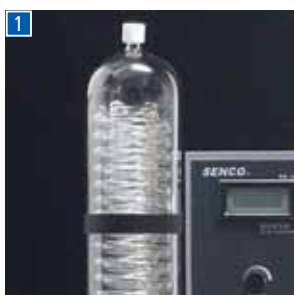


# 旋转蒸发器

## ROTARY EVAPORATOR

### 0.1-5L



#### 快速泄压口

当过压冲料时，位于冷凝器顶部的泄压阀可快速对系统放气。

#### Vent Port

It can be used to vent system pressure quickly when encountering with sudden bumping.



#### 锥磨口PTFE隔膜

锥磨口内衬PTFE隔膜，可减少锥口咬死，增加气密性。

#### PTFE Sleeve

PTFE Sleeve inside taper joint helps to prevent dead seizure, and increase sealing performance.



#### 锥磨口锁瓶退瓶装置

可稳固锁定锥磨口连接，方便锥口退瓶。

#### Taper joint lock and release device

Enable a reliable lock of evaporating flask and offer convenience to taper joint flask release.



#### 可升降浴锅

可根据需要高度平滑升降，避免玻璃部分移动，安全易操作。油浴最高可到180℃，设有独立电源开关，精确温控。

#### Lift Heating Bath

Prevents movement of glassware which is safe and easy to operate. Bath equipped with intelligent temp. controller. Heating temperature up to 99℃ for water bath and 180℃ for oil bath. Temp. wave within 2℃ or 0.2℃.

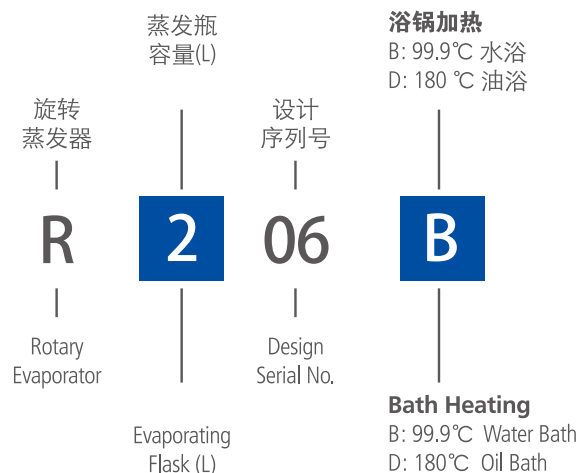


#### 水浴锅罩(选件)

为您带来15%的增效和60%的节水，安全实用。

#### Lid for Water Bath (option)

Optional for water bath. Can increase evaporation efficiency by 15% and save bath water by 60%. Safe and useful.





R213B



R214B



R308B



R503B

## 基本参数 Parameters

型号 Model	R213B	R214B	R205B	R206B	R308B	R502B	R503B
相关型号 Relevant Model	/	/	/	R206D	R308D	R502D	R503D
蒸发瓶 (L) Evaporating Flask (L)	0.5+1L/29, (2L/29)				3L / F50	5L / F50	5L / F50
收集瓶 (L) Receiving Flask (L)	1L/S35	1L/S35	1L/29, 下出料 Bottom Discharge	1L/S35	2L/S35	3L/40, 下出料 Bottom Discharge	3L/S35, 下出料 Bottom Discharge
冷凝面积 (m <sup>2</sup> ) Condensing Surface (m <sup>2</sup> )	斜式 Diagonal 0.14	立式 Vertical 0.15			立式 Vertical 0.2	立式 Vertical 0.29	
转速(rpm) Rotation Speed (rpm)	10-180	10-180	4-180	4-200	4-180	2-90	2-90
最大蒸发速度 (H <sub>2</sub> O)** Max Evaporating Speed (H <sub>2</sub> O)**	1.2L/h	1.2L/h	1.2L/h	1.2L/h	1.5L/h	2L/h	2L/h
到达真空 Reachable Vacuum Rate	< 133Pa (1.33mbar, 1 Torr)						
浴锅功率(kW) Bath Power (kW)	1.4kW	1.4kW	1.4kW	1.4kW	1.4kW	2 kW	2 kW
静态温控范围及波动(°C) Static Temp. Control Range & Wave (°C)	0-99 ± 2			0-99(180) ± 0.2			
浴锅尺寸(cm), 容量, 材质 Bath Size, Capacity, Material	Ø24x15, 6L, SUS304				Ø26x15, 8L, SUS304	Ø28x17, 10L, SUS304	
电源 Power	220V, 50/60Hz						
整机尺寸(cm) Dimensions (cm)	88x53x70H	62x33x82H	62x33x82H	62x33x82H	65x36x95H	84x36x110H	84x36x110H

