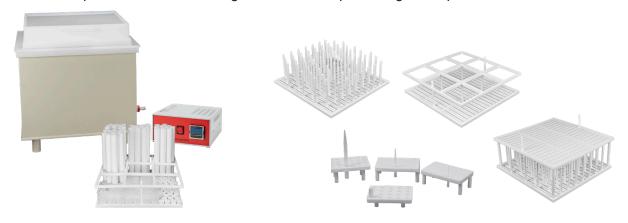


EasyTrace systems provide high purity labware and vessel cleaning without requiring ultrapure acids. Safe, unattended operation with lower reagent costs while producing low repeatable blank levels.



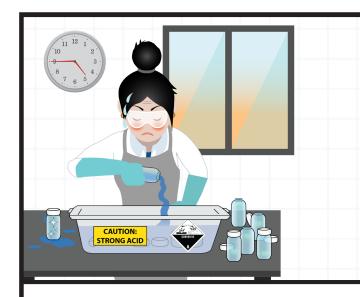
All EasyTrace systems include a versatile tray system for cleaning a wide variety of labware. Customized trays are available for more specialized applications.

#### Better Sample Preparation = Better Results

- High-purity vapor distillation process cleans glass and plastic laboratory vessels safely and efficiently with small volumes of acid in a closed system.
- Eliminate guesswork and manual labor out of labware cleaning procedures for trace metals analysis with the innovative EasyTrace systems from Analab.
- Significant costs savings by distilling reagent-grade acids and automating a typically labor-intensive process.
- The standard EasyTrace system offers safe and effective acid vapor cleaning, while the EasyTrace CRD (Clean/Rinse/Dry) fully automates the entire process with complete rinsing and drying of your labware.
- No operator contact with corrosive acids with enclosed EasyTrace and EasyTrace CRD systems.

# EasyTrace & EasyTrace CRD

## High Purity Labware Cleaning Simplified



Hand-washing laboratory glassware and plasticware for trace metals analysis is both time-consuming and tedious manual labor.

The analyst is directly exposed to strong acids and may require additional PPE. In addition, there are inherent risks of cross-contamination if an especially soiled container goes into the bath.

#### EasyTrace solves all of these challenges.

The sealed chamber design minimizes operator exposure to corrosive chemicals. By creating a high-purity acid vapor which is continuously regenerated, contaminants from any one piece of labware cannot be transported and re-deposited on any other item in the chamber. The fully automated EasyTrace CRD means contaminated labware can now be completely cleaned and rinsed overnight, and will be dry and ready for use the next day.



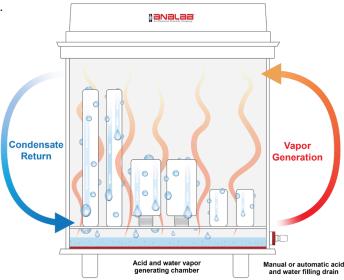




#### **How it Works**

- A small quantity of reagent grade acid (or water) is heated in the fully enclosed fluoropolymer chamber.
   This creates a high-purity vapor via sub-boiling distillation.
- The vapor rises into the upper chamber where it cools and condenses on the surfaces and in the pores of the vessels being cleaned.
- Condensed droplets leach away any impurities on the vessels and run down into the heating base once again.
- This process repeats continuously over time, drawing out any contaminants with a constant supply of ultra-pure vapor.
- The standard EasyTrace requires the operator to fill/drain the system with acid or water as required.
- EasyTrace CRD performs all these steps completely unattended, fully automating the labware cleaning process.

#### **EasyTrace Vapor Cleaning**



#### **Models and Sizes**



EasyTrace can be used to clean polymer, quartz, glass etc., and includes one tray with reconfigurable rods for microwave vessels and other containers.

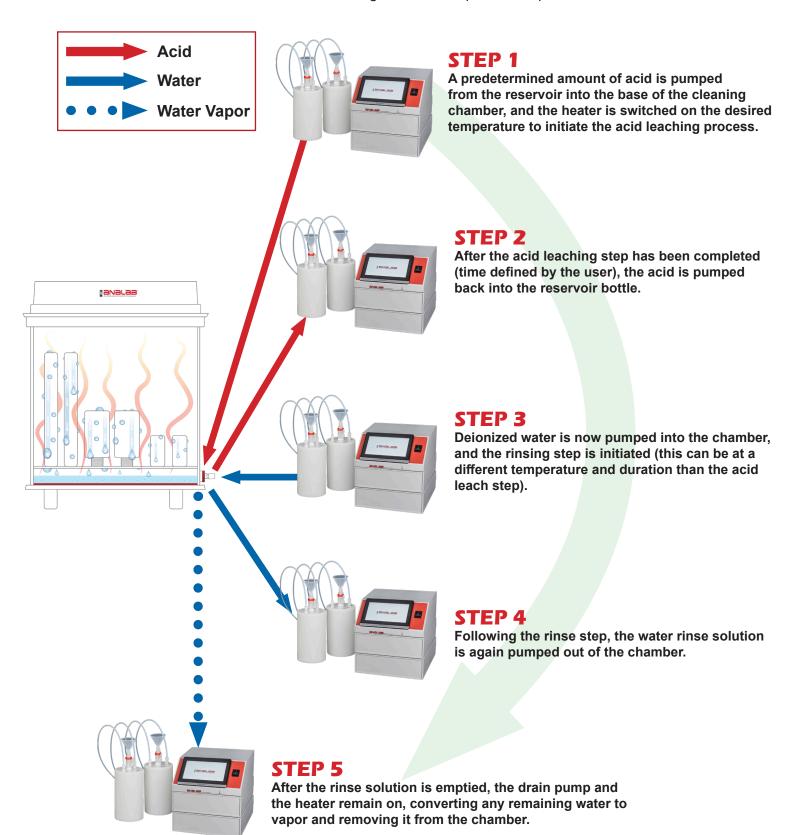


EasyTrace CRD offers complete automation of cleaning agent additions/removal, DI water rinse, and drying cycles.

