

# Strong shaker SR-2ES/2EW

**Shakes Separatory funnels vertically and powerfully with energy savings. Compatible with other vessels. Low noise with our proprietary "Silent swing mechanism".**

•Optimum for Soil elution testing, Soil harmful metals contained testing "Elution testing Shaker TS-20N" --> P.086



SR-2ES  
Example of using  
Horizontal shaking



SR-2ES  
with Separatory funnel  
shaking platform (Optional)



SR-2EW  
with Separatory funnel  
shaking platform (Optional)



## Features

- Vertical shaking and Horizontal shaking [SR-2ES]
- Dedicated for Vertical shaking, The capacity doubles with SR-2ES [SR-2EW]
- The start time of shaking and the intermittent shaking can be set by the timer

## Applications

- Liquid extraction of analysis samples such as residual pesticides and soil components
- Pretreatment of Solid phase extraction of analytical sample
- Various mixing-stirring, etc.

## Advanced user-friendly 3 kinds of digital timers

Equipped "ON-END timer" which ends the shaking time at the set time, "OFF-ON timer" which sets the starting time of the shaking and "OFF-ON-END timer" which sets the start and end time of the shaking. Both setting time and elapsed time are displayed during the timer operation and you can pause the shaking by switching off the shaking. When the timer is not being used, the elapsed time is displayed, and you can always check shaking time.

## Newly designed operation panel

Smooth speed setting by inputting your target speed directly.



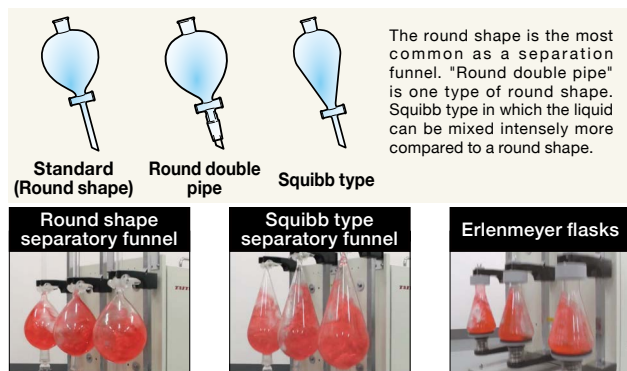
SR-2DW  
(Conventional machine)



SR-2EW

## Shakeable separatory funnels and vessels

3 types of separatory funnels are available. The holders that can fit to each is prepared. Erlenmeyer flasks, Centrifuge tubes, and Polyethylene bottles (Ask us for details) can be shaken with it.



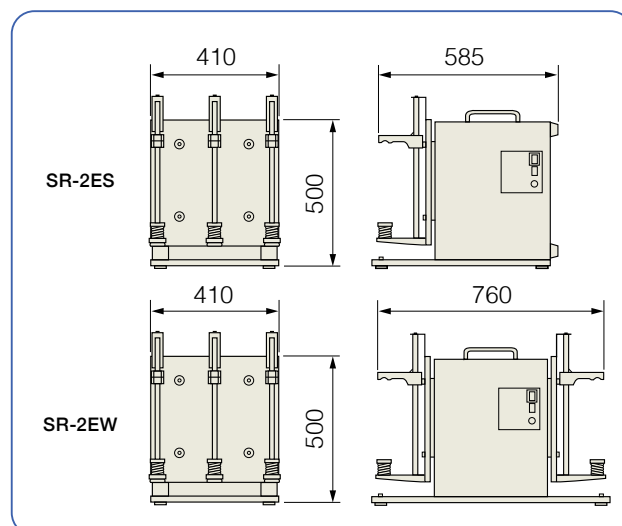
Model	SR-2ES	SR-2EW
Shaking motion	Reciprocal (Vertical and Horizontal)	Reciprocal (Vertical)
Shaking speed	Vertical: 100 to 300 r/min (*1) Horizontal: 50 to 300 r/min	50 to 300 r/min (*2)
Amplitude	40 mm	
Capacity	3 pcs of Up to 1 L Separatory funnel (SR-2EW 6 pcs) (*3)	
Maximum load	Approx. 7.5 kg (Shaking platform is included)	One side: Approx. 7.5 kg (Shaking platform is included)
Timer	Timer function (setting/display: 1 min to 99 h 59 min) * When the timer function is not being used, it can count the time. •ON-END •OFF-ON •OFF-ON-END  Integral timer 0 to 99 h 59 min or after: 100 h to 9999 h	
Speed display	Digital	
Safety devices/functions	Motor protection circuit at overload, Fuse	
Dimensions (WxDxH)	410 × 585 × 500 mm	410 × 760 × 500 mm
Weight	Approx. 49 kg	Approx. 57 kg
Power supply	AC100V/AC220V-240V/1.2A (built-in down transformer)	

