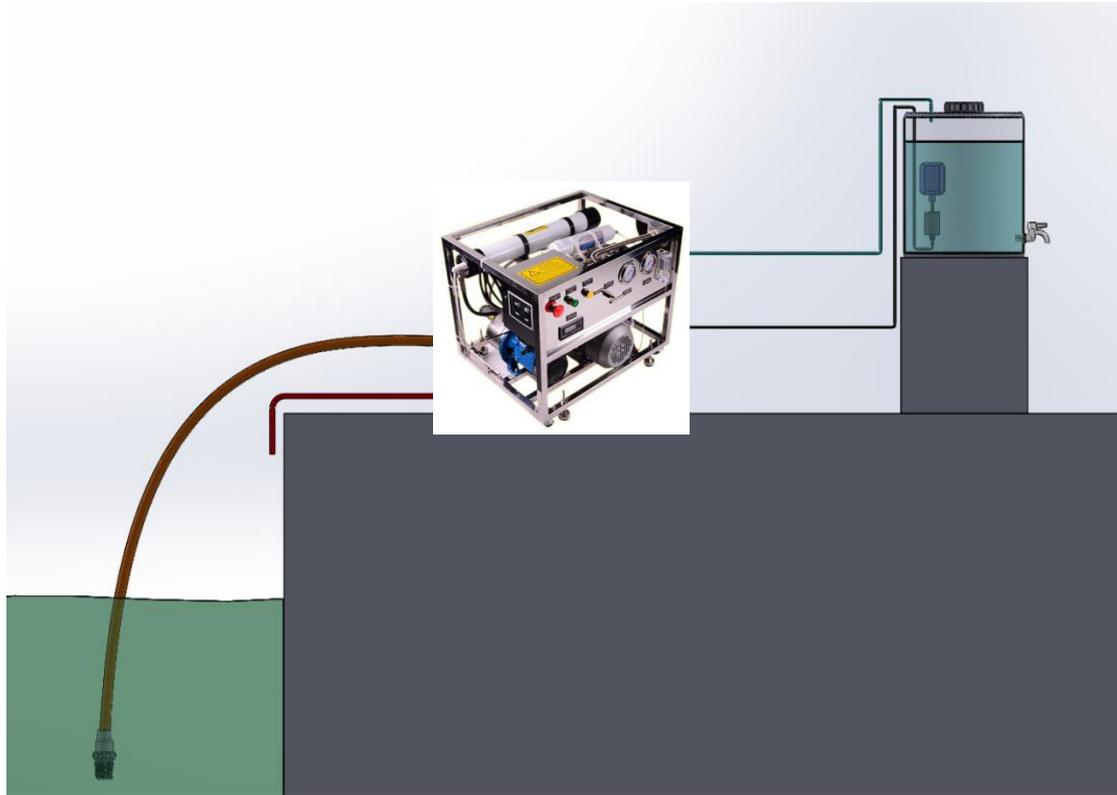


Movable Seawater Desalination System

HL-SWRO-500LPD/1000LPD/2000LPD/3000LPD Product introduction



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Catalogue

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1. HL-SWRO series movable seawater desalination system product introduction



- As the content of salt in the seawater is too high, that can not be used directly, there are mainly two methods to desalinate seawater, distillation and reverse osmosis. Distillation is mainly used for super-huge type seawater desalination and heat energy rich area, energy consumption is very high. Reverse Osmosis is very widely applicable, low energy consumption and high desalination rate, so it's widely used.
- We use the international best quality of seawater RO membrane. The membrane's salt removing rate is very high, with stable performance, safe and reliable. The HP pump we used is the international brand which is specialized in seawater desalination. The treated water quality meets the national life drinking water quality standards (GB5749-85), do not add any chemicals, can be used for direct drinking, fresh and sweet.
- For the portable use, reliable water, cheap price etc., after a long time of design and practice, we integrate the reliable technology and advanced technology, make our equipment stand out! From here on, you will experience the different use feelings!

2. HL movable seawater desalination system Advantages & Characteristics

- ① Emergency stop button, press it under emergency conditions, it will cut off all power immediately.
- ② Auto running.
- ③ Online conductivity meter, monitoring the output water quality at any time.
- ④ Auto cleaning.
- ⑤ Panel pressure meter and flow meter, showing the machine's whole course running status.
- ⑥ Fully polished stainless steel frame, safe and fastness, elegant appearance.





