



Technical resources

circulation oven

Model: DHG

<https://www.tencanballmills.com/en/products/sintering-series/circulation-oven.html>

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circulation oven

Model: DHG

Vertical forced air drying oven for uniform heating, drying, and sterilization. Compact, high capacity, ideal for labs.

Technical specifications

Temperature range	50~300℃
Power consumption	1200~6400W
Volume	40~640L

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



Use electric heating and forced air circulation system to heat items **Drying, baking, heat treatment, sterilization or constant temperature suitability test** box equipment. It is due to **Relatively small footprint, large studio capacity, and good temperature uniformity** and other features, often used in situations where space and sample capacity are required.

It is used by industrial and mining enterprises, laboratories, scientific research institutions, etc. for drying, baking and melting wax. This electric blast drying oven is made of mirror stainless steel or high-quality galvanized steel plate studio, with a plastic-sprayed outer shell and a double-layer tempered glass observation window, which has a beautiful and novel appearance. Computer intelligent temperature control, overheating protection, time setting, good temperature control linearity, small fluctuations. It has tracking alarm function and stirred hot air circulation, with small heat loss.

研磨系列

产品细节



Industrial field :

Electronic components: Dry circuit boards and semiconductor materials to prevent oxidation or moisture from affecting performance

Chemical materials : Constant temperature drying of powders and catalysts to avoid agglomeration or deterioration

food processing : Dehydration and sterilization of food raw materials (such as condiments and additives) to extend the shelf life

Research and Medical:

laboratory samples: Drying and preservation of biological reagents and pharmaceutical raw materials

medical device: Dry heat sterilization of glassware and surgical tools

Special application:

Materials research: Pretreatment of nanomaterials and polymer materials

Environmental protection field: Drying and recycling of industrial waste

Technical parameters

model	DHG-9040A(S)	DHG-9070A(S)	DHG-9140A(S)	DHG-9240A(S)	DHG-9440A(S)	DHG-9640A(S)
Supply voltage	220V 50HZ				380V 50HZ	
temperature range	50~300℃					
temperature fluctuations	±1℃					
Tracking alarm	+5℃					
Standard shelves	2 pieces					
Power consumption	1200W	1700W	2500W	3000W	3800W	6400W
Volume (L)	40	70	140	240	440	640
Studio size (mm)	350*350*350	450*350*450	550*450*550	600*500*750	700*650*900	800*800*1000
Overall dimensions (mm)	500*500*630	600*500*730	700*600*830	750*690*1060	850*840*1210	950*990*1310

heating stage :

The electric heating element (nickel-chromium alloy heating tube) is energized to heat up, and transfers heat to the box through radiation and convection.

forced convection:

The centrifugal fan drives the air to form a circulating air flow, which evenly covers the surface of the material and accelerates the evaporation of water.

temperature regulation:

The PT100 platinum resistance sensor monitors the temperature in real time, and the PID controller dynamically adjusts the heating power to maintain the set value.

Drying completed:

After drying, the hot air is discharged through the exhaust port to prevent the air pressure in the box from being too high.

Efficient hot air circulation :

use **Centrifugal fan** With special air duct design, forced convection makes the temperature uniformity in the box reach $\pm 1 \sim 2.5^{\circ}\text{C}$, and the drying speed is 2~3 times faster than natural convection.

Precise temperature control:

Equipped with microcomputer PID controller, supports 0.1°C resolution, and can set the temperature range **RT+10~300°C**, fluctuation degree $\leq \pm 1^{\circ}\text{C}$, suitable for precision experiments

Security protection:

Multiple protections: over-temperature alarm, leakage protection, motor overload power-off, etc. to ensure equipment and operation safety

Explosion-proof design: Some models meet the requirements of explosion-proof environments (such as chemical flammable scenes)

Durable and easy to maintain:

Stainless steel liner and high temperature resistant sealing strip, corrosion-resistant and easy to clean

Modular structure design supports quick replacement of fans, heating pipes and other components

Energy saving and environmental protection:

Optimize the thickness of the insulation layer (5~7cm) and waste heat recovery system to reduce energy consumption by 20%~30%

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Before operation, review the selected model's instructions and the material requirements.