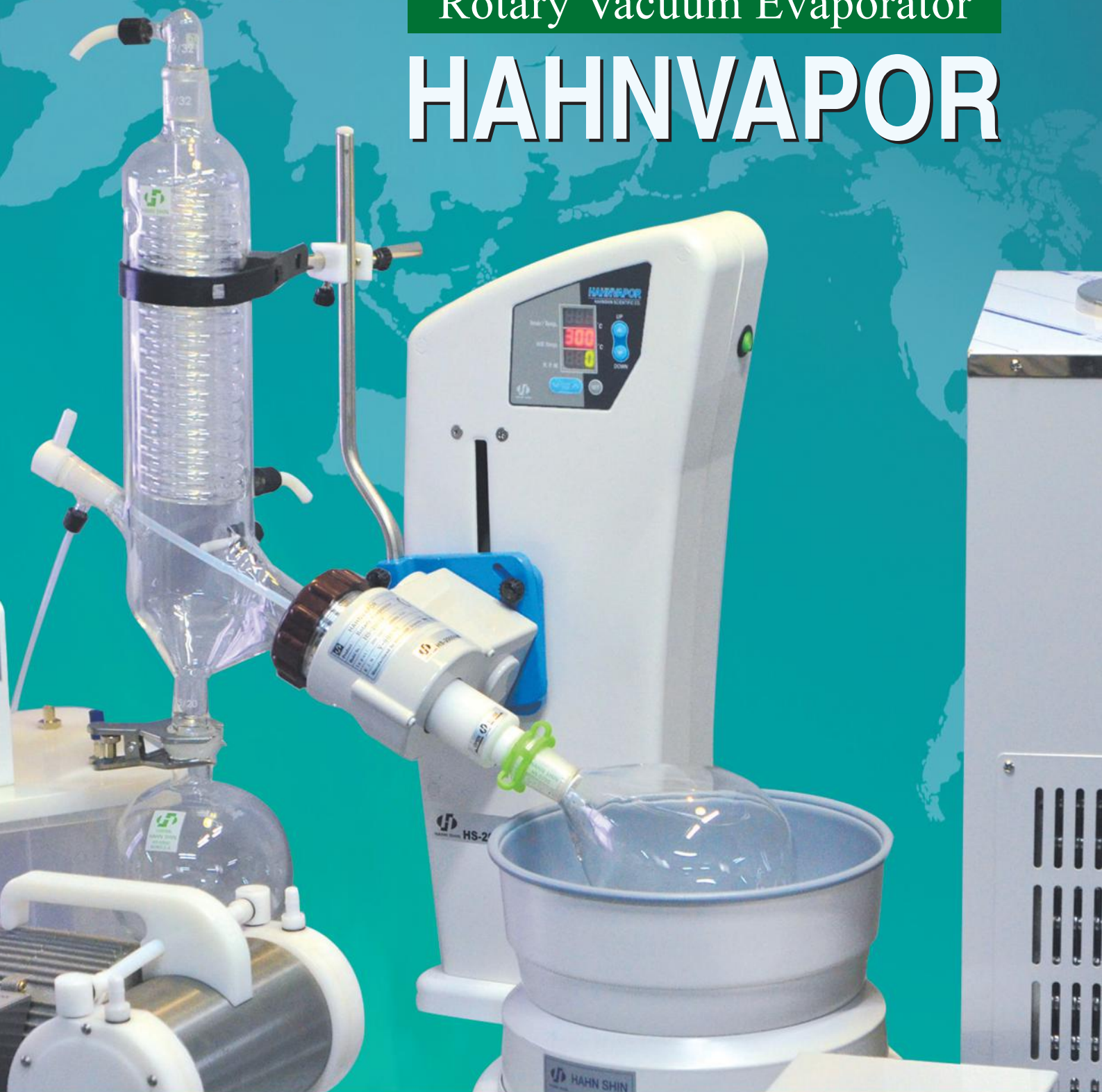




Rotary Vacuum Evaporator

# HAHN VAPOR



<http://www.hsscience.co.kr>  
E-mail: [haanshin@yahoo.co.kr](mailto:haanshin@yahoo.co.kr)  
[hahnshin@hsscience.co.kr](mailto:hahnshin@hsscience.co.kr)

 **HAHN SHIN SCIENTIFIC**

Address : 320-8, Nae-Dong, Ojung-Ku,  
Bucheon, Kyungki-Do, 421-807 South Korea  
Tel: 82-32-675-6276 Fax: 82-32-678-9652



## Rotary Evaporator

Based on the accumulated technologies for the last 30 years, we have strived for quality improvement and development of scientific research equipment. Finally, HAHNVAPOR is the answer to our effort, HAHNSHIN will work harder to make the best product for our customers around the world.

