Rectangular Muffle Furnace Laboratory Model

Code: W-1455 GST: 18% Brand: AVAIN LABS





AVAIN LABS® Rectangular Muffle Furnace Laboratory Model

The AVAIN LABS® Rectangular Muffle Furnace Laboratory Model is a high-performance heating furnace designed for precise and uniform high-temperature applications in laboratories, research centers, industrial testing facilities, and educational institutions. Engineered with advanced thermal insulation and durable construction, this laboratory muffle furnace delivers reliable heating performance for a wide range of scientific and industrial processes.

The outer body is constructed from high-quality mild steel sheet with powder-coated finish, ensuring excellent durability, corrosion resistance, and long service life. The furnace chamber is insulated with high-grade ceramic wool insulation to minimize thermal loss and maximize heating efficiency.

Equipped with premium Kanthal wire heating elements, made from a special high-temperature alloy, the furnace provides uniform heat distribution and stable temperature performance throughout the chamber. The unit operates within a temperature range of 100°C to 900°C, with a maximum design temperature of 1000°C and a working temperature up to 940°C.

Designed for dependable laboratory use, the AVAIN LABS® Rectangular Muffle Furnace is suitable for ash testing, heat treatment, material analysis, sintering, and various high-temperature laboratory applications. It is compatible with 220–440 Volt, 50Hz Single or Three Phase Power Supply, making it suitable for diverse laboratory and industrial setups.

Key Features

- Heavy-duty Rectangular Laboratory Muffle Furnace
- Durable Mild Steel Powder-Coated Body
- High-efficiency Ceramic Wool Insulation
- Uniform heat distribution using Kanthal Heating Elements
- Temperature Range: 100°C to 900°C
- Maximum Design Temperature: 1000°C
- Working Temperature up to 940°C
- Low thermal loss and energy-efficient performance
- Suitable for continuous laboratory operation
- Compatible with Single or Three Phase Power Supply

Here is the technical specification from the image converted into a clean, markdown table for easy copying:

Applications

- Chemical Laboratories
- Research & Development Centers
- Pharmaceutical Industries
- Material Testing Laboratories
- Ash Content Analysis
- Heat Treatment Processes
- Educational & Scientific Institutions
- Industrial Heating Applications

The AVAIN LABS® Rectangular Muffle Furnace Laboratory Model combines precision heating, durable construction, and efficient thermal performance, making it an ideal solution for professional laboratory and industrial high-temperature applications.

Available models

https://avainlabs.com/wp-content/uploads/2026/05/AL-533A-Rectangular-Muffle-Furnace-Laboratory-Model-Digital-video.mp4

Specifications

Technical Specification	Detail
Model	AL-533
Inner Muffle Size	Available in various sizes, such as 225x100x100mm, 250x125x125mm, 300x125x125mm, 300x150x150mm, 300x200x200 with corresponding inch conversions.
Temperature Range	Working temperature of up to 900°C.
Heating	Embedded heater running around the chamber.
Temperature Sensitivity	±5% by energy regulator and ±5°C by digital electronic controller.
Temperature Control	Options for energy regulator, microprocessor-based PID or digital temperature indicator cum controller or Thermostat (Optional).
Voltage	Operating voltage of 220 Volts AC (50 Hz)
Relay	Solid-state electronic relay with a protective heat sink
Heating Elements	Grooved refractory for supporting the heating elements made out of kanthal wire, which are easily replaceable.
Insulation	Brick insulation ceramic wool/brick insulated body.
Casing	Outer shell made of thick mild steel finished in attractive stoving enamel/powder-coated paint.
Cat No	Inner Chamber Size In Mm | Inner Chamber Size In Inches
AL-533A	225x100x100 | 9x4x4
AL-533B	250x125x125 | 10x5x5
AL-533C	300x200x200 | 12x6x6
AL-533D	450x225x225 | 12x8x8
AL-533E	450x225x225 | 18x9x9
Optional (MFL1)	Microprocessor PID Based Temp Indicator Controller
Optional (MFL2)	Profiler Controller with ramp and sock facility 16 Steps
Note	| Please ask for other capacities of your requirement. GMP model inner and outer SS complete also available |

Available models (3)

Cat. No.	Size	HSN
W-1455-S1	Small	
W-1455		
W-1455-S2	Large	

Scan for details & enquiry