

# Atecpool Inox AISI 316

## Stainless Steel Filter

# Instruction Manual



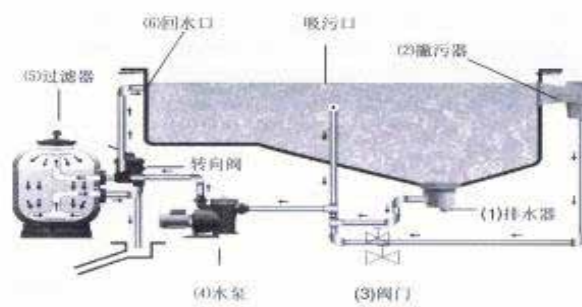
**Atecpool Zodiac Stainless Steel AISI 316 Filter**



**Atecpool Classic Stainless Steel AISI 316 Filter**



## Operation principle -----



The water will drain in the bottom of swimming pool (1) , and the surface of pool water will through (2) , and flow to the relative valve (3) to different pipe flow to the water pump (4). Water through the pump to flow to the filter (5) , and then return back to the returned port (6) back to the swimming pool. That return port and will be set in the opposite of the drain port. Filter is filtering the water to make water to recycle used as.

The filter, it is filtering water by the quartz sand inside. When water flow on the sand. Then the sand will filter it by adsorption and precipitation of suspended substances.

Once it is started filtration cycle, after a period of operation time. It is necessary to clean the filter, otherwise it will be dirty and sand material blockage, thereby preventing water go through.

Filter should be flushing when the it working pressure over  $1.3\text{kg}/\text{cm}^2$ .

The cleaning process is a reverse operation, reverse operation through the filter in the water, Drainage the dirty material into the sewer.



## Installation -----

Filters should be installed near the pool as close as possible. It's better 0.5 meters below the water surface and confirm the drainage pipe in advance.

Note: do not use iron or linen pipeline for Valve handle connection. It must be used plastic parts(UPVC) or Teflon (Teflon), pipe threaded diameter normally is 1½ inch and 2 inch sealing. You can buy the accessories from your supplier or in your local market.

In the filter around to leave enough space for the check and necessary maintenance

It should leave enough space around the filter for checking and necessary maintaining conveniently.

## Assemblage-----

Bellow method is the right way to assemble the filter;

- 1.Filters will be placed on the clean and flat ground;
- 2.Filter be fixed in the right location;
- 3.For the side mounted pool filter, it should assemble the valve handle. To sure the right connection for the valve and filter.



0.8kg/cm<sup>2</sup>-11.4PSI:  
Normal filter working pressure



1.3kg/cm<sup>2</sup>-18.5PSI:  
In pressure Need to backwash

### Backwash -----

The sand will adsorb suspended solid in water, then the suspended solid will stay in the sand. The working pressure of the filter will be increased. Until 1.3 kg/cm<sup>2</sup>, meaning the filter sand can't adsorb more suspended solid.

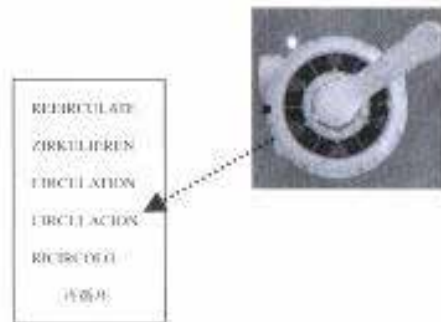
Then it would be cleaned by the following methods:

The valve handle will turn to "backwash" and then turn on the valve. Turn on the water pump and keep working for 2 minutes. The dirty substance will drain into the sewage through the backwash.



## Recirculate -----

Valve handle turn to the location as bellow picture show. The water from water pump will flow to swimming pool without the filtration by filter.



## Waste -----

If water can't drain to sewage directly because the swimming pool be equipped with the bottom drainage device. Then it can use water pump

to emptying water. It must turn the valve

handle to "waste" . When motor turn on,

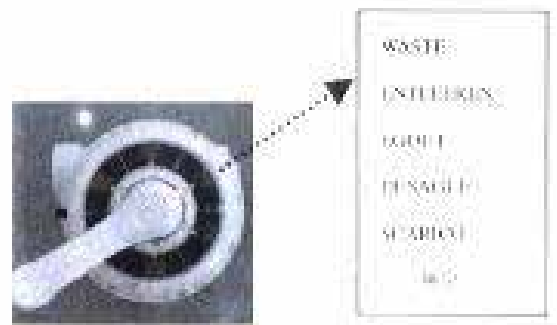
The drain valve should open completely.

Because the pump suction is large. If

used pump to pumping water, it must

keep the enough water in the hair collector and whole sewage.

Before the waste operate, it must make sure the skimmer valve and clean valve in the closed status .



