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# HEAVY METAL DIGESTOR TT-SH230N

The Heavy Metal Digestor TT-SH230N offers rapid disintegration, high efficiency, convenience, and a large processing capacity.

Heavy Metal Digestor TT-SH230N is well-suited for various industries such as food, medicine, agriculture, forestry, environmental protection, chemical, biochemical, as well as higher education institutions and scientific research departments. It's used for analyzing soil, feed, food, ore, etc.

Moreover, Heavy Metal Digestor TT-SH230N is compatible with atomic absorption, atomic fluorescence, ICP-AES, and other analytical instruments.

## APPLICATIONS

- **Food Industry**: Digests food samples to analyze heavy metal content, ensuring product safety, nutritional quality, and regulatory compliance.
- **Pharmaceuticals**: Prepares medicinal, biochemical, and raw material samples for precise trace metal detection and quality control.
- **Agriculture & Forestry**: Analyzes soil, fertilizers, feed, and plant materials to assess nutrient levels and detect heavy metal contamination.
- **Environmental Protection**: Processes water, sludge, and soil samples for pollution monitoring, ecological studies, and environmental compliance.
- **Mining & Metallurgy**: Digests ores, minerals, and concentrates for accurate heavy metal determination in exploration and processing.
- **Chemical Industry**: Supports material testing, production monitoring, and quality assurance by preparing samples for elemental analysis.
- **Academic & Research Institutions**: Enables advanced studies in material science, life sciences, and environmental research with reliable digestion methods.
- **Analytical Compatibility**: Provides complete digestion solutions for downstream testing with AAS, AFS, ICP-AES, ICP-MS, and related instruments.

## FEATURES

- The Heavy Metal Digestor TT-SH230N features an adjustable furnace temperature that ensures a consistent temperature at the control point. facilitating efficient heat transfer and straightforward operation.
- Using Teflon coating, this instrument effectively safeguards against corrosion caused by acids and acid gases produced during the digestion process.
- Its deflector tank design prevents acid from splashing into the circuit during experiments, ensuring safety and accuracy in operation.
- Equipped with multiple protective measures, this machine offers comprehensive safety against risks like over-voltage, over-current, and overheating.
- With embedded software temperature control, the Heavy Metal Digestor TT-SH230N delivers precise, stable, and uniform temperature distribution within the furnace. This feature guarantees consistent sample digestion and accurate results.
- The intelligent monitoring system keeps track of each heating unit's status, allowing real-time control of instrument operations for enhanced efficiency.
- The instrument features eco-friendly fiber and air duct insulation, enhancing overall insulation efficiency and contributing to a sustainable approach.
- Offering both Teflon and borosilicate glass test tubes, it caters to varied experimental needs.
- Its three-dimensional heating mechanism ensures uniform heating across all sample parts, minimizing heat dissipation and ensuring thorough digestion.
- The real-time human-machine dialogue functionality permits adjustments in experiment duration and enables easy output cutoff for precise control and flexibility.

## More precise temperature control for digestion

The Heavy Metal Digestor TT-SH230N is equipped with an advanced embedded automatic software temperature control technology, elevating precision in regulating temperatures for enhanced performance. This innovation ensures a more accurate and consistent temperature setup, augmenting the instrument's reliability. Additionally, an incorporated advanced timing device streamlines time control, simplifying operational aspects for users.

Through its lineage within the SH series digestion instruments, this equipment upholds a shared set of characteristics. It relies on materials adept at blending uniform thermal conductivity with superior corrosion resistance. This strategic material choice epitomizes the amalgamation of technological advancements and a user-centric approach, highlighting the instrument's progress and its commitment to user needs.

## Environmentally durable and safe

The Heavy Metal Digestor TT-SH230N features a specialized professional Teflon coating, crafted from a polymer compound derived from polytetrafluoroethylene through polymerization. This coating showcases exceptional chemical stability, corrosion resistance, heat resistance, abrasion resistance, moisture resistance, effective sealing capabilities, high lubrication, non-stick properties, reliable electrical insulation, and impressive resistance to aging.

Heavy Metal Digestor TT-SH230N deliberate design ensures no exposed insulation materials, promoting environmental friendliness and aesthetic appeal. This design approach also safeguards against the detrimental effects of poor insulation caused by acid and acid gas corrosion on insulation materials. The comprehensive qualities of the Teflon coating make it a durable and essential component, offering both functional and protective advantages to the instrument.

## Personalized configuration and wide range of applications

Based on experimental requirements, users can select between two types of cuvettes: PTFE and borosilicate glass. This selection broadens the scope of acids available for disintegration as per user needs. The equipment is suitable for various

industries including food, medicine, agriculture, forestry, environmental protection, chemical, biochemical, higher education institutions, and scientific research departments. It facilitates chemical analysis of soil, feed, heavy metals, ores, and other samples before digestion treatment, compatible with analytical instruments such as atomic absorption, atomic fluorescence, and ICP-AES.

## TECHNICAL SPECIFICATIONS

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|---|---|
| Product Model | TT-SH230N |
| Temperature control range | Room temperature +5℃ 450℃ |
| Temperature control accuracy | ±0.1°C |
| Heating method | Infrared heating and high purity graphite conduction |
| Thermal insulation | Eco-friendly fiber and air duct insulation |
| Anti-corrosion on the upper surface of the housing | Part stainless steel Part Teflon |
| Digestion tube | Glass tube with scale 50mL (full capacity 100mL) |
| | PTFE tube without scale (full capacity 70mL) |
| Processing Capacity | 30pcs/lot |
| Power supply | 220V AC±10% 50Hz (110V is also available. Please specify when ordering) |
| Power Rating | 3.6KW |
| Dimension (L×W×H) | 20.3 inches X 16.6 inches X 8.3 inches |
| Net weight | 48.5 |

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