

PRODUCT DATA SHEET

Stress Relief Furnace for 3D-Printed Parts

Stress Relief Furnace for 3D-Printed Parts is used for efficient stress relief of titanium alloy components and 3D-printed components.



OVERVIEW

Product Overview

The Stress Relief Furnace for 3D-Printed Parts is used to reduce residual stress in titanium alloy components and 3D-printed components. It helps users balance throughput, thermal uniformity and process consistency for post-forming, post-welding or post-print heat treatment.

The furnace can be tuned according to part geometry, material type and target deformation control. It is suitable for customers who want better dimensional stability before subsequent machining, assembly or use.

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

Used to reduce residual stress after machining, forming, welding or printing.

Supports dimensional stability and improved downstream processing consistency.

Suitable for metal parts with strict shape-control requirements.

Configurable around throughput, atmosphere route and thermal cycle.

APPLICATIONS

Typical Applications

- titanium alloy components
- 3D-printed components
- machined parts
- welded structures

TECHNICAL DATA

Technical Data Tables

TABLE 1

参数项目	Parameter
适用材料	钛合金、High-Temperature Alloys、模具钢、铝镁合金等
Rated Temperature	最高 950°C (根据工艺可定制更High Temperature)
Cooling Method	炉内随炉冷却 或 强制风冷系统 (可选)
数据记录	温度、Vacuum Level全过程记录导出 (符合航天/医疗标准)
洁净标准	炉内无油无粉尘污染设计
Ultimate Vacuum度	10 ⁻³ Pa 级高Vacuum (或高纯惰性气体保护)

REFERENCE DATA

Reference Information

Product

Stress Relief Furnace for 3D-Printed Parts

Process Type

Stress Relief

Temperature Reference

As defined by the confirmed technical proposal

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.