

**EYELA**

State-of-the-art model with body renewed sophisticatedly

Pursuing easy-operation, attractive new functions have been implemented!

# Rotary Evaporator

**N-1300E·V·S Series**



**TOKYO RIKAKIKAI CO., LTD.**

# EYELA brand evaporator representing highest reliability

## Rotary Evaporator N-1300E·V·S Series



### ■ Composition & Specifications

Product name	Rotary Evaporator								
<b>Composition</b> Free selection of N-1300 main unit driving part, E-V-S condenser, water or oil bath.									
<b>Bath type</b>	w/o bath			Water bath			Water/oil bath		
<b>Bath temp. control range &amp; accuracy</b>	-			RT + 5 ~ 90°C ± 1°C			RT + 5 ~ 180°C ± 1.5°C (oil ± 3°C)		
<b>E-V-S glass set</b>							<p><b>E type glass set suitable for installation in fume hood.</b>                      E type condenser: Vertical double helix condenser with built-in adapter (cooling area 0.117m<sup>2</sup>)                      Rotary joint: ¥29/38, ID 18xL 178mm                      Sample flask (Eggplant shape): 1L ¥29/38                      Receiving flask (Round bottom shape): 1L Ball joint S35/20</p> <p><b>V type glass set applicable to both small or large volume flask.</b>                      V type condenser: Vertical double helix condenser with built-in adapter (cooling area 0.146m<sup>2</sup>)                      Rotary joint: ¥29/38, ID 18x L 178mm                      Sample flask (Eggplant shape): 1L ¥29/38                      Receiving flask (Round bottom shape): 1L Ball joint S35/20</p> <p><b>S type glass set applicable to both low or high boiling point liquid.</b>                      S type condenser: Diagonal double helix condenser (cooling area 0.146m<sup>2</sup>)                      Rotary joint: ¥29/38, ID 18x L 272mm                      Sample flask (Eggplant shape): 1L ¥29/38                      Receiving flask (Round bottom shape): 1L Ball joint S35/20</p>		
<b>Model</b>	N-1300E	N-1300V	N-1300S	N-1300E-W	N-1300V-W	N-1300S-W	N-1300E-WB	N-1300V-WB	N-1300S-WB
<b>Cat. No. for 230V, 50/60Hz</b>	266492	266432	266372	266512	266452	266392	266532	266472	266412
<b>Cat. No. for 115V, 60Hz</b>	266499	266439	266379	266519	266459	266399	266539	266479	266419
<b>Rotation speed</b>	10~310rpm								
<b>Evaporation capacity</b>	Max. 23mL/min (Water evaporation)								
<b>Rotation speed setting &amp; display</b>	Setting by dial Digital display								
<b>Jack function</b>	Manual balancing system (Jack stroke 180mm, stepless)								
<b>Motor</b>	DC brushless motor								
<b>Heater</b>	-			1.05kW			1kW		
<b>Vacuum seal</b>	Vacuum seal (Teflon®+Teflon®·Viton double seal) 1 set Genuin parts: vacuum seal 2 sets Cat. No. 142610								
<b>Bath inner dimensions (mm)</b>	-			ID 220 x 120H			ID 240 x 120H		
<b>Bath material &amp; capacity</b>	-			SUS 304 4.3L			Aluminum (Teflon coating) 5L		
<b>Bath inlet terminal</b>	For connection to evaporator main unit driving part Max. 2A								
<b>Bath connection nozzle</b>	Cooling hose nozzle · Suction nozzle OD 10mm								
<b>Ambient temperature</b>	5~35°C								
<b>Dimensions (Max. height) (mm)</b>	E: 514W x 342D x 645(825)H 8.8kg V: 497W x 342D x 823(1003)H 8.9kg S: 672W x 342D x 504(684)H 8.2kg			E: 578W x 352D x 645(825)H 12.7kg V: 543W x 352D x 823(1003)H 12.8kg S: 736W x 352D x 504(684)H 12.1kg			E: 565W x 352D x 645(825)H 13.3kg V: 531W x 352D x 823(1003)H 13.4kg S: 724W x 352D x 504(684)H 12.7kg		
<b>Power source</b>	126VA · AC115V/253VA · AC230V, 50/60Hz			1.1kVA · AC115V/2.6kVA · AC230V, 50/60Hz			1.1kVA · AC115V/2.5kVA · AC230V, 50/60Hz		

\* Specification under room temperature 20°C and specified source voltage as above table.

\* Bath temperature control accuracy is during flask rotation.

\* Evaporation capacity differs according to the status of bath temperature, condenser temperature and kind of sample flask.

\* F series glass set is also available; featuring chemical resistance, transparency, heat resistiveness (-80°C, +120°C)

# “Renewal design from the conventional evaporator” Differences of New type evaporator, N-1300

It is renewal as N-1300 after fifteen years since we had launched our first evaporator N-1 and our past successive evaporators have continued to be well accepted and highly appraised at laboratories over half century. Design is renewed from the conventional model and it has finished up as a product which can constitute better laboratory environment.

## High flexibility in installation and Capability in space efficiency



**Possible to install glassware set from either of Right or Left hand side to fit in installation spot.**

Glassware can be set at either of right or left hand side of machine body. A machine can be set up, in consideration with space on lab table and dominant hand.



