

# Complete Turn Key Oil & Grease Solution

## Systems, Consumables & Applications

SPE-DEX® 3000XL  
OIL & GREASE MACHINE

### Automated O&G Extractor System

The SPE-DEX® 3000XL Extractor automates EPA Method 1664A, and provides an alternative to expensive, labor-intensive LLE methods for extracting O&G from aqueous samples.



### Oil & Grease Consumables

Horizon Technology can supply all your O&G consumables:

- Pacific™ Premium O&G SPE Disks
- Pacific™ O&G Fast-Flow Pre-Filters
- O&G Pans and pipettes
- O&G QC Standards, including 'Snip n Pour'
- Separatory Funnels
- ... and much more



### Fast Evaporation of n-Hexane Solvent

The Speed-Vap™ III Solvent Evaporation System provides safe and fast evaporation of n-Hexane solvent for Oil & Grease extractions.



### Capture n-Hexane Solvent Vapors

The Solvent Trap™ Recovery System captures up to 70% of n-hexane solvent vapor from EPA Method 1664A O&G extractions, minimizing the release of n-hexane into the atmosphere.



### TECHNICAL SPECIFICATIONS

#### EXTRACTOR

**Dimensions** 18" W x 15" D x 21.5" H  
**Weight** 45 lbs.  
**Gas Requirements** Nitrogen (Commercial Grade) (60 PSI min)  
**Vacuum Requirements** 25" Hg (min)

#### CONTROLLER

**Dimensions** 7" W x 10" D x 5.5" H  
**Weight** 2 lbs.  
**Power Requirements** 120 Volts

### LOCATIONS

#### NORTH AMERICA & CANADA

45 Northwestern Drive  
 Salem, NH 03079  
 Tel: +1.603.893.3663  
 Fax: +1.603.893.4994

#### EUROPE

United Kingdom, Spain, Germany,  
 France, Poland, Austria, Switzerland,  
 Czech Republic, Slovakia, Hungary,  
 The Netherlands, Belgium, Italy

#### ASIA PACIFIC

Australia, New Zealand,  
 China, India, Korea, Taiwan

#### MEDITERRANEAN

Israel

[WWW.HORIZONTECHINC.COM](http://WWW.HORIZONTECHINC.COM)



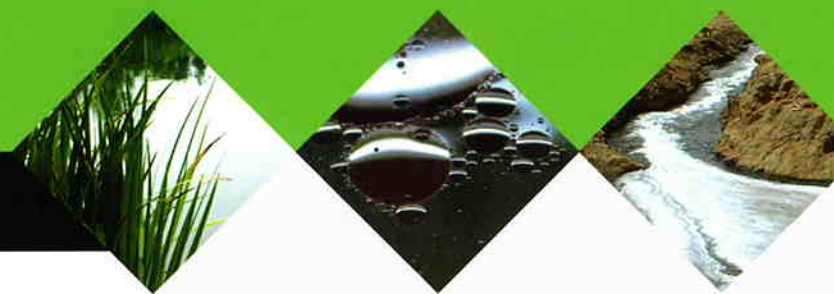
### SPE-DEX® 3000XL Automated Extraction System

A Fully Automated Oil & Grease Machine



# FULLY AUTOMATED OIL AND GREASE MACHINE

## Versatile for clean or dirty samples for O&G by EPA Method 1664A



The SPE-DEX® 3000XL Automated Extraction System is designed to automatically extract Oil & Grease from a wide range of 'clean' and 'dirty' aqueous samples using EPA Method 1664A. The system utilizes advanced liquid handling technology and Solid Phase Extraction (SPE) disks for maximum efficiency. Simply load the SPE disk, the sample bottle, and a collection vessel, press start, and walk away.



The SPE-DEX® 3000XL Automated Extraction System prewets to condition the SPE disk, then processes the sample directly from the bottle from which it was collected, 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 analytes of interest.

Many Oil & Grease samples are typically 'dirty', with high particulate matter, the SPE-DEX® 3000XL extractors are capable of handling any combination of 47mm, 50mm, and 100mm disks. The newly designed sample inlet valve allows the most challenging samples — clean or dirty to be processed.

Labs using the SPE-DEX® 3000XL Automated Extraction System realize increased cost savings by reduced labor costs, increased sample throughput, and more accurate sample results — consistently — through the use of automation.

