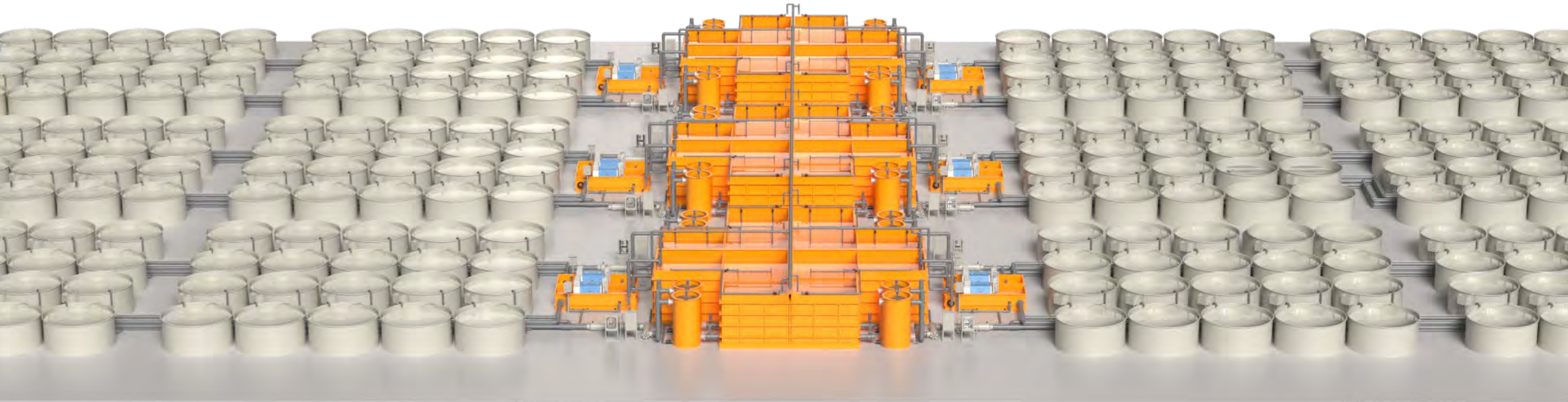


Your Trusted Cooperative Partner

- Eco - Aquaculture Equipment
- Industrial Eco - RAS Aquaculture System
- Intelligent Poultry & Livestock Farming Products
- Design & Engineering Services
- Software Monitoring & Control System
- Service & Support

HISHING

Sustainable Aquaculture Technology and Equipment



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All designs and specifications are for reference only and are subject to change without prior notice.



QINGDAO HISHING SMART EQUIPMENT CO., LTD.

V.26

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To our valued customers:

The entire team at QINGDAO HISHING SMART EQUIPMENT CO., LTD. would like to take the opportunity to say thank you for supporting us!

We have a complete set of R&D, design, manufacturing, sales, technical support, and after-sales service system. We will continue to provide you with high-quality, high-tech, high reliability and cost-effective system and equipment, perfect technical support and high-quality after-sales service to and join hands with you to create the future.

Thank you for your patronage and support. We look forward to continuing to serve you.

Yang Tao
General Manager

QINGDAO HISHING SMART EQUIPMENT CO., LTD.



HISHING has always been committed to sustainable development goals.



HISHING was founded in 2007, it covers about 1400 m² with mechanical workshop, automation workshop, office building, dormitories & canteens.

HISHING is a high-tech enterprise specialized in R&D, manufacturing, sales, installation & service for the RAS aquaculture system and equipment, poultry & livestock farming products, sea cages farming system & equipment, aquaculture wastewater treatment system, smart culture management system and internet of things.

HISHING has a complete system of research and development, manufacturing, sales, technical support, and after-sales service guarantee, providing customers with more value-added services.



Industry University Research Cooperation

HISHING has a long-term good cooperative relationship with IOCAS, YSFRI, ECSF, Zhejiang University, Dalian Ocean University, Ningbo University, Shandong University, Tianjin University of Science and Technology, Ocean University of China, Qingdao University of Science and Technology, etc.

As China's first enterprise to develop and commercialize complete intelligent equipment for industrial recirculating aquaculture systems, it rapidly turns R&D into high-quality, reliable, and cost-effective solutions.



Advanced Production Equipment & Facilities

HISHING has 4 sets of mechanical production lines, 5 sets of electronical special production lines, and 69 sets of all kinds of instruments and equipment. Besides, HISHING also has electrical SMT line and AOI series testing special equipment. Those equipment and instruments enable HISHING a powerful production capacity.

Leading R&D team

The R&D team has completed a large amount of research and development and trial production of aquaculture equipment over the years. HISHING has been authorized nearly a hundred of patents, and the R&D team with rich experience has put the company in a leading position in the field of recirculating water aquaculture equipment in China.



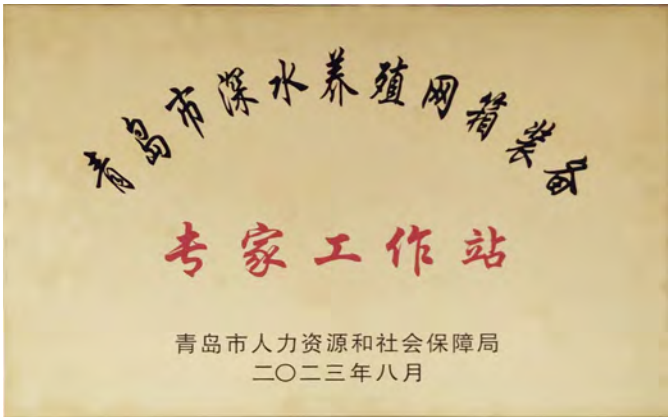
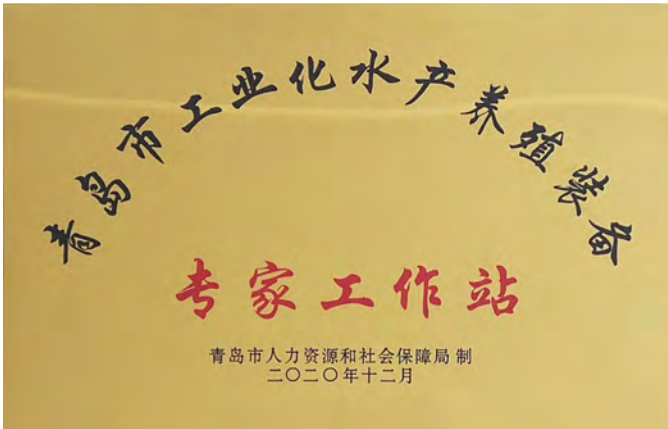
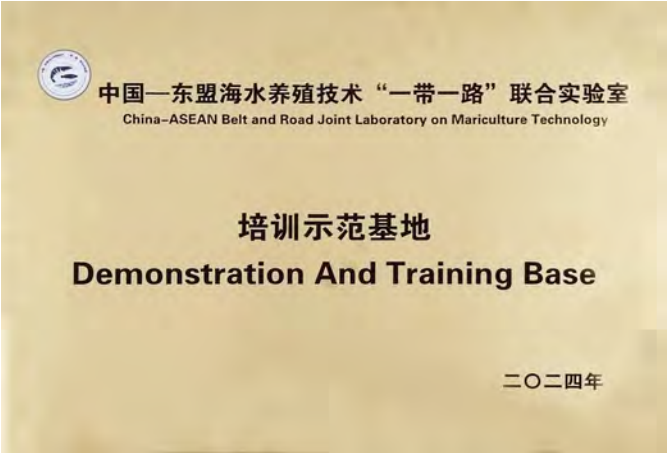
Strict Quality Management

HISHING has passed the certification of ISO9001:2015 quality management system, ISO14001:2015 environmental management system, ISO45001:2018 occupational health and safety management system. The company implements strict and perfect quality management, which strictly controls the quality from the parts entering the factory, process inspection to factory inspection.



Satisfied Technical Supports & Services

HISHING has excellent technical support & service teams, among which, there are 4 after sales service teams, and 3 resident regional service teams. They provide high quality, convenient and timely before-sales supports and after-sales maintenance service to our clients. HISHING has obtained a good reputation for their satisfied technical supports & services.

