

## Vacuum Hot Press Furnace Machine For Lamination And Heating

Item Number: KT-VLP



## Introduction

KINTEK Vacuum Lamination Press: Precision bonding for wafer, thin-film & LCP applications. 500°C max temp, 20-ton pressure, CE certified. Custom solutions available.

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| Dimensions                                  | Over-all: 775mm(L) x 550mm(W) x 1325mm(H)  |
|---|--|
| Structure                                   | <ul> <li>Two 135 x 135 mm flat heating platens made of high temperature resistant Cr steel with max. working temperature of 500°C</li> <li>1000W Heating element is inserted into the center of the heating plates for fast heating</li> <li>Max. Load on 135x135mm Heated Platen: 10 Metric Tons at 500°C (55 kg/cm²); 20 Metric Tons at RT (110 kg/cm²)</li> <li>Two precision temperature controllers which control two heating plates separately with 30 programmable segments</li> <li>Water cooling jackets are built on both top &amp; bottom of the heating plates for assisting cooling</li> </ul>  |
| Hydraulic Pump                              | <ul> <li>Modified electric hydraulic press is connected to vacuum chamber.</li> <li>Movable distance between two heating plates: 15 mm.</li> <li>Automatic max. pressure controlled via a digital pressure gauge.</li> <li>Pressure accuracy: +/-0.01 Mpa (0.1 kg/cm<sup>2</sup>)</li> <li>Two flat heating plates are installed with water cooling plates for Max. 500°C working temperature.</li> <li>Water cooling (&gt;15L/min) is required to cool the heating plates when the operating temperature is over 200 °C.</li> </ul>   |
| Temperature control and<br>Pressure Display | <ul> <li>Two precision temperature controllers with 30 programmable segments control the heating plates separately with +/-1°C accuracy.</li> <li>The temperature controllers have PID auto tune function, over-temperature protection and thermal couple broken protection.</li> <li>Max. Temperature: 500°C with inert gas or vacuum with accuracy +/-1°C</li> <li>Max. Heating rate: 2.5°C/min</li> <li>Software and PC interface is built in the controller, which can be connected to a PC for computer controlling via a RS232 connector.</li> <li>Digital pressure meter (controller) is built outside the vacuum chamber.</li> <li>You can set pressure at the desired value which can stop the electric hydraulic press automatically.</li> </ul> |
| Vacuum Chamber                              | <ul> <li>Electric hydraulic press and heating plates are placed inside the vacuum chamber.</li> <li>Vacuum chamber is made of SS304 with the size: 525Lx480Wx450H (mm).</li> <li>Vacuum chamber Capacity: about 75 Liters.</li> <li>300mm dia. vacuum sealed hinged type door with 150mm Dia. quartz glass window is installed for easy sample loading and observation.</li> <li>Silicone O-ring can be used for all vacuum sealings.</li> <li>One precision digital vacuum gauge (10E-4 torr) is installed on the vacuum chamber.</li> </ul>  |
| Model                                       | KT-VLP100  |



| Heating plate size     | 100x100mm                                | 300x300mm | 400x400mm |
|------------------------|--|-----------|-----------|
| Plates travel distance | 30mm                                     | 40mm      | 40mm      |
| Working pressure       | 30T during heating/40T in the cold state |           |           |
| Pressure gauge         | Digital pressure gauge                   |           |           |
| Heating temperature    |  |           |           |
| Temperature control    | Touch screen with PID thermal controller |           |           |
| Vacuum chamber         | 304 Stainless steel                      |           |           |
| Vacuum pump            | Rotary vane vacuum pump                  |           |           |
| Vacuum pressure        | -0.1Mpa                                  |           |           |
| Power supply           | AC110-220V, 50/60HZ                      |           |           |