



Never Worry About Sample Preparation Again.

Better Results

Increase precision and accuracy with fully-automated sample preparation

Improve reproducibility and eliminate inconsistent manual dilutions

Customized Hardware & Software

Unlimited number of predefined custom methods selectable on integrated touchscreen interface

Available in four models with several hardware options available to conform to your sample preparation needs

► Time & Cost Savings

Significantly decrease your sample preparation time

Eliminate the time spent training employees tedious manual sample preparation methods

prepFAST Station Capabilities:

- Autodilution
- Acidification
- Internal Standard Addition
- Standards Preparation
- Sample Mixing
- Vessel Cleaning

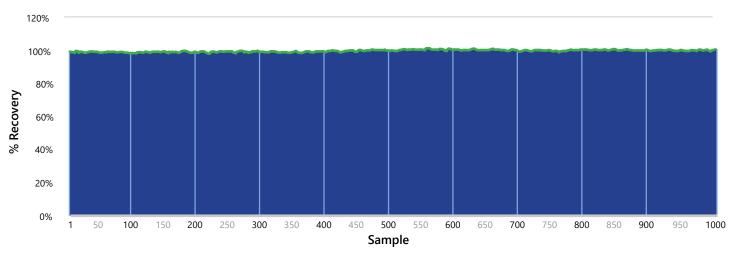


Better Sample Preparation. Better Results.

Accuracy

Average Accuracy: 100% ± 1%

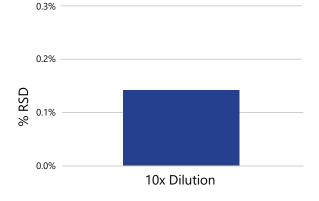
prepFAST Station automatically dilutes samples and standards at a high level of accuracy. ICPMS recovery for 1000 samples of Be, Ni, Cu, As, and Pb averaged $100\% \pm 1\%$ at a 10x dilution factor.



▶ Precision

Average Precision: <0.2% RSD

prepFAST Station produces superior results equal to or above the quality of manual dilutions without the hassle. prepFAST Station can dilute samples as low as 0.2% RSD or better depending on the final prepared sample volume.



Carryover

Average Carryover: 0.0014%

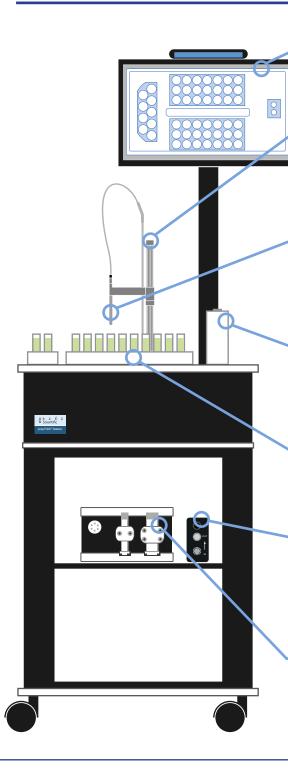
prepFAST Station has low carryover and minimal cross-contamination. The probe is rinsed internally and externally in a dual rinse station before and after preparing each sample. Rinseout after processing a high multielement standard shows a signal reduction factor averaging 82000x, equivalent to 0.0012% carryover-- comparable to the best rinseout data expected using ICPMS.

Analyte	Reduction Factor
Be 9	4800
Mn 55	22000
Cu 63	31000
As 75	180000
Ba 138	150000

Analyte	Reduction Factor			
Ce 140	150000			
Ta 181	53000			
Pb 208	18000			
U 238	130000			
Average	82000			
Carryover = 0.0012%				

Features

prepFAST Station: The Solution To All Of Your Sample Preparation Needs



Integrated Touchscreen Interface

- Easy-to-use software
- Unlimited number of custom methods

Auto-Align Arm

- Self-aligns after encountering capped sample tube
- Metal-free fluoropolymer probe aligner

Dual-Lumen Probe

- One channel for sample and diluent
- Second channel for gas MFC-driven mixing

Dual Overflowing Rinse Station

- Ultra-low cross contamination
- Independently pumped for low rinse consumption

Customized Sample Racks

 Variety of racks available to conform to vessels of all shapes and sizes

Gas Mass Flow Controller

- Used to mix samples after preparation
- Can be used to mix samples prior to aliquot to ensure homogenous sample uptake

Syringe Auto-Dilution

- More accurate and precise results
- · Cleaner, more reproducible results





▶ User-Friendly

Proprietary, intuitive software is easy-touse and responsive to the current status of the method

Simply turn on the tablet, select your desired method, and let prepFAST Station do the work for you

Customizable

Sample preparation methods are easily customized to meet your exact specifications

Quickly navigate to your methods on the home screen with easy access to a library of an unlimited number of custom methods

► Fully-Integrated

Clean, integrated system design without any visible cables or cords

Eliminate need to clean off valuable lab bench space for separate computer

Solving Problems For Every Type Of Laboratory

Sample Preparation Processes

High Throughput Labs

prepFAST Station provides the highest level of time and cost savings to laboratories with repetitive high throughput sample preparation processes.

Automated sample preparation will significantly increase laboratory efficiency and can improve the daily sample throughput.

Laboratory Classification

Market & Industry

prepFAST Station automates sample preparation for all types of labs including:

- Clinical
- Environmental
- Mining
- Pharmaceutical

Application

prepFAST Station can help labs in need of sample preparation for several applications including:

- Blood, Urine, & Serum Sample Dilution for Heavy Metals
- Drinking Water & Soil Analysis
- Four Acid Digestion
- USP <232>/<233> Sample Testing

Multi-Functional Labs

prepFAST Station especially benefits labs with multiple types of sample preparation methods.

The fully-automated sample preparation system allows you to select numerous preparation methods and walk away, freeing up time for more important tasks.

With prepFAST Station preparing samples, you will no longer have to worry about inconsistency between manual dilutions, thus improving precision and accuracy.



Technical Specifications

Station Specifications

	2DX	4DX	8DX	14DX	
System Dimensions					
Height	69"	69"	69"	69"	
Width	26"	35"	35"	46"	
Depth	13.6"	13.6"	24"	26"	
Fluid Contact Material	Components within sample flow path are inert, non-metallic materials				
Power Requirements	110V - 240V, 47 - 63 Hz, 7.2A One power outlet needed				
Gas MFC Requirements	Ar/N, 1/4" or 4 mm tubing				

Rack Capacity

	2DX	4DX	8DX	14DX		
Large Racks	2	4	8	14		
Microtiter Plates	4	6	-	-		
Maximum Sample Capacity						
50 mL	52	120	180	384		
15 mL	120	240	360	576		
8 mL	180	360	720	1260		
MT-96	384	576	-	-		



prepFAST Station **System Capacities**



© Elemental Scientific | 7277 World Communications Drive | Omaha, NE 68122 402-991-7800 | sales@icpms.com | www.icpms.com







