# **SC-DX System**

## **Fully Integrated Automation for ICP and ICPMS**

Elemental Scientific's innovative SC-FAST is the world's fastest-growing automation system for inorganic applications, field-proven over the last five years in premier analytical laboratories worldwide.

ESI now introduces the SC-DX system, a durable, stream-lined, fully-integrated automation system with fully expandable hardware and software supporting inorganic applications. The SC-DX system configurations range from a basic high-performance autosampler to a complete, easy-to-use, on-line sample preparation system.

The SC-DX is a cost-effective way to make difficult analytical problems routine and routine applications productive.



#### **SC-DX Hardware Components**

SC-DX autosamplers

FAST sample valves
(up to 3 valves)

Hydride generators

PeriSPEC speciation columns

SYRIX Syringe pumps

Preconcentration columns

#### **SC-DX Solutions**

DX-FAST	sea <i>FAST</i>	apex <i>FAST</i>
micro <i>FAST</i> MS	brine <i>FAST</i>	oil <i>FAST</i>
micro <i>FAST</i> OS	TRU <i>FAST</i>	DIN <i>FAST</i>
periSPEC	geo <i>FAST</i>	prep <i>FAST</i>
chrom <i>FAST</i>	soil <i>FAST</i>	scout <sub>DX</sub>

#### **SC-DX Benefits**

Flexible - Interfaces to all instruments | Configurable for many applications | Switch between instruments

**Durable -** Longer life components | Enhanced chemical resistance

Productive - Improves speed and data quality | Alternate and preemptive sampling

Chelation columns

Fully integrated | Streamlined | Compact

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Micro-peristaltic pumps

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## **Elemental Scientific**

## **SC-DX Application Solutions**



FAST System SC-FAST SC-FAST<sub>DL</sub>

High Throughput



**Geochemistry** geo*FAST* prep*FAST* 

High Throughput | Automated Sample Preparation



Micro Samples microFAST MS DINFAST

Automated Micro Sample Analysis



**Soil Monitoring** soil *FAST* 

High Throughput | Fast Rinseout



**Semiconductor** micro*FAST* MS micro*FAST*<sub>HF</sub>

Low Volume | High Purity | High Sensitivity



**Speciation** chrom*FAST* periSPEC

Low-Pressure Automated Elemental Speciation



Petrochemical/Solvents
oilFAST DINFAST
microFAST OS

Volatile Solvents | High Throughput



**Preconcentration**sea*FAST* apex*FAST*brine*FAST* TRU*FAST* 

**Automated Column Preconcentration** 



# Environmental SC-FAST apexFAST seaFAST chromFAST

High Throughput | High Sensitivity | Matrix Removal | Speciation



**Remote Monitoring** scout<sub>DX</sub>

On-line Remote Sampling



Clinical SC-FAST microFAST MS

High Throughput | Micro Samples



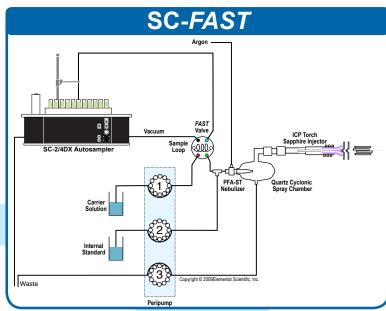
**Nuclear** TRU*FAST* SC-*FAST* 

apex*FAST* 

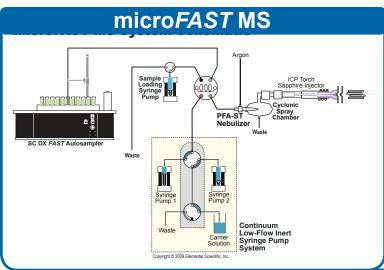
High Sensitivity | Radioisotope Detection

## **Elemental Scientific**

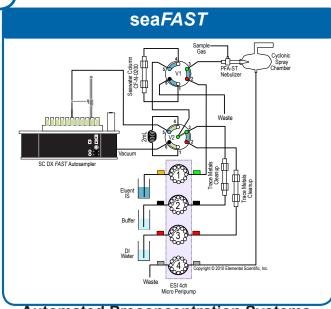
Examples of Application Solutions



**SC-FAST DX High Throughput Systems** 



Automated Micro Sample Analysis Systems



**Automated Preconcentration Systems** 

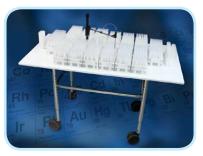
## **Elemental Scientific**

### **SC-DX Series of Automation Systems**









SC-2DX SC-4DX

SC-14DX

#### **SC-DX Accessories**



MP<sup>2</sup> Pump Micro peristaltic pump (< 1µL/min to > 10mL/min)



SYRIX
Syringe Pump
O-ring-free programmable
syringe pump system



Single and Dual FAST Valves
High throughput valve modules



Chelation Columns seaFAST and brineFAST applications



**continuum**Enclosed dual valve, dual syringe pump accessory



PC³
Peltier cooled cyclonic chamber (+2°C/-5°C)



apex FAST
Compact, high performance introduction system



PC³ FAST
High throughput Peltier
cooled cyclonic chamber

Sample Capacity									
System	50mL		15mL		8mL		Microtiter-96 (2mL)		
SC-2DX (Super rack)	<b>52</b> (64)	50 A A	<b>120</b> (160)	##	<b>180</b> (240)		384	AN THE THE PARTE AND A THE PARTE AND A SECOND ASSESSMENT AND A SECOND ASSESSMENT ASSESSM	
SC-4DX	94	30 30	240		360		576		
SC-8DX	208	20 -	480	munu	720		N/A		
SC-14DX	304	+	840	V	1260		2880		