## Rinse -----

Rinse is after filter flushing. The valve handle turn to the "filter" .

Filtering will be a little turbid in in a few seconds before. In order to avoid the turbid water flow back to the swimming pool. There is a: " Rinse" , the operation is as bellow.

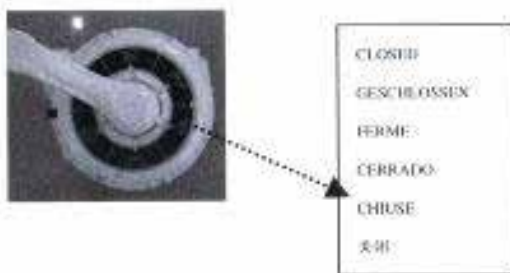


After brushing filter, turn to the valve to the "Rinse" . And keep the pump working last for 1 minute. Then turn off the pump. Turn the valve to the "filtration " .

This setting will make sure the water in filter will drain into the sewage directly.

## Closed -----

It is stopped the water from filter to pump. In the meantime, the operation is opened the hair collector.





## Start-up-----

Sand Filter need to clean itself after loading the sands. Methods as bellow:

1. Make sure the valve to “ Backwash”
2. Turn on the valve of the suction pipe of swimming pool, turn on the pump, and Run for 4 minutes.
3. Turn off the pump, and turn the valve to “Rinse” , and turn on the pump for 1 minute . Then turn off the pump , to turn the valve to the “Filter”

After the that, the filters can apply in swimming pool water recycle filtration.

Notice: It must turn off the pump when you turn of the valve position .

## Maintiance-----

Forbid to clean the filter cover with any chemical solvent. Otherwise, It will damage filter performance.

Replace the accessories which it is broken.

Please make a necessary sand backwash depending on the instruction.

And suggest to replace the sand each 2-3year just depend on your water quality.



## Protection in Winter

In order to avoid the damage in winter. The protection as bellow:

Please make a cycle for filtering and rinse as above mention.

Drain off the water inside filter.

Please open the lid of filter when the filter is not working. Keep Ventilated, and turn the valve to "winter" position.

When you need to use the filter. Please fellow the instruction.

### FAQ-----

FAQ	Reasons	Solution
Filter flow rate is small, and the Suction inlet water rate is small	Hair collector may be blocked	Clean the hair collector
	Pump reverse	Depend on the hair collector to check the motor steering
	Suction Inlet pipe may be blocked	Clean the suction pipe
The working pressure increase quickly when it is filtering	Water (it is turbid)	reduce the pH value by reagent
	Lack of chlorine (water is green)	Increase chlorine
Pressure gauge Intense fluctuation.	Air in the water pump	Check leaking of hair collector and suction pipe
	Pump is in semi absorbing state.	Check the inlet pipe status





## Security warning

Forbid to turn on the equipment when it is no water.

Prohibit Child or adult sitting on the equipment when handle the filter or the valve.

Don't make the filter with water pump connect directly without the pipes.

Otherwise it will make the pressure of filter increasing quickly.

And over the filter max working pressure.

Forbid to clean the filter cover with any chemical solvent. Otherwise, It will damage filter performance.

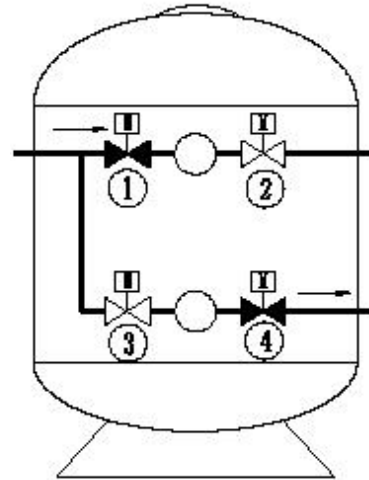
It is not necessary to tight the nut too much after all the equipment connected. Avoid to destroy some PVC accessories .



