

Muffle Furnace

Is an extremely heated chamber walls of which can radiantly heat the content which is kept inside so that material cannot have direct contact with the flame. These furnaces are often utilized in the testing laboratories as a means to create extremely high-temperature inside the chamber. They are employed to measure the characteristics of the materials at high and required temperatures. These furnaces are also known as retort furnaces.



Application of Muffle Furnace

Muffle furnace is used for numerous applications such as:

- 1- Fusing glass
- 2- Creating enamel coatings
- 3- Ceramics
- 4- Soldering
- 5- Brazing
- 6- Rubbers & Polymers

Apart from these well-known applications, muffle furnace is also used in many research centers, medical laboratories to determine the non-volatile and non-combustible proportion of the sample. The testing device is also used for highly sophisticated metallurgical applications. All types of muffle furnaces work on the basis of convections, conductions, and with the electrical resistance heating elements

SPECIFICATIONS

Furnace Structure	<ul style="list-style-type: none"> . Double shell steel case with cooling fan can keep outside case cool . High purity alumina fiber insulation for max. energy saving . New designed retention latch provides more safe working environment (Please click the left picture for details)
Dimensions	<ul style="list-style-type: none"> . Chamber: 250x 250x 300 mm (10 x 10 x 12 inch), 19 Liter . Overall: 600 x 780 x 620 mm (24 x 31 x 24.5 inch)
Power	9.0 KW
Voltage	AC 208V-240V single phase, 50/60 Hz (50A air breaker required) Note: Plug is not included, and it is suggested you use NEMA L5-30 / NEMA 10-30P plug for AC 110V and NEMA 6-20P plug for AC 208~240V)
Standard Working Temperature	1600°C or 2912° F (continuous)
Maximum Working Temperature (in different atmospheres)	<ul style="list-style-type: none"> . 1700°C (3092°F) in air <3 hours . 1650°C (3002°F) in N₂ . 1170°C ~ 1450°C (2138°F ~ 2642°F) in H₂
Heating Rate	0~10°C / min (suggestion = 5°C)
Temperature Accuracy	+/- 1° C
Temperature Uniformity	<ul style="list-style-type: none"> . +/- 5°C over 120 mm (5") @ 1700°C . +/- 2°C over 80 mm (3") @ 1700°C