Forced Convection Oven
250°C | 300°C

LAB1ST FCO250 and FCO300 Series Forced Convection Ovens are designed for demanding applications such as desiccation, torrefaction, wax-melting, and sterilization in mining, laboratories, and research. Featuring a durable mirror-finish stainless steel chamber with argon arc welding, these ovens include a high-temperature resistant synthetic silicone seal and a standard independent over-temperature controller for safety and reliability.

Features

> **Premium 304 Stainless Steel Interior:** The chamber is constructed with mirror-polished 304 stainless steel and assembled using argon arc welding, ensuring exceptional durability, corrosion resistance, and easy cleaning.

> **Advanced Thermal Sealing:** Features new synthetic silicone door gaskets capable of withstanding long-term high-temperature operation, minimizing heat loss and improving efficiency.

> **Precise & Intelligent Control:** A sophisticated PID microprocessor controller with a timing function (0-9999 min) ensures accurate and stable temperature control (±1°C).

> **Enhanced Safety Protection:** Includes an independent over-temperature alarm and cutoff system that automatically interrupts heating upon exceeding set limits, ensuring safe operation.

> **Superior Temperature Uniformity:** The high-temperature resistant air circulation system, comprising a durable fan and optimized air duct, ensures excellent temperature uniformity throughout the working chamber.

> **Adjustable Airflow Control:** Built-in damper adjustment on the control panel allows precise regulation of intake and exhaust airflow levels within the chamber.

Options

	FCO-RS485	RS485 interface and communication software
	FCO-Printer	Embedded printer
	FCO-DataExport	USB data storage and export
	FCO-ProgramCtrl	Multi-segment programmable LCD temperature controller
	FCO-TestHole	Test hole (Φ25mm) for external probes or cabling

Independent temperature-limiting controller

Air adjusting knob

Adjustable shelf

Specification

FCO250 Series >>>

Model	FCO250-16L	FCO250-30L	FCO250-50L	FCO250-80L	FCO250-136L
Electrical Requirement	220V 50Hz	220V 50Hz	220V 50Hz	220V 50Hz	220V 50Hz
Temperature Range	RT+10°C ~250°C				
Display Resolution	0.1°C				
Temperature Stability	±1°C				
Temperature Uniformity	±3%（at 100°C）				
Ambient Temperature	+5~40°C				
Power Consumption	800 W	850 W	1100 W	1550 W	2050 W
Chamber Volume	16 L	30 L	50 L	80 L	136 L
Interior Dimension (W×D×H) mm	250×260×250	340×320×320	420x395x350	450×400×450	550×450×550
Exterior Dimension (W×D×H) mm	530×370×420	620×440×490	720x530x520	740×530×630	840×580×730
Shelves	2 pcs	2 pcs	2 pcs	2 pcs	2 pcs
Timing Range	0~9999min				

Model	FCO250-220L	FCO250-420L	FCO250-620L	FCO250-1000L
Electrical Requirement	220V 50Hz	380V 50Hz	380V 50Hz	380V 50Hz
Temperature Range	RT+10°C ~250°C			
Display Resolution	0.1°C			
Temperature Stability	±1°C			
Temperature Uniformity	±3%（at 100°C）			
Ambient Temperature	+5~40°C			
Power Consumption	2450 W	3100 W	4000 W	5200 W
Chamber Volume	220 L	420 L	620 L	1000 L
Interior Dimension (W×D×H) mm	600×500×750	640×585×1355	840×600×1355	800×700×1590
Exterior Dimension (W×D×H) mm	880×630×930	780×730×1780	980×800×1880	1050×880×2060
Shelves	2 pcs	3 pcs	4 pcs	4 pcs
Timing Range	0~9999min			

Specification

FCO300 Series >>>

Model	FCO300-16L	FCO300-30L	FCO300-50L	FCO300-80L
Electrical Requirements	220V 50Hz	220V 50Hz	220V 50Hz	220V 50Hz
Temperature Range	RT+10~300°C			
Display Resolution	0.1°C			
Temperature Stability	±1°C			
Temperature uniformity	±3%（at 100°C)			
Ambient Temperature	+5~40°C			
Power Consumption	850 W	850 W	1100 W	1550 W
Chamber Volume	16 L	30 L	50 L	80 L
Internal Dimension (W×D×H) mm	250×260×250	340×320×320	420×395×350	450×400×450
External Dimension (W×D×H) mm	530×370×420	620×440×490	720×530×520	740×530×630
Shelves	2 pcs	2 pcs	2 pcs	2 pcs
Timing Range	0~9999min			

Model	FCO300-136L	FCO300-220L	FCO300-420L	FCO300-620L
Electrical Requirement	220V 50Hz	220V 50Hz	380V 50Hz	380V 50Hz
Temperature Range	RT+10~300°C			
Display Resolution	0.1°C			
Temperature Stability	±1°C			
Temperature uniformity	±3%（at 100°C)			
Ambient Temperature	+5~40°C			
Power Consumption	2050 W	2450 W	3100 W	4000 W
Chamber Volume	136 L	220 L	420 L	620 L
Interior Dimension (W×D×H) mm	550×450×550	600×500×750	640×585×1355	840×600×1355
Exterior Dimension (W×D×H) mm	840×580×730	880×630×930	780×730×1780	980×800×1880
Shelves	2 pcs	2 pcs	3 pcs	4 pcs
Timing Range	0~9999min			