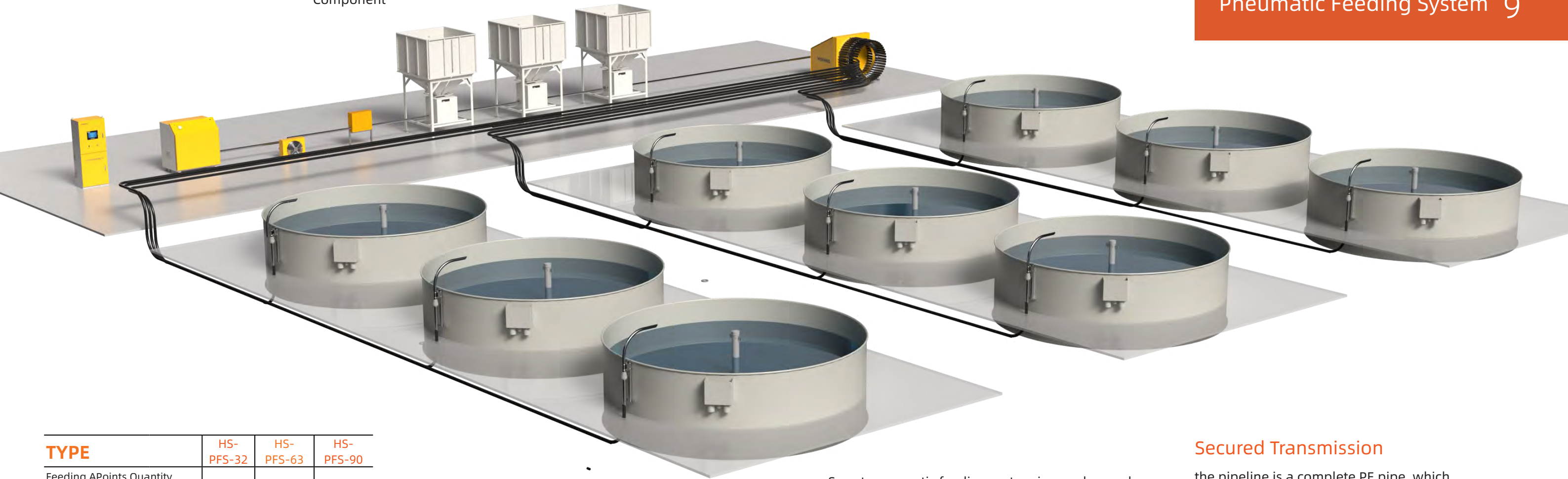


Certificates & Awards 7

HISHING is an executive director unit of the China Fisheries Association, a vice director unit of the Special Aquatic Engineering Branch of the China Agricultural Engineering Society, and a director unit of the Salmon Branch of the China Aquatic Products Circulation and Processing Association.

- Qingdao High tech Enterprise Certificate
- Qingdao Small and Medium sized Enterprise Specialized and New Product Certificate
- Shandong Province's "Specialized, Refined, Unique and New" Small and Medium sized Enterprises
- Qingdao Industrial Aquaculture Equipment Expert Workstation
- Qingdao Deepwater Net Cage Aquaculture Equipment Expert Workstation
- China ASEAN Marine Aquaculture Technology "the Belt and Road" Joint Laboratory Training Demonstration Base
- Deloitte Top 20 High Tech High Growth Companies in Qingdao in 2019
- AAA rated credit enterprise in enterprise credit evaluation
-





TYPE	HS-PFS-32	HS-PFS-63	HS-PFS-90
Feeding APoints Quantity (maximum)	32	32	24

Pellet Feeding Data (Per Feeding Line)

Pellet Size (Max.)	mm	5 ~ 7	11 ~ 12	17 ~25
Pellet Size (Min.)	mm	0.5	3	3
Feeding Q'ty (Max.)	kg/hr.	/	1200	/
Pellet Broken Rate	%	< 1	< 1	< 1
Pellet Powder Rate	%	< 0.5	< 0.5	< 0.5
Feeding Speed (Max.)	kg/min.	10	20	50
Feeding Speed (Min.)	kg/min.	3.6	12	24
Pipeline Length (Max.)	m	300	600	800
Feeding Speed (Max.) at Max. Pipeline Length	kg/min	3.0	10	10
Feeding Speed (Max.) at 50% Max. Pipeline Length	kg/min	5.4	15	34
Feeding Speed (Max.) at Min. Pipeline Length	kg/min	10	20	50

SYSTEM CONFIGURATION

SMART Control Cabinet	kW	6 ~ 8	11.5 ~ 15.5	15.5 ~ 22.5
Roots Blower	kW	7.5	11 ~ 15	18.5 ~ 22
Cooler	kW	/	0.2	0.5
Feeder	kW	0.4	0.4	0.4
Selector	kW	/	/	/
Pellet Bucket Elevator	kW	1.5	1.5	1.5
Silos	m³	1.5/ 2.8/ 8	1.5/ 2.8/ 8	1.5/ 2.8/ 8
Rotor Spreader	↑	≤ 32	≤ 32	≤ 24
Rotating Spreading Diameter	m (adjustable)	3 ~ 12	4 ~ 12	5 ~ 18
Duckbill Dispenser	↑	≤ 32	≤ 32	≤ 24
Duckbill Spraying Distance	m (adjustable)	2 ~ 6	2 ~ 6	3 ~ 9
Software		customized		

Note: The parameters are for reference only and are subject to actual conditions.

Smart pneumatic feeding system is an advanced centralized feeding system, suitable for multiple types of aquaculture, such as sea cages, fresh water cages, RAS, and pond aquaculture, etc. It is a positive pressure dilute phase pneumatic conveying system, pellets are conveyed to tanks by high speed air flows.

One System for Multiple Culture Areas

One system can supply multiple ponds at request, 12/32 pipes is the standard currently.

Accurate Scaling

feeding weight tolerance within 3%, accurate fixed location, fixed quantity & fixed time feeding.

Low Broken rate

The crushing rate is less than 1%, and the powder rate is less than 0.5%, significantly reducing feed loss and lowering breeding costs.

Clean and No-residue

No pellets residue in the pipeline, therefore there is no pellets pollution.

Secured Transmission

the pipeline is a complete PE pipe, which has good sealing performance, high strength, and it can work 24H/7D.

Fast Conveying Speed

feeding speed up to 350 kgs / minute

Large Conveying Quantity

continuous conveying, max.up to 20 mt / hour

Long Distance Conveying

400 / 600 meters two optional, others at request

Full Auto Control

full auto-mode without human interference

Remote Monitoring & Operating

the system can be monitored and operated at site, or control enter, or through internet, or through the handheld terminals.

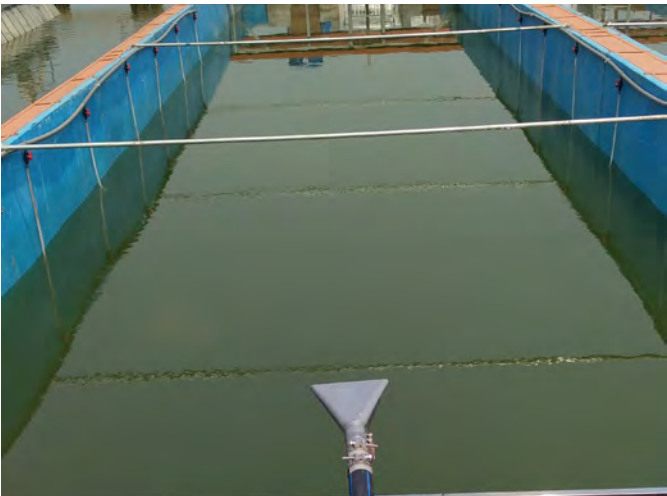
Feeding Records for IoT

the historical feeding data can be remote viewed via internet and exported as EXCEL tables, it makes an easy comparison to enable the accurate financial analysis.

Suzhou Tongli National Modern Agricultural Park

July ~ October, 2016

Jiangsu's first pond recirculating aquaculture pilot bases use smart feeders for precise feeding time and amount by fish species/size.



Offshore Fish Farm , Singapore

April ~ June, 2019

Singapore's offshore enclosed floating farm: 4×500m³ ponds, 40k-50k fish, 24 t/yr, 50 kg/m³. Species: red snapper, golden perch, grouper.



Yadong Salmon Health Cultivation

August, 2019 - March, 2020

Five stages: egg incubation, 2g, 10g & 100g fry cultivation, cultivation to 1kg commercial salmon. It can hatch 6 million eggs, cultivate 1.25-1.5 million fingerling, 400000 commercial fish.



Quzhou Sturgeon Project

October, 2021 - May, 2022

The largest sturgeon aquaculture and processing center in China, capable of producing up to nearly 200 tons of caviar annually.





Centralized feeding system for RAS, marine cages & deep-sea craft. Positive dilute-phase pneumatic conveying using high-speed airflow to deliver pellets for auto-feeding by time, quantity & parameters. Supports local/remote control, data logging, unattended operation – ideal for modern marine & deep-sea aquaculture.

