

applications



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

## **Filternox® Applications**

Irrigation  
Well water  
Surface water  
Power generation  
Cooling water and HVAC  
Steel industry and nozzle protection  
Sea water  
Fish farm  
Ballast water  
Water recycle & reuse  
Pulp & paper industry  
Other applications



## irrigation

**Filternox®** Automatic Self-Cleaning Filters protect irrigation and fertilizing systems from all kind of particles and ensure years of continued operation without the clogging of drippers, sprinklers, etc.

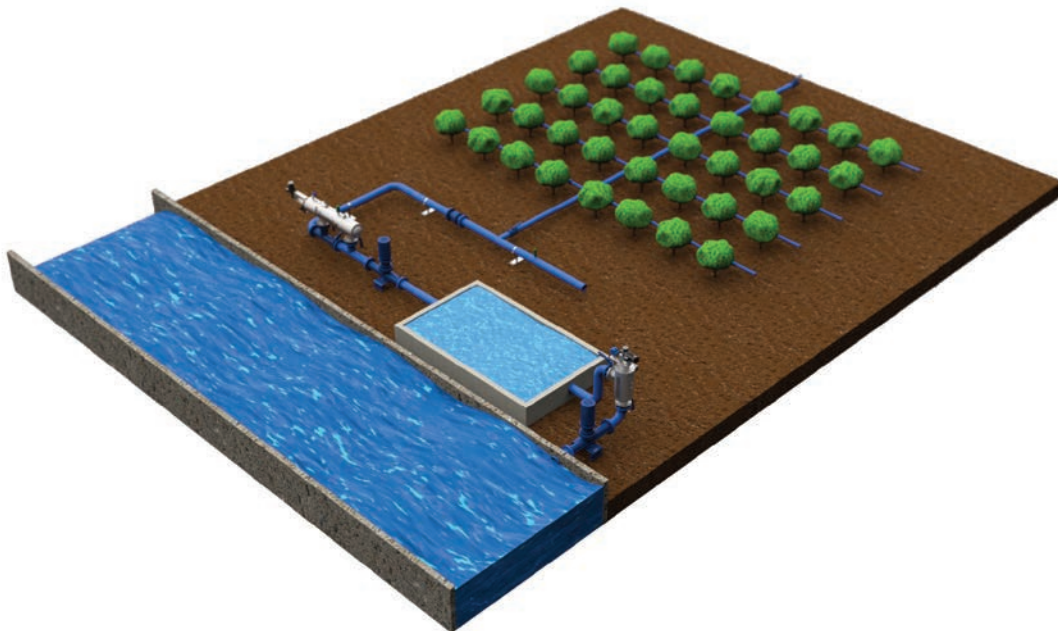
**Filternox®** is the perfect solution for golf courses, agriculture, gardening and various other applications wherever water economy is needed.

The reduction of available fresh water sources has become a major problem in recent years. The consequent reduction in water volume has also increased the concentration of contaminants and pollution. Because of this problem, modern irrigation systems, utilizing either underground or surface water require more efficient filtration systems.

**Filternox®** Automatic Self-Cleaning Filters are equipped with a special hydraulic control system which triggers the back flush without requiring any extra energy other than the pressure of the water. With this hydraulic control system during the back flush there is no any interruption of the flow.

**Filternox®** offers innovative filter models, double stage automatic self-cleaning models to be implemented directly to the surface water prior to the irrigation system with a small investment.

## application model



For further information about **Irrigation Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

[www.filternox.com/#filtration](http://www.filternox.com/#filtration)





Filtration of well water is becoming one of the most important forms of filtration in the environmentally changing world.

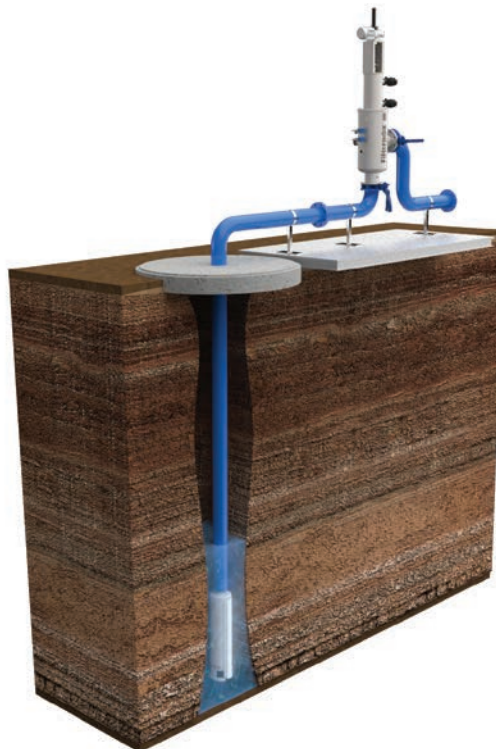
## well water

High carbon emissions along with the increasing greenhouse effect have dramatically reduced underground water supplies. This in turn, increases the amount of both organic and inorganic pollutant particles in the well water that is pumped through pipelines and other systems, creating the need of filtration for well water.

