



# ABZYCO

[www.abzyco.com](http://www.abzyco.com)

## Introducing of company: .....

ABZYCO Company has begun its activities as producer and supplier of fisheries services from 2013 using a professional team of relevant specialists. It has taken up effective scientific and practical steps to enhance the quality and quantity of aquaculture activities in the country.

## Technical and engineering services of ABZYCO

- Designing & supervision in construction of farms for fish rearing and propagation
- Scientific designing and construction of equipment and machines for aquaculture
- Equipping traditional aquaculture farms and improving production efficiency
- Design, installation and setting up RAS, water purification and return systems
- Consulting and supervising the production of farms and aquaculture complexes
- Scientific and practical training in construction and production of aquaculture farms
- Participation in production



## Equipment and tools

### 1-Aerators

#### a) splash

Splash aerator acts as a fountain

by spraying large amounts of water which breaks

the water surface and causes more water to come into contact with the air

Oxygenation rate g/h	Consumption amps A	Vigor hp	Vigor kW	device name
3500	4-6	1	0.75	Single phase splash
5000	4-3	2	1.5	Three phase splash



## Equipment and tools .....

### b):Air jetd

A propeller air-jet is covered inside

.the tube and connected to the electric motor with a shaft

Oxygenation rate (g/h)	Aeration depth (m)	Consumption amps A	Vigor (hp)	Vigor Kw	device name
3000	2-1	8-6	2	1.5	IrjetAbzico single phase
6000	2-1	12-10	4	3	
3000	2-1	5-4	2	1.5	IrjetAbzico three phases
6000	2-1	7-5	4	3	



## Equipment and tools



### c) Blower:

An air blower sucks air and injects air into the piping system with pressure. Exhaust air is converted into tiny bubbles in the water using diffusers.



Weight kg	Vigor kw	Voltage V	A Amp		Aeration capacity M3/h	Aeration pressurekpa	device name
			three phases	single phase			
15.3	0.7	220/380	7.56	3.3	110-130	24-27	HG-750
23	1.3	220/380	10.44	4.3	170-205	25-30	HG-1100
23.5	1.8	220/380	14.16	5.9	180-215	26-31	HG-1500
31.5	2.2	220/380	8.25	4.9	210(250)	36(43)	HG-2200
36	4	220/380	14.15	8.1	240(290)	39(45)	HG-4000
80	6.6	220/380	19.23	11.1	430-516	45-50	HG-5500

## Equipment and tools .....

### d) Diffuser

Diffusers diffuse the air. In the deep aeration method for proper transfer and injection of air into water, the use of diffusers is recommended due to the production of small bubbles. The smaller the air bubbles, the higher the efficiency of oxygen transfer to the water due to the increase in contact area.

Aeration capacity (m <sup>3</sup> /h)	Diameter (cm)	Length (cm)	Diffusers type
6-4	7	60	Tubular D60
12-8	7	100	Tubular D100
21-10.5	Hose diameter 2.5	210	3-blade butterfly diffuser
40-20	Hose diameter 2.5	400	4-blade butterfly diffuser





## 2-Equipment for water filters

### A) Drum filter:

Drum filter is a very efficient and effective type of micro-filter for the treatment of suspended particles in the return water of fish farms (insoluble wastes). In the early stages of water treatment, this filter which has a solid construction, continuously filters and automatically removes particles larger than 40 microns.



Engine type	Mesh (Microns)	The length of each row (cm)	Number of rows	Body/Chassis /Material	Capacity L/S
1 hp engine and gearbox	40-60-80-100	70	1	All steel 3.4	30
1 hp engine and gearbox	40-60-80-100	70	2	All steel 3.4	60
1 hp engine and gearbox	40-60-80-100	100	2	All steel 3.4	80
1 hp engine and gearbox	40-60-80-100	70	3	All steel 3.4	100
1.5 hp engine and gearbox	40-60-80-100	100	3	All steel 3.4	200
1.5 hp engine and gearbox	40-60-80-100	100	4	All steel 3.4	250
2hp engine and gearbox	40-60-80-100	100	5	All steel 3.4	300
2 hp engine and gearbox	40-60-80-100	100	6	All steel 3.4	350

## Equipment for water filters .....

### b) Media bio-filter:

A type of piece media, suspended with a unique design that creates the most useful surface per unit volume. This level causes the growth and multiplication of effective bacteria with more efficiency in the nitrification cycle and causes the conversion of ammonia and its reduction in the return water of fish farms. Other benefits of ABZYCO media are as follow:

- Very high contact area per unit volume
- Lower cost price
- Long service life
- Easy to wash and maintain

Specifications	Description
2300 m <sup>2</sup> /m <sup>3</sup>	contact surface
100 Kg-80	Weight per cubic meter of media
15mm	Approximate diameter of each media
15mm	Approximate length of each media
Abzico	Manufacturer







## UV production unit

C) UV production unit:  
Reducing the level of microorganisms and pathogenic factors are one of the important steps in the treatment of incoming and returning water of aquaculture farms.



