

02. DRYING OVEN



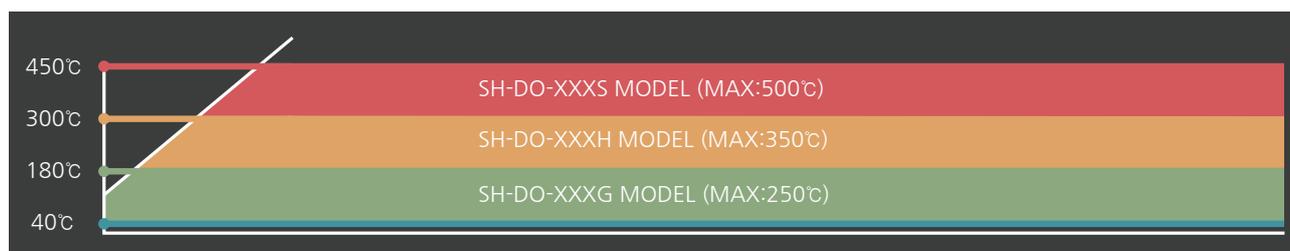
Forced Convection Drying Oven	28
350°C Drying Oven	32
500°C Drying Oven	35
Drying Oven with Air Filter	37

DRYING OVENS

Drying oven is an equipment which is widely used in laboratories and other related industries. The main function of a Drying oven is to a constant temperature for a certain set period.

Drying oven can be classified into two types, depending on the air circulation; forced air circulation and natural air circulation.

