# ROTARY EVAPORATORS I SETUP SOLUTIONS





# Choose your setup

/// Rotary evaporators and peripheral devices from a single source

IKA's rotary evaporator's award winning design and performance will make a significant difference in your laboratory. The IKA range of RV 3, RV 8, RV 10 digital, RV 10 auto and RV 10 auto pro rotary evaporators offers excellent distilling solutions to the demanding user. Value for money, design and technology – all for your convenience!

Depending on your application a vacuum system (pump / controller / valve) and cooling is required to get everything out of your distillation. The powerful vacuum pumps and recirculating chillers from IKA are designed to match the rotary evaporator portfolio perfectly. With devices from one single supplier you will be able to set up a well-coordinated system. It is even possible to supply multiple rotary evaporators with only one pump and chiller.

Are you interested in configuring your personal set-up? Contact our sales team to receive your individual offer. sales@ika.de // +49 7633 831-140

#### **5-YEAR WARRANTY\***

\* 2 + 3 years after registering at www.ika.com/register, glassware and wearing parts excluded.

### Step 1: Base unit

With selection of the base unit, consisting of heating bath, lift and piston drive, you define the maximum evaporation temperature, essential safety features as well as ease of use and degree of automation of your system.



# the digital and most automated

models for demanding and frequent distilling

		-			
Model Ident. No.	RV 3 V-C 0010003328	RV 8 V-C 0010003485	<b>RV 10 digital V-C</b> 0010004802	RV 10 auto V-C 0010004838	RV 10 auto pro V-C 0010004812
Motor lift	manual	manual	motorized	motorized	motorized
Safety lift-out function	no	yes	yes	yes	yes
Speed display	Scale	LED	LED	TFT	TFT
Max. heating bath temperature	99 °C	180 °C	180 °C	180 °C	180 °C
Integrated vacuum controller	_	_	_	yes / ON-OFF valve vacuum regulation	yes / automatic boiling point detection
Integrated vacuum pump	_	_	_	_	VACSTAR digital

All base units are available with vertical glassware (coated or uncoated), as FLEX version without glassware or with a dry ice condenser (coated or uncoated).

## Step 2: Vacuum solution

The result of a distillation is significantly influenced by the used vacuum system. IKA offers various vacuum solutions that perfectly match to the rotary evaporators. The portfolio includes pumps with and without integrated vacuum control as well as speed-controlled pumps and pumps with fixed speed. The degree of automation of the complete system can be influenced by the selection of the vacuum solution. For example, a speed-controlled pump with controller enables automatic boiling point detection.



Cleaning function of valves for long service life

> VC 10.400 table stand is available as accessory.



MVP 10 ba 0003980000

28.3 l/min

7 mbar

4

ON / OFF

	5	i																								

Requires external controller / valve



VACSTAR digital 0020016236

2

22 l/min
2 mbar
0 / 285 – 1200 rpm
Requires external controller / valve



VACSTAR control 0020109375

22 l/min 2 mbar 0 / 285 – 1200 rpm Integrated controller 1

#### Model

- Ident. No.
- Max. pump rate

Vacuum controller VC 10

ten pressure/time sequences.

Ident. No. 0020005132

Final pressure

Speed control

#### Regulation

Number of rotary evaporators which can be supplied

## Step 3: Recirculating chiller

In order to select the right chiller, the following parameters are important: size of the evaporation flask, number of rotary evaporators that are to be supplied with one chiller, requirements for flow or condensate temperature. On this basis, the cooling power requirement can be determined and the right cooling source can be selected. The decision for a recirculationg chiller from IKA is also the decision for high energy savings and reduction of operating noises.



