

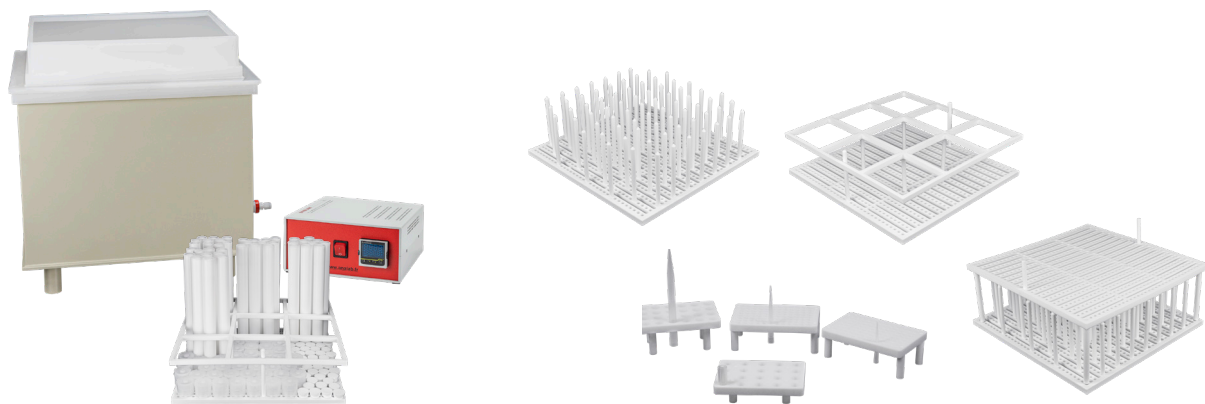
qm<sup>x</sup>

# EasyTrace & EasyTrace PLUS

Automated Labware Cleaning Systems



EasyTrace systems provide high purity labware and vessel cleaning without requiring ultra-pure acids. Enjoy safe, unattended operation and lower reagent costs whilst producing low repeatable blank levels.



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

## Better Sample Preparation = Better Results

- High-purity vapour distillation process cleans your glass and plastic laboratory vessels safely and efficiently with small volumes of acid in a closed system.
- Eliminate guesswork and manual labour out of labware cleaning procedures for trace metal analysis.
- Obtain significant cost savings by employing reagent-grade acids and automating a typically labour-intensive process.
- The standard EasyTrace system offers safe and effective acid vapour cleaning, while the EasyTrace PLUS fully automates the entire process with complete cleaning, rinsing and drying of your labware.
- Our fully enclosed systems ensures no operator contact with corrosive acids, providing significant health and safety benefits.

# EasyTrace & EasyTrace *PLUS*

*High Purity Labware Cleaning Simplified*

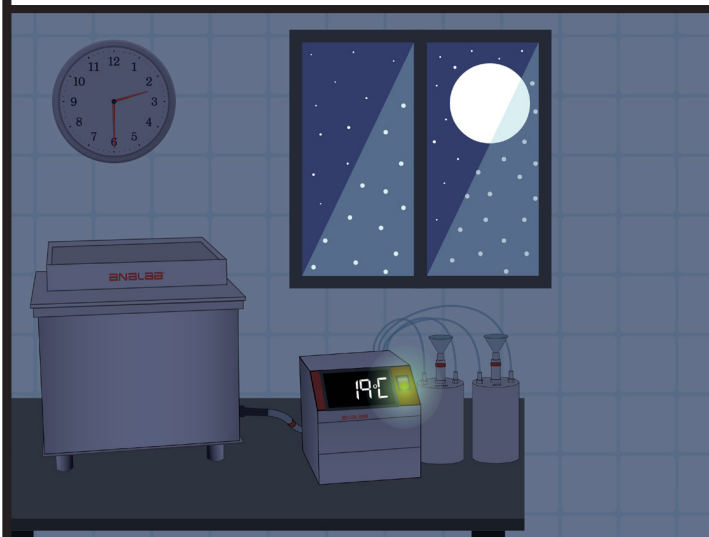
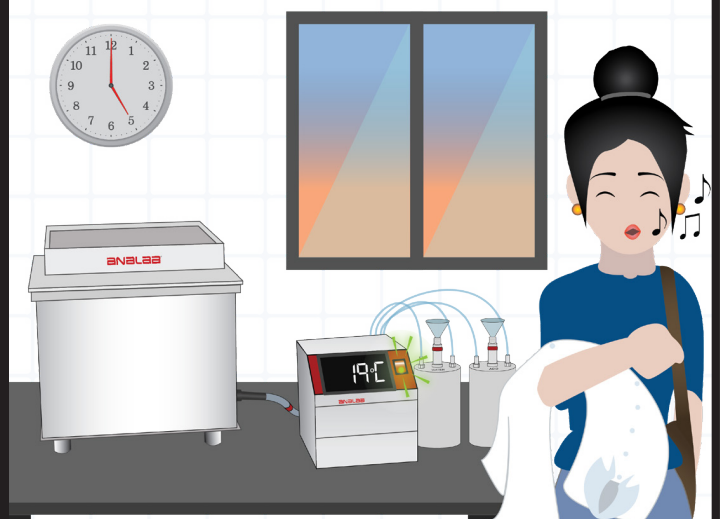