Selection guide

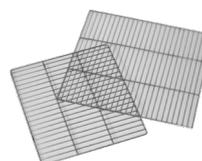


Ambient temperature is below 25°C, relative humidity is lower than 80%

Shelves' detail



Stainless steel 12mm punched shelves



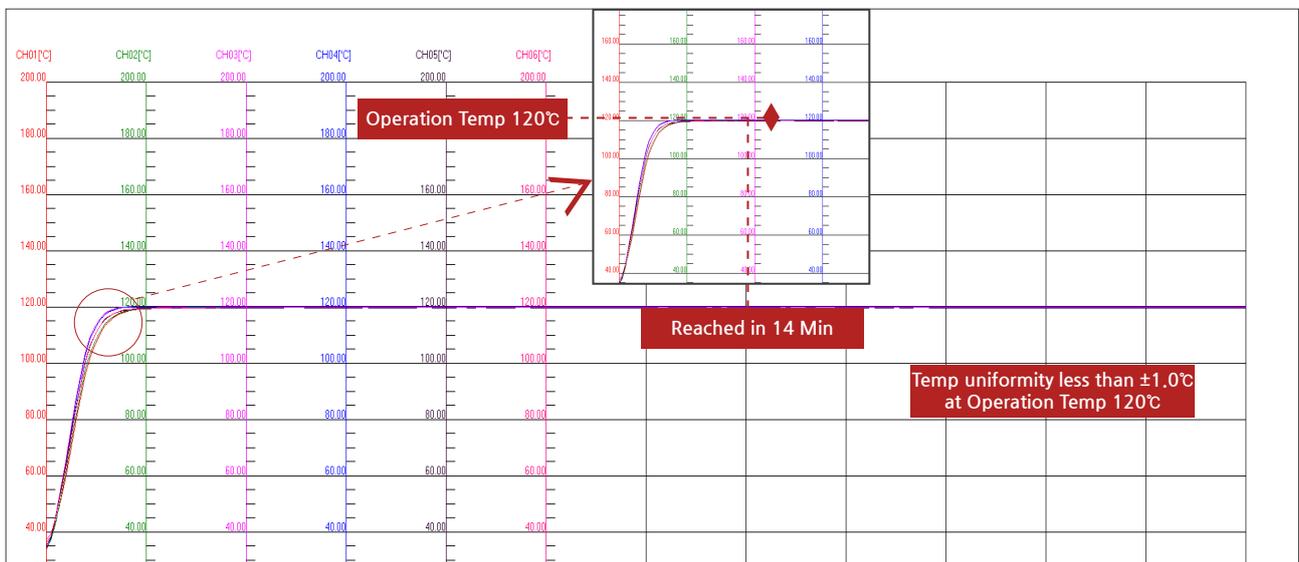
Stainless steel wire shelves

Catalog No.	Type	Dimensions(WxDxH)	Weight	Material	Application Model
DOWS54	WIRE PLATE	350x315x8mm / 13.78x12.40x0.31"	0.5 Kg	Stainless Steel	SH-DO-54NG,FG
DOPS54	PUNCH PLATE	350x315x17mm / 13.78x12.40x0.67"	0.9 Kg		SH-DO-100NG,FG
DOWS100	WIRE PLATE	450x375x8mm / 17.72x14.76x0.31"	0.7 Kg		SH-DO-149NG,FG
DOPS100	PUNCH PLATE	450x375x17mm / 17.72x14.76x0.67"	1.4 Kg		SH-DO-250FG, FH
DOWS149	WIRE PLATE	525x425x8mm / 20.67x16.73x0.31"	0.9 Kg		SH-DO-251FG
DOPS149	PUNCH PLATE	525x425x17mm / 20.67x16.73x0.67"	1.8 Kg		SH-DO-360FG, FH
DOWS250	WIRE PLATE	670x425x8mm / 26.38x16.73x0.31"	1.5 Kg		SH-DO-550FG, FH
DOPS250	PUNCH PLATE	670x425x17mm / 26.38x16.73x0.67"	2.4 Kg		SH-DO-90FG,FH,FS
DOWS251	WIRE PLATE	670x575x8mm / 26.38x22.64x0.31"	1.7 Kg		SH-DO-150FG,FH,FS
DOPS251	PUNCH PLATE	670x575x17mm / 26.38x22.64x0.67"	3.2 Kg		SH-DO-90FG,FH
DOWS360	WIRE PLATE	570x575x8mm / 22.44x22.64x0.31"	1.4 Kg		SH-DO-150FG,FH
DOPS360	PUNCH PLATE	570x575x17mm / 22.44x22.64x0.67"	2.8 Kg		SH-DO-90FS
DOWS550	WIRE PLATE	670x625x8mm / 26.38x24.61x0.31"	2.1 Kg		SH-DO-150FS
DOPS550	PUNCH PLATE	670x625x17mm / 26.38x24.61x0.67"	3.5 Kg		
DOWS90	WIRE PLATE	420x425x8mm / 16.54x16.73x0.31"	0.6 Kg		
DOWS150	WIRE PLATE	470x475x8mm / 18.50x18.70x0.31"	1 Kg		
DOPS90H	PUNCH PLATE	420x425x17mm / 16.54x18.70x0.67"	1.6 Kg		
DOPS150H	PUNCH PLATE	470x475x17mm / 18.50x18.70x0.67"	1.9 Kg		
DOPS90S	PUNCH PLATE	420x425x17mm / 16.54x18.70x0.67"	2.3 Kg		
DOPS150S	PUNCH PLATE	470x475x17mm / 18.50x18.70x0.67"	2.7 Kg		

Forced Convection Drying Oven -Feature

Forced Convection Drying Oven is commonly used in laboratories and other related industries for the purpose of sample drying and sterilization. It also comes with outstanding features such as high level of temp. uniformity, precise accuracy and stable temperature control. All of these are possible through our advanced technology and continuous innovation.