## Equipment for water filters

The advantages of using UV production unit are:

- Simple and cheap service and maintenance
- Reducing pathogenic factors up to 99%
- Do not use chemical agents
- Do not change the physical and chemical properties of water



ABZYCO

Regarding development of aquaculture, one of the aims of ABZYCO Company is to reduce the cost of aquaculture which is a concern for many aquaculture activists today. However, for the first time in the country (ABZYCO Company was able to replace ready-made tanks (Zincalume tanks with concrete ponds through various planning, research and experiments and this has reduced the cost of construction and production in aquaculture Cheap prefabricated Zincalume tanks, in addition to breeding aquatic species, are used in industrial activities, livestock and poultry, greenhouses, agricultural water storage, drinking water, etc ,These tanks consist of a very strong cylinder made of Zincalume with steel screws the middle layer of insulation and the inner waterproof layer made of HDPE or PVC Liner





The advantages of ABZYCO prefabricated Zinalume tanks are the following

- Ability to move and reassemble
- Very short manufacturing time (one day)
- Long-lasting anti-UV property
- High strength of steel structure due to sinus and cylindrical shape and stainless steel Zinalume and long life
- Suitable painting of the interior surface in accordance with health standards
- Less damage to the fish body in dense breeding due to the smoothness and slipperiness of the inner material, also less algae and sediments sticking to the walls
- Central output, also light, simple and cheap substructure
- Low wall size and good appearance
- Possibility of construction in large dimensions with a diameter of 3.5 to 10 meters and a height of 1.25 meters
- Very low price of structures compared to other aquaculture structures in this volume





## Equipment and tools .....

Fiberglass vans for maintaining larvae and juveniles of different aquatic species made with three layers of 450 needle fibers and one layer of 600 wicker fibers and reinforcing layers,also resistant resin and two layers of Gelcoat color and metal reinforcement straps in the van environment and fir base in the bottom of the van with fiberglasscover, having central output and an output plate and a completely polished inner surface

(cm) Size	Specifications
90-50	Useful height
30-15	Base height
120-70	Total height plus base
300-100	inner diameter
%5	Tank floor slope
90-65	Outlet pipe diameter



## Microcheap

The microchip has a special code that is designed by the laser beam at the time of manufacture. These codes could not be changed or replaced and after Subcutaneous injection by a special syringe, can be detected during the life of the fish as an accurate identification factor.

Resistance	Frequency KHz	Size mm	Description
IP64 / -20 to +50 c	134.2	8-14	Microcheap



## Microcheap Scanner

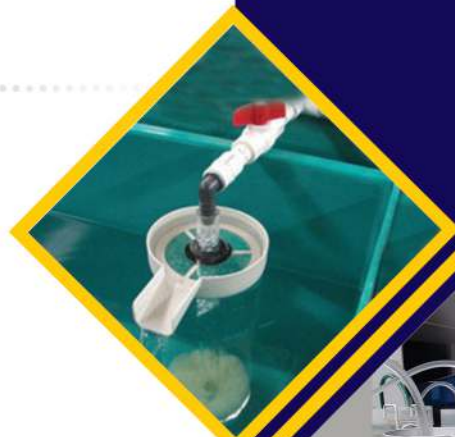
It is a device for reading microchip information. Using this device, the microchip number of each fish can be scanned and entered into the system. Then the results, can be studied and compared for each fish.



## ABZYCO incubator

It is a tool for storing fertilized aquatic eggs and  
.creating a proper flow of water for growing embryos

Fish egg capacity	Fish species
700 grams	Sturgeon
1000 grams	Salmon and carp





## ABZYCO FEEDER

The cost of food accounts for the largest share of production costs in the world's aquaculture and the most important challenge facing the development of aquaculture is the management of feeding systems.

### Advantages of ABZYCO feeder

- Feeding at regular intervals without the need for manpower
- Appropriate and uniform distribution of feed in a specific section
- Preventing possible contamination during feeding
- Aquatic habituation for the place and time of feeding
- Do not waste food
- Increasing the accuracy of feeding
- Reducing water pollution
- Increasing the accuracy of the amount of food



## 9-Providing control sensors

Sensors for controlling and checking the quantity and quality of the water

Power outage warning system via call and SMS

Water temperature information system of each pool or farm

Pool or farm water pH information system

Remote on and off system for air pumps

Remote control system and



Coldwater fish feed

Warm water fish feed

Feed for Sturgeons

Ornamental fish feed

Feed for cage culture

Shrimp feed

Larval feed

Probiotic

Artemiacycts

Solutions for Artemia enrichment




Central office:

7.11 Unit. 3.4Rd. Toseh saderat  
Bank Building. pastor ave. After  
mosalla square imam khomeini blv.  
Rasht.Iran

Tel: (+98 13) 33337920-22

 abzyco1  abzyco

 (+9813) 33337923



WWW.ABZYCO.COM