
700-2000LPD movable seawater desalination machine

Quick Start Guide

1. Description

- ★ This manual only applies to 700-2000LPD seawater desalination machines.
- ★ This manual can only be used as a reference; not as an end-use instruction. Detailed usage please carefully read 《YUBER movable seawater desalination machine instruction manual 700-2000LPD》.
- ★ The final explanation right of this manual is reserved by Shenzhen Yuber Technology Co., Ltd.

Disclaimer

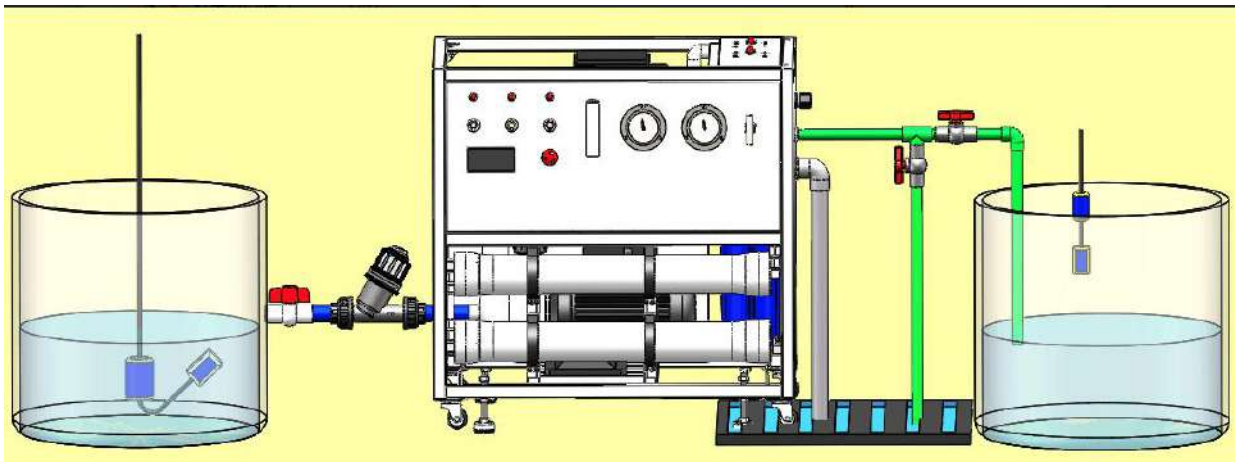
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1. Any damage to the equipment and property or personal injury (including direct, indirect, special or consequential loss or damage) caused by the user without reading this manual or improper operation, shall be borne by the user.
2. Without notifying YUBER, the user is responsible for all the equipment damage, property loss, and personal injury caused by the modification, replacement and alteration of the parts.
3. The principle and data given in this manual have been proved to be correct and effective by YUBER. However, with regard to the use of products out of YUBER control, and the resulting errors and omissions, we do not guarantee the final performance of the products, and are not responsible for it. The user has a responsibility to confirm the applicability of YUBER products to the user's specific purpose.
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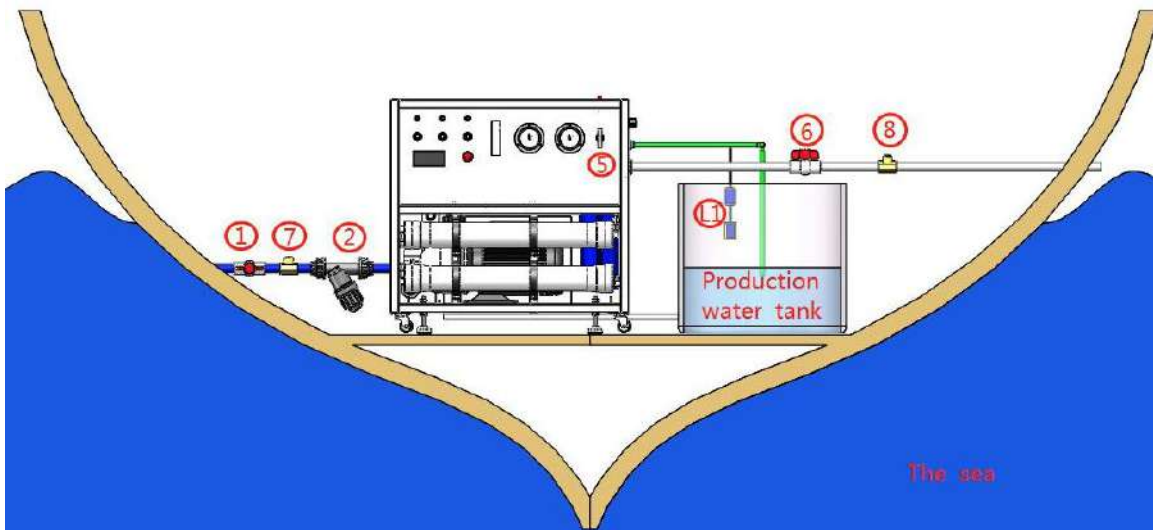
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2. Quick installation

