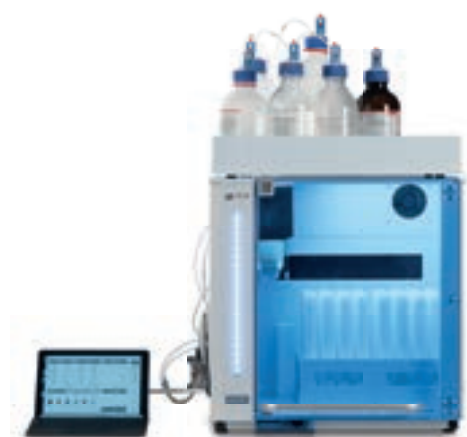




**MILESTONE**  
H E L P I N G  
C H E M I S T S



**YOUR LAB PARTNER**  
FOR IMPROVED WORKFLOW  
AND ENHANCED SAFETY



**easyFILL**  
Automated Dosing Station



LESS  
HANDLING TIME



ENHANCED  
SAFETY



IMPROVED  
LAB EFFICIENCY



CONSISTENCY  
OF RESULTS



HIGH  
FLEXIBILITY

# ALEVIATING BOTTLENECKS IN SAMPLE PREPARATION WORKFLOW

## I SAMPLE PREPARATION WORKFLOW

Many analytical procedures require repetitive sample preparation tasks that consume valuable operator time, increase laboratory costs, and extend turnaround times. One such task is the addition of acids and solvents into microwave digestion and extraction vessels. This process not only demands significant time from the operator but also exposes them to harsh reagents, increasing the risk of contamination due to manual handling. The easyFILL Automated Dosing Station effectively addresses these issues by utilizing a single platform that ensures superior workflow and enhanced safety for the operator, making it an indispensable tool in modern laboratories.

# LESS OPERATOR TIME, IMPROVED WORKFLOW, ENHANCED SAFETY

## | easyFILL WORKFLOW

The task of manually adding reagents occupies valuable time of the operator, limiting lab productivity and the ability of the chemist to accomplish other tasks. easyFILL automates these steps, reducing the operator time to just a few seconds.



Racks with vessels or vials  
are placed into the easyFILL



Select the Method  
and press 'Run'



Vessels are ready for the  
digestion or extraction process

Additionally, the easyFILL enables pre-dilution. At the completion of the digestion process, the solutions are transferred into volumetric containers and placed into easyFILL for automatic pre-dilution. This step is commonly done using ICP autosampler vials so that the operator has only to finalise the dilution and bring the solutions to the analytical equipment.



*Automatic pre-dilution in 50-mL ICP autosampler vials*



## | CONSISTENT & ERROR-FREE OPERATIONS

The handling of acids often leads to human errors and contamination, potentially impacting the analysis quality. The dispensing accuracy of the easyFILL pump ensures great reproducibility, while the hands-off approach and the use of high-purity PTFE for all the acid lines avoids risk of contamination. Moreover, the automatic cleaning of the lines, built into the sequence, avoids contamination when different reagents are dosed.



## | HIGH FLEXIBILITY

easyFILL offers great flexibility with a wide variety of racks to accommodate most digestion or extraction vessels and vials. The system handles up to six reagents at a time (such as mineral acids like:  $\text{HNO}_3$ ,  $\text{H}_2\text{O}_2$ ,  $\text{HCl}$ ,  $\text{HF}$  and solvents like acetone, hexane, methylene chloride) matching most application needs. easyFILL comes into play before the digestion for acid addition and after for pre-dilution or for acidification of the digested solutions. Moreover, easyFILL is compatible with ICP autosampler racks to avoid additional handling.



## | ENHANCED SAFETY

Handling of reagents is a common safety concern for all laboratories. Even the use of pipettes under a fume hood still could expose the operator to harsh reagents. easyFILL automates these processes and avoids acid handling. The built-in exhaust further enhances the safety of operations by diverting any vapours to the lab extraction system.



