

The TurboTrace Parallel SPE system is designed to streamline your laboratory's workflow and increase productivity by automating the manual steps in your sample preparation process. It is designed for high throughput and tough sample matrices. The TurboTrace Parallel SPE system automates existing manual SPE techniques and replaces older manual Liquid-Liquid Extraction techniques and outdated semi-automated instruments.

The TurboTrace Parallel SPE system combines extraction, drying and concentration into one step – providing a truly automated total sample prep solution for the laboratory. Simply load samples onto the TurboTrace Parallel SPE system then use the touch screen to trigger the automated extraction process. After loading the sample onto the SPE cartridge, the drying step is accomplished using vacuum, nitrogen or both. This drying step replaces manual techniques such as sodium sulfate drying. The analytes of interest are then eluted directly to the SuperVap™ Concentrator where the concentration process automatically brings the extract to final volume in an autosampler vial, ready for final analysis. Automating these processes into one step ensures the highest quality results in the shortest amount of time and eliminates both human error and the possibility of contamination.



The TurboTrace 3 system runs three samples in parallel while providing direct-to-vial concentration.

Reduces Errors

One-step automated SPE and concentration eliminates human error, saves labor costs and reduces solvent usage while increasing your sample throughput.

Fully Automated

Hyphenates the entire sample prep process—extraction, drying and concentration steps—into a one step program.

Runs up to 8 samples simultaneously.

Sample Liquid Level Sensor to detect when the sample has finished loading.

Automatic sample bottle rinse.

Concentrates samples up to 250 mL directly to a GC vial.

High Speed

The fastest automated sample processing available for SPE cartridges and columns.

Vacuum for fast loading of large volume samples.

Versatile

Handles a wide range of sample sizes and all matrix types.

Sample sizes 2 mL to many liters.

Expandable from one to eight modules.

Efficient

Uses all available SPE cartridge and column sizes.

Positive pressure pumping for loading small volume samples.

Nitrogen drying

Compliant

Complies with existing methods that require vacuum, positive pressure pumping for the precise delivery of sample and solvents.

Dispenses up to six solvents using an HPLC pump to deliver precise volumes and flow rates for conditioning and elution.

Easy Documentation

Programs and stores an unlimited number of methods and runs on an SD Card Easy method transfer.

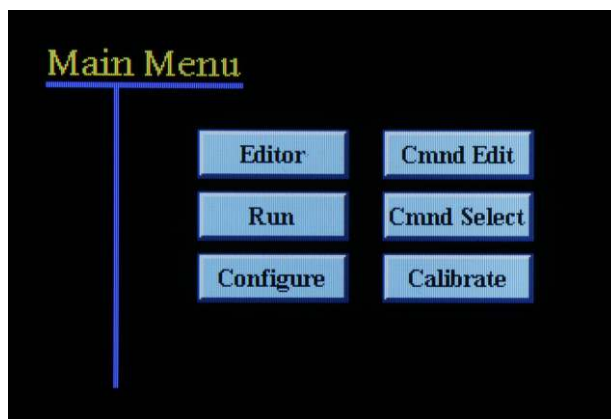
Easy-to-use software

The TurboTrace™ Parallel SPE system incorporates vacuum or positive pressure pump to load samples for compliance with all SPE methods. It uses positive pressure pumping for precise and accurate delivery of conditioning, washing and elution solvents. The TurboTrace Parallel SPE system is specifically designed to isolate analytes of interest from a wide variety of liquid matrices such as urine, blood, water, milk, beverages. Sample sizes range from 2 mL to 8 L and use the same bottle the sample was collected in. Sample loading rates are programmable. Samples are loaded onto the SPE cartridges and columns at unprecedented speeds and the system easily handles both clean and tough sample matrices. A liquid sensor detects when the sample has been loaded, triggering the system to initiate next steps.

The TurboTrace Parallel SPE system concentrates samples up to 250 mL directly to a GC vial. The Sample Processing Module is designed to use all standard formats of SPE cartridges and columns on the market today. For guaranteed results, especially when dealing with low limits of detection, we recommend using FMS prepacked columns and cartridges. Sample Processing Modules can be easily swapped out to perform cleanup column chemistries allowing the lab to use the TurboTrace Parallel SPE system to automate other sample prep processes.



The TurboTrace System is expandable from one to eight modules.



System control is accomplished via an easy-to-use touch screen.

The SuperVap™ Concentrator is where the concentration process automatically brings the extract to final volume in an autosampler vial, ready for final analysis.



Automatic time-based or endpoint detection for nitrogen shut off for each vessel

Measurements - Concentration / Evaporation vessels in 500 µL, 1 mL, and direct to a GC Vial or to dryness

Specifications

TurboTrace™ Parallel SPE System

Dimensions:	15" W x 18" D x 26" H
Weight:	30lbs.
Gas Requirements:	Nitrogen - 20 PSI minimum
Pump:	Piston Displacement
Flow rate:	0.2 to 15 mL/minute
Electrical Input:	110/220 Volts, 50/60 HZ
Controller:	Integrated Touch Screen Control

SuperVap™ Concentration System

Dimensions:	12" W x 13" D x 12" H
Weight:	20 lbs.
Gas Requirements:	Nitrogen - 20 PSI minimum
Electrical Input:	110/220 Volts, 50/60 HZ
Controller:	Integrated Touch Screen Control
Bath:	Dry

Ordering Information

Part Number	Description
TurboTrace / 1	TurboTrace 1 for running one sample
TurboTrace / 2	TurboTrace 2 for running two samples
TurboTrace / 3	TurboTrace 3 for running three samples
TurboTrace / 4	TurboTrace 4 for running four samples
TurboTrace / 5	TurboTrace 5 for running five samples
TurboTrace / 6	TurboTrace 6 for running six samples
TurboTrace / 7	TurboTrace 7 for running seven samples
TurboTrace / 8	TurboTrace 8 for running eight samples

Consumables

Part Number	Description
SPE-BT1	SPE Sample Bottle 1L
SPE-BTRC	SPE Sample Bottle Rinse Cap
SPE-ADP-1	SPE 1 mL Cartridge Adapter
SPE-ADP-3	SPE 3 mL Cartridge Adapter
SPE-ADP-6	SPE 6 mL Cartridge Adapter
SPE-ADP-20	SPE 20 mL Cartridge Adapter
SPE -ADP-35	SPE 35 mL Cartridge Adapter
SPE-PRE-20	SPE Pre-filter cartridge
SPE-CAR1-C ₁₈	SPE Cartridge 1 gram C ₁₈
SPE-CAR5-C ₁₈	SPE Cartridge 5 gram C ₁₈
SPE-CAR1-DVB	SPE Cartridge 1 gram DVB
SPE-CAR5-DVB	SPE Cartridge 5 gram DVB
TFE-TUB-071GR	Teflon Tubing Assembly Flanged any color, 7"
TFE-TUB-091GR	Teflon Tubing Assembly Flanged any color, 9"
TFE-TUB-161GR	Teflon Tubing Assembly Flanged any color, 16"
TFE-TUB-241GR	Teflon Tubing Assembly Flanged any color, 24"
PVAP-TUB-200M	Evaporator Glass Tubes
PVAP-TUB-200M	GC Evaporator Glass Tubes Standard -GC
PVAP-UNI-TF	Teflon GC Vial union