



PRODUCT MANUAL

WATER TREATMENT EQUIPMENT



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ENTER INTO JANTLE



Anhui Jantle Marine Engineering Co., Ltd. Founded in 2006, Marine engineering equipment service provider.

Anhui Jantle Marine Engineering Co., Ltd. Integrated ship construction; Offshore equipment; Seawater desalination; Pipe laying & cable laying equipment, providing one-stop service with high quality and excellent price.

Since its establishment in 2006, Anhui JANTLE has successfully designed, built and delivered more than 150 vessels of all types. 10+ sets of pipe laying & cable laying equipment; 30+ various types of seawater desalination equipment, in 18 years to create nearly \$1 billion of output value, and its product range includes but is not limited to deck barges, tugs, anchor tugs, anchor supply vessels, platform engineering vessels, platform supply vessels, diving support vessels, pipe layers, residential barges, transfer barges, landing vessels, self-propelled oil tankers, FRP passenger vessels, patrol boats, Semi-submersible drilling platform, pipe laying equipment, seawater desalination equipment, etc.

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Parameters And Selection

ETC CUSTOMIZABLE

01 Small Seawater Desalination Series

The small seawater desalination equipment is specially designed according to the particularity of the application of the ship, with small size, light weight, occupying a small area, easy installation, strong adaptability, suitable for yachts and fishing boats, the equipment is simple to operate, easy to maintain, as long as the supply of seawater, power supply, after starting can produce water, equipment desalination rate is high, stable performance, safe and reliable, novel and ingenious design. The equipment frame is made of stainless steel, rust and corrosion resistant, and the power supply has a wide range of application, which can adapt to most ships produced at home and abroad. The fresh water quality meets the hygienic standard of drinking water.

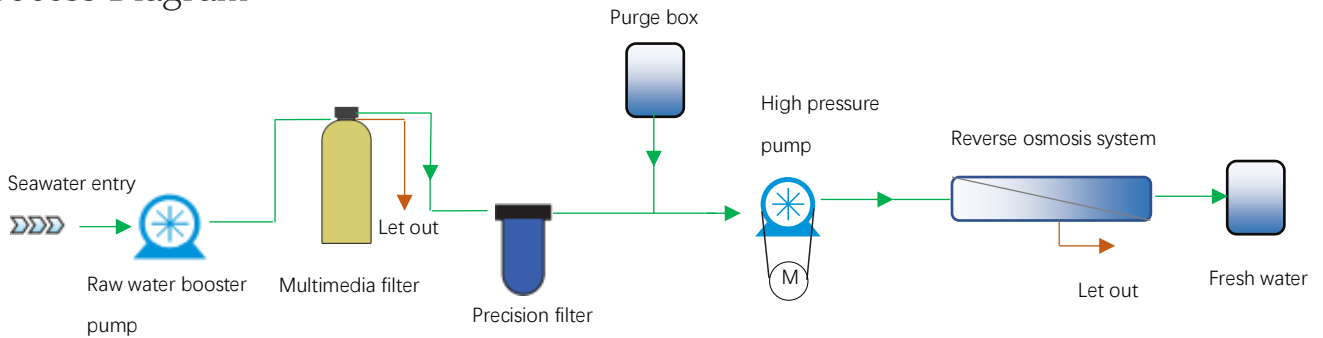


The device is designed for easier operation with a touch screen, and the required fresh water can be produced with just a touch of the screen.

Low noise, high capacity, small desalination equipment provides a comfortable environment and unlimited fresh water for your voyage. Having a small, lightweight, low-energy, and smooth desalination device will make your voyage faster, farther, and more comfortable. You don't have to plan to dock at a small port, but directly to the destination, creating more added value for you without having to prepare fresh water.

01 Small-Scale Seawater Desalination-Technical Parameters

Process Diagram



Equipment Configuration

- Reverse Osmosis Membrane: Dow, Hyde, Toray Sea Water Membrane
- Membrane Shell: Harbin Strand (Firstline)FRP Material
- Raw Water Booster Pump: Grundfos, Southern Pump (CNP)
- High Pressure Pump:HAWK , D1amond , P1NFL
- Frame: Stainless Steel, Pipe Surface Polishing Treatment
- Pipes: Dual-Phase Steel Or Stainless Steel Pipes And High-Pressure Hose Are Used For The High-Pressure Side Pipes, And UPVC Pipes Are Used For The Low-Pressure Side Pipes
- Electrical Components: Schneider Or Equivalent Brand

Performance And Characteristics

- The reverse osmosis desalination technology is mature and advanced, and the desalting rate is as high as 99.5%.
- Energy-saving design, low energy consumption, reduce the cost of water production;
- Rigorous process design to ensure long system life and low maintenance costs;
- The equipment has compact structure, small volume and simple installation;
- Easy to operate, cleaning and maintenance free disassembly, easy to manage;
- Can be customized according to customer needs.