**A vertical E-type condenser suited for fume hood**

A vertical condenser with a built-in adapter (E type condenser) has compact design in consideration with using in fume hood. Moreover, the condenser has been designed with no-reverse flow from capillary without having any concern, and with efficient vapor collection in spite of the compact size.



**Easy setting and useful Stand-base bath**

Since the both shapes of the evaporator stand-base and the water & oil bath have been improved to round, the bath can be set front always in spite of any angles (positions) of the evaporator base. It is possible to check bath temperature and enter temp. Setting without looking over.

## Improvement for even easier operation, New functions to be implemented



**Implementation of automatic reverse revolution to be suited for drying-out and concentration of powder and solid substance etc.**

Direction of flask revolution (Clockwise or Counter-clockwise) can be set up. Even automatic reversing is available. And, it (N-1300) can be applied to dry-out of powder and dry-out & concentration of samples including solid substance.



**Addition of new anti-reverse cover that protects against pool of condensed fluid**

Protection cover against fluid pool is added at the foot of a condenser (Receiver flask side). It protects fluid pool that happens to appear at sealing part when the condenser is tilted. Anti-reverse cover blocks entry of condensed fluid that flows inside of glassware.



**Possible to fix jack at any elevation depending on flask's shape due to non-stepping positions**

The jack can be adjustable without definite positions freely, that is different from the conventional evaporator. Since elevation can be fixed in accordance with size and shape of sample flask at any positions, it is easy to handle even when trap ball is used.



**With exclusive option added, capable to put and remove insulation hose easily**

In use of optional one-touch connector and one-touch insulation hose, the condenser and the insulation hose can be put and removed easily. One-touch insulation hose makes zip-tie bundling unnecessary despite bundled before. Line-connection is established just by inserting the insulation hoses into the connectors which are on a condenser.

**Option**



**Exclusive cover to reduce dew which appears on A condenser and nozzle parts.**

By putting exclusive cover on A condenser and nozzle parts, dew (dew condensation water) can be preventive. This cover can be applied to not only this new model but also models of the conventional evaporators.

**Dew preventive cover for rotary evaporator**

Consist: Cover for condenser, Covers for nozzle parts including 2 sets

Material: PP, Insulation, Urethane foam

Using condition: More than -10°C of circulating fluid temp.

(When circulating cooling media.)

Cat. No. **266040**

**Transparent cover to confirm evaporation status.**

**Condenser cover for rotary evaporator**

Composition: Condenser cover, Nozzle cover (2 pcs)

Material: Transparent PET, Silicone, Foamed silicone

Operating condition: Lowest circulating liquid temperature 5°C

(Room temp. 30°C, Humidity less 70%, circulation liquid; water)

Cat. No. **266110**



**One touch connector**

(ID10mm, 2 pcs)

Used with one touch cooling hose set, connection/disconnection to cooling hose can be carried out by one touch.

Cat. No. **267980**



**One touch cooling hose set**

(Applicable temperature -20~40°C)

Fixing by band is not required.

Just insert into one touch connector.



**Cooling hose set**

(Applicable temperature -30~80°C)

Prevents dew formation during cooling water circulation. Minimize loss of cooling capacity.

Product name	Tube diameter	Length	Cat. No.
One touch cooling hose set	OD 10mm	2m	<b>244940</b>
		5m	<b>244950</b>
Cooling hose set	ID 9mm	2m	<b>112700</b>
		5m	<b>174420</b>

**Related Products**

When making evaporator system, combination with following products is required.

**Low Temperatur Circulator  
Diaphragm Vacuum Pump  
Solvent Recovery Unit  
Vacuum Control Unit**

**CoolAce series, CoolAce Eco series  
NVP-EVP-DTC-MD series  
DPE series  
NVC series**

**Polyurethane coated glass to prevent glass projection**

**EYELA COAT®**

Glass coated with polyurethane is hard to break and even in case of breakage, minimizes glass or sample projection. It also features transparency and strong chemical resistiveness.

■ Polyurethane is friendly to environment against conventional PVC.

■ Heat resistance is -80~120°C. It is strong to various solvents and chemical materials.

**F series use EYELA COAT coated glass**

Main unit composition	Glass set	
Without bath N-1300 only	Eyela COAT	EF
		VF
		SF
With water bath N-1300+SB-1300	Eyela COAT	EF
		VF
		SF
With water/oil bath N-1300+OSB-2200	Eyela COAT	EF
		VF
		SF

Model	AC230V Cat. No.	AC115V Cat. No.
N-1300EF	<b>266502</b>	<b>266509</b>
N-1300VF	<b>266442</b>	<b>266449</b>
N-1300SF	<b>266382</b>	<b>266389</b>
N-1300EF-W	<b>266522</b>	<b>266529</b>
N-1300VF-W	<b>266462</b>	<b>266469</b>
N-1300SF-W	<b>266402</b>	<b>266409</b>
N-1300EF-WB	<b>266542</b>	<b>266549</b>
N-1300VF-WB	<b>266482</b>	<b>266489</b>
N-1300SF-WB	<b>266422</b>	<b>266429</b>

\* Eyela COAT is used on condenser, receiving flask, adaptor (V)

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**Safety Caution**

Please read "Instruction Manual" carefully before using the product for your continued safety.

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