- ① Professional electric cabinet, water separated from power, safe and reliable, it can be realized operation automatically, one button for cleaning, lacking water protection, water full and machine stop, emergency stop, online monitoring and other functions, guarantee the security and stability of the equipment operation.
- ② USA imported Hanovia brand UV sterilizer, wave length 254nm, avoiding the output water from secondary pollution.
- ③ High quality coconut activated carbon filter, remove peculiar smell, improve the water taste.
- ④ USA imported DOW brand seawater desalination RO membrane, salt removing rate reaches up to 99.7%. Filtration precision is above 0.0001micron, it can remove salt, organics, bacteria, microorganism etc. The output water meets the drinking water standards.

- ① First step 5micron PP filter, it can remove the sediment, alga, suspended solids and other particles.
- ② Second step 1micron pleated filter, intercept the residuary tiny suspended solids and particles residue from 5micron filter, protect the inlet water requirement for RO membrane.
- ③ All high pressure metal parts adopt SS316 material, bearing 7MPA pressure, safe, anticorrosion.



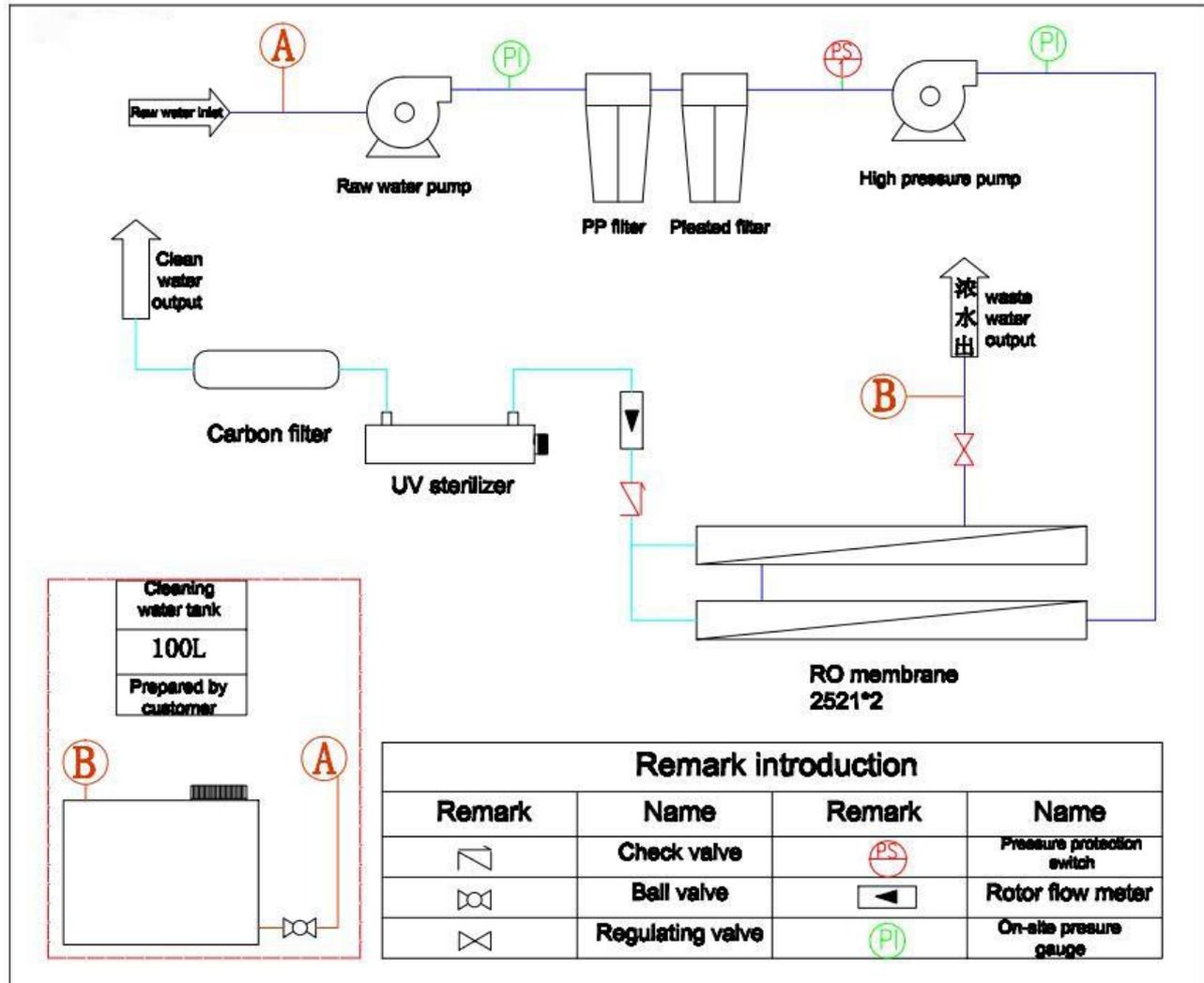


- ① Germany brand SS316L HP-pressure, low failure rate, running more stable, anti-corrosion.
- ② Universal wheel and adjusting legs, make the machine move more easier and portable.
- ③ Domestic famous brand raw water lift pump, head 6M, effectively solve the problem that long-distance getting water.

- ◆ HL series movable seawater desalination system also has modern design and high integration etc. characteristics.
- ◆ HL series movable seawater desalination system, volume 64cm L * 50cm W * 50cm H, only weight 60-80 KG, moveable design, easy to move and assemble.
- ◆ HL series movable seawater desalination system has most matching accessories, can directly use after connecting with water and power, easy operation.
- ◆ HL series movable seawater desalination system has a wide range of power supply, can be connected with common household AC power, gasoline/diesel generator, also can be connected with solar and wind etc. environmental energy.

3. Process flow and main configuration

Process flow



Movable seawater desalination system main configuration

Model/main configuration	HL-SWRO-500L	HL-SWRO-1000L	HL-SWRO-2000L
Core filtration component	USA DOW2521 sea water desalination membrane 1 pcs	USA DOW2521 sea water desalination membrane 2 pcs	USA DOW2540 sea water desalination membrane 2 pcs
Pretreatment	5 micron PP filter and 1 micron pleated filter		
