



# SHENSHENG

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## 100L EX Proof Separator / Extractor – SR-S100EX




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# 100L EX Proof Separator / Extractor – SR-S100EX

## Overview

Designed for mixing two or more kinds of solvents to perform efficient chemical or physical reaction under vacuum condition and room temperature. After reaction, reactants can be separated according to different weights. EX proof is required if separator is used in EX proof zone.

- Capacity: 100L;
- EX Proof Rate: EXdIIBT4Gb; 
- Mechanical sealing, resist to chemicals and durable, max vacuum <2 mbar;
- Gear motor with VFD controller, large torque, constant stirring speed;
- Stirring speed range: 20 - 600 rpm;
- Quality borosilicate glass 3.3 (BORO3.3);
- Taper vessel bottom for efficient separation;
- SS304 stirring shaft covered with PTFE.



## Model

Capacity (L)  
|  
SR - S **100** EX

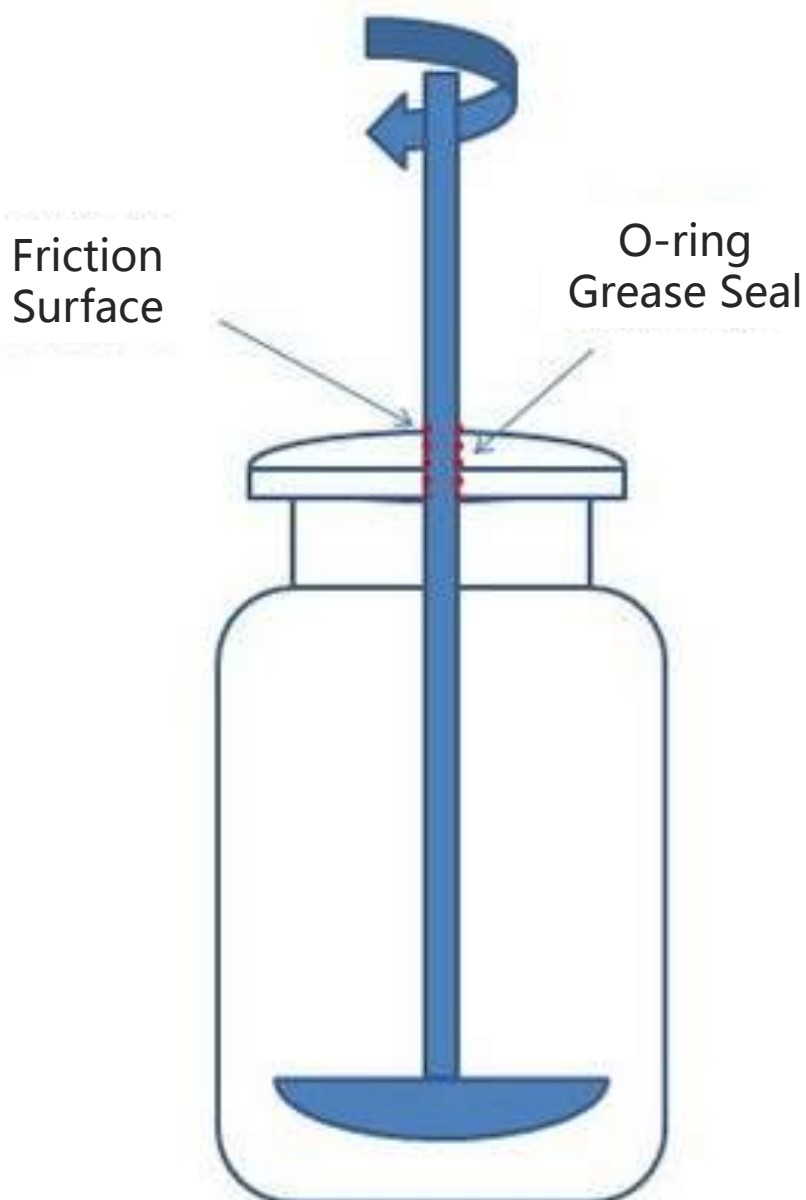
# Features



- A** Gear motor with large torque is safe and durable, offers constant speed stirring. Torque changes with the viscosity of material to ensure desired stirring speed. EX Proof Rate: ExdIIBT4Gb. ⚠️
- B** VFD controller (Variable Frequency Drive) offers **precise control** of stirring speed with LED display. Stirring speed range: 20 – 600 rpm. EX Proof Rate: ExdIIBT4Gb. ⚠️
- C** Mechanical sealing ensures **max vacuum level of <2mbar**, durable and excellent resistance to chemicals. Much better than most O-ring sealing;
- D** SS304 stirring shaft covered with PTFE/Teflon ensures strong stirring and resistant to chemicals;
- E** PTFE drain valve, no vacuum grease, clean discharge.
- F** Dual Branching Piece at bottom discharge for better observation on separation result.

