

# BENCHTOP MUFFLE FURNACE

LMF Series



Cabinet Constructed of 16-Gage Steel with Baked Epoxy Finish



- ✓ 550 in<sup>3</sup> Muffle Chamber
- ✓ 1100°C (2012°F) Maximum Operating Temperature
- ✓ Automatic and Programmable Models
- ✓ Modern Fiber/Firebrick Muffle Design
- ✓ 120 or 240V

LMF Series benchtop muffle furnaces feature a 550 in<sup>3</sup> chamber with fiber insulation and firebrick heating plates. The furnace cabinet is constructed of 16-gage steel with a baked epoxy finish. A top exhaust port allows gases to be vented, or it can be plugged during operation. Two temperature controller models are available: automatic and multistage programmable. LMF Series furnaces are ideal for heat-treating applications,

material research, and sample ashing determinations in the geological, metallurgical, and wastewater treatment industries. These furnaces are also used in chemistry, physics, and engineering laboratories.

The LMF-A550 has an analog pyrometer that displays temperature, scaled in 50° increments. Temperature is adjusted via a large control dial, scaled in 100° increments. The controller repeatability is excellent.

The LMF-3550 has a 3-stage programmable temperature controller that stores up to 10 programs in memory. Any

LMF-A550/120 shown smaller than actual size.

2 programs can be linked to create a single 6-stage program. One program is dedicated to a single setpoint that holds the setpoint indefinitely. The delay cycle allows the furnace to be set to its heating cycle at a specific time on a future date. The PID controller allows heat increase or decrease rates to be programmed into the cycle.



LMF-3550/120 shown smaller than actual size.

550 in<sup>3</sup> Chamber

2 Models:  
Automatic and Programmable



LMF-3550 models feature digital display with 3-stage programmable temperature controller.



Analog prometer displays temperatures on LMF-A550 models.

## Specifications

### Cabinet Dimensions:

41 H x 40 W x 39 cm D  
(16.0 x 15.7 x 15.3")

**Cabinet Construction:** 16-gage steel with baked epoxy finish

**Chamber Size:** 9.13 L (550 in<sup>3</sup>)

### Chamber Dimensions:

18 H x 23 W x 23 cm D (7 x 9 x 9")

### Electrical Requirements:

15 A @ 120V, 50/60 Hz;  
7.5 A @ 240V, 50/60 Hz

**Power Consumption:** 1800 W

**Watts to Maintain 1000°C:** 1025 W

### Operating Temp Range:

**LMF-A550:** 200 to 1100°C  
(392 to 2012°F)

**LMF-3550:** 50 to 1100°C  
(122 to 2012°F)

**Air Circulation:** Top exhaust port

**Muffle:** Fiber insulation with firebrick heating plates

## Heating and Cooling Times

Heating Temperature		Time (min)*	Cooling Temperature		Time (min)**
°C	°F		°C	°F	
200	392	5	1000	1832	5
400	752	10	800	1472	25
600	1112	20	600	1112	55
800	1472	30	400	752	110
1000	1832	50	200	392	180
1100	2012	65	—	—	—

\* Time to heat up from room temperature to indicated temperature with no load.

\*\* Time to cool down from 1100°C (2012°F) to indicated temperature with no load.

## To Order

Model No.	Volts	Controller Type	Shipping Wt kg (lb)
LMF-A550/120	100 to 125	Analog	23 (50)
LMF-A550/240	200 to 250	Analog	23 (50)
LMF-3550/120	100 to 125	Automatic	23 (50)
LMF-3550/240	200 to 250	Automatic	23 (50)

Comes complete with ceramic floor tray, power cord and operator's manual.

## Replacement Parts

Model No.	Description
LMF-HP	Heating plate (1 plate)
LMF-TRAY	Ceramic floor tray
LMF-TC	Thermocouple, Type K, 14 AWG, 4" L sheath, 48" L wire

**Ordering Example:** LMF-3550/120, 120V automatic control muffle furnace.  
LMF-TRAY, spare ceramic floor tray.