(\*1) May not be smoothly shaken at 50 to 99 r/min. (\*2) The shaker works when the plat-forms are mounted on both side but while not work when the platform is mounted on only one side. (\*3) The shaking platform is sold separately. The vessels that can be used for vertical shaking and horizontal shaking differ (the separatory funnel is for vertical shaking only). For details, the capacity, and other shaking platforms, please see the right page.

## Transmission output is possible

The available speed signal output from 4 to 20 mA makes it possible to connect to a recorder, etc. It is recommended for customers who need data in the working process.

## Dimensions



# Optional accessories and Capacity of Vessels

## Separatory funnel shaking platform (For Vertical shaking in SR-2EW/2ES)

Model	Standard (Round shape)	Round double pipe	Squibb type	Capacity
<b>HE-3 for SR-2</b>	50 mL to 1 L	-	50 mL to 1 L	3
	2 L	-	-	2
<b>HE-3W for SR-2</b>	100 mL to 1 L	100 mL to 1 L	100 mL to 1 L	3
	2 L	-	-	2
<b>HE-5 for SR-2</b>	50 mL to 200 mL	-	50 mL to 200 mL	5
	300 mL to 500 mL	-	300 mL to 500 mL	3
	1 L, 2 L (*)	-	1 L	2 (*)
<b>HE-5W for SR-2</b>	50 mL to 200 mL	100 mL to 200 mL	50 mL to 200 mL	5
	300 mL to 500 mL	300 mL to 500 mL	300 mL to 500 mL	3
	1 L	-	1 L	2
<b>FU-1R for SR-2</b>	100 mL to 3 L	-	-	1
<b>FU-2S for SR-2</b>	100 mL to 2 L	-	100 mL to 2 L	2
<b>FU-3S for SR-2</b>	100 mL to 1 L	-	100 mL to 1 L	3
	2 L	-	2 L	2

(\*)Up to 1 pc for liquid 1 L and up to 2 pcs for less than liquid 500 mL can be at-tached when 2 L is used.

•In SR-2EW, mount and use two separatory funnel shaking platform of the same type. •The vessels other than these described cannot be used. Contact us for a vessel other than these. •The number of racks is limited by size and weight of separatory funnel. e.g. HE-3 equipped with 3 holders whereas up to 2 pcs will be limitedly attached when 2 L round type separatory funnel. Be sure not attach the separatory funnel to the center holder. •The holders are individually sold (below). •The platform of former model SR-2S, 2DS/2W, 2DW can also be used.

Type	code	Weight	Type	code	Weight
<b>Holders for HE-3/HE-5</b>	1927	Approx. 0.8 kg	<b>Holders for FU-1R</b>	1930	Approx. 1.7 kg
<b>Holders for HE-3W/HE-5W</b>	62443	Approx. 0.8 kg	<b>Holders for FU-2S/FU-3S</b>	1929	Approx. 1.1 kg

## Test tube/Centrifuge tube shaking platform

Product Name/Model	Capacity of Vessel/Remarks	Dimension/Weight
<b>① Test tube rack shaking platform A shaking platform for SR-2</b>	Stoppered test tube stand (φ18 mm 50 pcs) can be placed 2 sets horizontally. ●Horizontal shaking in SR-2ES	410 × 300 × 100H mm Approx. 2.6 kg
<b>② Test tube shaking platform C shaking platform for SR-2</b>	φ10 to 35 mm Stoppered test tube can be set. Test tube length 45 mm to 145 mm, Max. weight of vessels 100 g, Max. 20 pcs (*) ●Horizontal shaking in SR-2ES, Vertical shaking in SR-2EW Test tube length 150 mm to 265 mm, Max. weight of vessels 250 g, Max. 10 pcs (*) Up to 200 r/min. ●Horizontal shaking in SR-2ES	465 × 408 mm Approx. 4.2 kg
<b>③ Test tube shaking platform C half shaking platform for SR-2</b>	Up to 10 pcs of Stoppered test tube and Centrifuge tube (φ10 to 37 mm × 100 to 120 Lmm in length) can be set. ●HE-3 is required for installation (HE-5 Unusable) ●For Vertical shaking in SR-2ES/SR-2EW	408 × 250 mm Approx. 2.4 kg

