

## PRODUCT DATA SHEET

# Bottom-Discharge CVD / Carbonization Furnace

Bottom-Discharge CVD / Carbonization Furnace is configured for high-temperature CVD processing of carbon-carbon composites and silicon carbide components. Design temperature reference: up to 2100°C.



## OVERVIEW

### Product Overview

The Bottom-Discharge CVD / Carbonization Furnace is intended for high-temperature chemical vapor deposition and related densification processes. It is aimed at carbon-carbon composites and silicon carbide components and can be arranged with multi-station, bottom-loading or large horizontal structures according to workpiece size and process continuity requirements.

For large or heavy workpieces, the system can be adapted around loading convenience, temperature uniformity and process continuity. It is aimed at customers who need dependable deposition conditions and engineering-oriented furnace structures.

## MANUFACTURER

### Yuanhang Industrial Furnace

#### Customized Furnace Engineering

Supplier of customized vacuum, atmosphere, graphitization, carbonization, sintering, brazing and CVD equipment with configurable structure, hot-zone dimensions and automation packages.

#### Contact Information

Phone: +86 15115399105

Website: <https://www.hnyhgyl.com>

Location: China, Zhuzhou, Hunan

## TECHNICAL FEATURES

# Technical Features

Configured for deposition uniformity, hot-zone stability and workable loading structures.

Available for bottom-loading, multi-station or large-format furnace arrangements.

Suitable for densification, infiltration and high-temperature CVD processes.

Focused on engineering practicality for large or process-critical workpieces.

## APPLICATIONS

# Typical Applications

- carbon-carbon composites
- silicon carbide components
- CVD densification
- coating and infiltration
- composite material processing

## TECHNICAL DATA

# Technical Data Tables

TABLE 1

Heating Method	等静压Graphite电阻加热（低压大电流方式）
设计/Working Temperature	Max Temperature <b>2100°C</b> / 长期常用 <b>2000°C</b>
温控精度	±0.1°C（日本岛电精密仪表控制）
Ultimate Vacuum度	≤ 5Pa（冷态空炉状态下）
恒压控制	100-7500Pa 范围全自动微正压恒定控制
Control System	西门子PLC + 15寸台达触摸屏（带历史数据导出）
有效放料空间	根据客户工艺需求提供 <b>非标尺寸定制</b>

REFERENCE DATA

## Reference Information

Product

**Bottom-Discharge CVD / Carbonization  
Furnace**

Process Type

**CVD / Densification**

Temperature Reference

**2100°C**

Manufacturer

**China | Zhuzhou Yuanhang Industrial  
Furnace Technology Co., Ltd.**

Website

**<https://www.hnyhgyl.com>**

Contact

**+86 15115399105**

## COMPANY PROFILE

# Zhuzhou Yuanhang Industrial Furnace Technology Co., Ltd.

Manufacturer of High-Temperature Industrial Furnaces and Thermal Processing Equipment



Zhuzhou Yuanhang Industrial Furnace Technology Co., Ltd. (Yuanhang Industrial Furnace) is a manufacturing company based in China, Zhuzhou, Hunan, specializing in thermal processing equipment. Centered on heat treatment and high-temperature thermal engineering technologies, we provide customized equipment and complete process solutions for industrial and research applications.

With more than 10 years of dedicated industry experience, we have served over 100 customers. Our principal product portfolio covers graphitization furnaces, carbonization furnaces, vacuum sintering furnaces, silicon carbide sintering systems, CVD furnaces and related custom high-temperature process equipment.

Particular attention is given to practical automation. After the workpieces are loaded and the furnace door is closed, the programmed cycle can be started with one command, allowing the system to operate automatically through the defined process sequence. This helps improve repeatability and reduce dependence on operator experience.

For projects involving vacuum, ultra-high-temperature, brazing, carbonization, graphitization, sintering or CVD-related thermal processing equipment, Yuanhang Industrial Furnace can provide technical communication, configuration support and project-oriented engineering coordination.

- Graphitization and carbonization equipment for carbon materials, felt, carbon fiber and graphite products.
- Vacuum and atmosphere sintering systems for advanced ceramics, cemented carbide and refractory metals.



- Bottom-loading, multi-station and large-format CVD systems for demanding composite processing routes.
- Technical support for furnace selection, custom engineering, retrofit evaluation and process matching.

Sales Hotline

**+86 15115399105**

Technical Support

**+86 15273391550**

Website

**<https://www.hnyhgyl.com>**

Location

**China, Zhuzhou, Hunan**

This material is intended for product introduction and selection reference. Final configuration, dimensions and technical parameters are subject to the mutually confirmed technical proposal.