	Power: 150 Volt AC
Liquid management	Air Syringe: One 10 mL air syringe
	LH Syringe: One 10 mL liquid handling syringe
	12-port Valve: Rotary, sliding Rulon® seal
	Valves: 3-way, Teflon® or PEEK on the Dionex AutoTrace 280 PFAS instrument
	Nozzles: Stainless steel
	Tubing: TFE tubing, 1/16" ID, or PEEK for Dionex AutoTrace 280 PFAS instrument 6 total provided
Sample pumps	Displacement: Positive
	Accuracy: ± 2.5%
	Tube Fitting: Kynar®
	Piston and Liner: Ceramic
	Non Use: Acetic acid, acetone
SPE configurations	1 mL Syringe: Compatible cartridges
	3 mL Syringe: Compatible cartridges
	6 mL Syringe: Compatible cartridges
	Disk Version: 47 mm SPE disk

## Ordering information

Description	P/N
Dionex AutoTrace 280 Automated Large Volume SPE instrument for 47 mm Disks	071386
Dionex AutoTrace 280 Automated Large Volume SPE instrument for 6 mL Cartridges	071385
Dionex AutoTrace 280 Automated Large Volume SPE instrument for 3 mL Cartridges	072605
Dionex AutoTrace 280 Automated Large Volume SPE instrument for 1 mL Cartridges	072604
Dionex AutoTrace 280 Automated Large Volume SPE instrument for 6 mL Glass Cartridges	072606
Dionex AutoTrace 280 PFAS Automated Large Volume SPE instrument for EPA 537.1	22136-60101

# Select your cartridges to specifications

## Ordering information

Product	Description	P/N
Polymeric HRPHS SPE Cartridges	SolEx HRPHS, 48 Pack, 3 mL Barrel with 60 mg resin	088124
	SolEx HRPHS, 48 Pack, 3 mL Barrel with 150 mg resin	088125
	SolEx HRPHS, 48 Pack, 6 mL Barrel with 100 mg resin	088126
	SolEx HRPHS, 48 Pack, 6 mL Barrel with 200 mg resin	088127
	SolEx HRPHS, 36 Pack, 6 mL Barrel with 500 mg resin	088128
Polymeric SAX SPE Cartridges	SolEx SAX, 48 Pack, 3 mL Barrel with 60 mg resin	088105
	SolEx SAX, 48 Pack, 3 mL Barrel with 150 mg resin	088106
	SolEx SAX, 48 Pack, 6 mL Barrel with 100 mg resin	088107
	SolEx SAX, 48 Pack, 6 mL Barrel with 200 mg resin	088108
	SolEx SAX, 36 Pack, 6 mL Barrel with 500 mg resin	088109
Polymeric SCX SPE Cartridges	SolEx SCX, 48 Pack, 3 mL Barrel with 60 mg resin	088189
	SolEx SCX, 48 Pack, 3 mL Barrel with 150 mg resin	088099
	SolEx SCX, 48 Pack, 6 mL Barrel with 100 mg resin	088101
	SolEx SCX, 48 Pack, 6 mL Barrel with 200 mg resin	088102
	SolEx SCX, 36 Pack, 6 mL Barrel with 500 mg resin	088103
Polymeric WAX SPE Cartridges	SolEx WAX, 48 Pack, 3 mL Barrel with 60 mg resin	088111
	SolEx WAX, 48 Pack, 3 mL Barrel with 150 mg resin	088112
	SolEx WAX, 48 Pack, 6 mL Barrel with 100 mg resin	088113
	SolEx WAX, 48 Pack, 6 mL Barrel with 200 mg resin	088114
	SolEx WAX, 36 Pack, 6 mL Barrel with 500 mg resin	088115
Polymeric WCX SPE Cartridges	SolEx WCX, 48 Pack, 3 mL Barrel with 60 mg resin	088117
	SolEx WCX, 48 Pack, 3 mL Barrel with 150 mg resin	088118
	SolEx WCX, 48 Pack, 6 mL Barrel with 100 mg resin	088119
	SolEx WCX, 48 Pack, 6 mL Barrel with 200 mg resin	088121
	SolEx WCX, 36 Pack, 6 mL Barrel with 500 mg resin	088122
Regular C8 and C18 SPE Cartridges	SolEx C18 6 mL cartridge with 1 g of Resin, Package of 30	074410
	SolEx C18 6 mL cartridge with 0.5 g of Resin, Package of 50	074417
	SolEx C18 3 mL cartridge with 0.5 g of Resin, Package of 50	074412
	SolEx C18 1 mL cartridge with 0.1 g of Resin, Package of 100	074623
	SolEx C18 (un-encapped material) 6 mL cartridge with 1.0 g of Resin, Package of 30	074416
	SolEx C8 6 mL cartridge with 1 g of Resin, Package of 30	074411
	SolEx C8 3 mL cartridge with 0.5 g of Resin, Package of 50	074413
	SolEx C8 1 mL cartridge with 0.1 g of Resin, Package of 100	074415
Phthalate-Free C8 and C18 SPE Cartridges	SolEx C18 Clean 6 mL cartridge with 1 g of Resin, Package of 30	075895
	SolEx C8 Clean 6 mL cartridges with 0.5 g of p Resin, Package of 50	075897
C18 SPE Cartridges for U.S. EPA Method 525.2	SolEx SCX, 48 Pack, 3 mL Barrel with 60 mg resin	075896
Unbonded Silica (Acid Washed) SPE	SolEx Silica 6 mL cartridge with 0.5 g of Resin, Package of 50	074589
Carbon-Based SPE Cartridges	Activated Carbon (Charcoal) SPE Cartridges for U.S. EPS Method 521 and 522 SolEx Carbon 6 mL cartridge with 2 g of Resin, Package of 20	074590
	Graphitized Carbon SPE Cartridges for EPA Method 535 SolEx GCB 6 mL cartridge with 0.5 g of Resin, Package of 30	075898

