

Laboratory Furnace

Standard Features:

- Precise temperature control & Uniform heating.
- Rapid heating and energy efficient.
- Maximum operating temp 3000°C.
- Furnace can operate under high vacuum.
- Water cooled jacket, skin temperature near to ambient.
- Door limit switch for making heating system off while door in open condition.
- Automated material handling

Accessories

- Hand Gloves
- Retort
- Thermal protection cloth
- Chiller unit
- Lifting mechanism
- Vacuum pump

VACUUM FURNACE-LVF

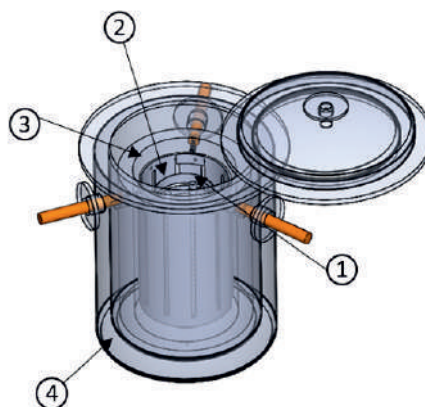


Vacuum Furnace LVF-3000

Tempsens laboratory vacuum furnace is a specialized piece of equipment used for various high-temperature processes under controlled atmospheric conditions. It is commonly employed in materials science, metallurgy, and other fields where precise heating, cooling, and controlled environments are essential for research, development, and production.

Heating elements graphite, molybdenum (Mo) or tungsten (W) generates heat required for the process. Vacuum pump removes air and other gases from the chamber to create a controlled vacuum environment.

Tempsens make furnace offers you customization according to the needs of environment with various accessories on offer.



- 1) Retort
- 2) Heating element
- 3) Radiation shield
- 4) Cooling jacket

Inside view of LVF-3000

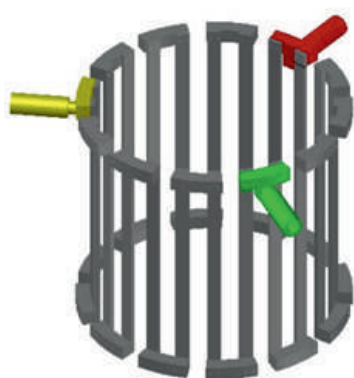
Tailorization

- Provision for gas purging application (Ar, N₂, H₂, etc.).
- Pre heating of gases.
- Programmable PID controller with RS-232/458/Ethernet & Data Logging software.
- Available in Front, Bottom and top loading.
- Available as per customer size requirement.

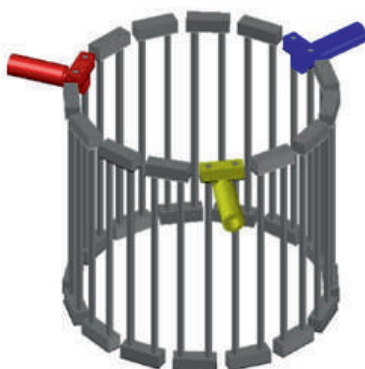
Applications of LVF:

- Materials processing, sintering, calcination.
- Degassing, pyrolysis, siliconization.
- Synthesis, sublimation, MIM, CIM.

Types of Heating Element



Strip Heater



Rod Heater



Mesh Heater

Technical Data

| Model | Max. Temp (°C) | Capacity (L) | Temp. Sensor Type | Heating Element |
|----------|----------------|--------------|-------------------|-----------------|
| LVF 1600 | 1600 | 4-7 | C/D | Mo |
| LVF 2300 | 2300 | | Pyrometer/C | W |
| LVF 3000 | 3000 | | Pyrometer | Graphite |