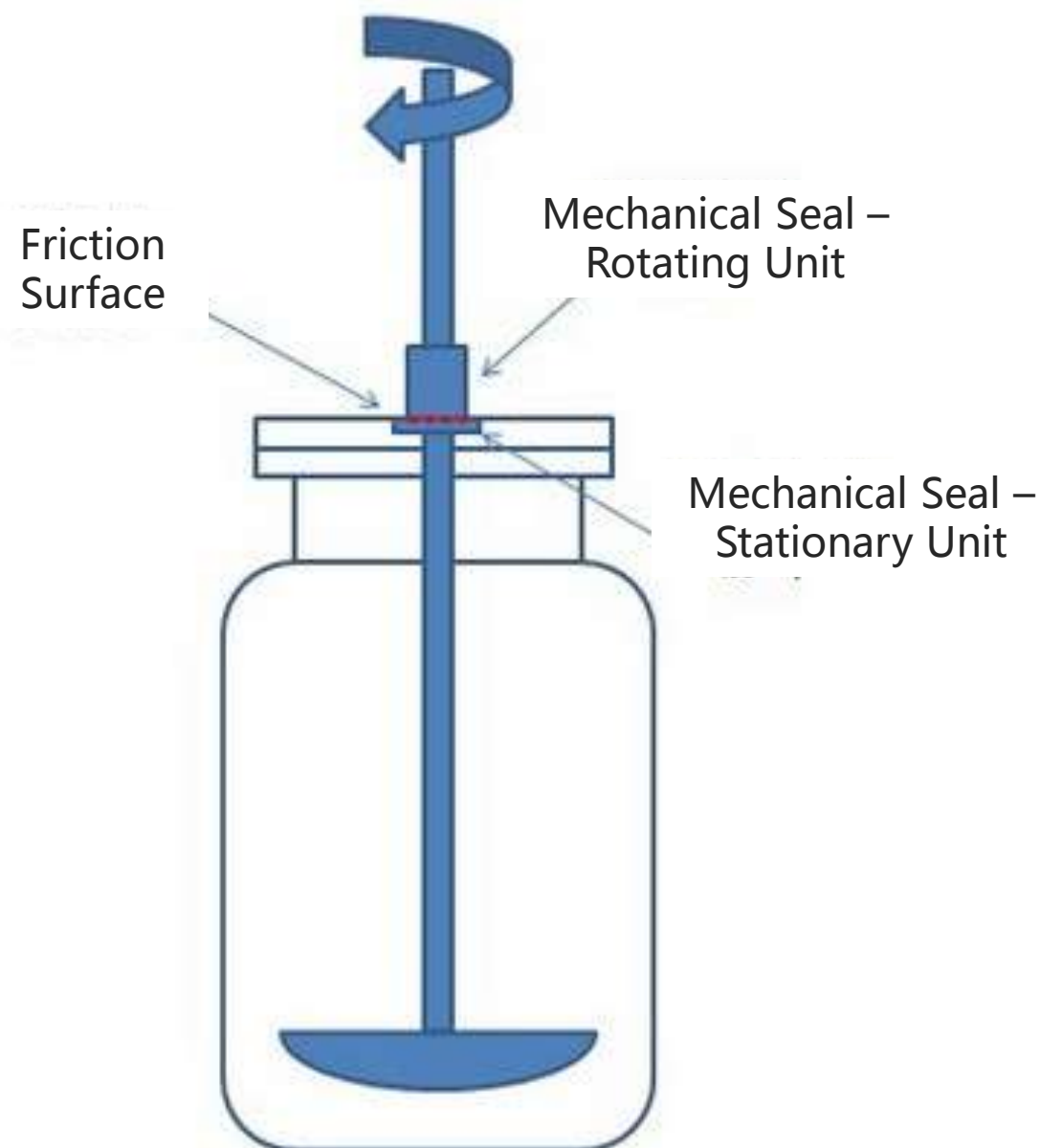


# Mechanical Seal VS Traditional Seal



## Traditional Seal – Seal on Axis

O-ring or Grease Seal is known as seal on axis to be used between stirring shaft and vessel lid, but is heavily prone to be worn out by friction, especially under corrosion of solvent and high temperature, which requires regular operation stop, disassemble and O-ring change.




## Mechanical Seal - Seal on Surface

Mechanical Seal is the seal on surface between its rotating part and stationary part. It is made of SiC and reinforced PTFE, which is vacuum tight, durable, long lasting and great for 24/7 operation.

With PTFE vessel lid, stirring can be very stable so that mechanical seal can ensure <2mbar vacuum level.

# Technical Specification & Configuration

Parameter	
Model	SR-S100EX
Capacity (L)	100L
EX Proof Rate 	EXdIIBT4Gb
Diameter of Vessel (mm)	265 mm
Nozzle Size & No. on Lid	3 (NS34×2+F60)
Max Vacuum Level(mbar)	< 2 mbar (-0.0998MPa)
Stirring Power (W)	370 W
Rotary Speed (rpm)	20 – 600
Glass Material	Borosilicate Glass 3.3 (BORO3.3)
Frame Material	SS304
Stirring Shaft Material	SS304 Covered with PTFE
Agitator	Turbine + Propeller, PTFE
Dimension (cm)	65×65×210H
Power Supply	220V/50Hz

Configuration	
Model	SR-S100EX