01 Small-Scale Seawater Desalination-Technical Parameters

Model number	Water yield	recovery	Standard	Electric conductivity	Desalination rate	Operating pressure	Membrane Elements & Membrane shells	voltage	Working power	Control mode	Specification and size	
											L*w*H	Net weight
	m ³ d	%		ppm	%	Mpa	-	V	Kw		mm	KG
JT-FSHB-1	1	10	GB5749.2006	≤700	≥99.5	<6.5	1*1	380V/50Hz/Three phase	2.05	Manual operation	950*440*1500	128
JT-FSHB-2	2	18					1*1		2.05		950*440*1500	135
JT-FSHB-3	3	20					1*1		2.05		950*440*1500	140
JT-FSHB-5	5	25					1*1		2.75		1100*500*1600	179
JT-FSHB-10	10	25					2*2	5.5	Auto	1650*840*1700	210	
JT-FSHB-15	15	30					3*3	7		1650*840*1700	249	
JT-FSHB-20	20	32					4*4	9		1650*950*2100	260	
JT-FSHB-25	25	32					2*2	9		1650*950*2100	300	

* Equipment in the form of RO film, water production, equipment size, voltage, control mode, etc. can be made according to customer requirements, only the standard model is shown in the table.

Intake water quality requirement

Raw water quality	TDS≤40000 mg/L
Inlet water temperature	5-45℃



02 Medium And Large Seawater Desalination Series

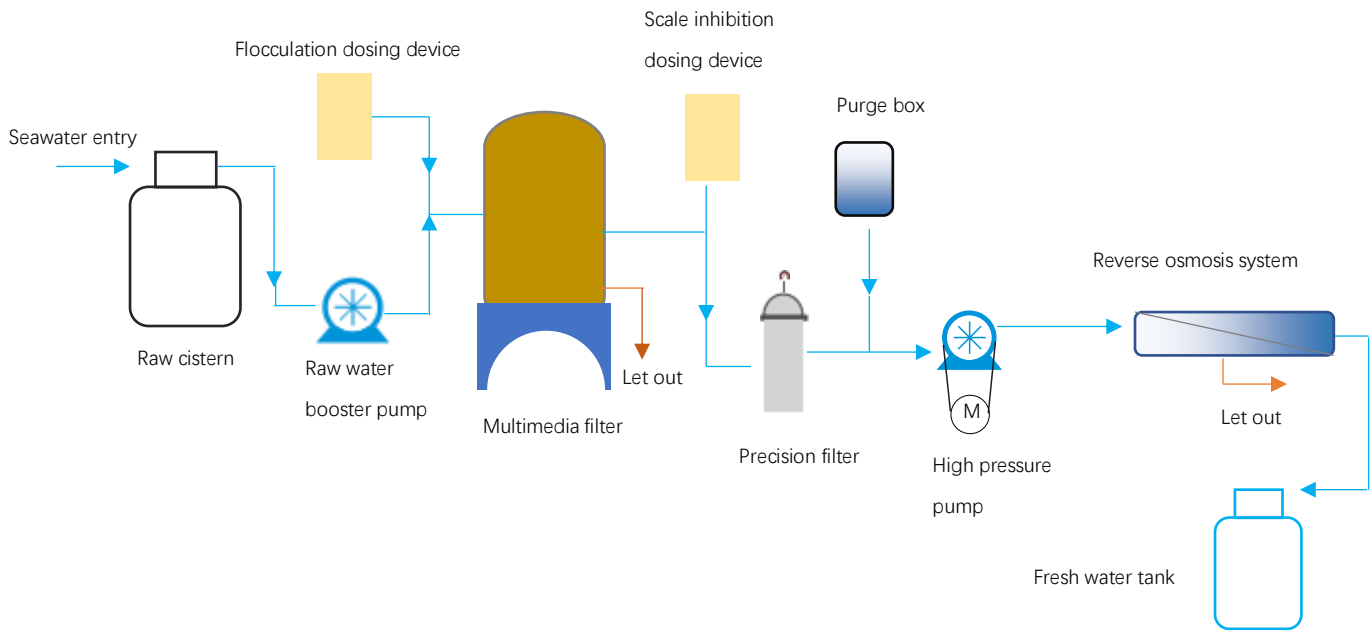
Medium and large seawater desalination equipment is suitable for cargo ships, oil tankers, offshore drilling platforms, islands, stations and coastal water shortage cities. Ro system is the use of advanced Ro system design software and high-quality membrane components, according to the water production of the equipment combined with efficient and unique energy recovery technology.



