

## DEENA SPECIFICATIONS

### Optional Accessories and Services

- Syringe Module
- HEPA Filtered Fume Hood
- Computer, Monitor, Printer
- Installation and Training
- Service Contracts
- Extended Warranties
- Vials and test tubes

**Capacity --** 60 x 50 ml samples  
**# of Reagents --** 9  
**# of Standards** 6

Fill-to Function (at 50 ml final volume)  
 Accuracy <1%  
 Precision (n=20) <1%

**Syringe Dispensing** \* = the greater of  
 Range 0.25 - 5 ml  
 Accuracy <10 ul or 2%\*  
 Precision (n=20) <5 ul or 1%\*

**Reagents Dispensing**  
 Range >0.5 ml  
 Accuracy <0.025 ml or 1%\*  
 Precision (n=20) <0.035 ml or 1%\*

**Temperature Control** Ambient - 180 C°  
**H x W x D (in)** 17.5 x 31.5 x 19.5  
 \*With Fume Hood 22 x 33.5 x 20  
 \*With Fume Hood and Syringe Module 22 x 48 x 20  
**Weight** 120 lbs/55 kg  
**Communication** USB / RS-232  
**Voltage** 100-240 V  
**Power** 15 A @ 110/115 V

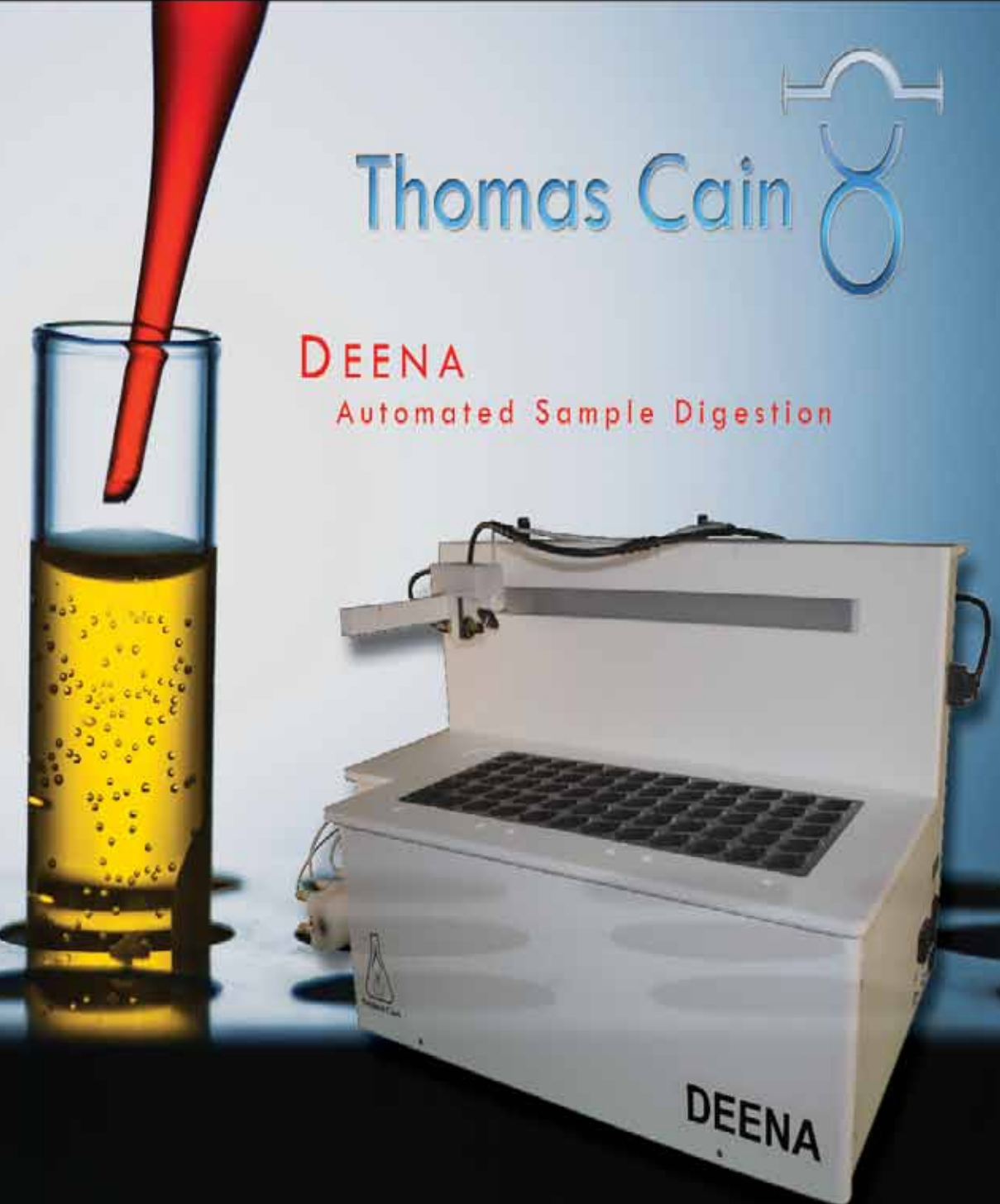
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Visit [ThomasCainInc.com](http://ThomasCainInc.com) for more  
 Information regarding DEENA