## Multitway Valve set and pipeline

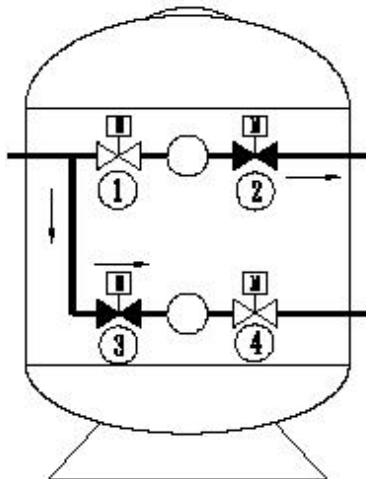
4-Ports Valve model

Normal Filtration



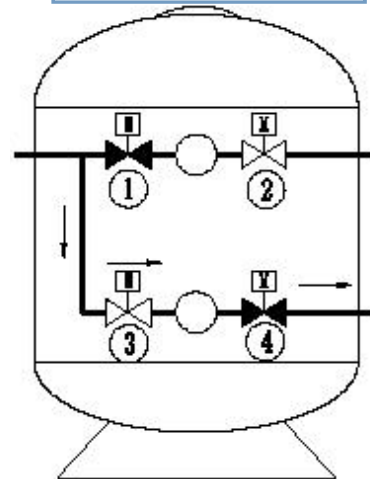
1 & 4 Open , 2 & 3 Closed

Backwash



2 & 3 Open , 1 & 4 Closed

Recirculate

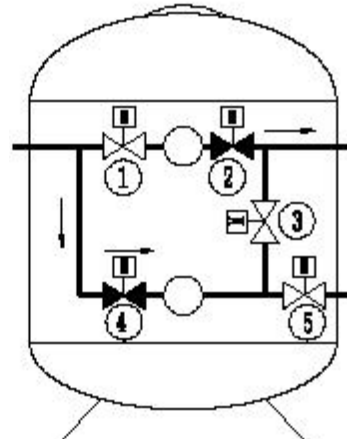
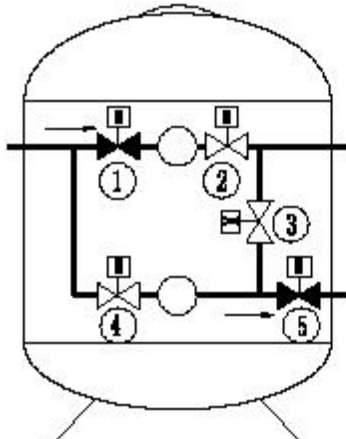


3 & 4 Open , 1 & 2 Closed

5-Ports Valve model

Normal Filtration

Backwash

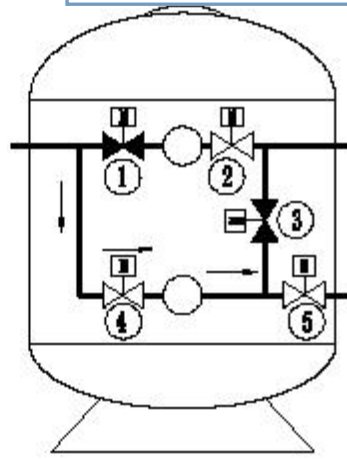
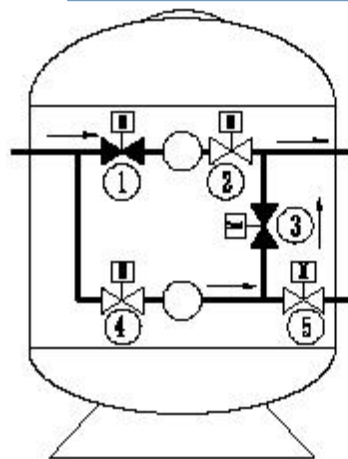


1 & 5 Open , 2 /3 /4Closed

2 & 4 Open , 1/3 /5Closed

Flushing

Recirculate

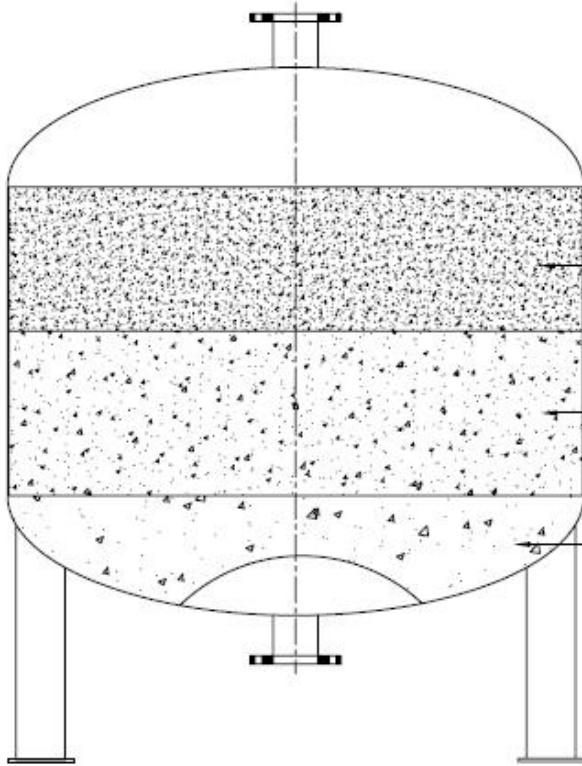


1 & 3 Open , 2/4 /5Closed

4 & 5 Open , 1/2 /3Closed



Sand in Filter structure (Top mounted and Side mounted is the same structure ) :



The Coarse sand of bottom must be cover the bottom water distributor over 100mm.

The sand volume should be 70%-85% of the sand volume.

Side mounted sand filter sand volume can't be cover the top water distributor.