

RELEASE

Milestone ultraWAVE is the Benchmark in Microwave Digestion



The Milestone ultraWAVE isn't just an evolution; it's a revolution - changing how industrial and research laboratories around the world prep samples for analysis. Milestone patented ultraWAVE Single Reaction Chamber (SRC) technology transcends traditional closed and open vessel digestion, offering significantly greater digestion capabilities for even the most difficult sample types.

High-performance stainless-steel construction allows for higher pressures and temperatures, while disposable vessels eliminate the need to assemble, disassemble or clean between processing. Just as important, dissimilar samples can be processed simultaneously, saving time and money.

Enhanced Efficiency in Sample Preparation for Metals Analysis

The SRC technology achieves extraordinary performance capabilities combining microwave heating with a high-pressure reactor which acts simultaneously as microwave cavity and vessel.

The ultraWAVE is easy to use, cost-effective, quick to adopt, and fast to implement. The ultraWAVE has already transformed and enhanced the way analytical chemists prepare their samples for trace metal analysis in hundreds of laboratories all over the world. The ultraWAVE represents the state-of-the-art in microwave sample preparation, overcoming the limitations of the conventional digestion systems.

One Method for All Samples

Any combination of sample types (food, environmental, polymer, cosmetic, pharmaceutical, geological, chemical, and petrochemical) can be digested simultaneously. No method development is needed, as the same method can be used for nearly any sample. For the first time, blanks and reference standards of any matrix can be digested alongside samples. The ultraWAVE dramatically improves the lab workflow, as it allows to run any matrices simultaneously in a single digestion cycle.

Unrivalled Performance for Superior Digestion Quality

Operating up to 199 bar and 300 °C, the ultraWAVE enables the complete digestion of extremely difficult samples and large amounts of organics. Unlike conventional microwave digestion systems, every sample is under direct temperature and pressure control, so there is no need to rely on a reference vessel or indirect control such as infrared temperature sensors. The ultraWAVE reaches high temperatures faster, cools faster (10 min from 200°C to room temperature), and is capable of higher pressure and temperature than any other system, expanding the digestion efficiency. The ultraWAVE does not suffer any cross contamination between samples. Blanks are significantly lower than with conventional microwaves since less acid is used, and vials have a much less surface in contact with the analytical solution.

Green Digestion

The ultraWAVE allows for the complete digestion of organic samples with diluted nitric acid only with clear benefits for the subsequent analytical step and for the environment.

High Productivity

High sample throughput and quick turnaround time are top priorities in most analytical laboratories, along with high quality of the analysis and low running costs. The Milestone ultraWAVE fully matches these requirements.

50% | **2X** | **50%**
reduction in cycle time | the throughput | lower labor costs



NUMBERS DON'T LIE
THE GAME CHANGER
IN MICROWAVE SAMPLE PREP

ultraWAVE

Single Reaction Chamber Microwave Digestion System

With over a thousand units installed globally, Milestone's Single Reaction Chamber (SRC) technology has revolutionized how industrial and research laboratories around the world prep samples for analysis. Our ultraWAVE transcends traditional closed and open vessel digestion, offering faster digestions, maximum throughput and lower cost of ownership.



| IMPROVED WORKFLOW

The ultraWAVE has already transformed the way analytical chemists prepare their samples for trace metal analysis in hundreds of laboratories all over the world.

| MAXIMUM THROUGHPUT

The fast assembly of the vials, the automatic closing and opening make the digestion process more efficient, reducing the labour cost up to 50%.

| NO BATCHING REQUIRED

Any combination of sample types can be digested simultaneously; no need to batch samples into identical type; no method development is needed.

| LOWER OPERATING COSTS

Running costs are significantly cut by increasing the consumables lifetime and by using inexpensive vials suitable for any trace metals determination.

See what the ultraWAVE can do for your lab.
Visit www.milestonesrl.com/ultrawave