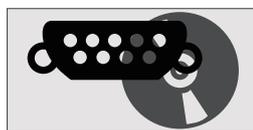
Uniformity Sheet



Features



Explosion-proof windows



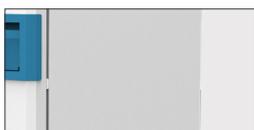
RS-485 or RS-232C interface



Digital PID controller



Surface finished stainless steel



Powder coated steel plate



Leveling feet



Safety devices



User friendly door handle

Basic Model Forced Convection Drying Oven



Model	SH-DO-54FGB	SH-DO-100FGB	SH-DO-149FGB
Air Circulation type	Forced		
Temp Range	Ambient +10°C to 250°C (Ambient +18°F to 482°F)		
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer		
Temp & Time controller	Microprocess PID controller		
Heater Capa	800 W	1600 W	2000 W
Dimension Internal (W×D×H)	380×340×420mm	480×400×530mm	555×450×600mm
	14.96×13.39×16.54"	18.90×15.75×20.87"	21.85×17.72×23.62"
Dimension External (W×D×H)	535×510×795mm	635×570×905mm	710×615×975mm
	21.06×20.08×31.30"	25×22.44×35.63"	27.95×24.21×38.39"
Weight	40 kg	50 Kg	60 Kg
Capa	54 L	100 L	150 L
Material Internal	Stainless Steel		
Material External	Steel Plate With Powder Heating Coated		
Shelves	2 Supplied (5 Maximum)	2 Supplied (6 Maximum)	2 Supplied (7 Maximum)
Electrical Requirements 120V ,50/60Hz, 1Φ	7.3 A	14.5 A	18.2 A
Cat. No.	DO54FGB120	DO100FGB120	DO149FGB120
Electrical Requirements 230V,50/60Hz, 1Φ	3.5 A	7.0 A	8.7 A
Cat. No.	DO54FGB230	DO100FGB230	DO149FGB230

. Accessory

-Movable stainless wire shelves 2EA

. Safety Device

- Automatic reset function incoming power cut
- Buzzer on when set time arrived
- Door open alarm
- Electric leakage breaker
- Over temp function

Forced Convection Drying Oven



Model	SH-DO-54FG	SH-DO-100FG	SH-DO-149FG	SH-DO-250FG
Air Circulation type	Forced			
Temp Range	Ambient +10°C to 250°C (Ambient +18°F to 482°F)			
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer			
Temp & Time controller	Microprocess PID Membrane Touch Digital controller			
Heater Capa	800 W	1600 W	2000 W	3000 W
Dimension Internal (W×D×H)	380×340×420mm	480×400×530mm	555×450×600mm	700×450×800mm
	14.96×13.39×16.54"	18.90×15.75×20.87"	21.85×17.72×23.62"	27.56×17.72×31.50"
Dimension External (W×D×H)	500×630×760mm	600×690×870mm	675×740×940mm	820×740×1140mm
	19.68×24.80×29.92"	23.62×27.16×34.25"	26.57×29.13×37.01"	32.28×29.13×44.88"
Weight	49 kg	64 Kg	73 Kg	104 Kg
Capa	54 L	100 L	150 L	250 L
Material Internal	Stainless Steel			
Material External	Steel Plate With Powder Heating Coated			
Shelves	2 Supplied (12 Maximum)	2 Supplied (15 Maximum)	2 Supplied (17 Maximum)	2 Supplied (24 Maximum)
Electrical Requirements 120V, 50/60Hz, 1Φ	7.3 A	14.5 A	18.2 A	27.3 A
Cat. No.	DO54FG120	DO100FG120	DO149FG120	DO250FG120
Electrical Requirements 230V, 50/60Hz, 1Φ	3.5 A	7.0 A	8.7 A	13.0 A
Cat. No.	DO54FG230	DO100FG230	DO149FG230	DO250FG230

• Accessory

-Movable stainless wire shelves 2EA

• Option

-Programmable controller
 -Digital recorder
 -2CH Hybrid recorder
 -RS-485 interface
 -RS-232C interface

• Safety Device

-Automatic reset function incoming power cut
 -Buzzer on when set time arrived
 -Door open alarm
 -Electric leakage breaker
 -Over temp function
 -Fire safety controller