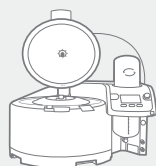
# Total workflow solutions from Thermo Fisher Scientific

Count on the Dionex AutoTrace 280 SPE instruments and their associated systems to bring true automation to your analysis workload saving you time and money at every phase.



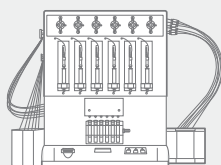
## Dionex ASE 150/350 Systems

Automated accelerated solvent extractor systems enable extraction of solid and semisolid samples using common solvents at elevated temperatures and pressures.



## Thermo Scientific™ Rocket™ Synergy 2 Evaporator

Discover a revolutionary solvent evaporator that concentrates or dries up to 18 ASE tubes or 6 large-volume flasks unattended.



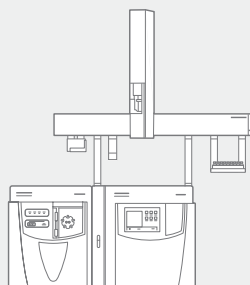
## AutoTrace 280 SPE Instrument

This instrument extracts large-volume samples (20 mL–20 L) for the isolation of trace organics in aqueous matrices. Produces analyte recoveries that are superior to manual liquid-liquid extraction techniques using less time and solvent.



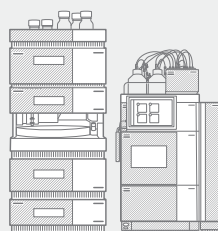
## Thermo Scientific™ TRACE™ 1300 Series GC Systems

The first and only gas chromatograph featuring user-exchangeable miniaturized, instant connect injectors and detectors that eliminate maintenance downtime and enable the user to quickly tailor instrument capability to specific applications and daily workload.



## Thermo Scientific™ TSQ™ 8000 Evo Triple Quadrupole GC-MS/MS System

A reliable, easy-to-use system that enables faster, more precise, error-free analyses, saving time and reducing laboratory costs. It enables more precise routine analyses and offers unstoppable productivity with uncompromised MS/MS simplicity.



## Thermo Scientific™ UltiMate™ 3000 and Thermo Scientific™ Vanquish™ HPLC and UHPLC Systems

Thermo Scientific Vanquish HPLC and UHPLC systems are the most advanced liquid chromatography instruments available. The Vanquish LC platform improves performance, repeatability, productivity and dependability with no trade-offs in quality or ease-of-use. Vanquish LC platform users have all they need to solve their toughest analytical challenges with confidence.



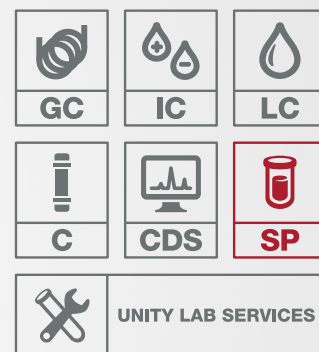
## Thermo Scientific™ Dionex™ Chromeleon™ Chromatography Data System Software

One scalable software platform for LC, GC, IC and MS that provides Operational Simplicity™ by streamlining your entire analysis process—ultimately boosting your lab's overall productivity and increasing the quality of your analytical results.

## The collective power of chromatography

Expect reproducible results with sample prep, columns and vials

Maximizing your chromatography productivity and achieving reproducible results requires optimizing the whole workflow from sample to knowledge. By choosing the right tools, from your sample preparation (manual or automated) to the highest selectivity column chemistry and cleanest vials, you maintain sample integrity and achieve the highest instrument efficiency and reduce the need for costly reanalysis. With the largest portfolio of sample handling; vials, plates and closures, column chemistries in a broad range of dimensions and sample preparation, we remain a steadfast and committed partner in your endeavor to improve the world around us.



For more information or to place an order, contact the Thermo Fisher Scientific office nearest you or your local distributor.

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