Modular integrated design – Fan, cooler, tank integrated into container for smart auto-run, no manual work.

Standardized precision assembly
– Parts fitted per drawings, ensuring accuracy, avoiding installation defects.

Turnkey delivery – Full test & acceptance before shipment, no on-site debugging, on-time delivery.

Easy transport & installation – Container structure, one-time installation, plug & play.

High stability – Fixed on solid base, adapts to floating platform vibrations, reliable connection.

Full sealing & protection – Moisture-sealed container shell for wet conditions; sealed hopper with SS manhole cover, weatherproof.

Reusable & high recycling value – Easy second installation, stable reuse quality, high scrap value.

Easy O&M – Sealed doors, side doors, safety ladder, small crane for access, operation, feeding.

Customizable quality appearance
– Reputable container shell, durable coating (5+ years), color options.

Name	Parameters
Single System	Feeds 32 tanks
Hopper (per system)	2 X 2.8m³
Dosing Accuracy	>97%
Breakage Rate	<2%
Feeding Speed	>600 kg/h
Conveying Distance	>300 m
Sensors	pressure, flow, temperature
Automation	fully automatic, no manual intervention
Remote communication	integrated IoT interface

Spray Feeder for large-scale aquaculture: IoT + AI enables precise feeding, smart control, data visibility & energy saving. Fixed pond-side, an auger delivers feed to a spinning disc, broadcasting it evenly via centrifugal force.

Efficiency & Labor Savings – Unattended Operation
Replaces manual feeding, supports 24/7 scheduled start/stop regardless of weather or time, saving >50% on labor costs. Single controller enables feeding parameter setting, historical data storage & retrieval, meeting automated management needs of industrial aquaculture.

Precision Feeding – Lower Costs
On-demand feeding amount avoids over/under feeding based on manual experience, improving feed utilization by 20-30%. Even feed broadcast reduces fish competition and local feed accumulation, further cutting waste.

Water Quality Improvement – Reduced Stress
Uniform feeding minimizes feed sinking, controlling harmful parameters like ammonia nitrogen and nitrite long-term, lowering water treatment costs. Scattered feeding prevents oxygen depletion and injury from competition, enhancing farming stability.

Type	HS-FL30-JP	HS-FL100-JP
Rated voltage	AC 220V/50Hz	AC 220V/50Hz
Power	50 W	50 W
Hopper capacity	30 L	100 L
Pellet size	0.8 - 10mm	0.8 - 10mm
Max feeding speed	25 kg/h	100 kg/h
Spreading distance	1 - 3m,adjustable	1 - 5m,adjustable
Control mode	Local control via standalone control box with touchscreen and Wi-Fi interface; remote operation via APP and WEB.	
Expandability	Single user can add & manage multiple feeders	
Core functions	scheduled/quantitative feeding, status monitoring, historical data storage.	



14 Air Blowing Feeding System

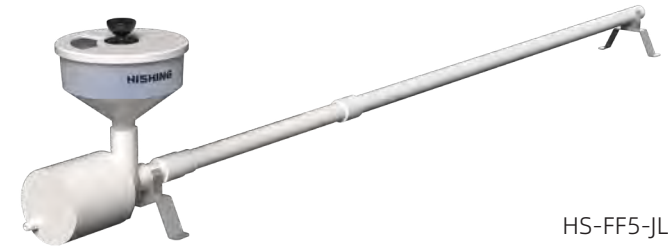
The feeders are fixed at the side of the aquaculture tanks. Feeder impeller push pellets into the feeding pipe. The continuous compressed air inside the pipe blows the pellets into the aquaculture tanks. All feeders working at the same time, all feeding settings, duration data acquisition and storage can be completed on one touch screen.

- IP67 control box
- LORA wireless terminal communication, low power consumption, stability and reliability, and long transmission distance.
- Centralized control system, 1 host PLC control many slaves controllers. 1 slave controller manager 4 sets of feeders. One system consist of 160 sets of feeders controlled by 1 touch screen .
- Touch Screen operation
- The mobile APP & LAN can synchronously operate the touch screen.
- with a network interface, for IOT functions.

TYPE	HS-FF2-AB
Pellet Size (Min.)	0.5 mm
Pellet Size (Max.)	2 mm
Silo Capacity*	15 L
Feeding Speed (Max.)	2 kg/min.
Feeding Type	air blowing
Power	15 W
Power Supply	AC220V/50Hz
Air Source**	Roots Blower
Air Source Power Supply	3-phase 4-wire /380V/50Hz
Feeder L*W*H (mm)	280*280*1400
Master Control Box L*W*H (mm)	500*600*180
Touch Screen	Industrial grade 10 inch
Slave Controllers Q'ty (Max.) controlled by 1 master controller	40 sets
Slave Control Box L*W*H (mm)	220*220*120
Feeders Q'ty (Max.) controlled by 1 slave controller	4 sets
Control Box IP Grade	IP67

* Silo capacity can be customized;

** Multiple feeders use Roots blower for air supply source;



HS-FF5-JL



HS-FF10-JL



HS-FF15-JL



HS-FF30-JL

Fixed Type Pellet Feeder 15

Fixed at aquaculture tanks, the feeder uses an auger to deliver pellets. Wireless communication enables one system to control up to 128 feeders simultaneously. Through touchscreen, operators set schedules, log data, and run fully automatic timed/pointed feeding with unmanned monitoring.

型号	HS-FF5-JL	HS-FF10-JL	HS-FF15-JL	HS-FF30-JL
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Feeding Parameters

Pellet Size	< 1.2 mm	0.5 ~ 8 mm	0.8 ~ 5 mm	4 ~ 8 mm
Feeding Speed(Max.)	50	2 ~ 500	500	500

Feeder Parameters

Pipe Length	customized			
Hopper Vol.	5 L	10 L	15 L	30 L
Rated Voltage	24 V	AC220 V	AC220 V	AC220 V
Rated Current	3.7 A	0.35 A	0.5 A	0.5 A
Motor Power	/	80 W	100 W	100 W
Static Torque	2.3 N.m	/	/	/

Single Unit Controller Cabinet

Rated Voltage	24 V	AC220	AC220	AC220
Rated Power		30 W		
Q'ty / Feeder	1 / 1	1 / 1	1 / 1	1 / 1

Main Control Box

Rated Voltage	AC220V	AC220	AC220	AC220
Rated Frequency	50(60)Hz	50(60)Hz	50(60)Hz	50(60)Hz
Rated Power		100 W		
Q'ty / Feeder	1 / 20	1 / 20	1 / 20	1 / 20
Comm.	lora wireless			
Touchscreen	•	•	•	•
IoT interface	•	•	•	•

• available



16 Rotary Drum Filter

Mesh screen as the medium, SMART drum type filter removes the tiny solid in water by mechanical physical filtration directly. It can quickly, massively and effectively filter the pellets, feces and organic particles, cooperating with other equipment, it can complete series treatment such as filtration, disinfection, sterilization and oxygen enrichment for the recirculating water.

It composes main body, flushing pump, pipe filter, control box and the level switch, etc. The level switch detects the water level, the motor drives the drum to rotate, the integrated high-pressure back-cleaning unit cleans the mesh screen, sewage is discharged through the sewage pipe, the cleaned mesh cloth rotates circularly for water filtration.

Wide Application

- industrial RAS water treatment
- pretreatment of raw water
- industrial water treatment
- domestic water pretreatment & final treatment
- recycling substances in industrial wastewater, etc.



Triple safety protection

real-time monitoring of pump pressure, integrated dry-run protection and automatic nozzle clog detection.

Fault self-diagnosis system

Automated operation monitoring, real-time alarm for abnormal conditions, and intelligent fault type identification.

IoT remote control

Built-in network interface enables remote device communication and IoT platform integration.

Quick-release filter screen replacement

The single mesh cloth is secured with only 4 screws, allowing rapid replacement without machine shutdown or professional intervention.

Super stainless steel filter screen

Made of anti-biofilm super stainless steel mesh, providing stable flow capacity and long service life.

Tool-free maintenance design

No special tools required for nozzle inspection/replacement; no need to drain the pool water before maintenance, ensuring continuous operation.

Full-access service layout

All maintenance components can be operated directly from the walkway side, with no need for climbing or complex disassembly.

Injection-molded grid support technology

The custom injection-molded grid expands the effective filtration area, enables dead-zone-free backwashing, and completely eliminates dirt residue.

Seawater durability validation

Tested and proven in harsh seawater environments, achieving an average trouble-free operating cycle of up to 415 days.

