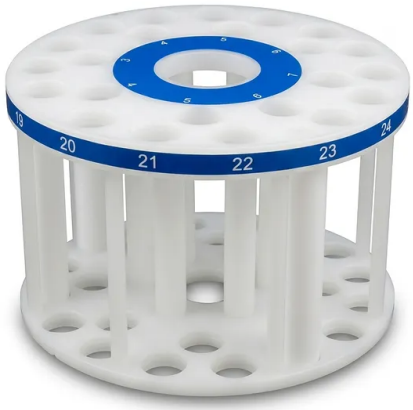
High Throughput Microwave Digestion Rotor For Tfm Vessels And Trace Element Sample Preparation

Item Number: PL-CP336



Introduction

Enhance laboratory productivity with our high-capacity twenty-four position microwave digestion rotor. Engineered for seamless compatibility with TFM vessels, this durable assembly ensures uniform heating and superior chemical resistance for critical trace metal analysis in demanding industrial laboratory environments.

Learn More

Application	Description	Key Benefit
Environmental Monitoring	Digestion of soil, sediment, and wastewater samples for EPA-compliant heavy metal analysis.	High batch capacity ensures rapid processing of large environmental survey sets.
Food and Beverage Safety	Decomposition of complex food matrices (fats, proteins) to detect toxic elements like Lead, Cadmium, and Arsenic.	Complete digestion of organic matter ensures accurate recovery of trace elements.
Pharmaceutical Quality Control	Preparation of active pharmaceutical ingredients (APIs) and excipients for elemental impurity testing per USP standards.	Prevents cross-contamination and ensures compliance with strict regulatory requirements.
Geochemical Exploration	Acid digestion of ore, rock, and mineral samples for precious metal assaying and geological mapping.	Robust construction handles the high temperatures needed for refractory mineral dissolution.
Petrochemical Analysis	Preparation of polymers, lubricants, and crude oil samples for catalyst residue and additive analysis.	Withstands aggressive solvent and acid combinations used in hydrocarbon digestion.
Clinical and Forensic Research	Processing of biological tissues and fluids for toxicological screening and metabolic studies.	Precision heating ensures preservation of volatile elements during the digestion process.

Specification Category	Parameter Details (Model PL-CP336)
Model Identifier	PL-CP336
Rotor Capacity	24 Positions (Customizable configurations available)
Primary Material	High-performance reinforced fluoropolymer / TFM
Vessel Compatibility	Designed for TFM/PFA digestion vessels (Customizable for various diameters)
Chemical Resistance	Universal resistance to concentrated HNO3, HCl, HF, and H2O2
Maximum Temperature	Optimized for high-temperature digestion (Customizable based on vessel specs)
Maximum Operating Pressure	Rated for high-pressure safety (Customizable based on vessel design)
Manufacturing Process	End-to-end precision CNC machining
Compatibility Scope	Supports both original imported and high-quality domestic vessel sets
Maintenance Requirement	Low maintenance; acid-resistant surfaces for easy decontamination