

# Vacuum Furnaces for Vacuum Sintering

Choose from our product range that includes:

- ▶ High temperature vacuum sintering furnaces
- ▶ High pressure sinter-HIP furnaces
- ▶ Debinding/pre-sintering furnaces



TAV VACUUM FURNACES produces vacuum sintering furnaces according to the customer needs, able to process metallic or ceramic powders in thermal chambers made of graphite or all metal (roughly from 1250°C/2912°F to 2.300°C/4172°F) at high cooling gas pressures.

### MIM

(Metal Injection Moulding)

TAV MIM vacuum furnaces operate at temperatures up to 1.600°C/2.912°F in either graphite or all metal chambers (ML/Mo/W) for sintering of stainless steels, titanium, ceramics, etc. Static/dynamic/flushing partial pressure regulation system complete with flow-meters guarantees a precise control of all the sintering parameters. MIM-box fixture allows for single-cycle debinding plus sintering processes.

### HARD METAL - SINTER HIP

(Hot Isostatic Pressing)

To get this process, TAV VACUUM FURNACES produces furnaces able to work at temperatures up to 1.600°C/2.912°F and pressure up to 10 MPa (100bar) to sinter and sinter HIP hard metals.

### LASER SINTERING

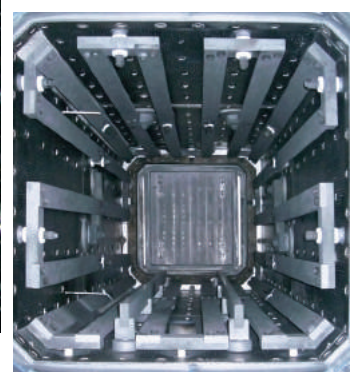
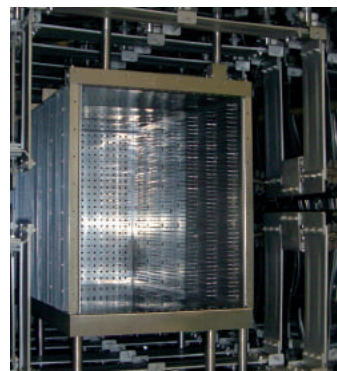
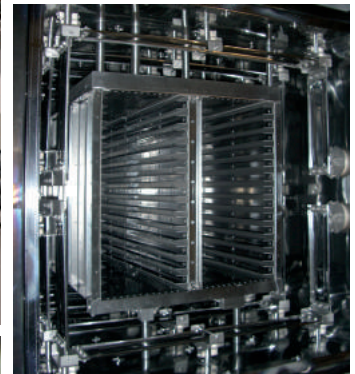
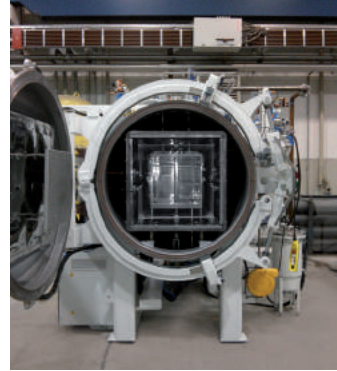
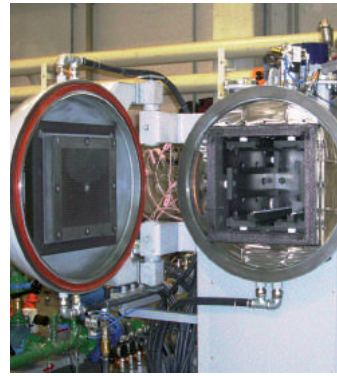
The components built up with this technology need to be submitted to a heat treatment to allow the detachment from their basis. Temperature and time are according to the nature of the sintered material.

**TAV VACUUM FURNACES** designs and manufactures advanced vacuum furnaces with the highest quality standards in a wide range of geometries and dimensions, now installed and running in over 50 countries in the 5 Continents.

**TAV VACUUM FURNACES** continuously develops its technology and vacuum furnaces through a close collaboration with its customers and partners.

VACUUM FURNACES MAINLY FIND APPLICATION IN THE FOLLOWING INDUSTRIES:

- aero-engine manufacturing
- industrial gas turbine manufacturing
- heat exchanger manufacturing
- commercial heat treatment
- manufacturing of sintered components
- additive manufacturing
- research centers



## TAV VACUUM FURNACES SPA

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