Top motor protection design

Adopts an elevated motor layout, physically isolating the power core from water-contact areas, effectively avoiding electrolytic corrosion risks to the drive system in high-humidity and high-salt-mist environments.

Low-energy drive motor

Low-power design of the drive motor.

Variable-frequency motor protection

with a variable-frequency drive for real-time speed regulation, extending motor service life.

Anti-corrosion drive system

Features a belt drive system with excellent corrosion resistance, paired with self-lubricating engineered plastic bearing components, forming a maintenance-free drive solution that ensures quiet, smooth operation and extended durability.

All 316L stainless steel frame

Fabricated by welding 316L stainless steel square tubes and plates. The high-strength structural design ensures overall rigidity, providing excellent seawater corrosion resistance and guaranteeing long-term service life.



Type*	HS-DT40/2
Water Treatment Capacity(Max.) *	22 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Tank type Flange Ø Inlet/Outlet:75/75
Main Frame Material	SS 316L
Dimension L*W*H in mm	790*565*640
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	0.80 kW
Driven Power	0.25 kW
Backwash Power	0.55 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DT80/2
Water Treatment Capacity(Max.) *	104 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Tank type Flange Ø Inlet/Outlet:200/200
Main Frame Material	SS 316L
Dimension L*W*H in mm	1115*1280*1340
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.00 kW
Driven Power	0.25 kW
Backwash Power	0.75 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF80/2
Water Treatment Capacity(Max.) *	104 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	1115*1030*1525
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.00 kW
Driven Power	0.25 kW
Backwash Power	0.75 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DT80/4
Water Treatment Capacity(Max.) *	207 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Tank type Flange Ø Inlet/Outlet:315/315
Main Frame Material	SS 316L
Dimension L*W*H in mm	1545*1280*1340
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.35 kW
Driven Power	0.25 kW
Backwash Power	1.10 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF80/4
Water Treatment Capacity(Max.) *	207 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	1560*1030*1525
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.35 kW
Driven Power	0.25 kW
Backwash Power	1.10 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.

** At maximum suspended solids in water of 25 mg/L.

*** Customizable upon request.



Type*	HS-DF80/6
Water Treatment Capacity(Max.) *	311 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	2000*1030*1675
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.70 kW
Driven Power	0.25 kW
Backwash Power	1.50 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.

** At maximum suspended solids in water of 25 mg/L.

*** Customizable upon request.



Type*	HS-DF80/8
Water Treatment Capacity(Max.) *	414 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	2435*1030*1675
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	2.45 kW
Driven Power	0.25 kW
Backwash Power	2.20 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.

** At maximum suspended solids in water of 25 mg/L.

*** Customizable upon request.



Type*	HS-DF120/9
Water Treatment Capacity(Max.) *	410 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	2120*1500*1855
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	1.87 kW
Driven Power	0.37 kW
Backwash Power	1.50 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.

** At maximum suspended solids in water of 25 mg/L.

*** Customizable upon request.



Type*	HS-DF120/12
Water Treatment Capacity(Max.) *	546 m³/h
Standard Mesh Aperture **	75 μm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	2560*1500*1855
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	2.57 kW
Driven Power	0.37 kW
Backwash Power	2.20 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF120/15
Water Treatment Capacity(Max.) *	683 m³/h
Standard Mesh Aperture **	75 μm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	3000*1500*1880
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	3.37 kW
Driven Power	0.37 kW
Backwash Power	3.00 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF120/18
Water Treatment Capacity(Max.) *	820 m³/h
Standard Mesh Aperture **	75 μm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	3465*1500*1880
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	3.37 kW
Driven Power	0.37 kW
Backwash Power	3.00 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF160/20
Water Treatment Capacity(Max.) *	1056 m³/h
Standard Mesh Aperture **	75 μm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	3215*1900*1950
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	3.55 kW
Driven Power	0.55 kW
Backwash Power	3.00 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF160/24
Water Treatment Capacity(Max.) *	1242 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	3525*1900*1950
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	3.55 kW
Driven Power	0.55 kW
Backwash Power	3.00 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



Type*	HS-DF160/28
Water Treatment Capacity(Max.) *	1449 m³/h
Standard Mesh Aperture **	75 µm
Main Structure	Frame
Main Frame Material	SS 316L
Dimension L*W*H in mm	3965*1900*1950
Power supply type	3-phase 4-wire /380V/50Hz
Total Power	3.55 kW
Driven Power	0.55 kW
Backwash Power	3.00 kW
Main Drive Motor Control Mode	Frequency conversion control (optional)
Other configurations and functions	Automatic backwashing
	Fault alarm
	IoT remote communication interface equipped
	Individual screen replacement, simple and easy to operate

* Model is for reference only; final quotation shall prevail.
** At maximum suspended solids in water of 25 mg/L.
*** Customizable upon request.



HS-FF-2000



HS-FF-1500



HS-FF-1200



HS-FF-600

Protein Skimmers are widely used in RAS, it removes the suspended particles and colloidal substances in water, when Ozone added, it also has the function of decolorization, deodorization and sterilization.

- Rotomolded polyethylene, one-piece - leak-proof
- Smooth both sides - dirt-resistant, easy to clean
- Efficiently removes fine particles and colloids
- Ozone-ready: decolorizes, deodorizes, disinfects

TYPE	HS-FF-2000	HS-FF-1500	HS-FF-1200	HS-FF-1000	HS-FF-600	HS-FF315
Max.treatment capacity S:Seawater F:Freshwater	S:500m³/h F:400m³/h	S:250m³/h F:250m³/h	S:150m³/h F:150m³/h	S:100m³/h F:100m³/h	S:30m³/h F:30m³/h	S:7m³/h F:7m³/h
Actual retention time	Approx. 1 min					
Total power S:Seawater F:Freshwater	S:4.4kW F:8.0kW	S:3.0kW F:4.4kW	S:2.2kW F:3.0kW	S:1.5kW F:2.2kW	S:0.75kW F:1.5kW	S:0.55kW F:0.75kW
Power supply 3-phase 4-wire	380V/50Hz	380V/50Hz	380V/50Hz	380V/50Hz	380V/50Hz	380V/50Hz
Main body material	PE	PE	PE	PE	PE	PVC
Cylinder Shell Manufacturing process	rotomolded in one piece	rotomolded in one piece	rotomolded in one piece	rotomolded in one piece	rotomolded in one piece	processing
Net volume Approx. in m³	4	4	2.53	1.73	0.563	0.127
Other configurations and functions	Automatic flushing foam					
	With IoT, remote communication interface					



Core Advantages

- Integrated & Continuous
Combines drum filter, screw press, and flocculant dosing into one unit. Seamless solid-liquid separation, sludge dewatering, and chemical purification for higher efficiency.
- Smart Dosing, Lower Cost
Real-time, precise chemical addition based on water quality. Eliminates waste, reduces operating costs, ensures stable effluent.
- Modular & Flexible
Plug-and-play modules. Easy to install, disassemble, and maintain. Works standalone or in parallel for any scale.

3-Stage Control, Deep Purification

Stages	Core Equipment	Working Principle & Performance
Stage 1: Physical Interception	Drum Filter	Tailwater first flows into the drum filter, where a high-precision stainless steel mesh efficiently captures large suspended solids (residual feed, feces, etc.), achieving primary solid-liquid separation and reducing downstream sludge load
Stage 2: Flocculation & Conditioning	Flocculant Dosing Unit	Before the separated sludge-laden water enters the screw press, the system automatically adds flocculant. Through chemical flocculation, fine suspended particles rapidly aggregate, creating optimal conditions for efficient dewatering.
Stage 3: Deep Dewatering	Screw Press	The flocculated concentrated sludge enters the screw press main body. The combined action of slow screw shaft extrusion and gap filtration between rotating and stationary rings significantly reduces sludge volume. The resulting sludge cake has low moisture content, high hardness, small volume, and no odor, making it easy to bag, store, and transport for disposal.



The UV lamp features high single-tube power, strong output intensity, and excellent penetration capability. Its continuous spectrum (200 nm - 400 nm) can simultaneously damage the DNA, cell membrane, and internal proteins of microorganisms, ensuring effective inactivation of bacteria, viruses, cysts, etc., for more thorough sterilization.