\*\* 最大蒸发速度与工艺参数设定, 配套设备性能及匹配度等有关。

Max evaporating speed is affected by operation settings and the performances and matching levels of supporting equipment.

## 功能配置 Functional Configurations

型号 Model	R213B	R214B	R205B	R206B	R308B	R502B	R503B
PTFE组合密封 PTFE Seal Assembly	●	●	●	●	●	●	●
PTFE下放料阀 PTFE Bottom Discharge Valve	/	/	●	/	/	●	●
3 退瓶装置 Evaporating Flask Unloader Device	●	●	●	●	/	/	/
1 泄压口 Vent Port	/	○	○	●	/	/	/
真空表 Vacuum Meter	/	/	●	●	●	●	●
数字显示 Digital Display	浴温 Bath Temp.		浴温·转速 Bath Temp., Rotation Speed				
2 锥口PTFE隔膜 Taper Joint PTFE Sleeve	/	●	●	●	●	●	●
4 浴锅升降 Bath Lift	●	●	●	●	●	●	●
回流 Reflux	●	○	/	○	○	/	●
蒸汽测温口 Thermometer Neck for Vapor	/	/	/	/	/	/	●
5 水浴锅罩 Water Bath Lid	○	○	○	○	/	/	/
转换接口 Transition Joint	○	○	○	○	○	○	○
备选蒸发瓶 Optional Evaporating Flask	100ml, 250ml, 2L				100ml, 250ml, 500ml, 1L	2L, 3L	2L, 3L

符号含义: / - 无, ● - 已配, ○ - 可选 (\* - 此选配功能必须在工厂生产时组装, 不能单独另配)

注: 相关型号部分具体参数与标准机型有少量差异, 需另行确认。

Symbol Instruction: / - None, ● - Equipped, ○ - Optional (\* - Only available when ordering of product, not for separate sale)

Note: Some specifications of relevant models may have differences from that of standard model. Details available at request.

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SHORT PATH DISTILLATION

旋转蒸发器  
ROTARY EVAPORATOR

夹套玻璃反应器  
JACKETED REACTOR

多功能反应器  
MULTIFUNC. REACTOR

真空配套  
VACUUM PRODUCTS

冷却/循环  
COOLING / ATING

搅拌  
STIRRING

# 真空控制器

## Vacuum Controller

一台可以将溶剂回收率提高到99%的实用机器，尤其适合低沸点物料分离浓缩时的过程压力控制。

- 可设定、显示、控制压力
- 内置PTFE电磁阀气路控制
- 可直接控制真空泵启/停
- 自配起保护作用的缓冲瓶和过滤瓶

Used for set, display and control vacuum rate in target system, esp. in processes of separating, condensing of low boiling temperature solution. Solvent receiving rate raise to 99% even for low boiling temp. solvent.