Along with this, fluctuations in weather patterns have limited the availability of surface water in certain locations, increasing the demand for supplies of well water. As a result, the filtration of well water is becoming a very important challenge in today's environment.

**Filternox®** provides an effective filtration of well water while minimizing the operational costs of many applications.

## application model



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For further information about **Well Water Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

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## surface water, UF, RO

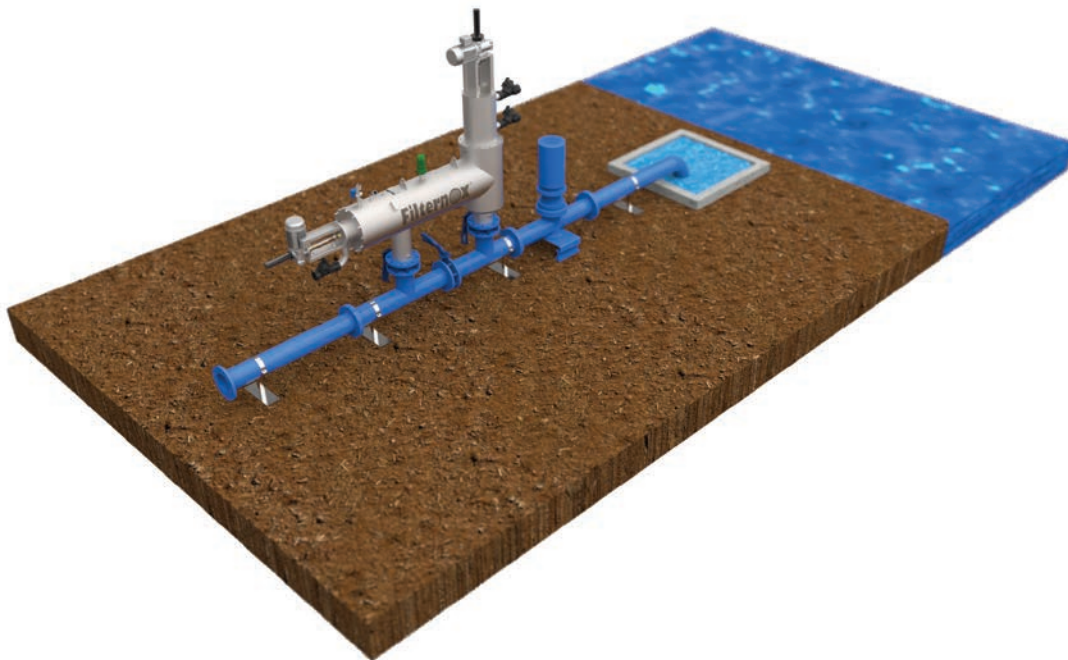
As well as sea water, surface water also contains a wide variety and sizes of contaminant particles. To effectively meet this challenge, filtration units require both coarse and fine automatic filtration. Sediment build up and the consequent loss of efficiency is one of the main problems in heat exchangers, nozzles, ion exchange systems, seals, membranes and other sensitive equipment.

To prevent unscheduled and unforeseen system shut downs for cleaning, the installation of **Filternox**® Automatic Self Cleaning Filters will remove the suspended particles from the incoming water supply, thus providing uninterrupted working conditions.

The use of **Filternox**® Automatic Self Cleaning Filters helps to maintain optimum pumping conditions through the prevention of pressure drop caused by sediment build up.

**Filternox**® recently designed an enhanced new filter model especially for surface water treatment applications.

### application model



For further information about **Surface Water, UF, RO Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

[www.filternox.com/#filtration](http://www.filternox.com/#filtration)





## power generation

A decrease in efficiency due to the accumulation of particles is one of the main problems for heat exchangers. Even a minor layer of scale causes a dramatic decrease in heat transfer which can result in the unforeseen shut down of the system for cleaning purpose.