Advantages

- Long lamp service life
- Sterilization efficiency ≥ 90%
- Dry-run protection (anti-dry burning) and over-temperature shutdown protection
- Network interface for remote communication and IoT functionality
- UV lamp fault alarm and indication function



TYPE	HS-UVW3000×1-G/200-2205
Installation method	Horizontal
Applicable medium	Seawater
Lamp configuration	3000W×1 pc
Total power	3 kW
Housing material	Super duplex SS 2205
Structure type	Pressure-bearing
Main body dimensions	600×510×540mm
Power supply	AC220V/50Hz
Fault alarm	Yes
Dry-run protection	Yes
Cumulative timer	Yes
IoT interface	Yes
Lamp core cable	<23m



Applicable Medium	Freshwater	Freshwater Seawater	Seawater
Single Lamp Power	120W	325W	120W 325W
Lamps Q'ty	20	3/12/16/18	3/5/10
Main Body Material	304	316L	Super SS 2205
Power Supply	AC220V /50Hz	AC220V/50Hz 3N/380V/50Hz	AC220V /50Hz
Fault Alarm	Yes	Yes	Yes
Group Control	Yes	≥ 18 lamps	≥ 10 lamps
Timed Switching	Yes	—	—
Dry-Run Protection	Yes	Yes	Yes
Cumulative Timer	Yes	Yes	Yes
IoT Interface	Yes	Yes	Yes
Lamp Core Cable	<23m	<23m	<23m



Applicable Medium	Freshwater Seawater	Freshwater	Seawater	Seawater
Single Lamp Power	75W/120W	75W/120W/325W	120W/325W	120W/325W
Lamps Q'ty	1	1/3/5/6/10/15/20	1/3/5/6/10/15/20	12/26/20/22/29/53
Main Body Material	PVC	SS 316L	Super SS 2205	Super SS 2205
Power Supply	AC220V/50Hz	AC220V/50Hz	AC220V/50Hz	3N/380V/50Hz
Fault Alarm	Yes	Yes	Yes	Yes
Group Control	/	≥ 10 lamps	≥ 10 lamps	≥ 10 lamps
Dry-Run Protection	Yes	Yes	Yes	Yes
Timed Switching	Yes	Yes	Yes	Yes
IoT Interface	Yes	Yes	Yes	Yes
Lamp Core Cable	<23m	<23m	<23m	<23m

Applicable Medium	Freshwater Seawater	Freshwater Seawater	Freshwater Seawater
Single Lamp Power	120W	325W	325W
Lamps Q'ty	20	8	17/23/31
Main Body Material	SS 316L	SS 316L	SS 316L
Power Supply	AC220V /50Hz	AC220V /50Hz	3N/380V /50Hz
Fault Alarm	Yes	Yes	Yes
Group control	Yes	Yes	Yes
Timed Switching	Yes	Yes	Yes
Dry-Run Protection	Yes	Yes	Yes
Cumulative Timer	Yes	Yes	Yes
IoT Interface	Yes	Yes	Yes
Lamp Core Cable	<23m	<23m	<23m



Channel-type UV sterilizer is an efficient and environmentally friendly water treatment device designed for open channels. Its core principle is to use UVC ultraviolet light to damage the DNA/RNA structures of bacteria, viruses, and other microorganisms in the water, rendering them unable to reproduce and achieving physical disinfection.

Advantages

- Long service life of UV lamps
- Sterilization efficiency ≥ 90%
- UV lamp dry-run protection and overheat shutdown protection
- Equipped with a network interface for remote communication and IoT functions
- UV lamp fault alarm and indication function



Applicable Medium	Freshwater Seawater	Freshwater Seawater
Single Lamp Power	120W/325W	120W/325W
Lamps Q'ty	10/13/15/20/25	13/30
Main Body Material	SS 316L	SS 316L
Power Supply	AC220V/50Hz	3N/380V/50Hz
Fault Alarm	Yes	Yes
Fault Alarm	Yes	Yes
Timed Switching	Yes	Yes
Dry-Run Protection	Yes	Yes
Cumulative Timer	Yes	Yes
IoT Interface	Yes	Yes
Lamp Core Cable	<23m	<23m

Main Advantages

- exquisite structure, effectively meet aquaculture requirements
- low operation cost

Main Technical Parameters

- cone Body Material: Food grade FRP / SS316L
- Max. environment temperature: 40℃
- Max. working water temperature: 40℃
- work pressure: 0.25 MPa



TYPE	HS-OC-300/316L	HS-OC-860/316L	HS-OC-310	HS-OC-600	HS-OC-860	HS-OC-1200	HS-OC-1250	HS-OC-1400	HS-OC-1700	HS-OC-1860	HS-OC-2235
Cone Material	SS 316L	SS 316L	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP	Eco-friendly FRP
Diameter (mm)	300	860	310	600	860	1150	1250	1400	1700	1860	2235
Height (mm)	1050	2130	1050	1730	2130	2700	3200	3630	3800	4350	5630
Working Pressure (MPa)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Maximum Test Pressure (MPa)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.26
Maximum Design Flow Rate (m³/h)	10	60	10	35	60	110	150	200	300	500	1000

Product Advantages

- Exquisite structure
- Low operating costs
- High quality PVC-U material
- Non-toxic
- Corrosion resistance
- Anti aging
- Long service life



TYPE	HS-OD-315-250	HS-OD-315-200	HS-OD-500-315	HS-RPO-315-PVC
Overall Dimensions (mm)	De315×1800	De315×1800	De500×2250	φ315×1420
Rated Power (kW)	0.55	0.55	0.55	—
Inlet/Outlet Pipe Diameter (mm)	De250	De200	De315	De140



Variable Diameter Pipeline Aerator

Following the principle of partial pressure, through the full contact of gas water convection, it can remove off the CO₂ in the aquaculture water.



TYPE	HS-CDS-2350-304	HS-CDS-2350-316L	HS-CDS-2950-316L	HS-CDS-1832-304	HS-CDS-4000-316L
Structure	Cabinet-type	Cabinet-type	Cabinet-type	Cabinet-type	Cabinet-type
Overall Dimensions	2350×885×1200	2350×885×1200	2950×960×1450	1832×1832×800	4000×1700×1300
Frame	SS 304	SS 316L	SS 316L	SS 304	SS 316L
Panel	PP	PP	PP	PP	PP
PE three-dimensional grid degassing packing	1.25m ³	1.25m ³	2.0m ³	1.62m ³	6.0m ³
Reinforced biological tank	/	/	/	φ3×2.6m PE rotational molded barrel	/
Air-water ratio	> 5:1	> 5:1	> 5:1	> 5:1	> 5:1
Blower configuration	1 SET 220V/50Hz 1405m ³ /h 488Pa 225W	1SET 220V/50Hz 1405m ³ /h 488Pa 225W	1 SET 220V/50Hz 1405m ³ /h 488Pa 225W	1 SET 220V/50Hz 1405m ³ /h 488Pa 225W	2 SETS 220V/50Hz, 1405m ³ /h 488Pa 255W



The HS-UFE series is a modular high-efficiency ultrafiltration system launched by HISHING. It covers a treatment capacity range of 5-80 t/h. All models come standard with a complete process of filtration, backwashing, chemical cleaning, and air scouring, delivering stable and reliable effluent quality.

- High filtration precision: 0.02-0.03 μm across the entire series, effectively removing bacteria and suspended solids, and reducing turbidity and SDI.
- Complete size range: Six models cover capacities from 5 to 80 t/h to meet the needs of different scales.
- Energy-saving and economical: Low operating pressure, total power ranging from 7 kW to 39 kW, and manageable long-term operating costs.
- Durable materials: For models with a capacity of 20 t/h and above, the pump wetted parts are made of 2205 duplex stainless steel for superior corrosion resistance.
- Intelligent automation: Fully automatic PLC control of backwashing, air scouring, and chemical dosing programs, making operation and maintenance easy.
- Wide applicability: Compatible with 380 V industrial power supply, suitable for aquaculture, industrial water purification, municipal water supply, and other fields.

TYPE	HS-UFE-5	HS-UFE-20	HS-UFE-30	HS-UFE-30-60H	HS-UFE-50	HS-UFE-80
Capacity (t/h)	5	20	30	30	50	80
Precision (μm)	0.03	0.03	0.03	0.03	0.03	0.02
Total Power	~ 7kW	~ 18kW	~ 20kW	~ 24kW	~ 32kW	~ 39kW
Pump Wetted Material	SS 304	SS 2205	SS 2205	SS 2205	SS 2205	SS 2205
Power Supply	3-Phase 4-Wire 380V/50Hz					



The oxygen distribution box provides oxygen supply and control for the recirculating aquaculture system. When the system is powered off or lack of oxygen, the emergency oxygen supply is turned on automatically.