Model	RC 2 lite	RC 2 basic	RC 2 GREEN basic	RC 5 basic
Cooling agent	R 290	R 134a	R 290	R 290
Cooling capacity at 20 °C	400 W	400 W	800 W	1400 W
Energy efficiency	high	very high	very high	very high
Max. pump pressure	0.35 bar	0.3 bar	0.5 bar	0.61 bar
Max. flow rate	18 l/min	18 l/min	21 l/min	31 l/min

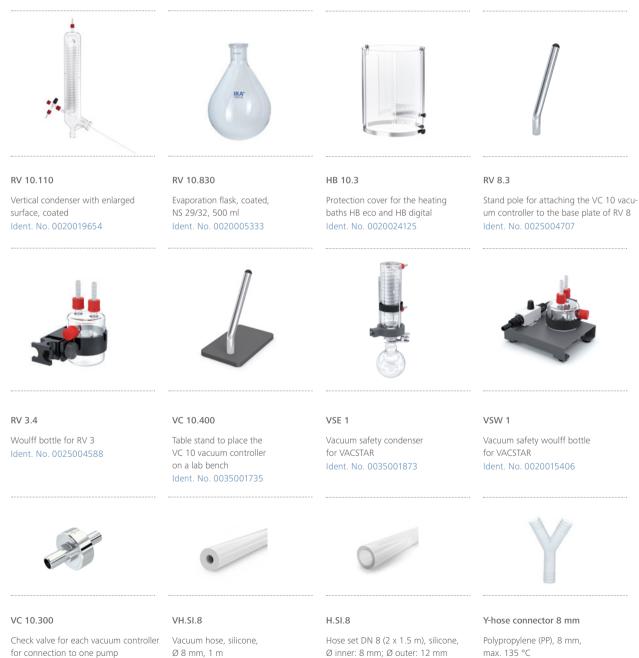
 $^{\ast}$  Cooling power at 20 °C cooling temperature. Water was used as reference solvent. When using other solvents, the cooling power demand could be lower.

The chillers RC 2, RC 2 GREEN and RC 5 are also available as control version with extended features. Please visit www.ika.com for further information.

### Step 4: Selected accessories

Depending on the base unit and the matching peripheral devices, IKA is offering many different accessories to complete your setup. Further accessories are available on www.ika.com.

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Ident. No. 0004569000

Ident. No. 0020010963

Ø 8 mm, 1 m Ident. No. 0020013886

Ident. No. 0020011105

# RV 10 auto pro V-C Complete Package

/// The complete solution for your rotary evaporator setup

With the new package, IKA is offering a complete solution at an attractive price. All components and connections required for operation are included in the package and come from the same manufacturer. In the event of queries or service cases IKA is your competent contact for the whole setup.

The RV 10 auto offers all characteristics required for efficient, safe, and cost-effective operation. Safety is ensured by the coated glassware which protects the user in case of glass breakage. The included VSE 1 vacuum safety emmission condenser prevents solvents from being released into the room air and thus ensures additional safety for user and environment.



PATENTED, VOLUME CONTROLLED, and more intuitive distillation Intuitive operation via brilliant TFT COLOR GRAPHIC DISPLAY, an integrated vacuum controller, cooling water monitoring and sophisticated safety standards HB digital combined SAFETY WATER-OIL HEATING BATH FOR UP TO 180 °C

# Set-up solutions for two or more rotary evaporators

With only one vacuum system and chiller, multiple rotary evaporators can be supplied. The following examples shows possible solutions for the set-up of a complete system including rotary evaporators with suitable vacuum and cooling system.

#### Example 1: Two rotary evaporators The system consists of:

- (1)  $2 \times RV \otimes V$ -C rotary evaporator  $2 \times RV 8.3$  stand pole  $2 \times VC$  10 vacuum controller  $2 \times VC$  10.300 check valve
- (2) 1 × VACSTAR digital vacuum pump 1 × VSE 1 vacuum safety emmission
- (3) 1 × RC 2 GREEN basic recirculating chiller  $2 \times RV$  10.5005 set of hoses  $2 \times Y$ -hose connectors, 8 mm



#### Example 2: Three rotary evaporators

The system consists of:

- (1)  $3 \times RV$  10 auto V-C rotary evaporator  $3 \times VC$  10.300 check valve
- (2) 1 × MVP 10 basic vacuum pump 1 × VSS 1 vacuum safety set
- (3) 1 × RC 5 basic recirculating chiller  $3 \times RV$  10.5005 set of hoses  $6 \times Y$ -hose connectors, 8 mm



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