**Filternox®** Automatic Self-Cleaning Filters, by removing all suspended solids and particles, provide uninterrupted working conditions for heat exchangers.

As well as protecting heat exchangers, **Filternox®** Automatic Self-Cleaning Filters will also provide protection for nozzles, ion exchangers, seals, membranes and other sensitive equipment installed in your system.

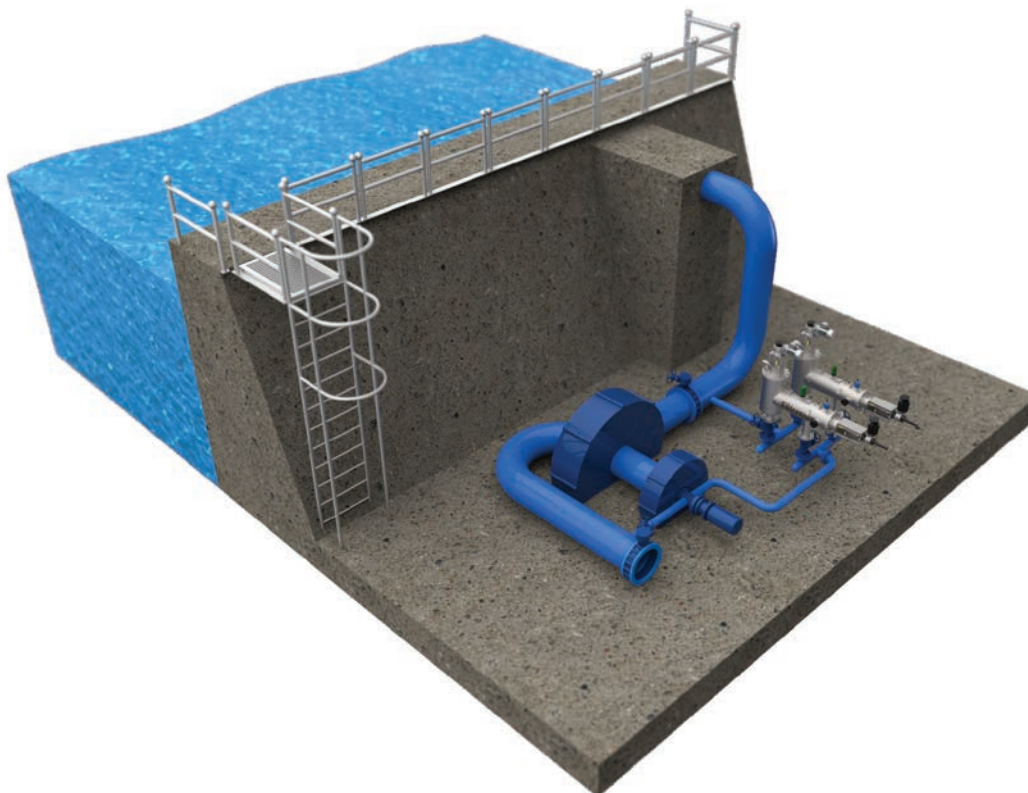
The use of **Filternox®** Automatic Self-Cleaning Filters helps to maintain optimum pumping conditions through the prevention of pressure drop caused by sediment build up.

### application model

The continuous operation of the turbines has vital importance for the hydroelectric power plants.

Dam water used for the cooling of the turbine bearing and the sealing equipment of the hydroelectric power plants, contains different sizes of particles as all the surface waters creating fouling in the pipes and heat exchanging surfaces, and damaging the turbine bearings and seals.

**Filternox®** provides a solution to this filtration problem with its two stage Automatic Self Cleaning filtration models which offer a convenient and cost effective way to address filtration challenges in hydroelectric power plants, extending the life of bearings and seals equipment and reducing maintenance and operational costs.



For further information about **Power Generation Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

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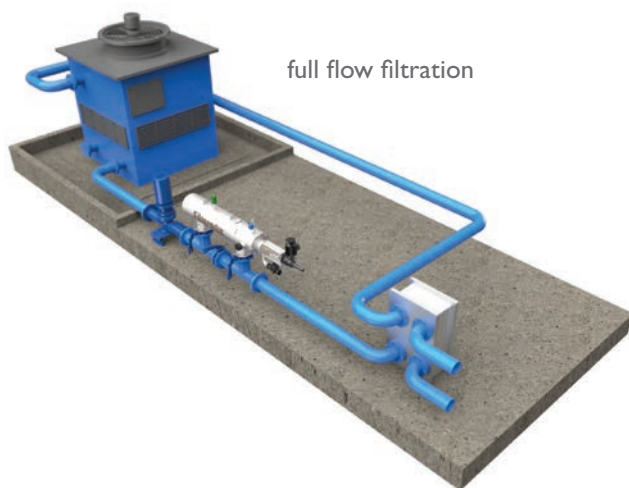
## cooling water and HVAC