Forced Convection Drying Oven



Model	SH-DO-360FG	SH-DO-550FG
Air Circulation type	Forced	
Temp Range	Ambient +10°C to 220°C (Ambient +18°F to 428°F)	
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer	
Temp & Time controller	Microprocess PID Membrane Touch Digital controller	
Heater Capa	4000 W	4800 W
Dimension Internal (W×D×H)	600×600×1000mm	700×650×1200mm
	23.62×23.62×39.37"	27.56×25.59×47.24"
Dimension External (W×D×H)	800×900×1420mm	900×950×1610mm
	31.49×35.43×55.90"	35.43×37.40×63.38"
Weight	134 Kg	185 Kg
Capa	360 L	546 L
Material Internal	Stainless Steel	
Material External	Steel Plate With Powder Heating Coated	
Shelves	2 Supplied (31 Maximum)	2 Supplied (38 Maximum)
Electrical Requirements 120V, 50/60Hz, 1Φ	36.4 A	43.6 A
Cat. No.	DO360FG120	DO550FG120
Electrical Requirements 230V, 50/60Hz, 1Φ	17.4 A	20.9 A
Cat. No.	DO360FG230	DO550FG230

• **Accessory**

- Movable stainless wire shelves 2EA

• **Option**

- Programmable controller
- Digital recorder
- 2CH Hybrid recorder
- RS-485 interface
- RS-232C interface

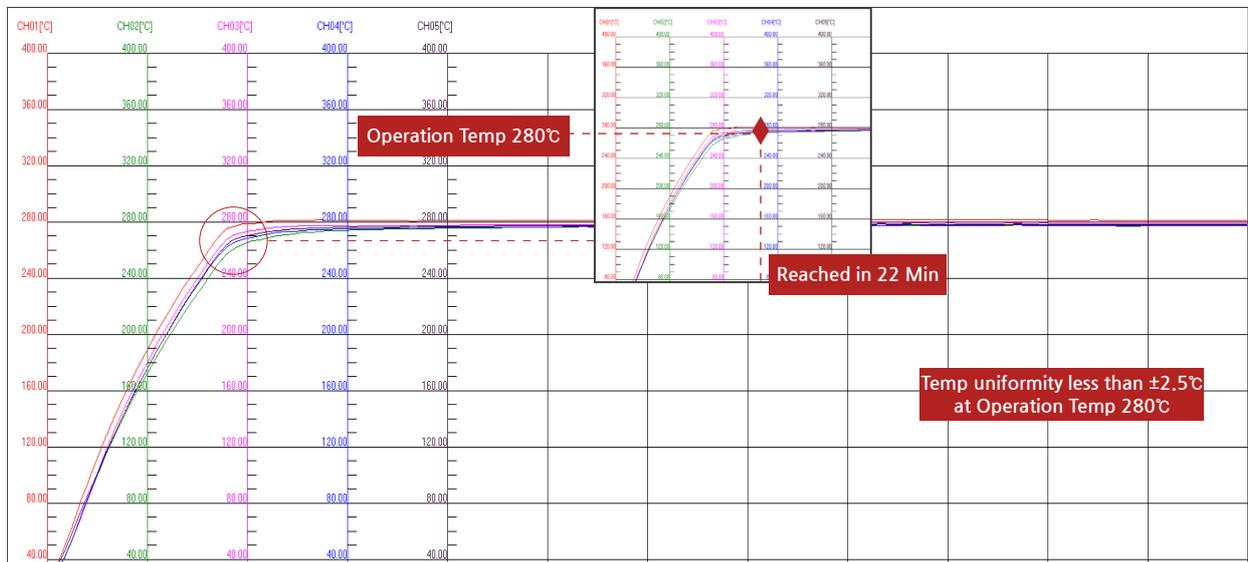
• **Safety Device**

- Automatic reset function incoming power cut
- Buzzer on when set time arrived
- Door open alarm
- Electric leakage breaker
- Over temp function
- Fire safety controller

350°C Drying Oven -Feature

This version of the forced convection drying oven is suitable for samples that need to be treated and/or hardened under a high amount of temperature, such as 200°C. Our 350°C Drying Oven has an excellent durability as its chambers and shelves are made of stainless steel, furthermore, our 350°C Drying Oven contains a powerful lock device, therefore, there is absolutely no problem in keeping a high chamber temperature.

