

Automated Extraction System

SPE-DEX® 1000XL

Versatile for clean or dirty samples for Oil & Grease by EPA Method 1664A

Uses 47, 50 and 90-mm SPE disks



The SPE-DEX[®] 1000XL Automated Extraction System is designed to automatically extract Oil & Grease from a wide range of "clean" and "dirty" aqueous samples using EPA Method 1664A. This low cost, fully automated, single station extraction system utilizes advanced liquid handling technology and Solid Phase Extraction Disks for maximum efficiency. Now the change to Method 1664A can be made easily and automatically.

The SPE-DEX® 1000XL automated extraction system provides maximum speed, accuracy, and simplicity for Oil & Grease testing. Simply load the SPE disk, the sample bottle, and a collection vessel, press start and walk away.

This system automatically:

- Delivers all necessary solvents
- Processes the sample directly from the original sample bottle
- Controls all critical air dry and soak times
- Thoroughly rinses the sample bottle
- Extracts the Oil & Grease from the SPE disk into a collection vessel
- urges the extractor in preparation for the next sample

Method 1664A, now approved and recommended by the U.S. EPA, replaces expensive Freon 113 with lower cost, n-Hexane as the extraction solvent. Laboratories using the SPE-DEX[®] 1000XL realize even more cost savings by reducing labor costs, increasing sample throughput, and getting more accurate sample results consistently through automation.

The SPE-DEX[®] 1000XL Extractors increase productivity by allowing chemists to perform other tasks while the samples are being processed. Automation provides consistent results regardless of variability between chemists.

The SPE-DEX[®] 1000XL processes the sample directly from the sample bottle eliminating the need for multiple transfer steps. The system also automatically rinses the sample bottle with the extraction solvent, ensuring the highest recovery of the Oil & Grease.



Quality and Productivity

Quality and Accuracy

EPA Method 1664A offers a new challenge with the addition of the new QC requirements and a 12 hour batch window. Today, more than ever, precision and accuracy of data is essential! The SPE-DEX® 1000XL Extraction System provides the accuracy and the consistency of data that laboratories have been looking for. Let the automation work to eliminate chemist to chemist variability and keep your QC data within compliance for Method 1664A specifications.

To maximize recoveries, the solvent handling areas in the SPE-DEX® 1000XL are made of high-grade polypropylene to prevent internal and cross-over contamination. Liquid sensors automatically monitor and control critical air dry and vacuum parameters to ensure optimum recoveries.

Versatility—Single Station Benchtop Design with Independent Operation Designed for facilities processing only a few samples per day or multiple samples per month, the SPE-DEX[®] 1000XL provides an economic, low cost, automated alternative to existing labor intensive and error prone manual techniques.

As many Oil and Grease samples are typically "dirty," with high particulate matter, the SPE-DEX[®] 1000XL extractors are capable of handling any combination of 47mm, 50mm and 90mm disks. This versatility allows the most economical disk to be used. The newly designed sample inlet valve allows the most challenging samples—clean or dirty to be processed.

The SPE-DEX[®] 1000XL Controllers are pre-programmed with the optimal parameters for EPA Method 1664A, for each disk size being used. New methods can be created and/or modified from the Controllers' keypad as required. In addition, the SPE-DEX[®] 1000XL, includes an option for an internal fan so the unit can be operated on the lab bench, freeing up valuable hood space.

Features	 Fast flow rates through a large sample inlet valve and use of a 90-mm and fast flow disks HPLC grade check valves Accommodates a wide range of sample bottle types Uses 19/22 taper collection vessels, 40-ml or 60-ml VOA vials Multiple rinse steps can be programmed for maximum recoveries
Specifications	Dimensions: 7" W x 15" D x 21" H Weight: 20 lbs. Gas Requirements: Nitrogen (Commercial Grade) (60 PSI min) Vacuum Requirements: 25" Hg (min)
Controller Specifications	Dimensions: 7" W x 10" D x 5.5" H Weight: 2 lbs. Power Requirements: 120 Volts