



HOT PLATE DIGESTION SYSTEMS - TORONHP™ - SERIES

ISO 9001, EPA 3050, EN 13657, ISO 15587

Versatile Open-Vessel Heating Platforms for Acid Digestion and Sample Evaporation

ToronHP™-Series Hot Plate Digestion Systems by Torontech are high-performance open-vessel digestion and evaporation systems designed for safe, efficient, and uniform heating of multiple samples simultaneously.

Engineered for environmental, food, pharmaceutical, geological, and materials testing laboratories, the ToronHP-Series provides precise temperature control, excellent corrosion resistance, and reliable long-term performance for all types of wet acid digestion and sample concentration processes.

Available in several configurations — HP-400, HP-460, and HP-600 — this series offers scalable solutions to meet diverse laboratory workloads, from small research labs to high-throughput analytical facilities.

APPLICATIONS

- Open-vessel acid digestion of soil, sediments, and food samples
- Sample evaporation prior to analysis by ICP-OES, ICP-MS, or AAS
- Pre-treatment of wastewater and chemical residues
- General heating and drying in research and industrial laboratories
- Complementary use with ToronMD-Series microwave digesters for post-digestion concentration

Hot Plate Digestion Systems - ToronHP-Series

FEATURES

- **Uniform Surface Heating** – Advanced electric heating plate ensures consistent temperature distribution across all vessels.
- **Wide Temperature Range** – Adjustable from ambient to 450 °C with ± 1 °C accuracy for efficient digestion and evaporation.
- **High-Corrosion Resistance** – Heating surface made from PTFE-coated graphite or ceramic glass for strong resistance to acids and alkalis.
- **Digital PID Temperature Control** – Precise temperature regulation with real-time display and programmable heating stages.
- **Large Working Area** – Supports simultaneous digestion of multiple samples in open vessels or beakers.
- **Rapid Heating and Cooling** – Optimized thermal efficiency reduces cycle times while maintaining stable performance.
- **Integrated Safety Protection** – Over-temperature shutoff, alarm indication, and power isolation ensure operational safety.
- **Compatible with Torontech Automation** – Integrates seamlessly with ToronAP-Series acid-adding and liquid handling systems for enhanced workflow automation.

THEORY & METHOD

Advantages

- Simple, reliable, and economical heating solution for sample digestion
- Supports simultaneous heating of multiple vessels for higher productivity
- Suitable for strong acid and corrosive reagent use
- Precise temperature control ensures reproducible results
- Robust and long-lasting construction for heavy laboratory use

Compliance and Quality

The ToronHP™-Series is manufactured under ISO 9001 quality management and CE-certified for laboratory safety and performance.

It complies with international standards including EPA 3050, EN 13657, and ISO 15587, ensuring compatibility with global sample preparation protocols.

TECHNICAL SPECIFICATIONS

Model	Working Area (mm)	Temperature Range	Temperature Accuracy	Surface Material	Control Type
ToronHP™-400	400 × 300	Ambient – 450 °C	±1 °C	PTFE-coated graphite	Digital PID controller
ToronHP™-460	460 × 360	Ambient – 450 °C	±1 °C	PTFE-coated graphite	Digital PID controller
ToronHP™-600	600 × 400	Ambient – 450 °C	±1 °C	Graphite / Ceramic glass	Digital PID controller

General Specifications:

- Heating Rate: Adjustable, up to 10 °C/min
- Voltage: AC 110/220 V ±10%, 50/60 Hz
- Safety Protection: Over-temperature protection, alarm function
- Optional Accessories: Acid fume hood, vessel racks, exhaust system



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 🇨🇦

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 🇺🇸

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 🇦🇪

Phone: +971 488 19252
Email: me@torontech.com