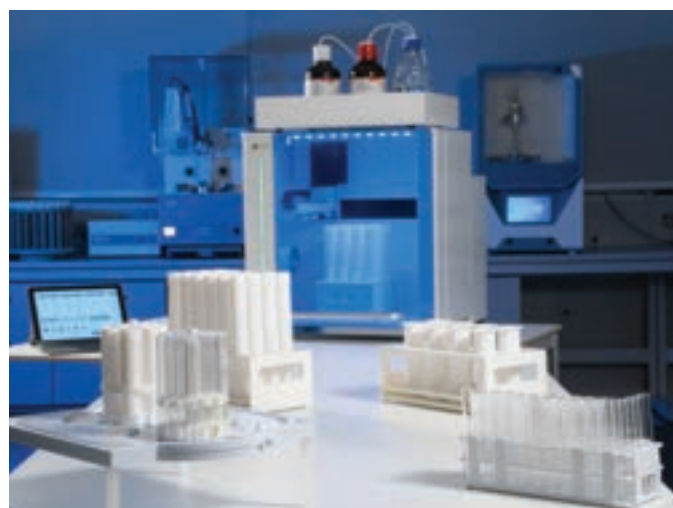
## | SMART SOFTWARE

easyFILL is fully controlled by a touch screen terminal with customized software. For routine processes the operator simply recalls a stored method with the type and volume of reagents as well as the number of positions in use. Availability of the reagents in the bottles and the waste volume are tracked by the software, so that the operator knows when it is time to refresh a reagent bottle or empty the waste tank. Moreover the software integrates a guided procedure to calibrate the pump, in just few minutes.



## | easyFILL CONFIGURATIONS

Digestion rotors and racks	easyFILL configuration
SK-15	2 racks with 8 pos (16)
MAXI-24 HP; MAXI-44; fastEX-24	2 racks with 24 pos (48)
7 position rack ultraWAVE 3	2 racks with x 7 pos (14)
15 position rack ultraWAVE	2 racks with 15 pos (30)
20 position rack ultraWAVE 3	2 Racks with 20 pos (40)
40 position rack ultraCLAVE	2 racks with 40 pos (80)
62 position rack ultraCLAVE	2 racks with 62 pos (124)
ICP autosampler vials Ø 30 mm	2 racks with 21 pos (42)
ICP autosampler vials Ø 16 mm	2 racks with 60 pos (120)





## I THE easyFILL

Reagent addition into vials or vessels is a tedious and often unpleasant step that, in high-throughput labs, requires a significant amount of time. easyFILL frees the operator from this task, with the additional benefits of reducing their exposure to reagents and ensuring consistency of the process.

# MILESTONE HELPING CHEMISTS

Established in 1988, Milestone is headquartered in Italy with its R&D and manufacturing centre in Germany and Switzerland and offices in the United States, China, Japan and Korea. We

operate worldwide through a network of over 100 exclusive distributors, all providing our customers with premium application and service support. Milestone's mission is to help chemists by offering them the most advanced instrumentation for sample preparation and direct mercury analysis in the world. Our industry-leading technology, in combination with fast, responsive service and applications support, allows Milestone to support our goal of giving you the highest return on investment possible.

## | ADDITIONAL SOLUTIONS FOR TOTAL SAMPLE PREPARATION WORKFLOW



### **ETHOS UP**

High Performance Microwave Digestion System



### **ultraWAVE 3**

Single Reaction Chamber Microwave Digestion System



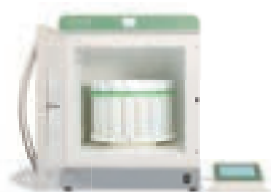
### **traceCLEAN**

Acid Steam Cleaning System



### **duoPUR/subCLEAN**

Acid Purification System



### **ETHOS X**

Advanced Microwave Extraction System

# WWW.MILESTONESRL.COM

## **MILESTONE**



H E L P I N G  
C H E M I S T S

UNI EN ISO 9001:2015  
CERTIFIED

MILESTONE Srl - Via Fatebenefratelli, 1/5 - 24010 Sorisole (BG) - Italy  
Tel: +39 035 573857 - Fax: +39 035 575498  
www.milestonesrl.com - email: analytical@milestonesrl.com

MILESTONE INC. - 25 Controls Drive - Shelton, CT 06484 - USA  
Tel: (203) 925-4240 - Toll-free: (866) 995-5100 - Fax: (203) 925-4241  
www.milestonesci.com - email: mwave@milestonesci.com

MILESTONE GENERAL K.K. - KSP, 3-2-1, Sakado - Takatsu-Ku, Kawasaki 213-0012 - Japan - Tel: +81 (0)44 850 3811 - Fax: +81 (0)44 819 3036  
www.milestone-general.com - email: info@milestone-general.com

MLS GmbH - Auenweg 37 D-88299 Leutkirch im Allgau - Germany  
Tel: +49 (0)7561 9818-0 - Fax: +49 (0)7561 9818-12  
www.mls-mws.com - email: info@mls-mikrowellen.de