Uniformity Sheet



Features



Steel plate with powder heating coated



Digital PID controller



Stainless steel



Leveling feet



Safety devices



Door sealing gasket

350°C Drying Oven



Model	SH-DO-90FH	SH-DO-150FH
Air Circulation type	Forced	
Temp Range	Ambient +10°C to 350°C (Ambient + 18°F to 662°F)	
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer	
Temp & Time controller	Microprocess PID Membrane Touch Digital controller	
Heater Capa	2600 W	3000 W
Dimension Internal (WxDxH)	450x450x450mm	500x500x600mm
	17.72x17.72x17.72"	19.69x19.69x23.62"
Dimension External (WxDxH)	644x633x935mm	694x683x1110mm
	25.53x24.92x36.81"	27.32x26.89x43.70"
Weight	82 Kg	95 Kg
Capa	91 L	150 L
Material Internal	Stainless Steel	
Material External	Steel Plate With Powder Heating Coated	
Shelves	2 Supplied (12 Maximum)	2 Supplied (17 Maximum)
Electrical Requirements 120V, 50/60Hz, 1Φ	23.6 A	27.3 A
Cat. No.	DO90FH120	DO150FH120
Electrical Requirements 230V, 50/60Hz, 1Φ	11.3 A	13.0 A
Cat. No.	DO90FH230	DO150FH230

• Accessory

- Movable stainless wire shelves 2EA

• Option

- Programmable controller
- Digital recorder
- 2CH Hybrid recorder

• Safety Device

- Automatic reset function incoming power cut
- Buzzer on when set time arrived
- Door open alarm
- Electric leakage breaker
- Over temp function
- Fire safety controller

350°C Drying Oven



Model	SH-DO-250FH	SH-DO-360FH	SH-DO-550FH
Air Circulation type	Forced		
Temp Range	Ambient +10°C to 350°C (Ambient + 18°F to 662°F)		
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer		
Temp & Time controller	Microprocess PID Membrane Touch Digital controller		
Heater Capa	4000 W	5000 W	6000 W
Dimension Internal (W×D×H)	700x450x800mm	600x600x1000mm	700x650x1200mm
	27.56x17.72x31.50"	23.62x23.62x39.37"	27.56x25.59x47.24"
Dimension External (W×D×H)	920x820x1230mm	820x970x1430mm	920x1020x1630mm
	36.22x32.28x48.42"	32.28x38.18x56.29"	36.22x40.15x64.17"
Weight	155 Kg	210 Kg	264 Kg
Capa	252 L	360 L	546 L
Material Internal	Stainless Steel		
Material External	Steel Plate With Powder Heating Coated		
Shelves	2 Supplied (24 Maximum)	2 Supplied (31 Maximum)	2 Supplied (38 Maximum)
Electrical Requirements 120V, 50/60Hz, 1Φ	36.4 A	45.5 A	54.5 A
Cat. No.	DO250FH120	DO360FH120	DO550FH120
Electrical Requirements 230V, 50/60Hz, 1Φ	17.4 A	21.7 A	26.1 A
Cat. No.	DO250FH230	DO360FH230	DO550FH230