Advantages

- transparent or open design, easy to observe
- with flow meter, easy for production statistical management
- compact structure, function integration

TYPE	HS-OB16-2*12	HS-OB16-1*12
Box Body	with glass observation window	
Width*Height*Thickness (mm)	542*652*200	434*652*200
Inlet Pipe Quantity	1	
Inlet Pipe Material	polyurethane (PU)	
Inlet Pipe Outer Diameter	φ16 mm	
Inlet Pipe inner Diameter	φ12 mm	
Outlet Pipe Quantity	2	1
Outlet Pipe Material	polyurethane (PU)	
Outlet Pipe Outer Diameter	φ16 mm	
Outlet Pipe inner Diameter	φ12 mm	
Pressure Transmitter	explosion proof	
Solenoid Valve	explosion proof	
Pressure Gage	oxygen specific	
Normal Oxygen Supply by Oxygen & Water Mixing	Yes	
Emergency Assisted Oxygenation*	Yes	/
Emergency Oxygenation**	Yes	/

* When there is a liquid oxygen source on site, emergency oxygen replenishment can be turned on and normal oxygen supply can be turned off in case of water interruption, power outage, or equipment abnormality;
**If the dissolved oxygen value is too low, turn on emergency oxygenation;



Designed for large-scale fish egg incubation, this vertical cabinet features 8 tiers with 16 independent boxes, handling 160,000–250,000 eggs per batch. It includes a complete water system and high-precision flow meter, supporting up to 12 full-volume exchanges per hour (max. 7 m³/h) and maintaining excellent water quality and dissolved oxygen. Total water volume is approx. 0.55 m³. Stable and easy to operate, it's an ideal choice for standardized hatchery management.



ITEM	Specifications
Configuration	8 tiers per unit, 16 incubation boxes
Capacity	Approx. 160,000 – 250,000 eggs per batch (depending on egg diameter and density)
Total Water Volume	Approx. 0.55 m³
Max. Water Exchange Frequency	12 cycles/hour
Max. Water Exchange Capacity	Approx. 7 m³/h
Main Components	Frame, incubation boxes, water inlet/outlet assemblies, flow meter, etc.

Vertical multi-layer drum with back-to-back 4-tier design; 96 PE cells per unit, ~5 L water volume per drum. 304 stainless steel welded frame. Detachable inlet/outlet pipes and egg support layer for easy cleaning. Includes supply/return piping and 16 acrylic troughs for uniform micro-flow. Capacity: 1–1.5 million eggs per batch. High space efficiency, ideal for large-scale hatcheries and research breeding.



ITEM	Specifications
Configuration	Vertical back-to-back 4-tier structure; 12 drums per side per tier
Incubation Drum Q'ty	96 pcs/set
Drum Specifications	Approx. φ200 × H330 mm; water volume approx. 5 L when full
Drum Material	PE (Polyethylene)
Drum Configuration	Quick-release detachable inlet/ outlet pipes and egg support layer
Frame Dimensions	Approx. 2600 × 600 × 1850 mm (L × W × H)
Frame Material	SS 304 square tube, welded
Return Trough Specifications	Acrylic structure; single unit approx. 1300×50×40mm; 16 sets total
Single Batch Capacity	Approx. 1~ 1.5 m eggs (depending on egg diameter and density)
Main Components	Stainless steel frame, 96 incubation drums, 96 sets of quick-release tube clamps, 96 sets of water inlet pipes, 16 sets of return troughs, 1 set of supply/return piping network

Feature

- Transferable objects: fish, shrimp, etc
- Transfer capacity: 20~345m3/h fish/shrimp water mixture
- No contact damage to fish/shrimp during transfer
- Convenient disassembly and assembly
- Transparent PVC steel wire hose, visible to fish and shrimp
- IP67 Control Cabinet
- Variable frequency control
- World-class brand electrical components



TYPE	HS-FP110-15/316L	HS-FP250-55/316L	HS-FP350-75/316L
Flow Rate of Suction Pipe	20 ~ 50 m³/h	60 ~ 145 m³/h	345 m³/h
Transferable Fish Size	fish body cross section height < 80 mm	fish body cross section height < 200 mm	fish body cross section height < 240 mm
Transferable Shrimp Size	shrimp length < 150 mm	shrimp length < 200 mm	shrimp length < 240 mm
Suction Pipe Diameter	110 mm	250 mm	350 mm
Discharge Pipe Diameter	160 mm	350 mm	350 mm
Material of Components in Contact with Water	316 L		
Dimension L*W*H *	1650*500*1150 mm	2600*700*1600 mm	3400*700*1700 mm
Motor Power	15 kW	55 kW	55 kW
Power Supply	3-Phase 4-Wire / 380 V / 50 Hz		
Anti-suction Bottom Device	Yes		
Motor Control Mode	VFC, enabling remote control		
Controll Box Functions	start/stop, speed control, emergency stop		

* Excluding hose size



Main Function

- with imported optical DO sensor, reliable, accurate and fast. 95% of the target value can be achieved in 60 seconds.
- IOT automatic cloud storage function, built-in wireless Internet of things cloud module, the measurement data can be synchronously stored in the cloud server.
- free phone application and computer client software, easy to view real-time data, historical data, historical curve and download.
- with independent QR code, users can add, bind and manage their own devices by themselves.
- touch screen control UI, the history curve can be viewed on the instrument.
- built in lithium battery, more than 24 H measuring.

TYPE	HS-02GI
DO Range	0 - 20 mg/L
DO Accuracy	0.1 mg/L
DO Resolution Ratio	0.01 mg/L
Temperature Range	- 5℃ ~ 50℃
Temperature Accuracy	± 0.1 ℃
Temperature Resolution Ratio	0.01 ℃
Response T90<45s	T95<60s@25℃
Screen	3.5" TFT LCD Industrial resistance touch screen
Resolution Ratio	320*240 px
Mobile APP	Yes
Built-in Battery	lithium battery continuous working > 24 h
External Power Supply	with power adapter
Portable Suitcase L*W*H	385*358*175 mm
Portable Suitcase Net Weight	2.20 kg



Technical Data

- outer dimension: 200*300*180mm double doors
- ABS, transparent cover with pendants
- installation : wall-hanging
- rated voltage: 220 V
- rated power: 20 W

Major Function

- real time online monitoring of water quality
- water quality historical data and curve query
- water quality alarm parameter setting
- abnormal alarm and alarm history query
- remote communication and IOT functions

TYPE	HS-AQS-2M	HS-AQS-3M	HS-AQS-3M1	HS-AQS-3M2	HS-AQS-4M	HS-AQS-4M1	HS-AQS-5M
Optical DO Sensor (DO & Temperature)	●						
PH Sensor (PH & Temperature)	/	●	/		●		
ORP Sensor (ORP & Temperature)	/			●		/	●
Conductivity Sensor (Conductivity & Temperature)	/		●	/		●	
Water Quality Instrument*	●						
Other**	●						
Software	●						
DO Range	0 - 20 mg/L						
Temperature Range	0 - 50 °C						
PH Range	/	2.00 -14.00	/	/	0.00 -14.00	2.00 -14.00	0.00 -14.00
ORP Range	/			±1000 mV		-	±1000 mV
Conductivity Range	/		0 - 200 ms/cm	/		0 - 200 ms/cm	

*Including electrical components such as touch screen, communication module, switching power supply, air switch, audible and visual alarm, etc.
** Connecting harness, installation piping and fittings

PP Welded Tanks

- durable
- lightweight and high-strength
- energy saving and insulation
- excellent sealing performance
- healthy, green and environmentally friendly
- good sound insulation effect
- corrosion resistance
- good dimensional stability
- good insulation performance



PE One-time Forming Tanks

- Polyethylene (PE) has high stiffness, excellent low-temperature impact strength, and excellent environmental stress cracking resistance, suitable for harsh environments
- economical and long service life
- smoothy inner and outer surface, easy to clean
- lightweight, easy to install and reposition quickly
- reliable barrel wall minimizes possible deformation
- open-top, nested to reduces transportation costs
- food grade materials, safe and non-toxic to aquatic organisms and animals
- contains anti-UV inhibitors for outdoor use



