

# Vacuum Heat Treatment Furnace

VIBRATION ISOLATOR & CHAMBER PRODUCTS



## Wafer anneal furnace

- Wide setting range from rapid heating to low speed heating
- Available easy operation of Multistage step heating without moving sample
- Available rapid gas quench and cooling control by implemented gas cooling mechanism and heated gas introducing
- Available various heating in vacuum, filled gas, and flow gas by implemented evacuation system
- Equipment integrated with flame supplies front panel concentrated operation that controls kinds of pumps, vacuum gauges, heat devices, and gas flow.
- Suitable for;  
Basic research of materials, heat process simulator, annealing semiconductor/superconductivity materials in a CO<sub>2</sub> gas atmosphere



Feel free to contact us for other customized specification such as quartz tube installation flange implement, or your required specification.

## Vacuum Heat Treatment (Entrustment Services)

### Feature

- Provide clean vacuum environment by implemented oil-free evacuation system
- Available various heat cycle process according to user needs
- Available cooling by using Nitrogen gas, Argon gas, etc.
- Available heat process with little deformation and distortion
- A maximum 900 X 900 X 500 H specimen size applicable
- Wide temperature range 150 ~ 1100 °C applicable
- Base pressure :  $10^{-5}$  Pa

### Purpose

- Vacuum chamber, metal mold, parts, jig
- Anneal processing in vacuum
- Vacuum magnetic annealing



### Application Field

- Precision Machine
- Automobile
- Aerospace
- Energy
- LCD/semiconductor manufacturing
- Electrical/electronic
- Medical Equipment
- Particle accelerator/Nuclear fusion
- Research and development
- Spectacles product
- Nano-technology

**VIC international provides entrustment services;  
Almost all molds, parts, and jigs are available in an optimum heat process.**

VIC International Co., Ltd <http://www.vic-int.co.jp/>

# Vacuum Heat Treatment Furnace

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## Vacuum Heat Treatment Furnace

### Feature

- Supply Vacuum Chamber in various size
- Available suitable heater materials according to the temperature range of process (High-frequency heating, Metal heater, Carbon heater, etc.)
- Selectable from low cost diffusion pumps to turbo molecular pumps supplying clean environment
- Forced cooling in the chamber by a heat exchanger (optional)
- Automatic operation mode is available by touch panel control (for production line)



**Square type large vacuum furnace**

Internal dim.: 1 meter SQ.  
heating temperature: 500 °C



**Cylindrical type large vacuum furnace**

Internal dim.: 400X580X350Hmm.  
heating temperature: 1050 °C



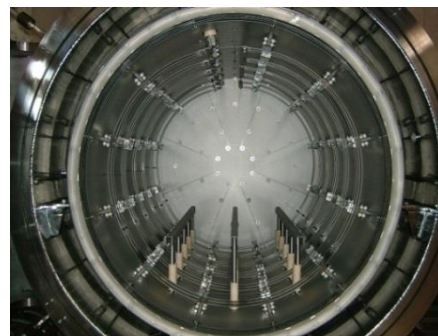
**Square type small vacuum furnace**

Internal dim.: 300mm SQ.  
heating temperature: 300 °C

## Oil-Free Vacuum Heat Treatment Furnace

### Feature

- Oil-free evacuation system consisted of Turbo Molecular Pump /Dry Pump
- Vacuum Chamber Configuration with space and weight saving
- Heater Reflector Configuration avoiding thermal and secular variation
- Simple operation for evacuation and heating control by touch panel operation
- Available for magnetic annealing of mu-metal material



**Cylindrical type large vacuum furnace**

Internal dim.: 960 X 1000mm  
heating temperature: 1100 °C