Post treatment	10W America Hanovia UV sterilizer and big T33 coconut shell activated carbon		
Raw water pump	Lingxiao pump, suction head 6m, 1.5TPH flow rate, pump lift 25M		
High-pressure pump	Germany brand SS316L high-pressure pump		
Instrument	Raw water pump inlet water pressure gauge, high-pressure pump Inlet water pressure gauge, fresh water flow meter		
Online conductivity meter	Korida online conductivity meter		
Optional Configuration	liquid level switch, pressure tank		

Model/main configuration	HL-SWRO-3000LPD
Core filtration component	USA DOW 2540 sea water desalination membrane 3 pcs
Pretreatment	5 micron PP filter and 1 micron pleated filter
Post treatment	10W America Hanovia UV sterilizer and big T33 coconut shell activated carbon
Raw water pump	Lingxiao pump, suction head 6m, 1.5TPH flow rate, pump lift 25M
High-pressure pump	stainless steel 316L
Instrument	Raw water pump inlet water pressure gauge, high-pressure pump, Inlet water pressure gauge, fresh water flow meter
Online conductivity meter	Korida online conductivity meter
Optional Configuration	liquid level switch, pressure tank

Consumable replacement cycle:

1. 5 micron PP filter and 1micron pleated filter : about 3 months.
2. T33 coconut shell activated carbon filter: about 6month.
3. UV lamp: about one year (9000hours)
4. USA DOW RO membrane: about 3 years

Note: the premise of calculation of above replacement cycle is on the basis of satisfying the use and maintenance condition of this equipment, running 20 hours per day

4. Movable Seawater desalination System Application Range

salty alkali lake



seaside villa



island family



1. Can be used for ships, fishing boats, yachts, marine, navy drinking water use;

2. Can be used for island family, island restaurant, seaside villa, island resorts drinking water use;

3. Can be used for salty alkali lake drinking water use;

4. Can be used for desert underground water;

5. Can be used for offshore operation platform and floating house;



marine



island restaurant



desert underground water

5. Movable seawater desalination system main parameters

(1) Model: HL-SWRO-500LPD

HL-SWRO-500LPD			
*Testing flow rate	45L/H	Recovery rate	4%
*Suggested to use flow rate	25L/H	Power	1.9KW
Voltage	220V 50HZ	Working temperature	5-45°C
Inlet water TDS	<45000ppm	Freshwater TDS	<600ppm
Design pressure	1000PSI	Working pressure	≤850PSI
Inlet water residual chlorine	<0.1ppm	Inlet water SDI	<5
Inlet water turbidity	<1	Inlet water PH	Neutral
Machine net size	64*50*55 (cm)	Machine net weight	60KG
Machine packing size	75*60*79 (cm)	Machine packing gross weight	80KG

