

**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 as a reliable brand name

## 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 Genuine 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		

\* Performance data was taken under 20°C of ambient condition with rated power and voltage.

\* Adjustable accuracy of bath temperature was taken value when a sample flask was turning.

\* Performance of evaporation differs depending on revolution speed, vacuum condition, bath temperature, condensing temperature, sample flask.

\* There is F series (EYELA COAT®) which is applied with coating on glassware and superior with chemical resistance, transparency, cold resistance (-80°C) and heat resistance (120°C).

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

It is renewal as N-1300 after 50 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**



Dew preventive cover for rotary evaporator

**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: Higher than -10°C of circulating fluid temp.

(When circulating cooling media.)

Cat. No. **266040** for V type

Cat. No. **270730** for S type

**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, including 2 pieces)

With "One-touch cold insulation hose set" used together, hose can be connected and disconnected easily.

Cat. No. **267980**



**One-touch cold insulation hose set**

(-20 to 40°C as applicable temperature)

It is not necessary to bundle zip-tie around hose like the conventional connection. The connection is established just by insert into the one-touch connector.



**Cold insulation hose set**

(-30 to 80°C as applicable temperature)

It is preventive against dew that appears when cooling media is circulated through, and reduces loss of cooling ability.

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>

**Relating products**

Please hook up the following EYELA products when A evaporator constitutes system.

- Low temp. circulator :** CA-1115, CCA-1111
- Diaphragm vacuum pump :** NVP-1000, NPV-2000, NPV-2100
- Solvent recovery unit :** DPE series
- Vacuum control unit :** NVC-2300 series

**Polyurethane resin coating which prevents from glass scattering when broken.**

**EYELA COAT®**

Glass parts that are applied with Eyela coat (Polyurethane resin coating), are not broken easily while glass and sample are not scattered in pieces and splash easily even if it is broken. Glass transparency is high. Membrane of new composition which is superior for chemical property.

■ polyurethane resin that is not like vinyl chloride of high environment load and is environment friendly, is selected.

■ Range of heat resistance temperature, is -80 to 120°C. It is tough with each solvent and superior with chemical resistance.

We have also F series evaporator which includes the coated glassware (Eyela coat®) that is superior with chemical resistance, transparency, cold resistance (-80°C), heat resistance (120°C).

Main unit composition	Glass set		Model	AC230V Cat. No.	AC115V Cat. No.
	Eyela COAT®				
Without bath N-1300 only	Eyela COAT®	EF	N-1300EF	<b>266502</b>	<b>266509</b>
		VF	N-1300VF	<b>266442</b>	<b>266449</b>
		SF	N-1300SF	<b>266382</b>	<b>266389</b>
With water bath N-1300+SB-1300	Eyela COAT®	EF	N-1300EF-W	<b>266522</b>	<b>266529</b>
		VF	N-1300VF-W	<b>266462</b>	<b>266469</b>
		SF	N-1300SF-W	<b>266402</b>	<b>266409</b>
With water/oil bath N-1300+OSB-2200	Eyela COAT®	EF	N-1300EF-WB	<b>266542</b>	<b>266549</b>
		VF	N-1300VF-WB	<b>266482</b>	<b>266489</b>
		SF	N-1300SF-WB	<b>266422</b>	<b>266429</b>

\* Eyela coat® is applied to condenser, receiving flask, adaptor (V type).

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www.eyelaworld.com



**Safety Caution**

Please read "Instruction Manual" carefully before operation for your safety.

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