



Yamato Customized Industrial Products

Large Autoclave

Large Walk-in Forced Convection Oven

Combination Forced Convection Oven

Large Vacuum Drying Oven

Targeting Productivity Improvement

Yamato offers customization of products based on customer requirements

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Forced Convection Oven

Combination type

C1-006



■ Usage: thermal treatment of products.

- Use platform stands to combine one machine with several units to save space
- Equipped with set recorder (to record product temperature), timer and product running status indicator lamp
- Repositioned air exhaust ports (facing backwards) to accommodate overlapping set of product
- Each door is equipped with an electromagnetic lock
- Customized chamber dimensions
- Easy operation, available for fixed temperature, program, quick auto stop, auto stop and auto start operations
- Self-diagnostic circuit (abnormal temperature sensor, heater disconnection, auto overheat prevention, SSR short circuit), overheat protector, ELB to prevent overcurrent, key lock, etc.

Model	C1-006
Method	Forced convection
Operating temp. range	Room temp. +10°C ~260°C
Temp. adjustment accuracy	±1.0°C (at 210°C)
Temp. distribution accuracy	±2.5°C (at 210°C)
Operation function	Fixed temp., program, auto stop and auto start operations
Additional function	Deviation correction, key lock, power outage compensation
Internal dimension	W700×D500×H500mm (single)
Power source	Single phase AC220V

Forced Convection Oven

Large walk-in type

C4-008



■ Usage: drying treatment of special materials.

- Large walk-in type
- Double door structure, anti lock mechanism
- Easy operation, available for fixed temperature, program, quick auto stop, auto stop and auto start operations
- Self-diagnostic circuit (abnormal temperature sensor, heater disconnection, auto overheat prevention, SSR short circuit), overheat protector, ELB to prevent overcurrent, key lock, etc.

Model	C4-008
Method	Forced convection circulation
Operating temp. range	Room temp. +10~100°C
Temp. adjustment accuracy	±1°C (at 100°C)
Temp. distribution accuracy	±5°C (at 100°C)
Operation function	Fixed temp., program, auto stop and auto start operations
Additional function	Deviation correction, key lock, power outage compensation
Internal dimension	W3500×D3500×H3000mm
Power source	3 phase AC380V

Conveyor Drying Oven

Fully automatic

C1-007

Operating temp. range RT +20~80°C



■ **Usage:** thermal treatment during electronic component production process.

- Installed with a conveyor to improve efficiency of thermal treatment
- Adjustable conveyor speed with the ability to set multiple treatment processes
- Program operation function
- Equipped with a frequency converter, beacon, infrared switch, etc.
- Equipped with safety devices such as auto overheat protector, overheat protector, emergency stop switch, conveyor overload protection, over-current earth leakage circuit breaker, etc.

Model	C1-007
Temp. range	Room temp. +20~80°C
Temp. distribution accuracy	±10°C (at 80°C)
Temp. rising time	15min (Room temp.→80°C)
Operation function	Fixed temp., program operation
Conveyor speed	0.035-0.35m/min
Conveyor length	1100mm
Inlet and outlet dimension	W400×H65mm
Power source	3 phase AC380V

Low Temperature Chamber

Large Capacity

YY-711

Operating temp. range -20~50°C

Internal capacity 800L



Industry: Material and parts manufacturers

Application: Environmental test of various materials, parts

■ Features

- Low temperature: -20°C
- Large capacity of 800L compared to standard models IN and INE which are up to 286L
- High airtight panel structure (thermal insulation panel)
- Door switch and other safety devices can be added
- Size can be specified according to customer's needs
- Other optional specs can also be added



Interior

■ Specifications

Model	YY-711
Operating temp. range	-20~50°C
External dimensions (mm)	W1600 x D1200 x H2100
Internal dimensions (mm)	W1300 x D800 x H800
Power source	AC220

Large Autoclave

Standard type

YYK500/750/800/900

Operating
temp. range

Room temp.
+10~70°C

Max. operating
pressure

0.9MPa

Internal
dimension

YYK500
ø500×850mm

YYK750
ø750×1100mm

YYK800
ø800×1100mm

YYK900
ø900×1300mm

Used to remove residual air bubbles after affixing polarizer in LED production.



■ Operation and features

- No temperature overshoot, precision temperature uniformity available
- 4 step working procedures:
 - (1) Preheat: temperature rising, no pressurizing
 - (2) Pressurizing: holding temperature, pressurizing
 - (3) Deaeration: holding temperature, deaerating
 - (4) End: temperature cooling, pressure dropping
- Adjustable air suction and exhaust speed
- Customized chamber dimensions

■ Safety features

- Door open / close detection, door lock / unlock detection, higher pressure alarm, air inlet pressure detection, safety valve, independent overheat protector, ELB to prevent over-current

■ Specifications

Model	YYK500	YYK750	YYK800	YYK900
Method	Heating + pressurizing			
Specifications	Class-1 pressure container (AQSIQ pressure container verification)			
Operating temp. range	Room temp. 10~70°C			
Operating pressure range	0.101~0.9MPa			
Temp. distribution accuracy	±3°C (at 50°C)			
Max. temp. reaching time	Within 15min (adjustable)			
Max. pressure reaching time	Within 20min (adjustable)			
Internal dimension (effective)	ø500mm×850Lmm	ø750mm×1100Lmm	ø 800mm×1100Lmm	ø900mm×1300Lmm
Material	SUS304 stainless steel, internal polishing			
Max. operating pressure	0.9MPa			
Hydraulic test pressure	1.35MPa			
Medium	Dry air (pressure: working pressure +0.05MPa or higher)			
Opening / closing system	Manual clutch easy to operate			
Pressurizing system	Controlled by pressure controller			
Heating system	PID control			
Stirring system	Stirred by centrifugal fan (Water-Cooling is not required for shaft seal, free-maintenance)			
Control system	PLC control			
Pressure gauge	Pressure range: 0 to 1.0MPa, accuracy: ±1% (with upper limit alarm contact)			
Temp. controller	Digital setting and display, PID control			
Pressure controller	Digital setting and display, ON/OFF control			
Working timer	Time range: 99 hr 59min, Digital setting and display,			
Temp. sensor output	5 groups of K thermocouple output terminals			
Safety features	Door open / close detection, door lock / unlock detection, higher pressure alarm, air inlet pressure detection, safety valve, motor overheating protection, independent overheat protector, ELB to prevent over-current			
External dimensions (W×D×Hmm)	1000×1656×1546	1200×1957×1781	1250×2057×1806	1400×1950×2232
Air suction port	15A (internally equipped with air filter and oil mist separator)			
Air exhaust port	20A (manual and auto exhaust, equipped with silencer)			
Power source (50/60Hz) rated current	3 phase AC380V 7A	3 phase AC380V 8A	3 phase AC380V 9A	3 phase AC380V 12A
Weight	~700kg	~900kg	~1000kg	~1300kg