Hand-washing laboratory glass and plastic vessels for trace metals analysis is both time-consuming and tedious manual labour.

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.

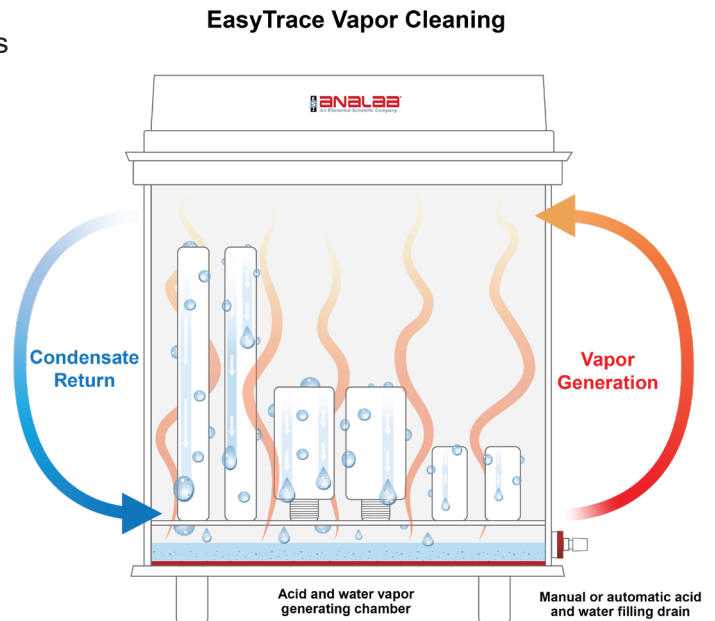
## EasyTrace solves all of these challenges.

The sealed chamber design minimises operator exposure to corrosive chemicals. By creating a high-purity acid vapour 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 *PLUS* 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 vapour via sub-boiling distillation.
- The vapour 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 vapour.
- The standard EasyTrace system requires the operator to fill/drain the system with acid or water as required.
- EasyTrace *PLUS* performs all these steps completely unattended, fully automating the labware cleaning process.