### Advantages

- Easy and accurate height control by using a simple up/down button.
- Our special vacuum seal is made of double-binding Teflon and NBR nitrile in order to provide the seal with anti-abrasion, anti-aging and anti-chemical functionality, which enables the machine to make higher vacuum pressure compared to most of other imported equipment.
- The leaning angle of the evaporating flask can be easily manipulated by screwing a simple bolt type controller.
- Combi-Clip can easily remove or attach the evaporating flask.
- The insulated heater prevents the machine from burning accident or heat loss.
- Water bath is made of stainless steel to prevent it from undesirable corrosion of the bath.

### Conditions for distillation

- Set the water temperature in water bath at 60°C.
- Set the cooling water speed at 40~60 l/h
- Inject the cooling water (15°C~25°C) into the condenser coil.
- Set the vacuum degree at 700mmHg or above.

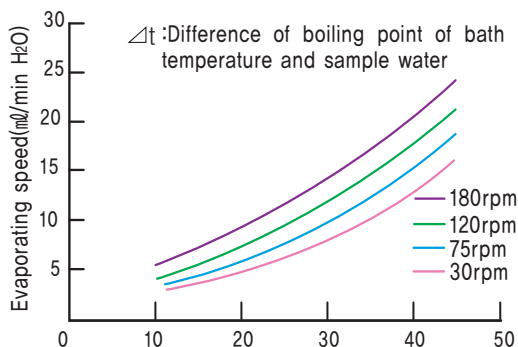
## HAHNVAPOR





▪ *Condition of Evaporating Capacity*

- Temp. of cooling water : 25°C~27°C
- Sample Flask : 1ℓ
- Sample Input : 500ml
- Vacuum pressure: 760mmHg



※ Condition:  
 Temperature of cooling water is set on level which is 10~20°C lower than boiling point of sample water.

- 6 types of flasks ranging from 50ml to 3000ml
- HAHNVAPOR is equipped with speed control, and R.P.M value is displayed in digital.
- Digital Water Bath covers ambient temperature up to 180°C
- If water level at heating bath goes down, power will be cut off automatically by sensor.
- Speed control 20~280 R.P.M

Rotary Evaporator suitable for intermediate grade users. The lowest price with complete functions. Press the main switch and control the speed.



Rotary Evaporator **HS-2005V-N**

Vacuum Controller **HS-0245**

Cooling Water Circulator(bath) **HS-3005N**

Diaphragm Vacuum Pump **HS-0153**

Electric Aspirator **HS-3000**





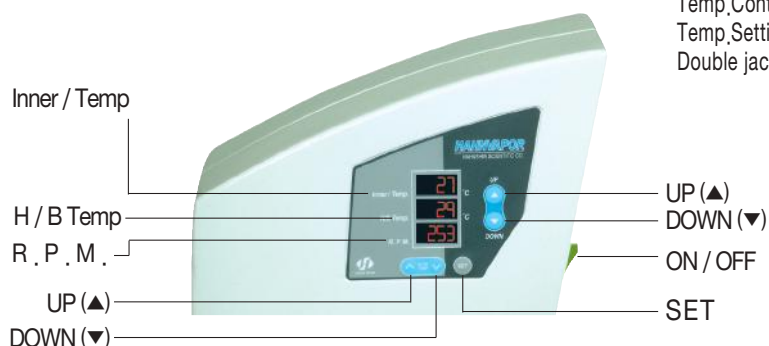
Registration Number 20-0258513

## Rotary Evaporator HS-2005S-N(CE)

Dimensions(W×D×H) : 730×410×630mm  
 Power source : AC 220V 50/60Hz 2,5A / Weight : 19,5kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R,P,M Display / Speed control range : 20~280 R.P.M  
 Slant type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution

Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

## Operating panel



Utility model & Design patent registered

If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose

Temp.Control range: Amb,~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



Registration Number 20-0258513

## Rotary Evaporator HS-2005V-N(CE)

Dimensions(W×D×H) : 620×410×870mm  
 Power source : AC 220V 50/60Hz 2,5A / Weight : 19,5kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R,P,M Display / Speed control range : 20~280 R.P.M  
 Vertical type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution

Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose

Temp.Control range: Amb,~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



Registration Number 20-0258513

## Rotary Evaporator HS-2005S(CE)

Dimensions(W×D×H) : 720×340×510mm  
 Power source : AC 220V 50/60Hz 2,5A / Weight : 20kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R.P.M Display / Speed control range : 20~280 R.P.M  
 Slant type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution  
 Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

### Operating panel



If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose  
 Temp.Control range: Amb.~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



Registration Number 20-0258513

## Rotary Evaporator HS-2005V(CE)

Dimensions(W×D×H) : 610×340×730mm  
 Power source : AC 220V 50/60Hz 2,5A / Weight : 21kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R.P.M Display / Speed control range : 20~280 R.P.M  
 Vertical type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution  
 Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose  
 Temp.Control range: Amb.~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



## Rotary Evaporator **HS-2000NS**

Dimensions(W×D×H) : 320×730×520mm  
 Power source : AC 220V 50/60Hz 2.5A / Weight : 16kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R,P,M Display / Speed control range : 20~280 R,P,M  
 Slant type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution  
 Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose  
 Temp.Control range: Amb.~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



Registration Number 20-0258513

## Operating panel



## Rotary Evaporator **HS-2001NS**

Dimensions(W×D×H) : 320×580×720mm  
 Power source : AC 220V 50/60Hz 2.5A / Weight : 17kg  
 Distinguished Features  
 6 different types of flasks are attachable (from 50ml to 3000ml)  
 Digital speed control  
 Digital R,P,M Display / Speed control range : 20~280 R,P,M  
 Vertical type condenser  
 Digital interior temperature measure and display  
 (It catches the temperature changes caused by the interior pressure drops)  
 Motorized UP- DOWN control switch  
 Easy to utilize standard distillation solution  
 Included Water bath HS-3001(PTFE coating)  
 Heater: 1000W / Bath Material: SUS304 / Weight: 2,8kg  
 Bath Dimensions(φ×H)mm: 245×120(Capacity:4,3 l )  
 Required Power Source : AC 220V 60Hz 4,5A  
 Distinguished Features

If the amount of water goes down under the certain threshold in the heating bath, the system automatically turns off its power for the safety purpose  
 Temp.Control range: Amb.~180℃  
 Temp.Setting/Display : Digital control(controlled by the main controller)  
 Double jacketed bath body (Safe to touch)



Registration Number 20-0258513





## Cold Trap Bath HS-3003

### ■ SPECIFICATION

- Capacity : 4ℓ
- Bath Dimension(D×H) : φ190×200
- Type : Glass Trap
- Temp,Range : Down to~ -40°C
- Controller : FND Controller
- Refrigerator : 1/3HP
- Refrigerant : 134A
- Dimension(W×D×H) : 250×510×510mm
- Gross weight : 28kg
- Power consumption : 334W
- Power Supply : AC 230V, 50/60Hz

### ■ APPLICATION

- When cold trap needs to be done in extremely low temperature,
- Solvent vapor trap to prevent contamination of vacuum pump by lubricating oil,
- Quick freezing of sample for freeze-drying,
- Quick freezing for reaction stop of enzyme,



## Cooling Water Circulator(Bath) HS-3005N(CE)

### ■ FEATURE

As a source of cooling water to the Rotary Evaporator and as a heat-emitting equipment it supplies sufficient quantity of cooling water as highly efficient chemical pumps are installed and does not contaminate other instruments as it does not get corroded.

### ■ SPECIFICATION

- Capacity : 4ℓ
- Bath Dimension(D×H) : φ190×200
- Circulator Pump : Magnet 20W Max, flow 15ℓ/min
- Temp,Range : Down to~ -20°C
- Controller : FND Controller
- Refrigerator : 1/3HP
- Refrigerant : 134A
- Dimension(W×D×H) : 250×510×510mm
- Gross weight : 28kg
- Power consumption : 334W
- Power Supply : AC 230V, 50/60Hz



## Electric Aspirator HS-3000

### FEATURE

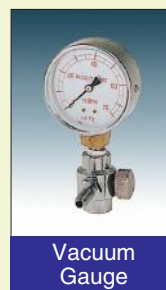
- Excessive consumption of water may be reduced that can happen when city piped water is used.
- Utilizing water pressure gained by motor pump, two aspirators can be installed.
- By preventing reflux of air, vacuum, filtering and vacuum distillation are possible.
- Applicable to Rotary vacuum evaporator.
- A cooling coil could be installed to prevent the loss of vacuum effect in the case when the water temperature increases (option).
- Vacuum controller could be equipped for checking degree of vacuum status during the operation.
- Bath is made of polypropylene which is strong and lasts long.