. Accessory

- Movable stainless wire shelves 2EA

. Option

- Programmable controller
- Digital recorder
- 2CH Hybrid recorder

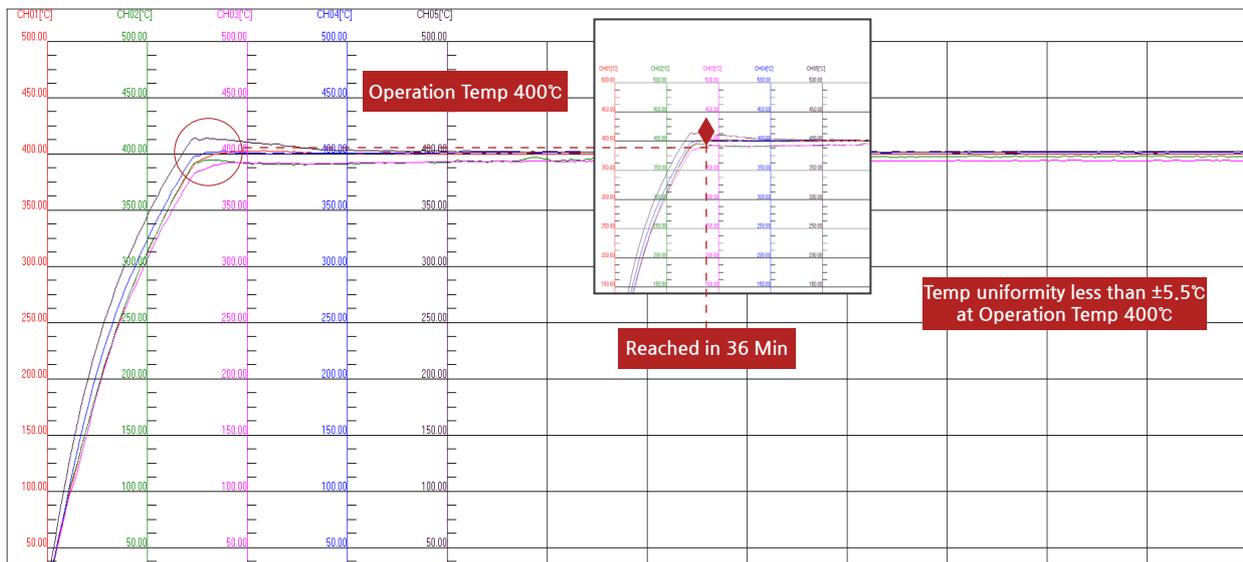
. Safety Device

- Automatic reset function incoming power cut
- Buzzer on when set time arrived
- Door open alarm
- Electric leakage breaker
- Over temp function
- Fire safety controller

500°C Drying Oven -Feature

This version of the forced convection drying oven is suitable for samples that need to be treated and/or hardened under a higher amount of temperature than 300°C. Furthermore, this model comes with improved insulation and structure, specially designed to ensure customer's safety.

Uniformity Sheet



Features



Steel plate with powder heating coated



Digital PID controller



Stainless steel



Leveling caster



Safety devices



Door sealing gasket

500°C Drying Oven



Model	SH-DO-90FS	SH-DO-150FS	SH-DO-216FS
Air Circulation type	Forced		
Temp Range	Ambient +10°C to 500°C (Ambient + 18°F to 932°F)		
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer		
Temp & Time controller	Microprocess PID Membrane Touch Digital controller		
Heater Capa	3300 W	4200 W	5400 W
Dimension Internal (W×D×H)	450×450×450mm	500×500×600mm	600×600×600mm
	17.72×17.72×17.72"	19.69×19.69×23.62"	23.62 x23.62 x23.62"
Dimension External (W×D×H)	1196×700×925mm	1296×750×1075mm	1440×850×1075mm
	47.09×27.56×36.41"	51.02×29.53×42.32"	56.69×33.46×42.32"
Weight	190 Kg	234 Kg	308 kg
Capa	91 L	150 L	216 L
Material Internal	Stainless Steel		
Material External	Steel Plate With Powder Heating Coated		
Shelves	2 Supplied (12 Maximum)	2 Supplied (17 Maximum)	
Electrical Requirements 120V, 50/60Hz, 1Φ	38.2 A	49.1 A	N/A
Cat. No.	DO90FS120	DO150FS120	
Electrical Requirements 230V, 50/60Hz, 1Φ	18.3 A	23.5 A	31.8 A
Cat. No.	DO90FS230	DO150FS230	DO216FS230

• Accessory

-Movable stainless punch plate

• Option

-Programmable controller
-Digital recorder
-2CH Hybrid recorder

• Safety Device

-Automatic reset function incoming power cut
-Buzzer on when set time arrived
-Door open alarm
-Electric leakage breaker
-Over temp function
-Fire safety controller

Drying Oven with Air Filter -Feature

This version of the forced convection drying oven comes with an air filter. This unit is perfect for samples that need a completely dust-free environment. This addition is beneficial for drying and sterilization processes.