## AUTOMATION FOR ANALYTICAL LABORATORIES

Thomas Cain 

**DEENA**  
 Automated Sample Digestion



ACCURATE • CONSISTENT • RELIABLE • SIMPLE

[THOMASCAININC.COM](http://THOMASCAININC.COM)

## A FULLY AUTOMATED SAMPLE DIGESTION SYSTEM FOR METAL ANALYSIS

THOMAS CAIN, INC.

## DEENA AUTOMATES

### DEENA

- An automated sample digestion system that fully automates the sample preparation for EPA and other laboratory methods.
- Methods that include hot water baths or heated blocks in metal and mercury analysis.

### DEENA

- Handles up to 6 standards and 9 reagents including a dedicated reagent line for difficult solutions (e.g.,  $\text{KMnO}_4$ ).
- There are 3 racks, each having a capacity of 20 samples, for ease of handling and portability.
- With the optional fume hood, **DEENA** can be placed on a bench top, freeing up valuable space.

**Improves laboratory safety**  
**Reduces manual handling of acids**  
**Increases efficiency**  
**Frees up technician time**  
**Provides consistent results**

Reagents addition  
Standard addition  
Sample agitation (shaking)  
Heating

Cooling  
Color inspection (mercury methods)  
Filling to volume (final dilution)  
Detailed sample reports

### DEENA Software

- Is specifically designed to be user and auditor friendly. It is simple to navigate and the digestion methods are made from easy to understand commands. The methods are completely customizable. This allows the user to use **DEENA** to automate standard EPA methods or any variation of laboratory methods. The software will save an unlimited number of methods. The report functions of the software keep records of exactly what is done to each sample and a log can be printed or exported for tracking purposes. For audits, the software also keeps detailed calibration information which can be printed or exported.

### DEENA Software Features

Unattended overnight operation  
Preheat function  
Audit Reports  
Sample Reports  
Variable vial positions  
Unlimited Customizable Methods

### Computer Requirements

- Windows XP / Vista
- 1.8 GHz Processor Speed
- 128 MB Memory
- 20 GB Hard Drive
- 1 USB Port or 1 COM Port



### DEENA Syringe Module

- An automated standards accessory.
- The Syringe Module is capable of accommodating up to six standards. These standards may include check, calibration, and laboratory control standards as well as spikes.

### DEENA Fume Hood

- Allows the customer to place **DEENA** on a standard laboratory bench top in order for customers to better utilize their existing laboratory fume hoods.
- Includes a HEPA filter and duct tubing to connect to the laboratory's exhaust system.

### DEENA-m

- This model is a compact version of **DEENA** with a smaller foot print and a sample capacity of 30. This is an option for those customers who may not need a full batch of 60.

- **DEENA m** performs identically as **DEENA**, following the same software **and** optional accessories and services.