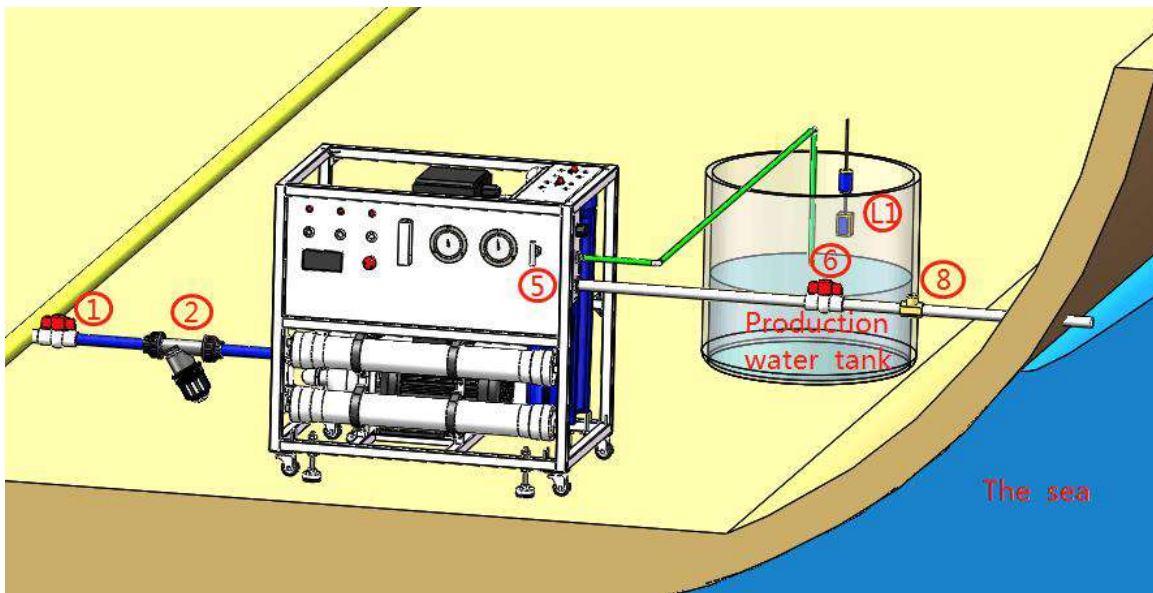
2.1 Standard Installation



2.2 Installation on boat 1



2.2 Installation on boat 2



No.	Name	Specification	Remark
1	Equipment inlet valve	≥3/4inch (DN20)	Cut off water or service
2	Screening filter	≥3/4inch (DN20)	Prevent sundries from entering the pump
3	Clean the valve	3/8inch	Use in cleaning
4	Produced water valve	3/8inch	Cut off water production or overhaul
5	Pressure regulating valve	3/8inch	this valve cannot be full closed at any time
6	Concentrated water valve	≥3/4inch (DN20)	Used when maintenance
7	Check valve	3/4inch	Preventing backflow of pump diversion
8	Check valve	1/2inch	Prevention of seawater backfilling
L1	Float ball liquid level	High water level	Selection, Equipment High Level Protection
L2	Float ball liquid level	Low level of raw water	Selection, Low Level Protection of

			Equipment
	Inlet pipe	Pipeline \geq 3/4inch (DN20)	
	Concentrated water pipe	Pipeline \geq 3/4inch (DN20)	
	Seawater pipe	Pipeline \geq 3/4inch (DN20)	Intake pressure should be at least 0.1 Mpa
	Production water pipe	Pipeline \geq 3/8inch	
	Seawater tank	Volume \geq 1000L	
	Production water tank	Volume \geq 500L	

Notice: when reference to the standard installation, take the desalination machine as the center of circle, the distance of the seawater tank and desalination machine better within 5 meters. If too far, that will serious influence the pumping performance of the desalination machine.

3.1 Startup & Shutdown steps

3.1.1 Preparation for start-up

- According to the power source parameters on the nameplate of the equipment, connect with power supply after confirmation.
- After installation in place, replace the oil dipstick of the HP pump head.
- Ensure the filter cartridges installed in the filter housings.
- The seawater to be processed must be clean and pollution-free.
- Check all the valves whether in the correct position.
- Ensure the Pressure regulating valve is **FULL OPEN**.

3.1.2 Start-up sequence

- ① Connect the equipment with water supply and power supply.
- ② If using 3 phases power, please make sure the motor direction of rotation is correct, otherwise the pump will be powerless. (remember to inject water into the raw water pump and exhaust)
- ③ Flush the system for 10-30 min, and exhaust air inside the 2 pieces of filter housing.
- ④ Start the water producing process, slowly adjust the pressure adjusting valve after the equipment

starts smoothly, until reaching the rated capacity. Discharge the production water filtered in former 10 min. The following table is a reference value for the normal operation of the equipment.

Raw water pump outlet pressure gauge	0.25-0.35MPa	Production water flow meter	(refer to equipment nameplate for details)
HP pump outlet pressure gauge	≤5.5MPa	Production water TDS	≤700ppm

★It's prohibited to fully close the pressure adjusting valve at any time, preventing the danger of holding pressure!

★When closing the pressure adjusting valve, pay attention to the "HP pump outlet pressure gauge", at any time the working pressure is prohibited to be over 5.5 MPa!

3.1.3 Shutdown sequence

- ① Slowly, fully open the pressure adjusting valve, then stop the equipment.
- ② Press the Flush button, to flush the RO membrane for 5-10 min.
- ③ Shut down the main power supply, and inlet valve of the equipment.

3. Attention

- Regular check the prefilter cartridges whether polluted (suggest check every time before use), seawater from different sites is with different cleanness, so the replacement frequency of the filter cartridge is different.
- Replace the pump head oil after first use for 20-50 hours, and replace the oil every 100-300 hours more or less in future. (Please refer to the instructions for the detailed replacement of oil.)
- When the high pressure pipeline leaks, immediately stop the pump and eliminate the leakage reasons. (Strictly prohibit to do any troubleshooting operations under high pressure)
- Once the membrane element is wet, it must keep wet, otherwise it will cause permanent damage to the membrane.
- It's prohibited to feed polluted seawater, such as obvious cloudy, with oil, with oxidizing substances etc.
- The equipment should not stop for a long time, that will seriously influence the production water quality and capacity. Suggest to operate 30-60min per day for short-term stop. If long-term stop, suggest to flush the equipment using fresh water and inject protection liquid into the membranes.