Cooling towers act in a similar way to air scrubbers by collecting all particles from the surrounding environment into the cooling water. These particles, such as dust, sand, algae and pollen attach easily to the hot surfaces during the circulation inside cooling system, and cause clogging, fouling and reduction in efficiency of the process, which results in the shut down of the system for cleaning. Efficient filtration is very important for maintaining the continuous operation of the cooling system.

By using **Filternox®** Automatic Self-Cleaning Filters in the cooling system, either as sidestream or full flow applications, you will avoid all above mentioned problems.

By filtering the cooling water, you will also decrease chemical material consumption for water conditioning (e.g. chlorine, biocides, etc.)

### application model



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For further information about **Cooling Water and HVAC Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

[www.filternox.com/#filtration](http://www.filternox.com/#filtration)





## steel industry and nozzle protection

The quality of cooling water is crucial for the manufacturing of high quality steel. If cooling water contains particles which clog the spray nozzles, this will lower the quality of the end product. This may also lead to serious losses in production due to the unscheduled shut down of production lines.

**Filternox®** Automatic Self-Cleaning Filters, by the removal of particles contained in the cooling water, provide a perfect solution to prevent clogging of the nozzles and to maintain continuous production.

In addition, **Filternox®** special “high energy back-flushing system” avoids screen blockages from oil and grease in the cooling water of the steel industry.

### application model



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For further information about **Steel Industry and Nozzle Protection Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

[www.filternox.com/#filtration](http://www.filternox.com/#filtration)







## sea water

**Filternox®** offers special models for different type of sea water applications.

KFH series have both coarse and fine filtration stages in one body and both featuring an independent automatic self-cleaning system.

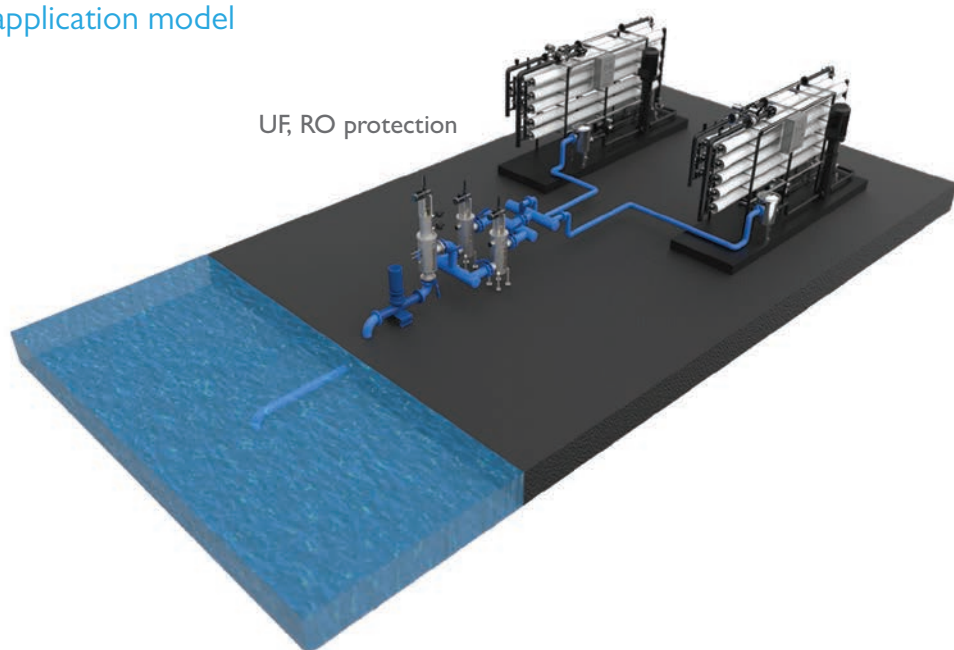
SPT-WBV-MR models provide high performance with its unique design having double effect cleaning system on one single screen.

The size of particles contained in sea water varies widely. Therefore sea water filtration needs more care than other fluids. A very special filtration solution is required to remove particles from 10 mm at one end of the spectrum down to 50 microns particles at the other. This kind of water needs to be filtered in order to remove coarse and fine particles at the same time.

