



TITOLU MOUL

KSL-1100X-S-UL-LD is a CE certified & UL Ready compact hybrid furnace that offers 4"x4"x4" high purity fibrous alumina chamber, gas inlet and outlet ports and a 30-segment, programmable temperature controller, and the furnace is with UL / MET / CSA Certified electric components. For material synthesis under vacuum or the specific gas , This hybrid furnace integrates a 50mm O.D tube with the sealing flange into the small box furnace. It is the ideal muffle furnace for preparing small-sized sample using temperatures up to 1000°C in material research and dental labs with maximum energy saving (500 - 700W only). In addition, the compact furnace can be placed into a glove box to sinter samples in a vacuumed or controlled atmosphere.

SPECIFICATIONS:

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Furnace Construction Multile Furnace Configuration	High purity fibrous alumina insulation for maximum energy saving - 30% less power consumption than other brands (click pic below left to order spare) Door drops down for easy and safe sample loading and unloading (with automatic power off when the door is opened). Hybrid Furnace: One end flanged 2" quartz tube is included to perform tube flange application. (See the main picture) Thermal block is included, which can be inserted to work as a muffle furnace. (See the second pic at the left) Pressure gauge "The Stinger" is included for accurate digital pressure measurement.
Temperature Calibrator	Portable Digital Temperature Calibrator with USB and RS232 Interface & Software - NIST certificated - EQ-TC-calibrator-LD
Chamber Size	Size: 4"x4"x4" or 100x100x100 mm Capacity: 65 cubic-inch or 1 liter Click on picture to see the chamber size
Power	110V version: 950 W (power cord is included) 220V version: 1.2KW
Voltage	AC 110V or AC 220V 50/60 Hz please select the voltage in the option bar
Operating Temperature	• 1000°C max for an hour
Max. Heating Rate	30 °C /min
Temperature Controller	 PID automatic control and auto-tune function. 30 programmable segments for precise control. Built-in protection for the over-heating and broken thermocouple. Large digital control panel (48 x 96 mm) for easy operation.
Temperature Accuracy	+/- 1 °C
Heating Elements	Fe-Cr-Al Alloy doped by Mo
Thermocouple	K type
Optional	 Two 8 mm diameter hose barb connectors (gas inlet and outlet) (see pic below) in the furnace back panel are available at extra cost (\$99 for both connectors). Check the option box. Note: Self-Installation is required. The open barb-holes and threaded holes will be ready.
Overall Dimensions	 200 x 230 x 360 mm (Without tube) Click on picture to enlarge and view details
Laptop, software & WiFi Control(Optional)	Brand new laptop with Microsoft Window 10 and Microsoft Office 2013 (30 days free trial) for immediate use. Labview Based Temperature Control System (EQ-MTS01) enables user to edit temperature profile, manage heattreatment recipe, record and plot data for MTI furnaces. A wireless remote control provides up to 300 meters operating range. Above features are available upon request at an extra cost (up to \$1,000). Please contact us for more information. Note: The software is only compatible with MTI's Yudian Temperature Controller
Net Weight	~ 8Kg
Shipping Dimensions	17"(L) x14"(W) x 18"(H)
Shipping Weight	40 lbs
Warranty	 One year limited warranty with lifetime support ATTENTION: Any damages caused by the use of corrosive and acidic gases are not under the coverage of MTI One Year Limited Warranty.

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The furnace is ready to pass TUV(UL61010) or CSA certification at extra cost. (please click marks below to learn details)









Application Notes

Compliance

With the small footprint, low weight and low power requirement, it can be easily accommodated in a glove box and heat treat samples under protective gas. Please click pic.1~3 to see details.
 For High vacuum application (> 10e-6 torr), please choose quartz tube with CF flange as picture 4









Warnings

Toxic or explosive gases are not recommended for use with this furnace without necessary safety controls and

supervision. Please put furnace into fume hood for better safety (Click Pic.1)
Small cracks may appear on the surface of the refractory ceramics over extended use. This is a normal occurrence and the cracks may be repaired with alumina coating.