### SPECIFICATION

- Pump Capacity : 18ℓ/min × 2EA
- Bath Capacity : 8ℓ
- Motor Power : 150W
- Material of Bath : Polypropylene
- Material of Aspirator : Metal 2 pcs
- Safety : Fuse
- Power source : AC 220V 50/60Hz 0.7A
- Dimensions(W × D × H) : 320 × 240 × 330mm
- Weight : 6kg



### Option



Vacuum Gauge



Cooling Coil (Copper)

## Vacuum Controller HS-0245

### SPECIFICATION

Solid state module maintains precise control ( $\pm 3\%$ ) of the system vacuum by cycling the pump on/off as required.

Adjustable for any level between 1mmHg and 760mmHg

- Power source : AC 220V 50/60Hz
- Dimensions(W × D × H) : 160 × 130 × 95mm
- Weight : 1.8kg







## Vacuum Pump HS-3004

### SPECIFICATION

- Pump Speed : 100 l / min
- Ultimate Pressure Torr(Pa) :  $5 \times 10^{-4}$ ( $6.7 \times 10^{-2}$ )
- Full Load Power : 0.4kw
- Motor Speed : 1700 RPM
- Oil Capacity : 500 ml
- Ambient Operation Temp. Range : 7~40°C
- Overall Dimensions(W×D×H) : 150×392×250mm
- Power Source : AC 220V 50/60Hz 2A
- Weight : 19kg



## Diaphragm Vacuum Pump HS-0153

### Diaphragm Pumps for Air, Gases and Vapors

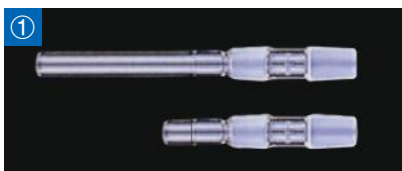
#### Technical features;

- 100% oil-free transfer
- Pure transfer, evacuation and compression
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive and corrosive gases or vapors
- Maintenance-free
- Environmentally friendly



### Technical data

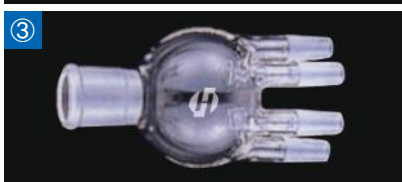
Delivery(l/min) <sup>1</sup>	20
Ultimate vacuum(mbar abs.)	7
Operating pressure(bar g)	1
Connectors for tube(mm)	OD 10
Permissible gas and ambient temperature	+5...+40°C
Voltage/ Frequencies	230V/50Hz~60Hz
Power P <sub>1</sub>	180W
Operating current	1.2A
Weight	9.3 kg
Dimensions L x H x W(mm)	270/180/220



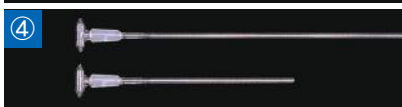
- ① HAHNVAPOR duct  $\varnothing$  24/40 (HS-2000NS/2005S/2005S-N)  
 $l = 312\text{mm}$  Model : HS-0100 PTFE Design patent registered  
 HAHNVAPOR duct  $\varnothing$  24/40 (HS-2001NS/2005V/2005V-N)  
 $l = 200\text{mm}$  Model : HS-0150 PTFE Design patent registered



- ② Bulbs for flask  $\varnothing$  24/40  
 $l = 100\text{ml}$  Model : HS-0200  
 $l = 250\text{ml}$  Model : HS-0201



- ③ Four bulbs for flask  $\varnothing$  24/40 14/20  
 Model : HS-0300



- ④ Stop cock  $\varnothing$  19/38  
 $l = 450\text{mm} / 590\text{mm}$  Model : HS-0400



- ⑤ Connecting adapters  
 (上)  $\varnothing$  24/40 (下)  $\varnothing$  14/20 Or (上)  $\varnothing$  24/40 (下)  $\varnothing$  24/40  
 Model : HS-0500