(\*)The vessels length differ slightly which depends on the thickness and shape of vessels. •The vessels other than these described cannot be used. Contact us for vessels other than these. •The platform of former model SR-2S, 2DS/2W, 2DW can also be used.

## Shaking platform for Erlenmeyer flasks and other vessels

Product Name/Model	Remarks	Vessels/Capacity
<b>④ Adapter for Flask</b>	This is for attaching the Erlenmeyer flask to the separatory funnel shaking platform. Applicable vessels are up to 350 mm in height, the flat bottom and the diameter of lid that fits to the diameter of adapter.	Up to 300 mL Erlenmeyer flasks, Up to 200 mL Messzylinder *Upper retainer for φ10 to 35 mm available as an option.
<b>⑤ B adapter for Flask</b>	●Dedicated for Vertical shaking in SR-2EW/2ES	Plastic bottle, GL-45 screw cap bottle, Bottle for water quality inspection *Upper retainer for φ38 to 55 mm available as an option.
<b>⑥ Plastic bottle adapter (for SR-2)</b>	This is for attaching the Plastic bottle to the separatory funnel shaking platform HE-3.	For 2 L and 3 L *SR-2ES should be used at below 250 r/min in Horizontal shaking.

•The vessels other than those described cannot be used. Contact us for a vessel other than these. •The platform of former model SR-2S, 2DS/2W, 2EW can also be used.

Product Name/Model	Remarks	Capacity of Vessel	Dimension/Weight
<b>⑦ Erlenmeyer flask shaking platform B shaking platform for SR-2</b>	6 pcs of 500 mL can be attached by the vessel press bars (accessories) *4 pcs: Long, 6 pcs: Short. Additional press bars may be required depending on the number of vessels. (*) ●Horizontal shaking in SR-2ES	50 mL: 30 pcs 100 mL: 20 pcs 200 to 300 mL: 12 pcs 500 mL: 6 pcs 1 L: 4 pcs	Dimension: 410 × 300 × 100H mm Weight: Approx. 2.6 kg

(\*)Vessels press bar for SR-2 (Long) and \*Vessels press bar for SR (Short). Ask us the required number. •The platform of former model SR-2S, 2DS/2W, 2DW can also be used.

## Shaking platform

Product Name/Model	Capacity of Vessel/Remarks	Dimension/Weight
<b>⑧ Spring net shaking platform E shaking platform for SR-2</b>	This enables various shaped vessels to be fixed on the platform. ●Horizontal shaking in SR-2ES, Below 160 r/min	Dimension: 410 × 300 × 100H mm Weight: Approx. 2.5 kg

•The platform of former model SR-2S, 2DS/2W, 2DW can also be used.

## Mojonnier tube shaking platform (for SR-2ES \*See the next page for details)

HE-5



In the photo, the separatory funnels are in different sizes, but are attached in balance when in use.

The holders (in pink) are individually sold. Contact us for singly sales of the table (Plate part, Weight 1.87 kg).



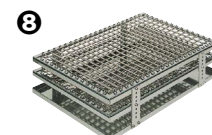
Possible for Vertical shaking by attaching to SR-2EW.



Attached to the unit with HE-3.



The bottom holding plate is φ80 mm.



NEW

Constant-temperature incubator shaker  
OD Monitor

For cell culture related products

Shaker

Mixer  
Rotator  
Stirrer

Bead beater  
homogenizer  
Ultrasonic homogenizer

Aluminum block Bath  
Multi-size Bath

Water bath  
Shaking Water bath  
Immersion cooler

Hybridization  
Incubator  
Constant-temperature Chambers

Centrifugal Concentrators  
Cold Trap

Freeze dryers

Substrate Electrophoresis apparatus  
Blotting device for hybridization

Constant-temperature water circulating system [Chilled]

Appendix