- Built-in electromagnetic valve
- Equips in control power port for vacuum pump
- With buffer bottle and filter bottle for protection

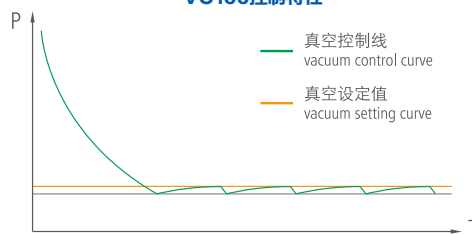


### 基本参数 Parameters

型号 Model		VC100C
测量范围	Measure Range	0.1-105kPa
设定范围	Set Range	2.0~90kPa
分辨率	Resolution	0.1kPa
负载能力	Load Capacity	220V, 370W
电源	Power	220V, 50/60Hz
整机尺寸(cm)	Dimensions (cm)	34x16x39H

注：不可抽取含固体粉尘气体！ Not for pumping of gas with powder or grain!

VC100控制特性



欢迎垂询SENCO智能型真空控制器  
Welcome to contact for inquiring Senco new intelligent vacuum controller

蒸不出或者蒸得特别慢？  
蒸出来了，但收不到？  
突然冲料，前功尽弃？  
真空泵又坏了！  
工作环境都是难闻的有害气体，躲都躲不及？.....

SENCO为您提供的“真空控制蒸发方案”

能帮您免除这些烦恼。

希望您的工作**安全、高效、可重复**

Evaporation speed is slow?  
Vaporized solvent cannot be well collected?  
Sudden bumping destroys everything you collected?  
Trouble again on vacuum pump!  
Awful smell all around in lab? ...

SENCO's “**Rotary Evaporation Set**” under Vacuum Control will save you from these troubles.

We hope to bring you **safe, efficient, repeatable** operation experience with Senco



# 实用、高效、价格适中 的真空控制蒸发方案

## Practical-Efficient-Economical Rotary Evaporation Sets



实验室2L旋蒸配置方案 2L Lab Evaporation Set

SENCO也提供中试20L\*旋蒸配置方案 For 20L\* Evaporation Set: LX400 + R2006KB + VC100 + MZ 2C



- 制冷循环泵**  
**COOLING CIRCULATOR**
- 提升回收率
  - 节省大量冷却水资源
  - With big cooling power;
  - Increase receiving rate;
  - Save water resource

- 旋转蒸发器**  
**ROTARY EVAPORATOR**
- 尤具密封耐腐蚀性能
  - 提供温度，转速及真空度显示
  - Strong in sealing and anti-corrosion performance;
  - Has display on rotation speed, temperature, and pressure

- 真空控制器**  
**VACUUM CONTROLLER**
- 提升蒸发效率
  - 提升回收率
  - 减少溶剂气体外溢
  - Improve efficiency of evaporating and receiving;
  - Decrease bumping risk;
  - Reduce vapor escaping;
  - Protect vacuum pump

- 水循环真空泵**  
**WATER CIRCULATION VACUUM PUMP**
- 维护保养简便
  - Easy maintenance;
  - Resist certain corrosion

### 实验结果：使用SENCO 2L旋蒸配置方案来回收低沸点的试剂 **回收率 99%**

根据以下参数设定，整个蒸发收集过程均**高速，稳定**。系统真空压力在真空控制器的自动控制下稳定维持，加热蒸发端和冷却收集端的产能均达到最大化。

### Test Result Using SENCO "2L Rotary Evaporation Set" to deal with solvents of low boiling point **Receiving Rate 99%**

Under below settings, evaporation processes were **quick and stable**. System vacuum is well controlled by Vacuum Controller, which enables either heating (evaporation) or cooling (receiving) efficiency going to max.

Experimental Data	设定参数 Working Parameters Set			实验结果 Working Efficiency	
试剂 Solvent	冷却温度 Cooling Temp.	加热浴温 Bath Temp.	真空压力 Vacuum	蒸发速度 Evaporating Speed	回收率 Receiving Rate
乙醇 Ethanol-C <sub>2</sub> H <sub>6</sub> O	<5°C	70°C	10.2kPa	2.2L/hr	98.7%
丙酮 Acetone-C <sub>3</sub> H <sub>6</sub> O	<-2°C	54°C	37.7kPa	5.2L/hr	99.4%
氯仿 Chloroform-CHCl <sub>3</sub>	<-2°C	58°C	32.8kPa	6.0L/hr	99.0%

实验数据来自SENCO 2L旋蒸配置，实验条件：室温22℃，使用1000ml蒸发瓶，一次加料500ml。

欲获得最大蒸发量，加热温度应高于试剂沸点温度40℃以上。

The data is collected in test of 2L SENCO Rotary Evaporation Set. Condition: RT22°C, Rotation flask 1000ml, Charging Volume 500ml.

