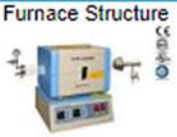
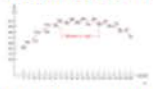
SPECIFICATIONS:

Furnace Structure 	• Double layer steel structure. • High purity Al2O3 fibrous insulation with Max. energy saving • High purity alumina coating on refractory ceramics for longer service life. • Two 4" length heating zone which can be controlled by temperature independently. • Dual Heating zone design and Alumina circle block help you build customized Temperature Gradient inside the tube. • All electric components (>24V) are UL certified and ready to pass TUV, CSA, and UL test
Power	1.5 KW
Voltage	• 110V
Max. Temperature	1200°C (<1 hour)
Continuous Temperature	1100°C (continuous)
Max. Heating Rate	≤ 20°C/min
Heating Zone Length	• Two heating zone and each zone length is 100mm and 200 mm in total
Constant Temp. Zone & Temperature Gradient	• 50mm within +/-1°C (If set two zones at same temperature) • 70mm within +/-2°C (If set two zones at same temperature)  • Max. temperature gradient : 1°C/ mm (one zone heating) • Max. temp difference between the adjacent zones ~100°C (heat up one zone only, without the isolator between the adjacent zones)
Temperature Controller	• Two temperature controllers are built to control heating zone independently via K-type thermal couples • PID automatic control via solid state relay with 30 steps programmable • Built in Over Temperature and Thermocouple Failure Protection
Temperature Accuracy	+/- 1°C
Heating Elements	Fe-Cr-Al Alloy doped by Mo
Tube Size Please select the tube size in the options bar, (click below to order spare tube)	1" quartz tube (25mm O.D x 22mm I.D x 450mm L) • Two fibrous ceramic tube blocks are included • Quartz blocks (optional) are ideal for clean & Hight vacuum • May order flange support to avoid tube rotating (click Pic below right) 
	2" quartz tube (50mm O.D x 44mm I.D x 600mm L) Two fibrous ceramic tube blocks are included for blocking heat radiation from tube chamber. (Ceramic blocks must be fully inserted into the furnace chamber before heating) 
Vacuum Flanges	• 1" flange has no thermocouple insert (click bottom picture to see details) 
	• 2" and 2.36"(Option) tube flange (click bottom picture to see details) 
Vacuum Level	10^{-3}torr (by mechanical pump)
Fitting Ports & Optional Parts	• You may need a vacuum valve at the vacuum portend (click picture left to order) • You may consider ordering quick connecting flange at extra cost. • You may click the pictures in below to order furnace with a vacuum pump and a temperature calibration kit. 
Pressure Measurement & Monitoring 	• Standard mechanical vacuum gauge measures within a pressure range of -0.1 to 0.15Mpa is included. • **OPTIONAL:** A gas-type independent (above 10mbar) digital vacuum gauge with a wide range between $3.8x10^{-5}$ to 1125 Torr. Aside from greater measurement precision, this gauge reduces risks of chamber explosions caused by the incorrect reading of gas pressures due to gas-type dependency.
Net Weight	35 Kg
Shipping Package Size	**40"(L) x 25"(W) x 35"(H)**
Shipping Weight	**110 lbs**
Warranty	One year limited warranty with lifetime support (Consumable parts such as processing tubes and o-rings are not covered by the warranty, please order replacements at related products below.)
Compliance	• CE Certified • All electric components (>24V) are UL / MET / CSA certified • The furnace is ready to pass TUV(UL61010) or CSA certification at extra cost. (Pls click marks below to learn details) • Please choose certification type from product option bar 
Application Notes & Warning   	• Tube furnaces with quartz tubes are designed for using under vacuum and low pressure < 0.2 bars / 3 psi / 0.02 MPa. Vacuum pressures may only be safely used up to 1000°C • ***Attention: A two-stage pressure regulator must be installed on a gas cylinder to limit the pressure to below 3 PSI for safe operation.*** Click here to learn the installation of a gas regulator. • How to set up the ceramic tube and vacuum flange for MTI tube furnaces. • For safety, you may consider putting the small tube furnace inside a fume hood. (click picture left)