WOL clean oven

Features

- Special door back panel design ensures non-deformity after it is heated to significantly reduce heat loss. The oven is known for both “temperature uniformity” and “energy conservation.”
- Imported HEPA filter that is up to 99.97% efficient; it can reach Class 1000 ~ Class 10. Only clean accessories and materials are adopted inside the chamber.
- Even higher-spec seamless chamber that is highly clean of Class 10 (according to the US Federal FED-STD-209E or ISO TC/209 Standard)

Application

Industries where drying in a clean environment is needed, such as LCD, chamber pipe, wafer, light guide plate, IC, transistor, diode, LED, backlight module, and jig drying, etc.

Model No.	Inner dimensions WxDxH cm	Outer dimensions WxDxH cm	Power	Temperature range	Temperature uniformity
WOL-2	70 x 50 x 60	95 x 124 x 151	220V 3φ60HZ 7.5KVA	+60~300°C Max.	± 2 ~ 200°C ± 4 ~ 300°C (No-Load)
WOL-3	70 x 50 x 90	95 x 124 x 181	220V 3φ60HZ 10.5KVA		
WOL-7	140 x 70 x 100	195 x 105.5 x 179	220V 3φ60HZ 17KVA	+60~200°CMax. (Option300°C Max.)	± 3 ~ 200°C (No-Load)
WOL-8	150 x 70 x 160	198 x 123 x 254.5	220V 3φ60HZ 26KVA		
Other	Customization is possible for all.				

QWO oxidation-free oven

Features

An oxidation-free oven differs from a clean oven in that the chamber is inflated with inertial gas during drying, which avoids product oxidation, and the optimal airtightness brings down the oxygen level to 10 ppm. An optimal oxygen-free drying environment is fulfilled.

Application

For use in respective industries such as IC encapsulation, wafer drying, and coating.

10 ppm oxidation-free key technology

- Special decompression design: Valves with the ventilating volume that may be adjusted along with the amount of air let in keep the pressure inside the chamber positive and maintain a low oxygen-content environment.
- The air-tight tubular heating outlet comes with the inner and outer insulation design for reinforced airtightness.
- N2 flow-regulating design - The nitrogen loop design is divided into two parts (main/auxiliary) and allows automatic control of the flows.
- Cooling interlayer design - The special indirect cooling approach enables retention of an oxidation-free environment when the temperature drops.
- Inner door design - It forms a shapeless nitrogen wall to keep off external gases while at the same time preventing heat loss.
- N2 is instilled into the outbound pipeline and door frame and the waste heat from heat transfer is recycled to reduce energy waste.

Model No.	Inner dimensions WxDxH cm	Outer dimensions WxDxH cm	Power	Temperature range	Temperature evenness
QHWO-2	61 x 61 x 61	145 x 113 x 122	220V 3φ 60HZ 9KVA / 15KV	+ 60 ~ 300°C Max. + 60 ~ 500°C Max.	300°C ± 1.5% 500°C ± 2%
QWO-2DS (Two-chamber)	71 x 61 x 56	146 x 96 x 180	220V 3φ 60HZ 12KVA	+ 60 ~ 250°C Max.	at 200°C ±1.5% (No-Load)
QWO-4D (Cart-type)	71 x 61 x 91	138 x 90 x 140			

Cloud data Quick series connection

Best helper for an unmanned smart factory!

AGV Automated guided vehicle Clean oxidation-free oven

Features

Fully automatic oven
It can be used in combination with the Automated guided vehicle and electric/manual cart (AGV/MGV) and related data can be uploaded to the server directly to realize unmanned factory and automation.

Oven specifications OVEN CONTROL (PLC/PC base)			
Process temperature	RT ~ 300°C	Oxygen content	1%
Temperature evenness	±1.5%	Loading capacity	Can be customized
Cleanness	Class 100		
Operational interface	Humanized operational interface that can conform to “CIM, Ethernet & SECS/GEM”, PCBECZ		
Optional	Air-cooling quick temperature reduction, Solvent recycling system, Quick-release lining device		
Process	PCB D/F, Lamination, Plug Hole, Solder Mask; SAP, Bumping, "Panel Fan-out"		
Equipment	AGV/RGV/MGV		

Oven specifications OVEN CONTROL (PLC/PC base)			
Process temperature	RT ~ 300°C	Oxygen content	1%
Temperature evenness	±1.5%	Loading capacity	Can be customized
Cleanness	Class 100		
Operational interface	Humanized operational interface that can conform to “CIM, Ethernet & SECS/GEM”, PCBECZ		
Optional	Air-cooling quick temperature reduction, Solvent recycling system, Quick-release lining device		
Process	PCB D/F, Lamination, Plug Hole, Solder Mask; SAP, Bumping, "Panel Fan-out"		
Equipment	AGV/RGV/MGV		

Smart key technology

- Automatic oven system and Automated guided vehicle (AGV) and platform design (for uploading/downloading materials) material access technology.
- Various sensors and controllers are deployed and are connected in series with the control system interface through the IoT.
- The cyber-physical system (CPS) is created to enhance the throughput utilization rate and production efficiency with smart software design.
- A database system that creates electronics history and makes quality traceability possible.
- Real-time connection in series upstream and downstream processes to realize unmanned operation and quality monitoring

Application Industries where automatic production is needed, such as semiconductor, PCB, LED, and electronics industries.