HS-FT1050

HS-FT2090

TYPE	HS- PE-630	HS- FT1050	HS- FT2090	HS- FT2060	HS- PE- 3000	HS- PP2000	HS- PP3000	HS- PP4000	HS- PP4500	HS- PP5000	HS- PP6100
Material	PE					PP					
Process	one-time molding					welding					
Outer Diameter	630 mm	1050 mm	2090 mm	2060 mm	3000 mm	2000 mm	3000 mm	4000 mm	4500 mm	5000 mm	6100 mm
Upper Inner Diameter	572 mm	980 mm	1928 mm	1960 mm	2857 mm	1988 mm	2980 mm	3980 mm	4480 mm	4800 mm	6070 mm
Lower Inner Diameter	527 mm	848 mm	1767 mm	1750 mm	2764 mm	1988 mm	2980 mm	3980 mm	4480 mm	4800 mm	6070 mm
Thickness	4 mm	6 mm	8 mm		12 mm	6 mm	10 mm				15 mm
Height	470 mm	970 mm	1140 mm	1640 mm	1330 mm	1380 mm	1200 mm	1500 mm	1200 mm	1600 mm	2000 mm
Effective Volume	0.08 m³	0.5 m³	2.5 m³	3.5 m³	6.5 m³	3 m³	7 m³	12.5 m³	16 m³	27.3 m³	50 m³
Water Outlet Connection	De32	De50	De90			/					
Note	without base					*					

* Can be welded and installed on-site, and the size can be customized

- durable
- lightweight and high-strength
- energy saving and insulation
- excellent sealing performance
- significant health, green environmental protection
- energy-saving effects
- good sound insulation effect
- corrosion resistance
- good dimensional stability
- good weather resistance
- good insulation performance
- good shock absorption performance

NAME	Tank	Tank	Trough
TYPE	HS-FT250-GRP	HS-FT500-GRP	HS-FRP-4000
Material	FRP	FRP	FRP
Process	fabrication	fabrication	fabrication
Length	753 mm	1000 mm	3750 mm
Width	760 mm	1000 mm	700 mm
Height	1150 mm	1150 mm	510 mm
Effective Volume	0.25	0.5 m³	1.08 m³
Cultural Water	0.2 m³	0.37 m³	0.85 m³
Observing Window	Yes	Yes	/
Note	Includes lid, drainage assembly, and flow meter		/



HS-FT250-GRP



HS-FT500-GRP



Strip Incubation Trough

Vertical flow settler is widely used in RAS, located at the edge of tanks, to remove large particles from water in the first time, reducing the load on subsequent water treatment systems. Each tank accompanies with an independent vertical flow settler, customized design for the installation position, positioning height, etc. Generally, the designed water flow is 5-20% of the recirculating water volume of each tank.

- PE , one-time molding or fiberglass material
- smooth inner wall, no dirt accumulation
- by timely manual unplugging or automatic sewage discharge, to reduce the enrichment of ammonia nitrogen & sulfite resulted by the accumulation of aquaculture pollutants.

TYPE	HS-RDS-650-PE	HS-RDS-850-PE
Material	PE	PE
Process	Integrally molded	Integrally molded
Diameter	650 mm	850 mm
Height	1200 mm	1500 mm
Inlet Diameter	63 mm	90 mm
Outlet Diameter	75 mm	90 mm
Drain Diameter	50 mm	63 mm



Butter Crab Culture System



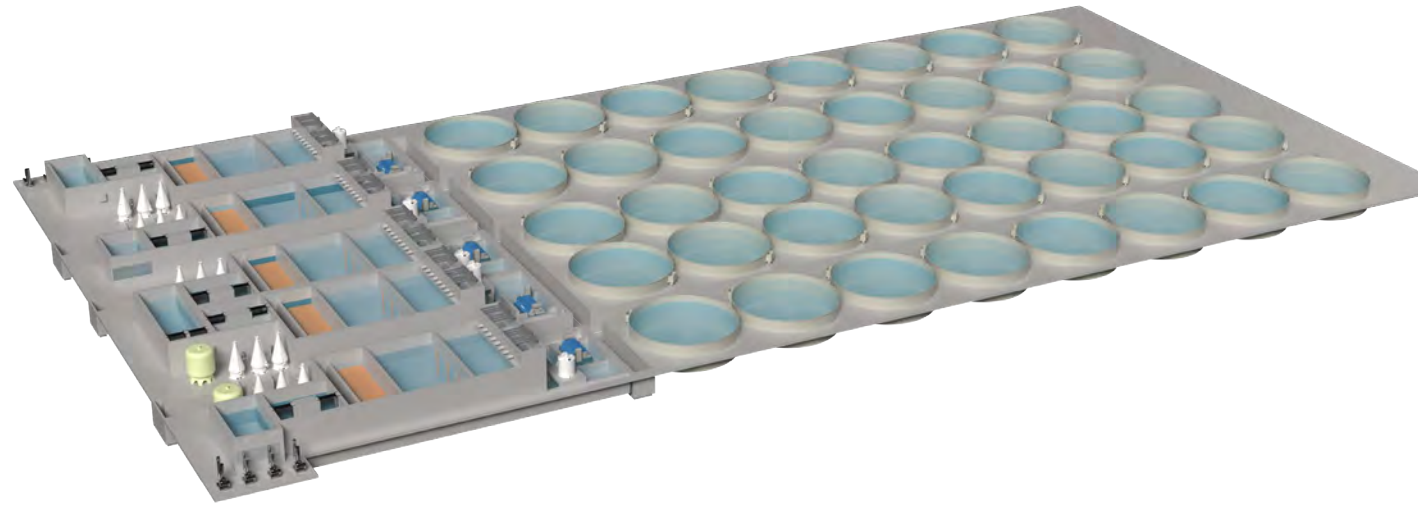
Soft-Shell Crab Culture System



Shrimp and Crab Experimental System



Zebrafish Experimental System



Salmon Land-based Industrialized Recirculating Aquaculture System

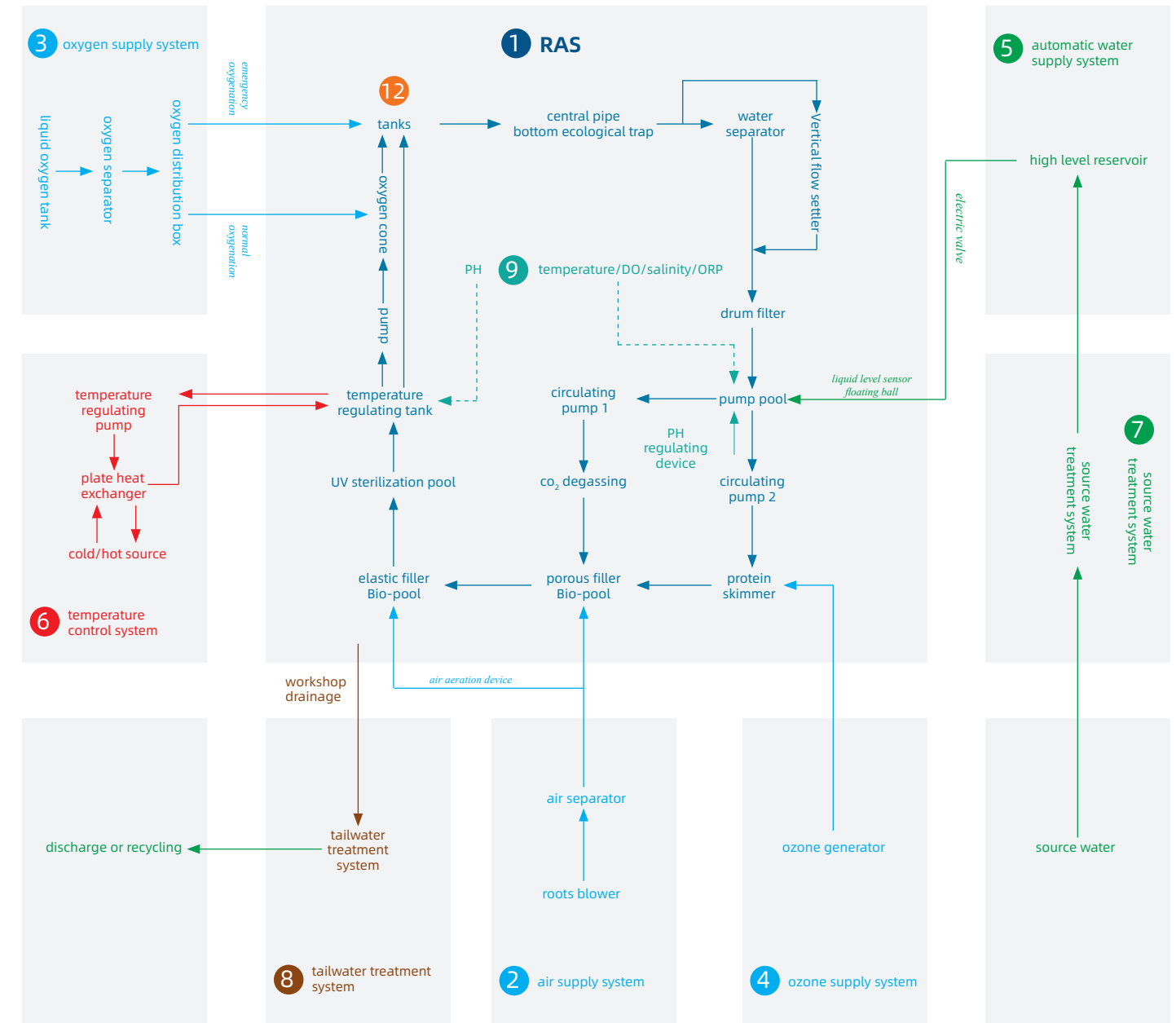
The entire system adopts a modular design, including