It can effectively remove harmful components such as inorganic salts, heavy metal ions, organic bacteria and bacteria in seawater. The desalination of seawater will become a drinking water that meets the national standards (GB5749-2006). The whole system is equipped with advanced flow and pressure control instruments and safety relief devices. It is equipped with an advanced detection and monitoring system to ensure the smooth operation of the system and the high quality of the water produced (when the quality of the water produced exceeds the warning salinity value, the system automatically opens the discharge valve and leads the produced water into the waste water drainage channel) and provides accurate values for the operation of the system.

02 Medium And Large Seawater Desalination Series-Technical

Process Diagram



Equipment Configuration

- Reverse osmosis membrane: Dow, Hyde, Toray sea water membrane
- Membrane shell: Harbin Strand (FirstLine)FRP material
- Raw water booster pump: Grundfos, Southern Pump (CNP)
- High pressure pump:Grundfos , D1AMoND , P1NFL
- Frame: stainless steel, pipe surface polishing treatment
- Pipes: Dual-phase steel or stainless steel pipes and high-pressure hose are used for the high-pressure side pipes, and UPVC pipes are used for the low-pressure side pipes
- Electrical components: Omron PLC, brand inverter, Schneider Electric Components or equivalent brand

Performance And Characteristics

- The reverse osmosis desalination technology is mature and advanced, and the desalting rate is as high as 99.5%.
- Energy-saving design, low energy consumption, reduce the cost of water production;
- Rigorous process design to ensure long system life and low maintenance costs;
- Easy automatic operation, cleaning and maintenance free disassembly, easy management;
- Equipment combination types can be achieved: skid mounted, container type;
- Can be customized according to customer needs.

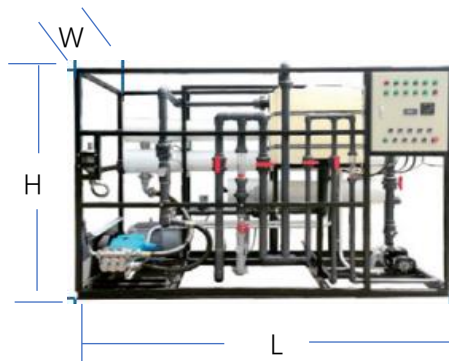
02 Medium And Large Seawater Desalination Series-Technical Parameters

Model number	Water yield	Recovery rate	standard	Electric conductivity	Desalination rate	Operating pressure	Membrane Elements & Membrane shells	voltage	Working power	Control mode	Specification and size	
							quantity				L*w*H	Net weight
	m ³ /d	%	ppm	%	Mpa	-	V	Kw	mm	KG		
JT-Sw-30	30	32	GB5749 . 2006	<700	≥ 99.5	<6.5	2*2	380 V/ 50Hz/ Th ree phase	12.5	AUTO	1700*1100*2100	349
JT-Sw-50	50	35					3*3		16.5		2600*1100*2100	530
JT-Sw-60	60	35					5*2		17		2600*1100*2100	600
JT-Sw-72	72	35					6*2		20		3700*1350*2400 20-foot containe	890 6000
JT-Sw-120	120	40					9*3		34		4500*1500*2400 20-foot containe	1380 7000
JT-Sw-240	240	40					18*3		38		6000*2100*2400 40-foot container	2600 8000
JT-Sw-360	360	45					30*5		42.5		40-foot container	8500
JT-Sw-720	720	45					60*10		85		40-foot container *2	17000
JT-Sw-1000	1000	45					84*14		108.5		40-foot container *2	18000
JT-Sw-2000	2000	45					168*24		193		40-foot container *4	36000
JT-Sw-5000	5000	45					420*60		596.7		40-foot container *10	80000
JT-Sw-10000	10000	45					4704*672		965		40-foot container *20	160000

* Equipment in the form of RO film, water production, equipment size, voltage, control mode, etc. can be made according to customer requirements, only the standard model is shown in the table.

