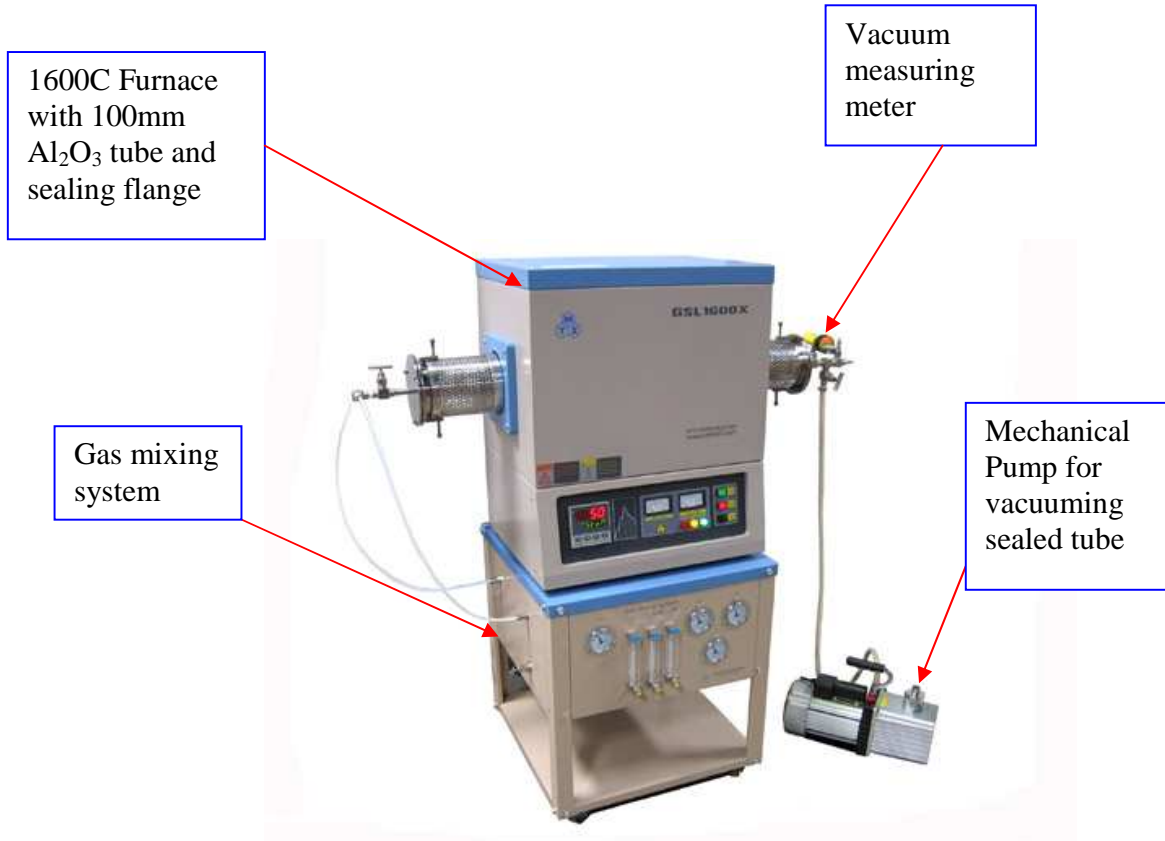


## Introduction

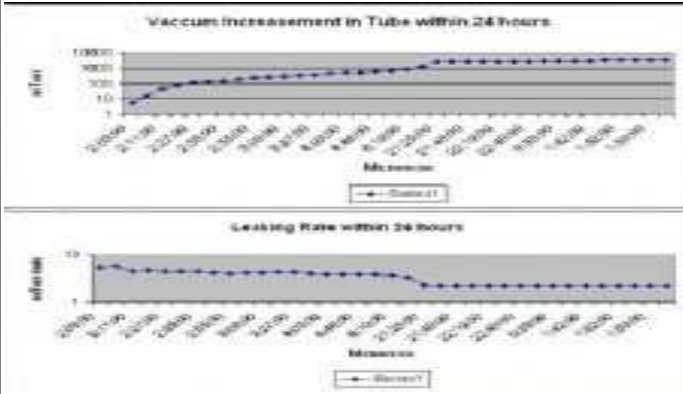
GSL-1600X-3CLV is cover split-able single zone tube furnace with mechanical vacuum pump and three channels gas flowing system, which can achieve vacuum up to  $10^{-2}$  torr and mix 1-3 type of gases for CVD or diffusion.

## Structure



## Specification

Furnace casing	Double layer steel casing with air cooling. Two cooling fan inside to keep temperature of outside case < 55°C
Power	9 KW at Max.
Voltage	AC 208-240V Single Phase, 50/60 Hz
Heating Element	1700 grade MoSi <sub>2</sub> ( 8 pcs )
Max. Temperature	1600 °C <1 hour
Continuous Temperature	800~1550 °C

Max. Heating/Cooling Rate	5 °C /min
Tube Size and Materials	99.8% high purity Al <sub>2</sub> O <sub>3</sub> ceramic                      4" OD x 3.75"ID x 40" Length
Heating Zone length	455 mm ( 18")
Constant temperature zone	150 (+/-1°C)
Temperature controller	<ul style="list-style-type: none"> <li>• Two precision temperature controllers and control two zone independently</li> <li>• PID precision control by PWM solid relay</li> <li>• 30 segments programmable for any temperature profile</li> <li>• Built in protection for overheated and broken thermal couple</li> </ul>
Temperature Accuracy	+/- 1
Vacuum Seal	<p>Two stainless steel flanges with vacuum gauge and valves and the leaking rate is 6 mtorr/min at max. and 2 in stable, click the picture below to get details chart and data measured by CE certified vacuum meter:</p>  <p>(For a whole 24 hours curve display, the time segment through 08:00:00~21:10:00 in X axis is passed over in the chart, therefore, steep variety in there)</p>
Vacuum pump	Double Steps Rotary Vane High Speed Vacuum Pump- 2TW-4C-110v with max. vacuum pressure of 10 <sup>-2</sup> torr. Stainless steel hose tube is included for connecting to tube furnace
Vacuum Gauge	CE certificated vacuum meter with LED digital display with the range 10E-4~10E3 torr, click <a href="#">here</a> to see details



Click the picture above, the vacuum system reaches to 50mtorr at the condition 1/4 NPT fitting valve, and rubber pipe, pumping 60 minutes; to get high vacuum environment which can be 5mtorr at minimum, please order **MTI's KFD25 fitting and ball valve, SS pipe.**

Gas flow pipe

Two gas flowing pipes are provided for immediately use:



Gas flow meter and pressure meter

- **Three gas flow-meters ( 40 - 400 cc/min flow rate and 4% accuracy FS)** are installed in bottom mobile case and monitor each gases flowing rate ( two kinds of gases in total )
- **Four pressure meters** are installed in bottom mobile cart which monitor each type of flowing gas pressure and mixing gas pressure separately.

Valve

Four stainless steel valves are installed in side panel of mobile cart to control mixing gases and three inlet gases separately.

Dimension

Furnace: 550 L x 500 W x 700 H mm Bottom Mobile case: 600x600x597

Net Weight

450 lbs

Shipping weight

500 lbs

Shipping package size after crating

Two cases in one pallet: 45x45x35/ case

Warranty

One year limited. ( not including tube)