## Models and Sizes



### EasyTrace

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



### EasyTrace PLUS

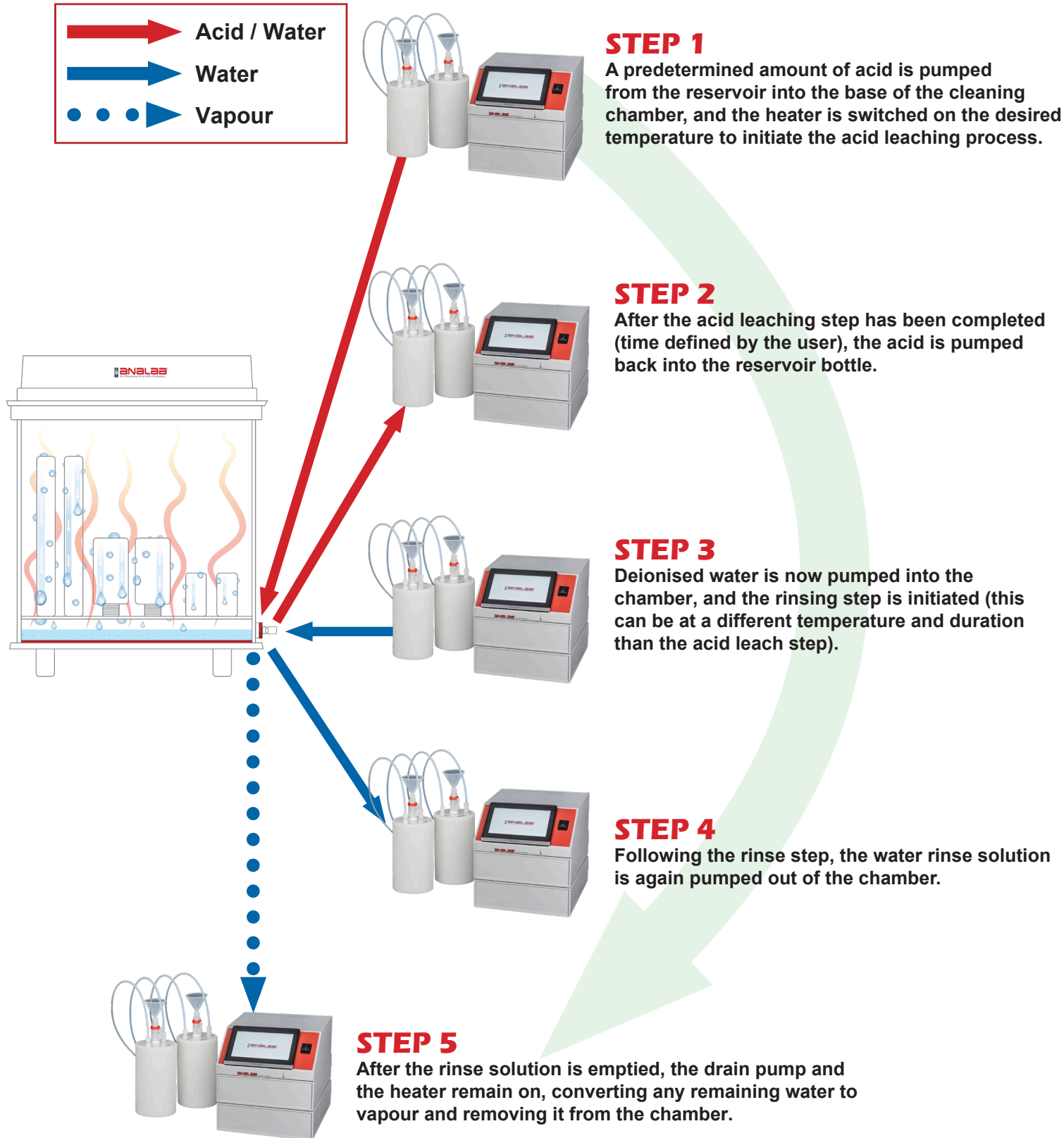
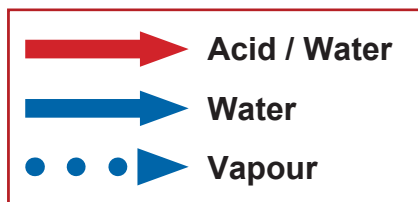
EasyTrace *PLUS* offers complete automation of cleaning agent additions/removal, DI water rinse, and drying cycles.

### Specifications and Ordering Guide

Model	Total Footprint (cm)	Capacity (cm)	Product Code
EasyTrace	40 L x 40 W x 37.5 H	35.5 L x 35.5 W x 23.5 H	QX187432
EasyTrace <i>PLUS</i>	40 L x 40 W x 37.5 H	35.5 L x 35.5 W x 23.5 H	QX187433

# EasyTrace PLUS - Automated Cleaning, Rinsing & Drying

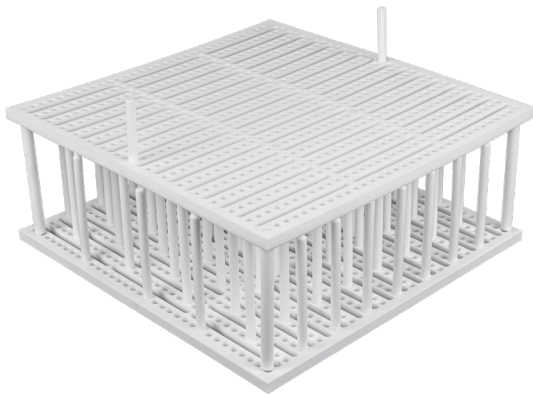
The EasyTrace PLUS system completely automates the labware cleaning process. A fully automated controller fills/empties the cleaning chamber with timed operating temperature cycles, then dries the chamber and contents after the cleaning and rinse steps are completed.



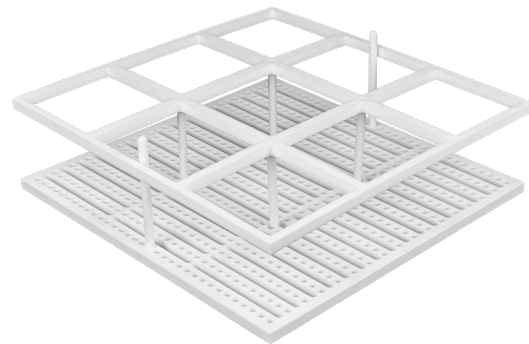
## Available Trays

EasyTrace is highly versatile by design, able to accommodate almost any type of plastic or glass vessel or labware. The base plates feature removable/reconfigurable vertical rods, allowing for a custom fit.

