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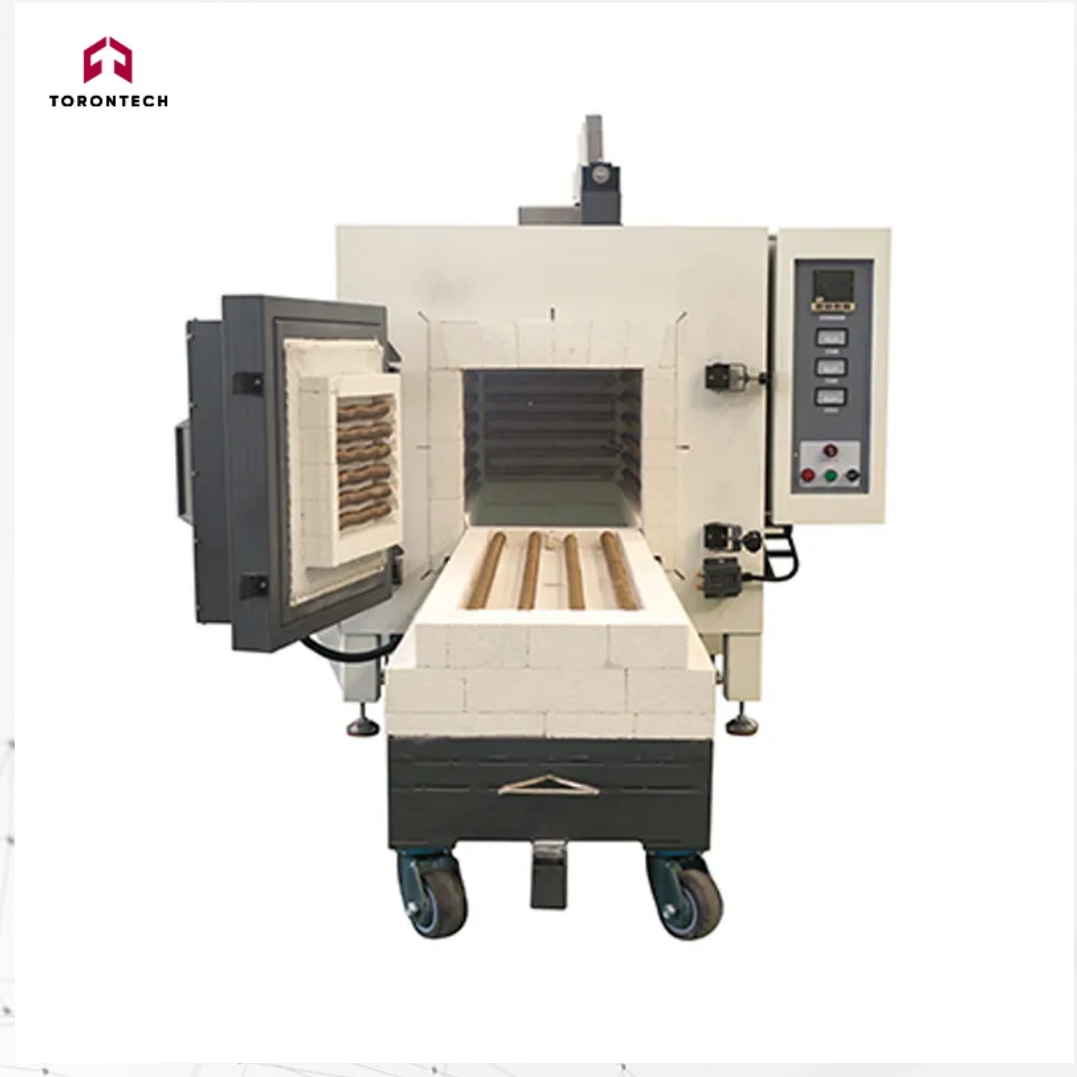

BOGIE HEARTH FURNACE TT-BHF-168-1300

The Bogie Hearth Furnace TT-BHF-168-1300 is engineered for processing large materials or supporting small-scale production with consistent, high-quality results. Built using durable furnace components and advanced construction techniques, it delivers stable temperature control up to 1200°C, with a maximum working temperature of 1300°C. An automated trolley system ensures smooth material handling and uniform heat treatment, making it suitable for continuous operation in research or production environments.

This furnace is ideal for developing and processing advanced materials, including metals, ceramics, nanomaterials, and semiconductors. It operates on 380V/18 kW and features high-quality HRE alloy resistance wire heating elements. Temperature is precisely monitored with an N-type thermocouple, achieving ±1°C accuracy for reproducible and reliable thermal processing.