WVO vacuum oven

Features

- Reinforced transparent observation window and pressure-resistant strong door frame allow clear views of what is happening inside the chamber. The temperature-tolerant silicon does not deform upon compression, with optimal airtightness.

Application

Dries any items that contain water or liquid or are porous and resin or air bubbles in volatile liquid quickly.

Model No.	Inner dimensions WxDxH cm	Power	Temperature range	Heating method	Vacuum pump
WVO-30	30 x 30 x 30	220V 1φ/3φ 2KW	RT + 20 ~ 200°C	RID + SSR Indirect heating	Oil-type
WVO-40	40 x 40 x 40	220V 3φ 2.5KW			
WVO-50	50 x 50 x 50	220V 3φ 5KW			
WVO-60	60 x 60 x 60	220V 3φ 7.5KW			

WSF high-temperature sintering chamber

Features

- The inner chamber is made of temperature-tolerant ceramic wool and ceramic plates, high-alumina insulating bricks, and rock wool, that is, with four layers of insulation; the surface temperature of the machine is low.
- Bilateral thermal radiation on both sides inside the chamber evens the distribution of temperature from heating.

Application

Various ashing tests, module thermal treatment, and pre-heating, tempering, and melting of various materials

Model No.	Inner dimensions WxDxH cm	Power	Temperature range	Heating method
WSF-10	10 x 20 x 10	220V 1φ/3φ 2KW	RT ~ 1200°C	RID + SSR Air radiation conveyor
WSF-15	15 x 30 x 10	220V 3φ 3KW		
WSF-20	20 x 40 x 15			

WTH Climate Chamber

Features

- The upper heat-sink arrangement saves the space occupied by the machine and renders optimal heat dissipation results.
- The door gap designed with P.P non-metal insulation material helps reduce and control energy consumption by at least 1/4.
- The complete touch panel looks beautiful and is easy to read. The microcomputer P.I.D. dual text screen shows the S.S.R. control with precise accuracy.

Application

Metal hardware of national defense industry/aerospace industry/automatic vehicle parts/plasticizing industry/food industry/pharmaceutical industry/semiconductor and computer peripheral components. And the R&D and quality engineering test regulations for respective related products.

WBC Environmental test cart

Internal and external dimensions	Specific design as needed by customers is possible.
Temperature range	RT+10 to 80°C
Temperature evenness	70°C±1.5°C
Safety device	Circuit breaker/Over-temp protection device/Electrical over-current protection device/Abnormal buzzer display/Over-temp and over-temp protection for the motor
Expandability	When there are too many carts, one can consider installing the temperature monitoring module to consistently monitor and control the temperature values at multiple points inside the cart.

Features

- The temperature reducing system is designed reflective of the amount of heat generated by customers' products and is known for its optimal temperature control features.
- It is mobile; the cart can be moved to each region and be used accordingly, reflective of the customer's production line, and it is highly convenient.
- The test power source is available: The power or switch that is needed for the test can be configured anywhere inside the cart as needed by the customer.
- Greatly reduced duration of work in the field: The cart is manufactured and passes the functional test before it is released from the factory and delivered to the customer. The customer only needs to position it and supply the needed electricity and trial runs it prior to official use. The impacts on the customer can be greatly reduced.

Application

The quality of each large test sample is tested so that the reliability of the product is relatively enhanced after it enters the market; it helps protect product quality.
It is used in electronic products, the reliability testing of computer screens, home appliances, communication, instruments and meters, automobiles, plastics, metals, foods, chemical engineering, construction materials, medicine, and aerospace and aviation industries.

WCO Conveyor Oven drying equipment

Features

- The temperature curve of the chamber can be adjusted according to the item being dried.
- The special hot-air ventilating passage design demonstrates optimal even temperature effects.
- Clean drying equipment can be fulfilled with the cleanness design improved as needed.

Application

When used for production line drying, it effectively enhances work efficiency, reduces energy and manpower waste, and accomplishes effort, time, and energy-saving purposes. The dimensions and specifications can be designed reflective of the customer's process to go with the preceding automatic process.

WIR Infrared IR conveyor oven dryer

Features

- The special reflector heating device features quick and even heating efficiency.
- It uses the imported high-precision infrared electromagnetic heating pipe that heats up quickly and evenly.