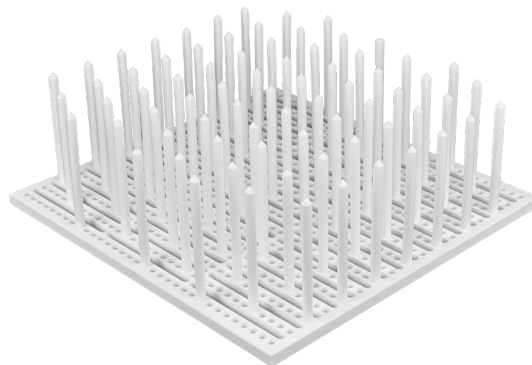
Product Code	Description
QX187435	80 additional PTFE Rods for stabilizing vessels - 120 mm height, for use with EasyTrace
QX187436	80 additional PTFE Rods for stabilizing vessels - 160 mm height, for use with EasyTrace
QX187437	80 additional PTFE Rods for stabilizing vessels - 210 mm height, for use with EasyTrace
QX187434	Middle Plate for EasyTrace - 150 mm height
QX187438	Outer Diameter vessel holder for EasyTrace. 90mm height
QX187439	Additional PTFE tray for use with EasyTrace with 80 vessel stabilizing rods



QX187434



QX187438

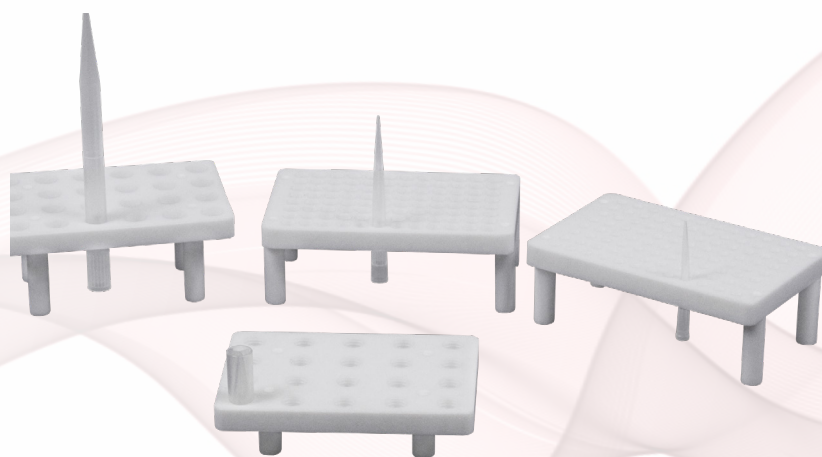


QX187439

## Pipette Tip Cleaning

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

Product Code	Description
QX147031	1000 µL Pipette tips rack for use with EasyTrace
QX147032	10000 µL Pipette tips rack for use with EasyTrace
QX147033	200 µL Pipette tips rack for use with EasyTrace
QX147034	5000 µL Pipette tips rack for use with EasyTrace
QX136598	96 position 1000 µL Pipette Tips transfer track for use with EasyTrace
QX136599	96 position 200 µL Pipette Tips transfer track for EasyTrace



## EasyTrace Features & Benefits

Feature	Benefit	EasyTrace	EasyTrace PLUS
Sub-boiling vapour distillation	High purity acid vapour and steam generated from reagent-grade starting materials for lower operating costs	✓	✓
Most effective method of surface cleaning	Contaminants continuously leach away from labware surfaces/pores with condensing ultra-pure acid vapour, and drain away into reservoir	✓	✓
Cleaning acids can be re-used multiple times	Lower operating costs with reduced waste	✓	✓
Fully enclosed and sealed cleaning chamber	No operator exposure to acids and vapours. Eliminates corrosion in laboratory environment	✓	✓
Automated rinsing	Labware automatically washed with DI water after acid vapour cleaning		✓
Automated drying	Labware automatically dried after DI water rinse cycle		✓

### **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 vapour employed by EasyTrace is far more effective, as any dissolved/mobilised 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.



Contact [info@qmx.com](mailto:info@qmx.com) for inquiries  
Visit [www.qmx.com](http://www.qmx.com) for additional information