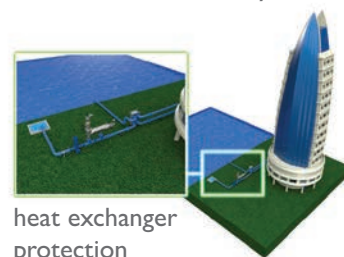
**Filternox®** Automatic Self-Cleaning Filters are used for sea water filtration on oil platforms, the protection of heat exchangers, ultra filtration and Reverse Osmosis units as well as recreational usages.

Another important consideration in the filtration of sea water is the corrosive effect it has. **Filternox®** offers the best permanent solution with a rubber coating over its stainless steel body.

## application model



Sea water use for utility



heat exchanger protection

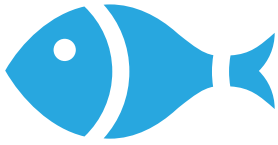


oil platform

For further information about **Sea Water Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

[www.filternox.com/#filtration](http://www.filternox.com/#filtration)





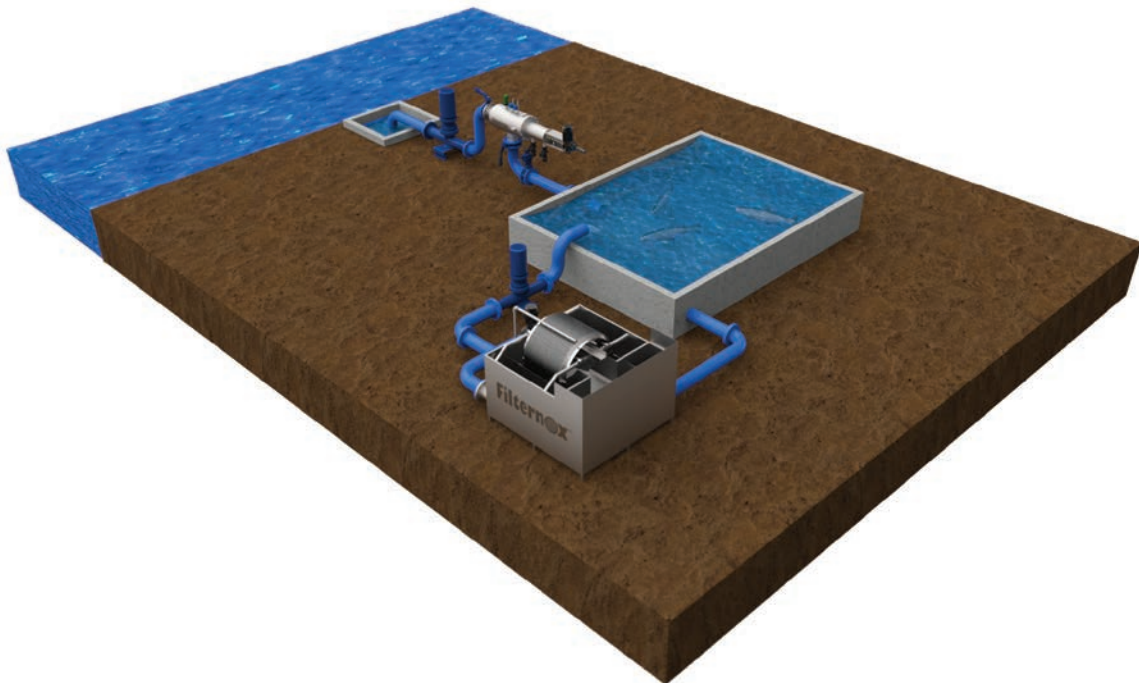
## fish farm

Fish farms use either sea water or fresh water as a source of water for fish production. This water must be filtered to ensure optimum conditions for fish production.

The make-up water to feed the basins have to be filtered. In addition to that filtration, the water inside the tanks and basins should also be continuously filtered by side stream to maintain the necessary sanitary water conditions.

The complete stainless steel structure of **Filternox®** Automatic Self-Cleaning Filters provide the most convenient and hygienic filtration for the removal of suspended solids and particles for fish farm water.

## application model



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For further information about **Fish Farm Applications** please visit our website.  
You can use the QR Code on the right to access online information about the application.

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## ballast water

New regulations are required for almost all type of vessels to implement filtration systems of maximum 50 microns followed by a UV system for disinfection of ballast water.

