VACUUM OVEN

Precision Drying for Advanced Battery Research & Production

Vacuum Oven is designed for efficient drying of battery electrodes and moisture-sensitive materials by removing moisture under vacuum conditions at controlled temperatures.

KEY FEATURES

Precise Temperature Control
Digital PID controller ensures accurate temperature with high uniformity.

High Vacuum Performance
Achieves high vacuum level for efficient moisture removal and drying.

Durable & Corrosion Resistant
Stainless steel chamber with robust construction for long-lasting performance.

Observation Window
Tempered glass window allows easy monitoring of samples during operation.

Spacious Chamber
Multiple removable shelves provide flexibility for various sample sizes.

Safe & Reliable Operation
Equipped with safety features for secure and worry-free operation.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Application	Drying battery electrodes and moisture-sensitive materials
Temperature Range	Ambient +10°C to 200°C (models available up to 250°C or 300°C)
Temperature Resolution	0.1°C
Temperature Uniformity	±1°C
Vacuum Level	≤133 Pa (≈1 Torr) or better
Chamber Material	SS304 Stainless Steel
Shelves	2 – 4 removable stainless steel shelves
Display	Digital PID controller with LCD/LED display
Door	Tempered glass observation window
Vacuum Port	Standard KF or hose connection
Heating Type	Electric heating (stainless steel tubular heater)
Temperature Sensor	PT100
Timer	0 – 9999 minutes (programmable)
Safety Features	Over-temperature protection, vacuum break valve, fuse protection
Power Supply	220 – 240 V AC, 50 Hz
Power Consumption	Up to 2 kW (model dependent)
Chamber Capacity	25 L / 50 L / 80 L / 136 L / 216 L
Internal Dimensions (W×D×H)	Model dependent
Net Weight	Model dependent

ADDITIONAL FEATURES

- Fast and uniform drying
- Low-temperature oxidation prevention
- High-quality insulation for energy efficiency
- Compact and space-saving design
- Easy to operate and maintain

TYPICAL APPLICATIONS


Lithium-ion Battery Electrode Drying


Solid-state Battery Material Drying


Moisture-sensitive Material Drying


Research & Development

BENEFITS

- Removes moisture effectively for improved battery performance
- Enhances electrode quality and consistency
- Prevents contamination and extends material shelf life
- Ideal for R&D, pilot-scale, and production environments

Precise Temperature Control | High Vacuum Performance | Durable & Corrosion Resistant | Observation Window | Spacious Chamber | Safe & Reliable Operation

Engineered for Precision. Built for Reliability. | Powering Innovation in Battery Technology.