



BOGIE HEARTH RESISTANCE FURNACE TT-BHF-660-1200A

The 1200°C Bogie Hearth Resistance Furnace – TT-BHF-660-1200A is engineered for sintering large materials or supporting small-scale production, providing reliable and uniform thermal performance. Built with high-grade furnace components and advanced construction techniques suited for high-capacity operations, it delivers stable temperature control and consistent results. An automated trolley system ensures smooth material handling and efficient operation, making it ideal for continuous use in research or production environments.

This furnace is suitable for processing advanced materials such as metals, ceramics, nanomaterials, and semiconductors. It features a 660L chamber capable of continuous operation at 1100°C and reaching a maximum temperature of 1200°C. Heating is achieved using high-quality HRE alloy resistance wire, with precise temperature monitoring via an N-type thermocouple, ensuring $\pm 1^{\circ}\text{C}$ accuracy for reproducible and reliable thermal processing. The system operates on 380V/45 kW, offering robust performance for industrial or laboratory applications.

Model No.	TT-BHF-660-1200A
Chamber Volume	660L
Continuous Temperature	1100°C
Max Temperature	1200°C
Voltage	380V/45kw
Heating Element	High Quality Alloy Resistance Wire□ HRE□
Temperature Precision	$\pm 1^{\circ}\text{C}$
Thermocouple	N type

APPLICATIONS

- **Advanced Ceramic Materials** – Enables high-temperature sintering and densification of ceramics, ensuring uniform microstructure, excellent thermal resistance, and mechanical strength for industrial production and research applications.
- **Nanomaterials Research** – Provides precise, stable thermal processing for nanostructures and advanced composites. Supports R&D in functional nanomaterials for electronics, catalysis, and energy storage applications.
- **Semiconductor Materials** – Facilitates annealing, diffusion, and oxidation of semiconductor substrates at high temperatures. Ensures accurate temperature control critical for microelectronics, optoelectronics, and materials development.
- **Powder Metallurgy** – Supports high-temperature sintering of metal powders into dense, uniform components. Widely applied in producing complex shapes and advanced alloys in both research and industrial environments.
- **Petrochemical & Chemical Laboratories** – Suitable for catalyst activation, thermal decomposition, and reaction mechanism studies requiring temperatures up to 1200°C. Delivers precise and reproducible thermal profiles for chemical R&D.
- **Aerospace Materials Engineering** – Enables testing and processing of high-performance alloys, ceramics, and composites for aerospace applications. Provides consistent thermal stability and mechanical validation under controlled conditions.
- **Energy & Battery Research** – Offers controlled thermal treatment for lithium-ion battery materials, solid-state electrolytes, and next-generation energy storage systems. Ensures reproducible temperature uniformity and high-temperature stability.

- **Universities & Research Institutes** – Ideal for advanced studies in materials science, physics, chemistry, and engineering. Offers versatile programming, reliable performance, and robust safety for academic laboratories.
- **Industrial Quality Control & Certification** – Supports ultra-high temperature testing for product validation, compliance verification, and certification. Meets ISO, CE, SGS, and TÜV standards for regulated industries.

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°C	1100°C	380V	18KW	HRE	±1°C
TT-BHF-288-1200	600×800×600	288L	1200°C	1100°C	380V	30KW	HRE	±1°C
TT-BHF-640-1200	800×1000×800	640L	1200°C	1100°C	380V	45KW	HRE	±1°C
TT-BHF-1200-1200	1000×1200×1000	1200L	1200°C	1100°C	380V	80KW	HRE	±1°C
TT-BHF-2160-1200	1200×1500×1200	2160L	1200°C	1100°C	380V	150KW	HRE	±1°C
TT-BHF-96-1400	400×600×400	96L	1400°C	1300°C	380V	21KW	SIC	±1°C
TT-BHF-288-1400	600×800×600	288L	1400°C	1300°C	380V	30KW	SIC	±1°C
TT-BHF-640-1400	800×1000×800	640L	1400°C	1300°C	380V	50KW	SIC	±1°C
TT-BHF-1200-1400	1000×1200×1000	1200L	1400°C	1300°C	380V	100KW	SIC	±1°C
TT-BHF-2160-1400	1200×1500×1200	2160L	1400°C	1300°C	380V	200KW	SIC	±1°C
TT-BHF-96-1700	400×600×400	96L	1700°C	1600°C	380V	25KW	MoSi2	±1°C

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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