

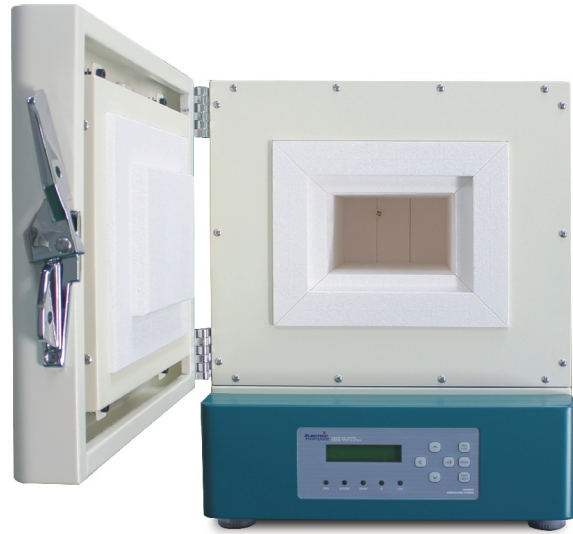
Electric MUFFLE FURNACE

MELTING
ASHING
up to 1200 °C



Electric Muffle Furnace

Ideal for experiments and process needs high temperature up to 1200 °C such as chemical analysis, annealing loss determination, materials testing and ashing processes.



Specifications

Heating	KANTHAL A-1
Temp. Range	Max. 1,200 °C
Accuracy	± 3.0 °C at 500°C (JSMF-30T)
Uniformity	± 3.0 °C at 500°C (JSMF-30T)
Control	Programmable PID Control 3 Pattern Memory 9 ramps and 9 dwells segments
Sensor	CA-Type Sensor
Safety	Over-Temperature Cut-Off Over Current Cut-Off
Material	Body : Epoxy Powder Coated Steel Chamber : Ceramic Fiber
Electric	220 ± 10% VAC 50/60Hz 1-Phase 380 ± 10% VAC 50/60Hz 3-Phase 4-Wire

Plug config.



CEE 7/7 Schuko



BS 1363



30 Amp



Max 1200 °C



Program Controller
3 Patterns Memory

Control Accuracy

- ▶ Programmable Digital PID control with $\pm 1.0^\circ\text{C}$ resolution
- ▶ 3 Patterns memory, 9 ramps and 9 dwell segments max. 999 times repeat for each pattern
- ▶ Constant Temp. Mode / Program Mode
- ▶ Pattern link and Segment skip function
- ▶ Automatic STOP timer Max. 99min 59sec
- ▶ Temperature calibration and auto-tuning function

- ▶ 해상도 $\pm 1^\circ\text{C}$ 정밀한 프로그램 PID 컨트롤러
- ▶ 3 패턴 저장 메모리 온도상승구간 9개, 온도유지구간 9개, 999회 또는무한 반복운전
- ▶ 정치운전 또는 프로그램운전 기능
- ▶ 작동 중인 패턴 종료 후 다른 패턴으로 링크하여 연속작동
- ▶ 현재 작동 중인 세그먼트 건너 뛰기 기능
- ▶ 타이머 내장 99분59초
- ▶ 온도보정, 오토튜닝 기능 내장

Performance

- ▶ Heavy-duty vacuum molded ceramic-fiber insulation designed to support heavy loads and extreme heat
- ▶ Door inner liner is filled with molded ceramic-fiber for long service life
- ▶ Embedded or exposed Kanthal-A1 heating elements offer maximum heat transfer and thermal uniformity long service life, protection from harmful materials and mechanical shock
- ▶ Maximum temperature up to 1200°C

- ▶ 진공성형된 세라믹 챔버는 단열성이 뛰어나고 열과 충격에 강함
- ▶ 도어 내부는 진공성형된 세라믹 라이너로 단열
- ▶ 내장형 (또는노출형) KANTHAL A-1 히터는 가열성능이 뛰어남
- ▶ 최고 온도 1200°C

Ordering Information

	JSMF-30T	JSMF-45T	JSMF-120T	JSMF-140T	JSMF-270T
Temperature Maximum / General Operating	1,000 / 800°C				
	JSMF-30H	JSMF-45H	JSMF-120H	JSMF-140H	JSMF-270H
	1,100 / $1,000^\circ\text{C}$				
	JSMF-30HT	JSMF-45HT	JSMF-120HT	JSMF-140HT	JSMF-270HT
	1,200 / $1,100^\circ\text{C}$				
Accuracy at 500°C	$\pm 3.0^\circ\text{C}$	$\pm 4.0^\circ\text{C}$	$\pm 5.0^\circ\text{C}$	$\pm 6.0^\circ\text{C}$	$\pm 7.0^\circ\text{C}$
Uniformity at 500°C	$\pm 3.0^\circ\text{C}$	$\pm 4.0^\circ\text{C}$	$\pm 5.0^\circ\text{C}$	$\pm 6.0^\circ\text{C}$	$\pm 7.0^\circ\text{C}$
Heat-up Time to 800°C	30 min	30 min	30 min	30 min	35 min
Chamber Volume (Capacity)	2.9 L	4.5 L	12.0 L	14.0 L	27.0 L
Dimensions Inner	130 x 250 x 90	150 x 300 x 100	200 x 300 x 200	250 x 350 x 160	300 x 300 x 300
W x D x H mm Outer	435 x 480 x 560	465 x 535 x 580	525 x 565 x 690	575 x 605 x 650	625 x 605 x 790
Heater Capacity	1.4 kW	1.6 kW	3.3 kW	4.0 kW	4.6 kW
Power Rating	6.5 Amp	7.4 Amp	15.2 Amp	18.3 Amp	20.2 Amp
Power Plug	CEE 7/7 Schuko	CEE 7/7 Schuko	30 AMP	30 AMP	30 AMP

Convenience

- ▶ Opening size adjustable ventilation damper
- ▶ Optional ceramic shelf

- ▶ 세라믹 재질의 배기구
- ▶ 세라믹 선반 [옵션]

Safety

- ▶ DUAL OVER TEMP. CUT-OFF
- ▶ MAX TEMP CUT-OFF
- ▶ SENSOR DISCONNECTION ALARM
- ▶ OVER CURRENT CUT-OFF : Electrical Leakage Breaker

Accessories

Art No.	Descriptions
	Ceramic Shelf
PHS-E01	for JSMF-30T(H, HT)
PHS-E02	for JSMF-45T(H, HT)
PHS-E03	for JSMF-120T(H, HT)
PHS-E04	for JSMF-140T(H, HT)
PHS-E05	for JSMF-270T(H, HT)