



Vacuum Hot Press (VHP)

Hot pressing is a high-pressure, low-strain-rate powder metallurgy process for forming of a powder or powder compact at a temperature high enough to induce sintering and creep processes.

Using a Vacuum Hot Pressing machine, it would be possible to form materials under vacuum and high temperature and pressure conditions. So, new materials with certain special properties, such as the amorphous phase, reduced material gap, increased strength and rigidity and even change in the structure of the materials can be obtained.

Features:

- High heating and cooling rate
- Ability of producing the wide range of metals, ceramics and composites
- Ability to develop temperature and force by customer order
- Fully automatic control and programmable system
- Measuring of compression path and speed
- Camera and recording system
- User friendly interface
- Cost efficient product



Specification

Double wall stainless steel chamber	50 lit, sensor-based door lock
Hydraulic system	Double-acting 15 tone with servo valve
Max temperature of induction furnace	1500 °C
Temperature measurement system	Thermocouples, optionally controlled by pyrometer
Vacuum system	$<5 \times 10^{-2}$ mbar
Touchscreen monitor	7 inch TFT