- source water treatment system module
- recirculating water treatment system module
- tail water treatment system module
- air supply and oxygenation system module
- ultraviolet ozone disinfection system module
- temperature regulation system module
- feeding system module

These modules can be combination according to different needs. With Internet of Things interface, each module can be monitored and controlled through a central control system.

species

Atlantic Salmon		Yellowtail	
Rainbow Trout		Bass	
Grouper		Tilapia	
Sturgeon		Flatfish	
Miniatus Grouper		Penaeus Vannamei	



- | | | | |
|------------------------|----------------------------|---------------------------------|----------------------------|
| ① RAS | ④ ozone supply system | ⑦ source water treatment system | ⑩ automatic control system |
| ② air supply system | ⑤ Auto water supply system | ⑧ tailwater treatment system | ⑪ IoT system |
| ③ oxygen supply system | ⑥ temperature control | ⑨ online water quality system | ⑫ smart feeding system |

Rainbow Trout Intensive Aquaculture Project in Hu Bei

Species: Rainbow Trout

A modern aquaculture base with an annual output of 3,000 tonnes of rainbow trout. The core production units include 12 standardized grow-out workshops, each with a yield of 250 tonnes, as well as hatchery, nursery, and processing workshops.



Industrialized Salmon Recirculating Aquaculture Project in Jiangsu

Species: Salmon

An industrialized salmon RAS project for full-cycle production from eyed eggs to adults. Phase I covers eyed eggs to fry. With 18,800 m² building area, 6,000 m³ water volume, and an annual output of 2 million 200-gram salmon fry.



Yadong Salmon Health Cultivation in Tibet

Species: Yadong Salmon

Spanning five stages from egg hatching, 2 g, 10 g, and 100 g fry, to 1 kg market-size Yadong salmon, the project annually hatches 8 million eggs, produces 1.25-1.5 million juveniles, and markets 400,000 fish (approx. 160,000 kg).



Pacific White Shrimp RAS in Zhejiang

Species: Pacific White Shrimp

Supply 73 sets of drum filters, protein skimmers, biochemical reaction and filtration systems, channel-type UV sterilizers, and other RAS equipment, plus tailwater treatment systems and equipment.



Chinese Sturgeon Nature Reserve Base
in Shanghai

Species: Chinese Sturgeon

The water treatment system for the entire project comprises microscreen filters, UV sterilizers, biofiltration systems, oxygenation systems, and their associated control systems.



Modern Digital Aquaculture Zone
Project in Nanxun, Zhejiang

Species: California Bass

Including equipment for the digital aquatic original and improved species breeding center, freshwater seed technology incubation base, 10 sets of 160 m³ and 16 sets of 185 m³ largemouth bass fingerling systems, and one Artemia hatching system.



Agricultural Industry Integration
Demonstration Zone in Shandong

Species: California Bass

40 sets of recirculating aquaculture equipment, each with a 560 m³ culture volume, one IoT system, and one tailwater treatment system.



Aquatic Seed Breeding and Modern
Aquaculture Demonstration Center in
Jiangsu

Species: Pacific white shrimp,
grouper, etc.

Total: 18 sets of recirculating aquaculture systems



Mini-RAS for Fry or Scientific Research

- mechanical fine filtration
- CO₂ removal
- ammonia nitrogen removal
- UV sterilization
- oxygen treatment
- temperature control



Aquatic Animal Platform Experimental System

- cultivation system of developmental gene mutants in amphioxus
- experimental system for zebrafish
- algae and small fish aquaculture systems
- Immune evaluation system
- vaccine evaluation and breeding system
- low temperature temporary aquaculture system
- ecological temporary aquaculture system
- marine parasite aquaculture system
- freshwater parasite aquaculture system
- shrimp and Crab virus experimental system
- seawater fish disease experimental system
- freshwater fish disease experimental system
- seawater bacteria experimental system
- freshwater bacteria experimental system



The system adopts intelligent control management system, via on-site, control center, remote internet, or handheld terminals, it monitors the system operation status and fault information in real-time. The system operation status can be modified or controlled at any time.

- | | |
|--------------------|---------------------|
| • dissolved oxygen | • oxygen saturation |
| • salinity | • water temperature |
| • PH | • ORP, etc |



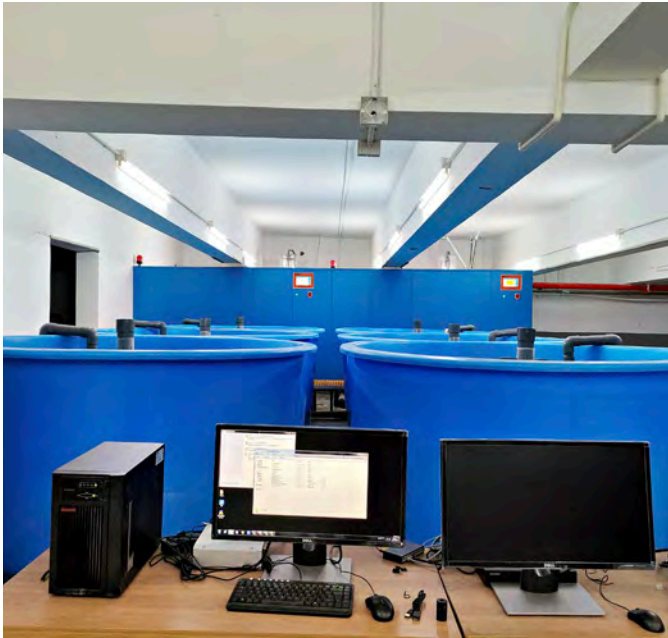
Ningbo University



Shanghai Ocean University



Dalian University of Technology



Zhejiang Ocean University



It includes water treatment system, water supply & drainage system, power supply system, air supply system and oxygen supply system, the water system includes:

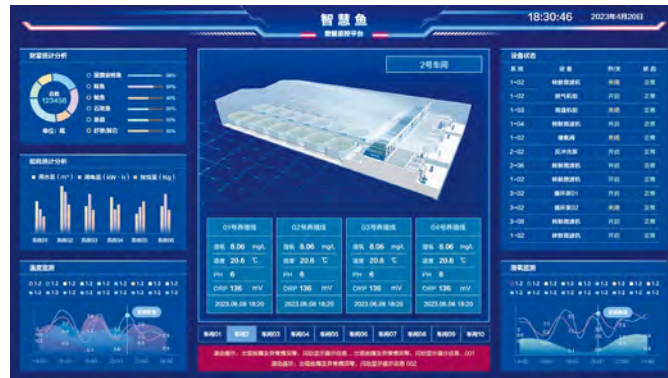
- parent fish temporary culture system
- parental induction cultivation system
- the two stages fry rearing system
- seedling experiment system
-

All above systems support the functions of at-site, control center, Internet remote viewing, operation & alarm.

Real-time Monitoring & Operating

It can real-time monitor, modify or control the system running status and faults information via the site, control center, remote internet or handheld terminal.





IoT Cloud Box APP & Smart Fish APP



SMART FISH aquaculture management system ensures users good quality and best efficiency with improved profitability. It not only can real time monitor the system running status and faults information through the site, control center, remote internet or handheld terminal, but also can modify or control the equipment running status at any time.

Real Time Data

Fishsense real time monitors all main water quality parameters, includes

- temperature
- dissolved oxygen
- oxygen saturation
- PH
- ORP
- salinity
- conductivity
- others as request

Historical Data

All water quality parameters are displayed in line or bar graph, with max.& min. values auto-marked, it is convenient to know the water quality changes in time, users can make further analysis on historical data.



The system adopts embedded design, embedded TCP / UDP protocol, and powerful microcomputer processor chip with built-in hardware watchdog. It has stable performance, compact appearance and high cost performance, which can meet the requirements of various remote data transmission.