(2) Model: HL-SWRO-1000LPD

HL-SWRO-1000LPD			
*Testing flow rate	80L/H	Recovery rate	8%
*Suggested to use flow rate	50L/H	Power	1.9KW
Voltage	220V 50HZ	Working temperature	5-45°C
Inlet water TDS	<45000ppm	Freshwater TDS	<600ppm
Design pressure	1000PSI	Working pressure	≤850PSI
Inlet water residual chlorine	<0.1ppm	Inlet water SDI	<5
Inlet water turbidity	<1	Inlet water PH	Neutral
Machine net size	64*50*55 (cm)	Machine net weight	70KG
Machine packing size	75*60*79 (cm)	Machine packing gross weight	90KG

(3) Model: HL-SWRO-2000LPD

HL-SWRO-2000LPD			
*Testing flow rate	160L/H	Recovery rate	15%
*Suggested to use flow rate	100L/H	Power	1.9KW
Voltage	220V 50HZ	Working temperature	5-45°C
Inlet water TDS	<45000ppm	Freshwater TDS	<600ppm
Design pressure	1000PSI	Working pressure	≤850PSI
Inlet water residual chlorine	<0.1ppm	Inlet water SDI	<5
Inlet water turbidity	<1	Inlet water PH	Neutral
Machine net size	110*50*55 (cm)	Machine net weight	80KG
Machine packing size	123*60*73 (cm)	Machine packing gross weight	101KG

(4) Model: HL-SWRO-3000LPD

HL-SWRO-3000LPD			
*Testing flow rate	240L/H	Recovery rate	20%
*Suggested to use flow rate	150L/H	Power	1.9KW
Voltage	220V 50HZ	Working temperature	5-45°C
Inlet water TDS	<45000ppm	Freshwater TDS	<600ppm
Design pressure	1000PSI	Working pressure	≤850PSI
Inlet water residual chlorine	<0.1ppm	Inlet water SDI	<5
Inlet water turbidity	<1	Inlet water PH	Neutral
Machine net size	110*50*60 (cm)	Machine net weight	90KG
Machine packing size	123*60*81 (cm)	Machine packing gross weight	115KG

Note:

* is based on the below testing conditions: 32000ppm NaCl, 800psi (5.5MPa), 77° F (25°C), PH is 8, less than relevant recovery rate (variation range no more than -15%)

* Based on the below reasons: different seawater quality in every place, bad seawater quality, complicated seawater composition, bad equipment usage environment, we suggest customer to use “suggested flux”, which can protect the equipment service life

Movable seawater desalination system photos:



6. CE certificate for movable seawater desalination system

	Shenzhen SEM.Test Technology Co., Ltd. 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101)
CERTIFICATE OF CONFORMITY	
Certificate No.: SEM1511660S	
The following product has been tested by Shenzhen SEM.Test Technology Co., Ltd. with the listing standards and found in conformity with the EC Council Directive of 2006/42/EC . It is possible to use CE marking to demonstrate the conformity with this MD Directive .	
Report No	: STR15118296S
Applicant	: ShenZhen HL Co.,Ltd
Address	: NO.A701 GuangFa Building,XinHu Road,XiXiang Street, BaoAn District,ShenZhen City,China
Manufacturer	: ShenZhen HL Co.,Ltd
Address	: NO.A701 GuangFa Building,XinHu Road,XiXiang Street, BaoAn District,ShenZhen City,China
Description of Product	: PORTABLE SEAWATER DESALINATION MACHINE
Model No	: HL-SWRO-3000LPD,HL-SWRO-2000LPD,(2)HL-SWRO-1000LPD HL-SWRO-500LPD
Trade Name	: 
Test Standards	: EN ISO 12100:2010 EN 60204-1:2006+A1:2009
The referred test report(s) show that the product complies with the essential requirements in the above listed standards. The applicant is authorized to use this certificate in connection with the EC declaration of conformity according to Annex 1 of the Directive.	
	 Jandy Go Supervisor Approved Date of Issue: Dec. 24, 2015
This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above mentioned product. It does not imply an assessment of the whole production and other relevant Directives have to be observed.	
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