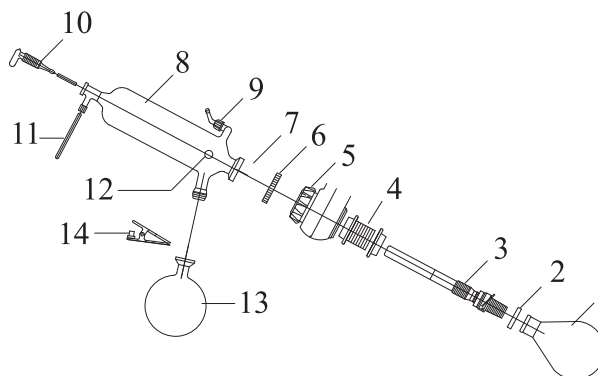
- ⑥ Evaporating flask ( $\varnothing$  24/40)  
 Capacity 50ml Model : HS-0605  
 100ml Model : HS-0610  
 250ml Model : HS-0625  
 500ml Model : HS-0650  
 1l Model : HS-0700  
 2l Model : HS-0800  
 3l Model : HS-0900

- ⑦ Receiving flask (S35/20)  
 Capacity 100ml Model : HS-0930  
 250ml Model : HS-0940  
 500ml Model : HS-0950  
 1l Model : HS-0960  
 2l Model : HS-0970  
 3l Model : HS-0980



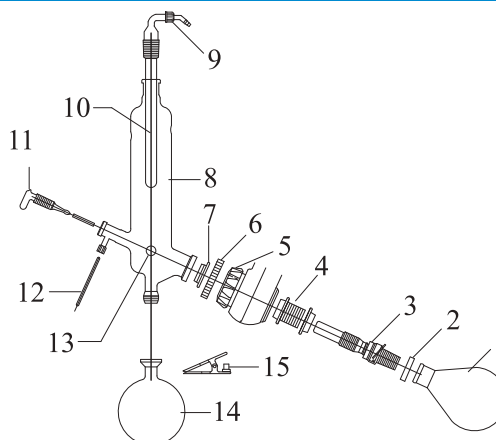
## Glass Assembly HS-2005S-N, HS-2005S, HS-2000NS

1. Evaporating Flask
2. Joint clamp
3. HAHNVAPOR Duct
4. Duct Screw Cap
5. Condenser Screw Coupling
6. Condenser Holder Spring
7. Vacuum Seal
8. Assembly Condenser
9. Vacuum Connector
10. Vacuum Stop-cock
11. Drawing Teflon Hose
12. Vapor Sensor
13. Receiving Flask
14. Receiving Flask Clamp



## Glass Assembly HS-2005V-N, HS-2005V, HS-2001NS

1. Evaporating Flask
2. Joint clamp
3. HAHNVAPOR Duct
4. Duct Screw Cap
5. Condenser Screw Coupling
6. Condenser Holder Spring
7. Vacuum Seal
8. Assembly Condenser
9. Vacuum Connector
10. Vacuum Adapter
11. Vacuum Stop-cock
12. Drawing Teflon Hose
13. Vapor Sensor
14. Receiving Flask
15. Receiving Flask Clamp



## Rotary Evaporator Glass Assembly



Evaporator  
Condenser-A

HS-0510



Evaporator  
Condenser-B

HS-0511



Vacuum Seal

HS-0170



Receiving Flask Ball Clamp

HS-0171



Joint Clamp

HS-0172



Adapter

HS-0173




# HAHN VAPOR ROTARY EVAPORATOR

## Rotary Evaporator HS-2005V-N

### SPECIFICATION

Model	HS-2005V-N
Voltage	AC220V 50/60Hz
Glass Type	Vertical Condenser
Rotation Speed	20~280 rpm
Weight	19.5 kg
Dimension(W×D×H)	620×410×870mm
Flask Sizes	50~3000ml

### HEATING BATH

Power consumption	AC220V 50/60Hz
Bath Size(m/m)	Φ245×120(H)
Temp. Controller	Amb.~180℃
Temp. Accuracy	±1℃
Capacity	4.3 l
Heater	1000W
Weight	2.2 kg
Water level sensor	Magnetic Type
Seal of Approval	

## Rotary Evaporator HS-2005S-N

### SPECIFICATION

Model	HS-2005S-N
Voltage	AC220V 50/60Hz 2.5A
Glass Type	Slant Condenser
Rotation Speed	20~280 rpm
Weight	19.5 kg
Dimension(W×D×H)	730×410×630mm
Flask Sizes	50~3000ml

### HEATING BATH

Power consumption	220V 50/60Hz
Bath Size(m/m)	Φ245×120(H)
Temp. Controller	Amb.~180℃
Temp. Accuracy	±1℃
Capacity	4.3 l
Heater	1000W 4.5A
Weight	2.2kg
Water level sensor	Magnetic Type
Seal of Approval	