Intake water quality requirement

Raw water quality	TDS ≤ 40000 mg/L
Inlet water temperature	5-45 °C



03 Brackish Water Desalination Series

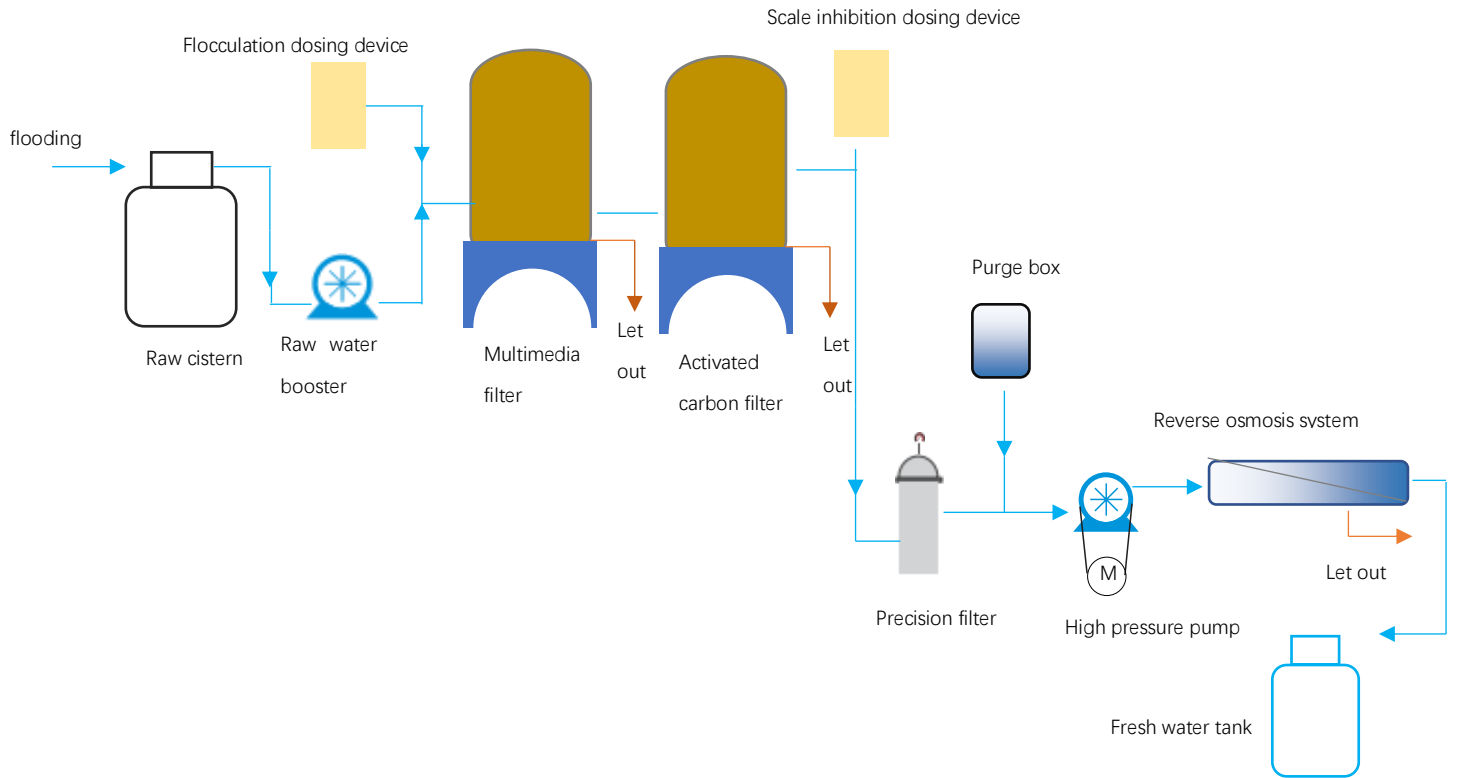
Brackish water desalination equipment is suitable for high salt and alkali areas and seawater backfilling areas, using imported reverse osmotic membrane elements, high-quality pressure vessels, and efficient high pressure pumps, with reasonable pretreatment equipment, It can effectively remove the harmful components of inorganic salts, heavy metal ions, organic matter, bacteria and germs in the water, and desalinate the brackish water into fresh water that meets the national drinking water health standards.