Application

It bakes and dries various products such as SMT active and passive elements, 3C electronic product printing, 3C electronic product surface spraying, plastic product surface printing, coating, PCBs, and resistance parts, among others.

WUV UV drying equipment

Features

- The imported UV light tubes are selectable with strong and weak options; the new light design does not get damaged as easily and is durable and highly efficient.
- It dries quickly and cures even more quickly; it is free of pollution, involves low cost and high efficiency, and is even more energy-saving.

Application

It dries various products of plastic printing, plastic product protection film, paper coating, PCBs, circuit board printing, resistance parts, backlight panel printing, and electronic spraying, among others.

UV LED light source

- It can be designed and installed in any machine and be used together as needed.
- The low-temperature LED irradiation makes it suitable for industries where low-temperature processes are needed for heat sensitive materials.
- The high LED conversion efficiency is known to be electricity and energy-saving and for a long life span. The low expenditure on consumables makes it an optimal choice to bring down the operating cost of equipment.
- It is easy to operate, convenient to service, and is user-friendly

All the specifications on Page 15 can be customized.

Shared features

- It can accommodate the needs of the workpiece and the process/throughput, with the various conveyor models designed.
- The drive system, along with the electronic stepless control, is precise and stable.
- With high-precision temperature control and high-precision phase control, it realizes the temperature control effect more precisely.
- It shortens the production process flow and can enhance the throughput with a maximum efficacy of 30% and reduce the consumption of electricity by 20%.
- It can accommodate the electricity requirements in respective countries and can be designed according to the customer’s process to go with the preceding automatic process.

SWO Precision hot-air circulating oven

Features

- The special high-temperature-tolerant long-axis motor runs quickly and is durable; the special ventilating passage design contributes to optimal temperature evenness.
- The convex thermal insulation design of the back panel of the door keeps off heat optimally.
- The adjustable full throttle allows quick discharge of water vapor and solvent inside the box to conserve energy.

Application

It is applied in various processes such as drying, thermosetting, forming and processing, pre-heating, joining, sealing, and tempering.

Model No.	Inner dimensions WxDxH cm	Outer dimensions WxDxH cm	Doors
SWO-1	45 x 40 x 40	78 x 60 x 99	1
SWO-2	50 x 50 x 60	93 x 70 x 125	1
SWO-3	60 x 50 x 90	93 x 70 x 155	1
SWO-4	80 x 60 x 100	133 x 80 x 165	1
SWO-5	100 x 60 x 100	159 x 80 x 169	2
SWO-6	120 x 60 x 100	179 x 80 x 169	2
SWO-7	140 x 60 x 120	199 x 80 x 191	2
SWO-8	160 x 80 x 140	228 x 102 x 222	2
SWO-9	180 x 100 x 140	248 x 122 x 229	2
SWO-10	180 x 140 x 140	248 x 162 x 229	2

SCWO
Cart Type circulating oven

Features

- The bottom rails are attached to the ground after it is positioned, so it is easy to push the cart.
- There are insulation layers on both sides of the trails so that the inner temperature is not lost easily to render optimal electricity-saving performance.
- It may be divided into two chambers as needed for production, with each chamber to be controlled independently; it helps maximize the throughput.

Application

It is the exclusive model for the industrial drying process of PCBs, electronics, electrical engineering, plating, parts, LCD, pharmaceutical, chemical engineering, plastics, food, and tea roasting and other processes (involving larger-volume production) such as drying, drying, curing, tempering, pre-heating, and testing.

The electrical heat volume of SCWO is 10% more than SWO

All the specifications on Page 11 can be customized.

Shared features

- Japan PID micro-computer automatic algorithm temperature control, with a PID control precision of ± 0.1% FS
- Special electric heating brick combined with low-watt black-heat-effect electric heater known for low radiation heat and less oxidized
- Designed with multiple safety circuits and 3 over-temp protection mechanisms for reinforced equipment safety and a longer life span
- High-profile blast-proof door buckle, with extreme airtightness upon forced compression, to reduce heat loss and realize energy conservation
- Temperature reduction and cooling design inside the control box of electrical equipment to ensure that all parts can run over an extended period of them with minimal thermal failure.

HWO High-temp Hot-air Circulating Oven

Features

- Unique reinforced design of the chamber prevents deformation at a high temperature and eliminates stress.
- The tailored temperature-resistant separate motor is durable and involves minimal vibration; the drive shaft is particularly treated and does not deform during exposure to heat.
- The imported high-temperature heat-generating element does not oxidate and leak easily and features a long life span.
- Temperature range: Ambient temperature ~ 500°C. The 600°C specification can be tailored separately.

Application

High-temp drying, coating, metal thermal treatment and various industrial applications such as glass sintering, glass coating, age hardening, annealing, MLCC, thermisters, and filters, among others.