Model No.	TT-BHF-168-1300
Chamber Volume	168L
Continuous Temperature	1200℃
Max Temperature	1300°C
Voltage	380V/18kw
Heating Element	High Quality Alloy Resistance Wire（ HRE）
Temperature Precision	±1°C
Thermocouple	N type

APPLICATIONS

- **Advanced Materials Processing** – The Bogie Hearth Furnace TT-BHF series is engineered for processing large-scale or batch materials with exceptional precision and reliability. Its stable temperature control, reaching up to 1200–1700°C depending on the model, ensures consistent results for research and production environments.

- **High-Performance Thermal Management** – Featuring high-quality HRE, SiC, or $MoSi_2$ heating elements depending on the model, the furnace delivers efficient, uniform heating on three sides of the chamber. An advanced control system with ±1°C precision and N-type thermocouple monitoring enables reproducible thermal processing across metals, ceramics, nanomaterials, and semiconductor materials.

- **Automated Material Handling** – The bottom-mounted trolley system provides smooth, shock-free movement for loading and unloading large workpieces. A movable workbench and top-mounted flip exhaust vent support efficient material handling, debinding processes, and enhanced temperature uniformity. Optional rapid cooling and air intake control systems allow precise thermal cycle management.

- **Structural Reliability & Insulation** – Built with a multi-layer refractory insulation system of lightweight brick or ceramic fiber, the furnace minimizes heat loss while maintaining a low external surface temperature. Silicon carbide baseplates ensure mechanical strength, thermal conductivity, and stable load support. All units are asbestos-free and designed for energy-efficient operation.

- **Versatile Applications** – Suitable for advanced material development and small-scale production, the TT-BHF series supports pilot-scale sintering, heat treatment, and batch processing of metals, ceramics, graphene, lithium battery electrodes, semiconductors, and other advanced materials. It is ideal for R&D labs, production facilities, and industries requiring precise, large-volume thermal processing.

FEATURES

- The furnace features a multi-layer heat insulation system made from refractory materials, including lightweight refractory brick or ceramic fiber lining. Its strong structure, high-strength assembly, and absence of asbestos contribute to minimal heat loss and low energy use.
- Heating is applied on three sides—left, right, and bottom—to promote even temperature distribution throughout the chamber.
- A silicon carbide baseplate covers and protects the furnace floor, offering high mechanical strength, excellent thermal conductivity, and stable horizontal load support.
- The bottom-mounted trolley moves smoothly without shocks, and materials are loaded from below using a movable workbench.
- Custom configurations are available to meet specific processing needs.
- The system includes an advanced control unit for precise temperature regulation. An automatic top-mounted flip exhaust vent allows for material debinding, while a furnace-top circulation fan enhances temperature uniformity.
- A rapid cooling unit is available for controlled cooling from temperatures up to 400°C, along with optional manual or automatic air intake controls.

TECHNICAL SPECIFICATIONS

Model	Chamber size（ mm）	Volume	Max temp.	Working temp.	Voltage	Power	Heating element	Temp precision
TT-BHF-96-1200	400×600×400	96L	1200℃	1100℃	380V	18KW	HRE	±1℃
TT-BHF-288-1200	600×800×600	288L	1200℃	1100℃	380V	30KW	HRE	±1℃
TT-BHF-640-1200	800×1000×800	640L	1200℃	1100℃	380V	45KW	HRE	±1℃
TT-BHF-1200-1200	1000×1200×1000	1200L	1200℃	1100℃	380V	80KW	HRE	±1℃
TT-BHF-2160-1200	1200×1500×1200	2160L	1200℃	1100℃	380V	150KW	HRE	±1℃
TT-BHF-96-1400	400×600×400	96L	1400℃	1300℃	380V	21KW	SIC	±1℃

TT-BHF-288-1400	600×800×600	288L	1400℃	1300℃	380V	30KW	SIC	±1℃
TT-BHF-640-1400	800×1000×800	640L	1400℃	1300℃	380V	50KW	SIC	±1℃
TT-BHF-1200-1400	1000×1200×1000	1200L	1400℃	1300℃	380V	100KW	SIC	±1℃
TT-BHF-2160-1400	1200×1500×1200	2160L	1400℃	1300℃	380V	200KW	SIC	±1℃
TT-BHF-96-1700	400×600×400	96L	1700℃	1600℃	380V	25KW	MoSi2	±1℃
TT-BHF-288-1700	600×800×600	288L	1700℃	1600℃	380V	50KW	MoSi2	±1℃
TT-BHF-640-1700	800×1000×800	640L	1700℃	1600℃	380V	80KW	MoSi2	±1℃
TT-BHF-1200-1700	1000×1200×1000	1200L	1700℃	1600℃	380V	150KW	MoSi2	±1℃
TT-BHF-2160-1700	1200×1500×1200	2160L	1700℃	1600℃	380V	300kw	MoSi2	±1℃

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