According to the local water quality of detailed analysis and special design, and strive to be efficient and durable, and make the desalination water quality fully meet the national drinking water quality standard (GB5749-2006), and completely solve the water problem in the water shortage area. Because the groundwater quality varies from place to place, users need to be able to provide detailed local water quality analysis reports to ensure that a reasonable and economical configuration is designed to achieve the best effluent effect.

03 Brackish Water Desalination Series-Technical Parameters

Process Diagram



03 Brackish Water Desalination Series-Technical Parameters

Equipment Configuration

- Reverse osmosis membrane: Dow, Hyde, Toray sea water membrane
- Membrane shell: Harbin Strand (FirstLine)FRP material
- Raw water booster pump: Grundfos, Southern Pump (CNP)
- High pressure pump:Grundfos , D1AMoND , P1NFL
- Frame: stainless steel, pipe surface polishing treatment
- Pipes: Dual-phase steel or stainless steel pipes and high-pressure hose are used for the high-pressure side pipes, and UPVC pipes are used for the low-pressure side pipes
- Electrical components: Omron PLC, brand inverter, Schneider Electric Components or equivalent brand.

Performance And Characteristics

- The reverse osmosis desalination technology is mature and advanced, and the desalting rate is as high as 99.5%.
- Energy-saving design, low energy consumption, reduce the cost of water production;
- Rigorous process design to ensure long system life and low maintenance costs;
- Easy automatic operation, cleaning and maintenance free disassembly, easy management;
- Equipment combination types can be achieved: skid mounted, container type;
- Can be customized according to customer needs.

03 Brackish Water Desalination Series-Technical Parameters

Model number	Water yield	Desalination rate	Salt content of produced water	recovery	Operating pressure	Membrane Elements & Membrane shells	voltage	Specification and size	
								L*w*H	Net weight
	m ³ d	%	mg1L	%	Mpa	-	V	mm	KG
JT-Bw-5	5	≥ 99.4	< 150	28	0.5-2.5	1*1	380V/ 50Hz/ Three phase	1100*500* 1600	176
JT-Bw-10	10			32		2*2		1400*500* 1900	210
JT-Bw-15	15			45		3*3		1400*500* 1900	315
JT-Bw-20	20			55		4*4		1400*550* 1900	340
JT-Bw-25	25			58		2*2		1600*600*2000	350
JT-Bw-30	30			60		2*2		1600*600*2000	370
JT-Bw-50	50			65		3*3		2000*1500*2000	630
JT-Bw-100	100			65		6*2		3100*1600*2000	900
JT-Bw-200	200			65		10*2		6000*1600*2200	1200
JT-Bw-500	500			65		30*5		6800*1500*2200	2100
JT-Bw-1000	1000			65		50* 10		6800*1800*2200	3000
JT-Bw-2000	2000			65		102* 17		6800*3000*2200	5000

* The equipment adopts RO film form, water yield, equipment size, voltage, control mode, etc. can be made according to customer requirements, only the standard model is shown in the table.

Intake water quality requirement

Raw water quality	TDS ≤ 10000 mg/L
Inlet water temperature	5-45℃



Engineering Case

5 tons \ day seawater desalination equipment
The Philippines



20 tons \ day two level seawater desalination
equipment
Singapore



25 tons \ day Marine water machine
China Merchants Heavy Industries



50 tons \ day Marine water machine
Shenzhen Merchants Youlian shipyard



72 tons \ day seawater desalination equipment
Maldives



50tons \ day seawater desalination equipment
Maldives



Engineering Case

120tons \ day seawater desalination equipment
Fiery Cross Reef in the South China Sea



144tons \ day seawater desalination equipment
Iraq



360tons \ day seawater desalination equipment
South China Sea islands



3840tons \ day seawater desalination equipment
Xiamen



13000tons \ day seawater desalination equipment
Malaysia



19000tons \ day seawater desalination equipment
Malaysia



AFTER-SALES SERVICE

Technical support: Provide equipment installation, commissioning (training), regular return visits and on-site after-sales service.

Service response time: Provide 24-hour telephone response service, from receiving the user fault repair information, our company immediately provide telephone online support services, if it can not be ruled out, will arrive at the user site in the shortest time for maintenance services.

Spare parts: Long-term to provide customers with high quality and cheap equipment accessories and consumables.

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