

## COMMODITY DESCRIPTION

H.S. Code	Item No	Description	Unit	Quantity
8514.20.1000		Electric Muffle Furnace	SET	1

A. Model Name : JSMF-45HT

B. Product Description : Electric Muffle Furnace

C. Manufacturer / Origin : JS Research Inc. / Rep. of KOREA

D. Application :

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

E. Photo



Vacuum Molded Ceramic Fiber Insulation  
with KHANTAL A-1 Heating Element

JSMF-45HT Electric Muffle Furnace

## **F. Feature**

### **Controller**

- ✓ Programmable Digital PID control with  $\pm 1.0$  °C resolution
- ✓ 3 Patterns Memory, 9 Ramps and 9 Dwell Segments, Max. 999 Cycles repeatable for each pattern
- ✓ Program Mode / Constant Temp. Mode
- ✓ Pattern Link Function
- ✓ Segment Skip Function
- ✓ Automatic STOP timer Max. 99 min 59 sec
- ✓ Temperature calibration
- ✓ Auto-tuning function
- ✓ CA-Type sensor

### **Construction**

- ✓ Heavy duty vacuum molding ceramic fiber insulation designed to supports heavy load, high temperature and repeated use
- ✓ Door inner liner is filled with molded ceramic-fiber for long service life
- ✓ Ventilation damper on top

### **Performance**

- ✓ 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 1,200 °C

### **Convenience**

- ✓ Opening size adjustable ventilation
- ✓ Optional Ceramic Shelf

### **Safety**

- ✓ OVER TEMP. CUT-OFF  
Digital system cut-off heater and AUDIO VISUAL ALARM in case +2 °C above set temperature  
Analog system cut-off heater 10% above set temp.
- ✓ MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM when +1 °C above maximum limit
- ✓ SENSOR DISCONNECTION ALARM
- ✓ OVER CURRENT CUT-OFF : Electrical Leakage Breaker

## G. Specifications

Chamber Volume (Capacity)	4.5 Liters
Inner Dims. (W x D x H)	150x 300 x 100 mm
Outer Dims. (W x D x H)	465 x 535 x 580 mm
No. of Ventilation damper	1 EA
Heating	KANTHAL A-1 heating element
Temp. Range	Maximum +1,200°C General operating +1,100°C
Accuracy	±4.0°C at +500°C
Uniformity	±4.0°C at +500°C
Heat up time to +800°C	30 min.
Control	Programmable PID control 3 Pattern Memory 9 ramps and 9 dwells segments
Sensor	CA(K)-Type Sensor
Safety	Over-Temperature Cut-Off Over Current Cut-Off
Material	Body : Epoxy Powder Coated Steel, 1.0 mm thickness Chamber : Ceramic Fiber
Electrical Requirement	220 ± 10% VAC, 50/60Hz, 1-Phase
Heater Capacity	1.6 kW
Power Rating	7.4 amps
Plug Configuration	CEE 7/7 Schuko or BS 1363

## H. Standard Accessories

Instruction Manual : 1 EA  
Warranty Card : 1 EA

## I. Options & Accessories

Art No.	Descriptions
PHS-E02	Ceramic Shelf

## J. Warranty

1 Year full coverage warranty