Seal	Mechanical Sealing
Stirring Speed Controller	Variable Frequency Drive (VFD)
Reactor Lid	Glass Lid with 3 Nozzles
Agitator Type	Two Agitators: Turbine + Propeller
Drain Valve	PTFE Valve, Drift Diameter: 10mm
Digital Display	Stirring Speed
Vacuum Meter	Scale
Dual Branching Piece	Yes, Equipped with PTFE Valve
Taper Vessel Bottom	Yes
Safety Features	Over-current Protection No-spark Electronic Control
5L Dripping System	Optional
Glass Baffles	Optional
PTFE Coated Frame	Optional

# Water Circulation Vacuum Pump



Safe and reliable water circulation vacuum pump.

Equipped with five independent suction nozzles for vacuum supply.

Easy operation and maintenance.

Can be water supply for condenser.

Oil free and water saving.

## Parameters

Model	SHZ – 95B
Type	Water Circulation
Max Vacuum Level (mbar)	20 mbar
Extraction Rate (L/min)	10L/min×5
Power (W)	550 W
Dimensions (cm)	45×35×82
Power Supply	220V/50Hz

# Factory Show - Shanghai Shensheng Biotech Co., Ltd.



Manufacture Plant in Shanghai



Quality Mechanical Parts



Glassware Fabrication





**Fine Processing**



**Individual quality control for every unit**



**Pilot Scale Jacketed Glass Reactor**



**Pilot Scale Rotary Evaporator**



# Our Customer



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