To successfully extract Oil & Grease the SPE-DEX® 3000XL Automated Extractor performs four major steps:

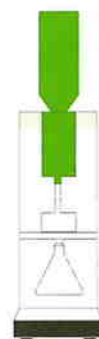
- Step 1. Prewet/Conditioning Solvent
- Step 2. Process Sample
- Step 3. Solvent Rinse of Sample Bottle
- Step 4. Extraction of the SPE Disk

Successfully Extract Oil & Grease in Four Steps — Just Press a Button and Walk Away

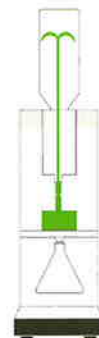
Prewet/  
Conditioning Solvent



Process  
Sample Step



Solvent Rinse  
of Sample Bottle

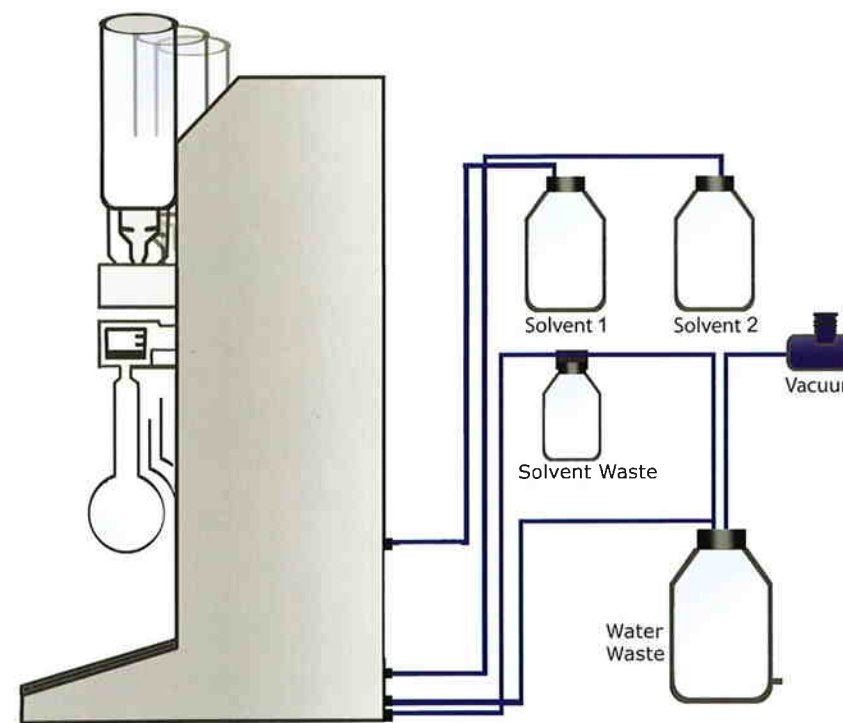


Extraction of  
the SPE Disk



### Features of the SPE-DEX® 3000XL Automated Oil & Grease Machine

- Accommodates a wide range of sample bottles, volumes and sizes, by utilizing custom cap adapters.
- Fast flow rates through a large sample inlet valve.
- Uses either 47mm, 50mm or 100mm SPE disks.
- Uses 19/22 taper collection vessels, 40 mL or 25 mL Erlenmeyer flask, and 125 mL separatory funnel.
- Automatically dispenses methanol and hexane rinses to rinse the sample bottle, and pulls methanol to waste per EPA Method 1664A specifications.
- SPE-DEX® 3000XL Controller pre-programmed EPA 1664A methods, with modifying capabilities for method development.
- Coated sample handling valves and tubing eliminate internal and crossover contamination.



Easy to Install — Easy to Operate

### Customer Testimonials

"The SPE-DEX® 3000XL Oil and Grease Machine has undoubtedly increased the capacity of our lab, and therefore improved the profitability of this analysis."  
~ ACZ Laboratories, Inc., Steamboat Springs, CO

"We used to perform rainwater outfalls (EPA 1664 Oil & Grease) by hand at about 4-6 samples a day. Now not only do we do that - and the matrix blanks - in half that time, but the recoveries are better too."  
~ Flint Hill Resources, Odessa, TX

"The transition to the SPE-DEX® 3000XL made it easier for me to analyze both clean and dirty samples. I have been able to analyze samples with much more expedience and confidence in the results. As expansion is predicted in the future, I would surely invest in another 3000XL."  
~ Hovensa LLC, Christsted, Virgin Islands (U.S.)

"After using the Pacific™ Premium O&G SPE disks, and reviewing the data, the results were excellent. The results ranged from 86-98%; the method acceptance limit is 78-114%."  
~ Katahdin Analytical Services, Scarborough, ME

### Oil & Grease Consumables

Horizon Technology can supply all your Oil & Grease consumables, including a wide range of SPE disks and supplies. Horizon Technology Oil & Grease consumables are "lot certified" for performance and automation, ensuring not only the best chemistry, but also safeguarding your automated sample preparation system so that it can operate at maximum efficiency, thus greatly increasing the productivity of your laboratory.