Specifications and Ordering Guide						
Model	Total Footprint (cm)	Capacity (cm)	110-120VAC Models	208-240VAC Models		
Easytrace-S35	40 L x 40 W x 37.5 H	35.5 L x 35.5 W x 23.5 H	ET-S35-1V	ET-S35-2V		
Easytrace-S35 CRD	40 L x 40 W x 37.5 H	35.5 L x 35.5 W x 23.5 H	ET-S35-CRD-1V	ET-S35-CRD-2V		

#### EasyTrace CRD - Automated Cleaning, Rinsing & Drying

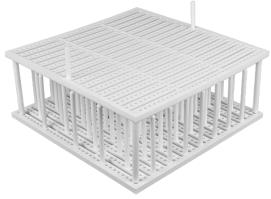
The EasyTrace CRD (Clean/Rinse/Dry) completely automates the labware cleaning process. A fully automated controller fills/empties the cleaning chamber with timed operating temperature cycles, then dries the chamber and contents after the cleaning and rinse steps are completed.



### **Available Trays**

EasyTrace is highly versatile by design, able to accommodate almost any type of vessel or labware. The base plates feature removable/reconfigurable vertical rods, allowing for a custom fit. EasyTrace XL models can support two baseplates stacked within the chamber for maximum vessel capacity.

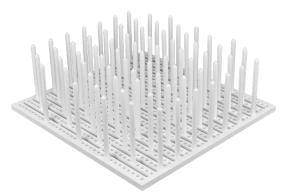
Part No.	Description		
ETX-48R-120	80 additional PTFE Rods for stabilizing vessels - 120 mm height, for use with EasyTrace		
ETX-48R-160	80 additional PTFE Rods for stabilizing vessels - 160 mm height, for use with EasyTrace		
ETX-48R-210	80 additional PTFE Rods for stabilizing vessels - 210 mm height, for use with EasyTrace		
ETX-MP-S35	Middle Plate for EasyTrace S35 150 mm height		
ETX-OD-S35	Outer Diameter vessel holder for EasyTrace S35. 90mm height		
ETX-BASE-80R-S35	Additional PTFE tray for use with EasyTrace S35 with 80 vessel stabilizing rods		



ETX-MP-S35



ETX-OD-S35



ETX-BASE-80R-S35

### **Pipette Tip Cleaning**

EasyTrace can also clean pipette tips before use. A selection of racks for different tip sizes are available. Transfer racks are used for inserting/removing tips that come in prearranged sets into the cleaning racks in order to minimize manual handling of smaller individual tips.

Part No.	Description		
ETX-PR-1000	1000 μL Pipette tips rack for use with EasyTrace		
ETX-PR-10000	10000 μL Pipette tips rack for use with EasyTrace		
ETX-PR-200	200 μL Pipette tips rack for use with EasyTrace		
ETX-PR-5000	5000 μL Pipette tips rack for use with EasyTrace		
ETX-PTR-1000	96 position 1000 μL Pipette Tips transfer track for use with EasyTrace		
ETX-PTR-200	96 position 200 μL Pipette Tips transfer track for EasyTrace		



## EasyTrace Features & Benefits

Feature Benefit		EasyTrace	EasyTrace CRD
Sub-boiling vapor distillation  High purity acid vapor and steam generated from grade starting materials for lower operating cost		$\checkmark$	$\checkmark$
Most effective method of surface cleaning	Contaminants continuousy leach away from labware surfaces/pores with condensing ultra-pure acid vapor, and drain away into reservoir	<b>√</b>	<b>√</b>
Cleaning acids can be re-used multiple times	Lower operating costs with reduced waste	$\checkmark$	$\checkmark$
Fully enclosed and sealed cleaning chamber	No operator exposure to acids and vapors. Eliminates corrosion in laboratory environment	$\checkmark$	$\checkmark$
Automated rinsing	Labware automatically washed with DI water after acid vapor cleaning		$\checkmark$
Automated drying	Labware automatically dried after DI water rinse cycle		$\sqrt{}$

### **EasyTrace** — **Highlighted Applications**



### **Microwave Digestion Vessel Cleaning**

Conventional procedures for cleaning microwave digestion vessels are time-consuming and tedious, and may not always successfully remove all contaminants.

The surface leaching process with ultrapure acid vapor employed by EasyTrace is more effective, as any dissolved/mobilized contaminants are now transported out of the vessel during the cleaning process.



#### **Ultra-Trace Samples**

Ultra-clean analytical laboratory applications in isotope geochemistry, oceanography and other fields require strict control and elimination of any contamination sources in tools and labware.

The large perforated tray in EasyTrace is suitable for cleaning a wide variety of digestion vessels and sample containers as well as lids, caps and other tools used in ultra-trace sample preparation, analysis or storage.