To get max vaporization speed, heating temp. shall be 40°C higher than that of boiling temp. of solvent.

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冷却/循环  
COOLING / ATING

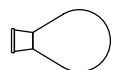
搅拌  
STIRRING

# 旋转蒸发器 - 常用选备件

## Parts & Accessories

更多选备件，敬请咨询  
For more spare parts, contact  
[www.senco.cc](http://www.senco.cc)

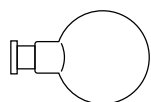
### 蒸发瓶 Evaporating Flask



锥磨口-梨形  
Taper Joint-Pear

100ml/29(24)  
250ml/29(24)  
500ml/29(24)  
1L/29(24)  
2L/29(24)

For R2, R3, R5  
  
For R2 only

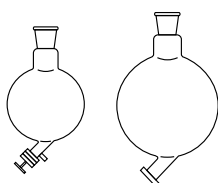


法兰口-圆形  
Flange Joint-Round

3L/F50;  
5L/F50, 5L/F95, 5L/F120;  
10L/F95, 10L/F120  
20L/F95, 20L/F120;  
50L/F120

For R3, R5  
For R5, R10, R20  
For R10, R20, R50  
For R20, R50  
For R50

### 收集瓶 Receiving Flask



锥磨口，下出料  
Taper Joint, w/discharge  
neck

1L, V6/29, Ø9  
3L/F40, ST40

For R205  
For R502



球磨口  
Spherical Joint

1L /S35  
2L /S35

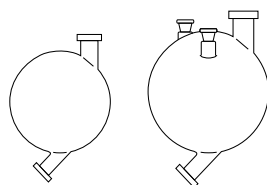
For R213, R214, R206  
For R308



球磨口，下出料  
Spherical joint,  
w/discharge neck

3L/F40, S35

For R503

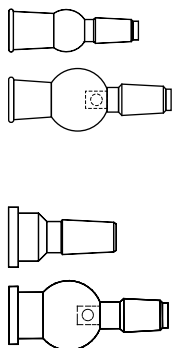


法兰口，下出料  
Flange Joint,  
w/discharge neck

5L/F50, F40  
10L /F50, F40  
10L /F60, F40x3  
20L/F60, F40x3

R10  
R20  
R50

## 转换接头 Joint Adaptor



描述	规格	备注
锥口转锥口 Taper to Taper	29 → 29 29 → 24 29 → 19	2L机型选用 Optional for 2L models
法兰转锥口 Flange to Taper	F50 → 29 F50 → 24	3L~5L机型选用 Optional for 3~5L models

## 其他 Others



导气轴 Vapor Shaft	Ø25/29, Ø25/24	2L以下机型使用 For 2L and below model use
	Ø25	3-5L型号使用 For 3~5L model use
	Ø50/F60	10L以上型号使用 For 10L and above model use
进料阀 Charging Valves		根据主机型号配 Order according to model
放料阀 Discharge Valve	V10/F40	5-50L机型使用 For 5~50L model use
主密封 Main Seal	25x35x7	5L以下机型使用 For 5L and below model use
	50x70x10	10L以上机型使用 For 10L and above model use
O-型圈套装 O-rings		根据主机型号配 Order according to model
厚壁真空管 Vacuum Pipe	Ø8/Ø15	真空管线用 For vacuum connection use
水浴锅罩 Lid for Water Bath		2L旋转蒸发器水浴机型选用 Optional for 2L and below rotary evaporator use (for water bath only)
卸瓶架 Flask Unload Handler		20L以上旋转蒸发器选用 Optional for 20L and above model use

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