Feature

Excellent Clean Air Distribution

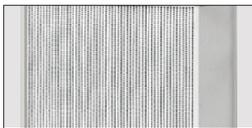
- Air circulation type by means of filtering causes a low state of wind velocity and flow volume as it goes through the filter made in high density. Therefore, air distribution degree and thermal uniformity will be decreasing considerably. Regardless of this restriction, our Clean Drying Oven has improved uniformity of air and temperature under low air velocity and low airflow volume by making air flow layer inside door.

Excellent Filter Durability

- The Hefa filter used our Clean Dry Oven is not a common filter in for clean bench.
- It is developed for an excellent durability under a high temperature and a heavy airflow environment.

Vertical Stand

- Vertical design for space effectiveness



High temp flow hefa filter
99.97% 0.3 μ efficiency filter



Digital P I D controller



Auto back up



RS-485
or
RS-232C interface



Steel plate with powder
heating coated



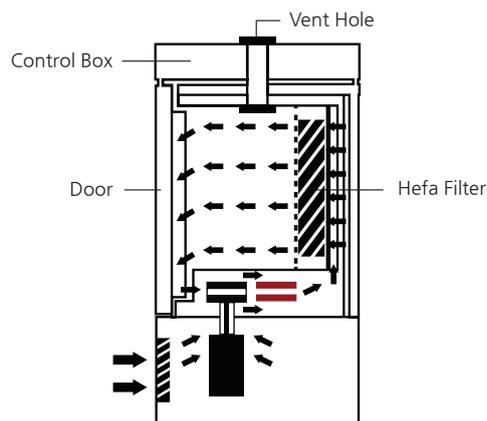
Leveling caster



Safety devices



Door sealing gasket



Drying Oven with Air Filter



Model	SH-DO-90FG	SH-DO-150FG	SH-DO-251FG
Air Circulation type	Forced with Air Fliter		
Temp Range	Ambient +10°C to 250°C (Ambient + 18°F to 482°F)		
Time Range	00.00 to 99HR 59MIN (MIN SEC) Selectable Digital Counter Timer		
Temp &Time controller	Microprocess PID Membrane Touch Digital controller		
Heater Capa	1500 W	2000 W	2500 W
Dimension Internal (W×D×H)	450×450×450mm	600×500×500mm	700×600×600mm
	17.72x17.72x17.72"	23.62x19.69x19.69"	27.56x23.62x23.62"
Dimension External (W×D×H)	630×842×1562mm	780×892×1612mm	880×992×1712mm
	24.80x33.15x61.50"	30.71x35.12x63.46"	34.65x39.06x67.40"
Weight	110 Kg	150 Kg	204 Kg
Capa	90 L	150 L	250 L
Material Internal	Stainless Steel		
Material External	Steel Plate With Powder Heating Coated		
Shelves	2 Supplied (12 Maximum)	2 Supplied (14 Maximum)	2 Supplied (17 Maximum)
Electrical Requirements 120V ,50/60Hz, 1Φ	14 A	18 A	22.5 A
Cat. No.	DO90FG120HF	DO150FG120HF	DO251FG120HF
Electrical Requirements 230V,50/60Hz, 1Φ	7 A	9 A	11.3 A
Cat. No.	DO90FG230HF	DO150FG230HF	DO251FG230HF

• Accessory

-Movable stainless wire shelves 2EA

• Option

-Programmable controller
 -Digital recorder
 -2CH Hybrid recorder
 -RS-485 interface
 -RS-232C interface

• Safety Device

-Automatic reset function incoming power cut
 -Buzzer on when set time arrived
 -Door open alarm
 -Electric leakage breaker
 -Over temp function
 -Fire safety controller