MILESTONE
HELPING CHEMISTS

MICROWAVE TECHNOLOGY
THAT ADAPTS TO YOUR
DAILY NEEDS

ETHOS and ETHOS LEAN

Microwave Labstations

THE POWER OF MICROWAVE TECHNOLOGY

ONE PLATFORM, COUNTLESS USES

Microwave technology has been a cornerstone of laboratory operations for decades. Originally developed for closed-vessel digestion, it has since evolved to support a wide range of analytical applications. Today, microwave digestion is a cornerstone of sample preparation for elemental analysis across multiple industries and is recognized as the gold standard by numerous official methods. It has elevated every aspect of this process, from digestion quality and analytical accuracy to operational safety and laboratory productivity.

Over the years, the advantages of microwave heating have been applied to additional workflows such as solvent extraction, chemical synthesis, and high-temperature applications.

Thanks to the unique heating selectivity of microwaves, combined with closed-vessel technology, this approach fits perfectly within a variety of industries, including environmental, food and feed, materials science, and academia supporting both teaching and research.

Milestone's ETHOS and ETHOS LEAN microwave labstations integrate all these capabilities within a single platform. A complete suite of dedicated accessories enables laboratories to tailor the system to their specific applications. This all-in-one solution helps maximize investment, minimize equipment footprint, simplify training, and reduce maintenance costs.

FASTER SAMPLE PREPARATION ACROSS ALL APPLICATIONS

SUITABLE FOR BOTH ROUTINE AND RESEARCH LABORATORIES

DESIGNED TO SIMPLIFY DAILY OPERATIONS

MAXIMUM SAFETY AND RELIABILITY

MODULAR PLATFORM TO MEET CURRENT AND FUTURE NEEDS

COMPREHENSIVE SOLUTIONS FOR **ENVIRONMENTAL**

RELIABLE SAMPLE PREP FOR ENVIRONMENTAL CONTAMINANTS

Environmental laboratories face increasing analytical demand, tighter turnaround requirements, and large sample volumes, both for research projects and contract testing. ETHOS and ETHOS LEAN simplify sample preparation across a wide range of matrices, from wastewater and soil to sediments and wastes, enabling reliable analysis of metals and organic contaminants while ensuring consistent results and regulatory compliance.

DIGESTION ROTORS FOR

Heavy metals
Chromium (VI)

EXTRACTION ROTORS FOR

PAH, TPH, Phenols, PCB, Dioxins, PBDE, Pesticides PFAS, Microplastics

COMPREHENSIVE SOLUTIONS FOR **FOOD TESTING**

FROM CONTAMINANTS TO NUTRIENTS, WITH UNMATCHED FLEXIBILITY

Food and feed laboratories face diverse analytical challenges, from detecting contaminants to determining nutritional content. ETHOS and ETHOS LEAN streamline sample preparation with modern microwave technology, replacing outdated and reagent-intensive techniques. The result is faster, safer, and more reproducible workflows for both contaminant and nutrient analysis.

NUTRIENTS

- Minerals
- Total Fat
- FAME
- Amino Acids
- Sterols and DAKs
- Nification number
- Residual Ash

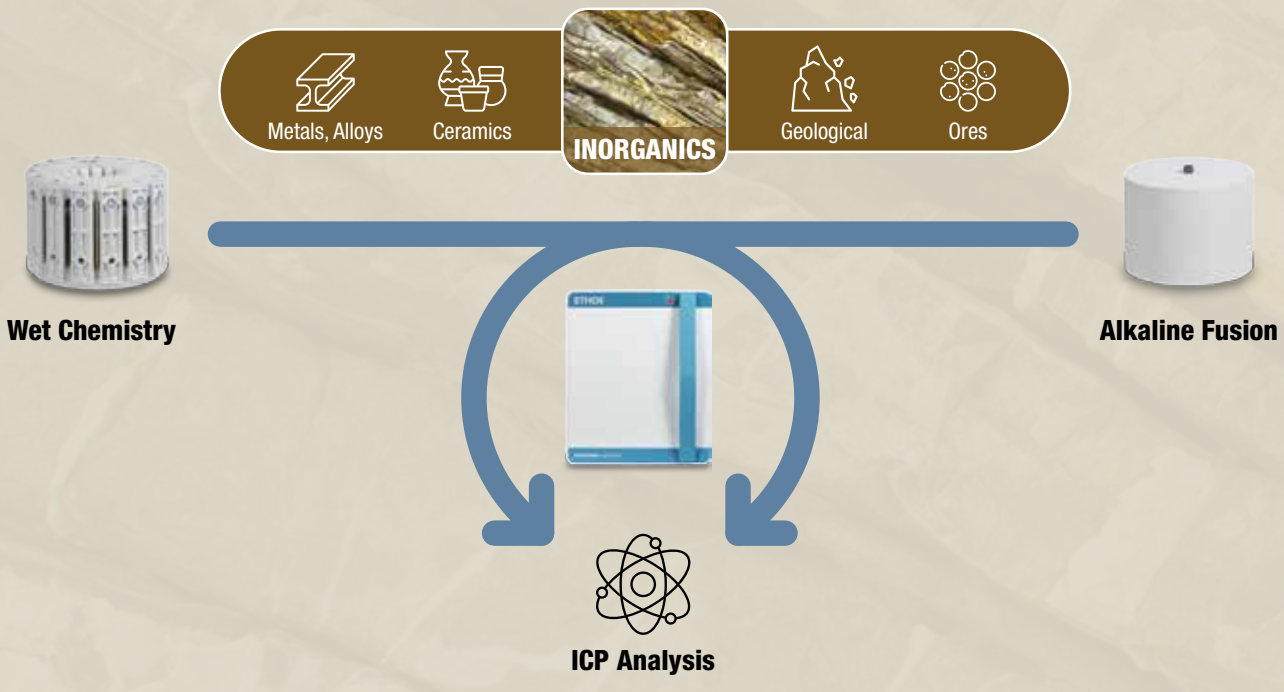
CONTAMINANTS

- Heavy metals
- PAH, PCBs, Dioxins
- PFAS
- MOAH & MOSH
- Microplastics

COMPREHENSIVE SOLUTIONS FOR **INORGANICS**

WET DIGESTION AND FUSION, IN ONE SYSTEM

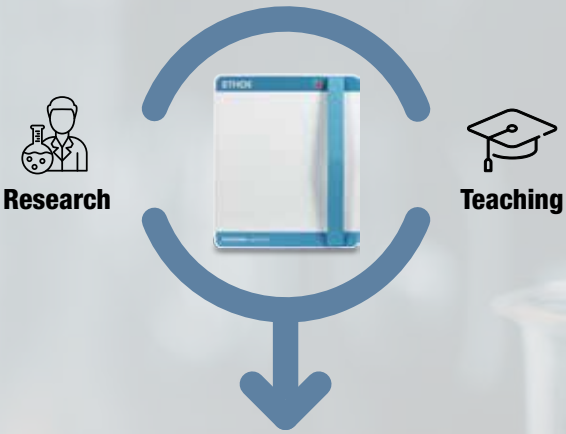
Preparing inorganic materials, from ores and alloys to ceramics and oxides, for elemental analysis often requires different strategies. The ETHOS platforms offer the flexibility to perform both microwave closed-vessel digestion (wet chemistry) and microwave alkaline fusion within a single system, ensuring accurate, complete decomposition and the highest level of safety. This dual-purpose capability allows laboratories to handle most inorganic matrix with confidence.



COMPREHENSIVE SOLUTIONS FOR ACADEMIA

A VERSATILE PLATFORM FOR TEACHING AND RESEARCH LABORATORIES

The ETHOS platforms are ideal solutions for academic and research laboratories. Their flexibility allows professors, students, and core facilities to easily adapt the system to applications ranging from digestion and extraction to synthesis. With a wide range of dedicated accessories and a modular design, the platform evolves with laboratory needs, bridging the gap between theory and practice and serving as a valuable asset for both current and future projects.



MICROWAVE SAMPLE PREPARATION FOR

Organic pollutants, PFAS, Microplastics, MOAH & MOSH	Total fat determination, FAMEs, Amino acids	Natural product extraction	Heavy metals	Organic synthesis, Inorganic synthesis

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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 MILESTONE SOLUTIONS

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Dosing Station

duoPUR/subCLEAN

Acid Purification
System

traceCLEAN

Acid Steam
Cleaning System

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