**Filternox®** engineers recently developed a new model designed specifically for this application.

As the ballast system requires high flows, and to meet the 50 micron filtration requirement, filtration surface areas have to be large. The technology used in **Filternox®** designed for ballast water filtration applications provide the optimum surface area for a successful result.

**Filternox®** also offers models that combine two stage filtration within one unit with automatic self-cleaning of the coarse screen structure integrated into the fine screen body, making it ideal for the filtration of the ballast water.

## application model



For further information about **Ballast Water Applications** please visit our website.  
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One of the high water usage processes is manufacturing of paper. The daily amount of the water consumption for the Pulp & Paper Industry is high as well as some of other industries.

## pulp & paper industry

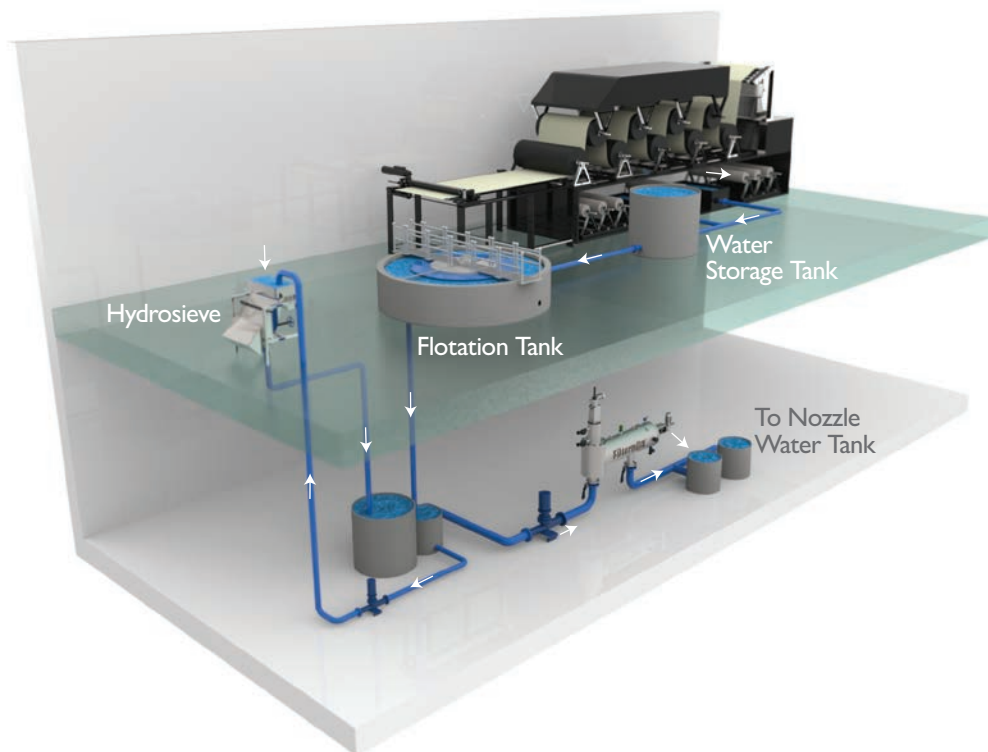
**Filternox®** Automatic Self Cleaning Filters are used for the filtration of the water from untreated sources, such as cooling tower, well, etc. that goes to the process directly. Thus, the filtered water are useful to protect the process and improving the plant efficiency in Pulp & Paper industries.

Reusing the process water is taking a significant part of the water gaining. Having **Filternox®** Automatic Self Cleaning Filters helps to recycle & reuse the process water. The filters can be placed either some points in the process or into the waste water treatment plant of the paper mills for reusing the water.

Another typical application area is filtration of the used water which comes from paper machine sieve and goes to the spray nozzles. There are many spraying applications with special nozzles which are shower, trim, etc., and **Filternox®** Automatic Self Cleaning Filters are used to protect the nozzles for all the spraying needs of the paper mills.

**Filternox®** SPT-WBV-MR & KFH-MR series are the most common type filters for reaching the demands of the reused water quality.

### application model



For further information about **Pulp & Paper Industry Applications** please visit our website. You can use the QR Code on the right to access online information about the application.

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the solution in filtration

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**irrigation  
applications**



**River Water Filtration for Drip Irrigation**



**River Water Filtration for Drip Irrigation**



**Well Water Filtration for Drip Irrigation**



**Well Water Filtration for Drip Irrigation**



**Water Filtration for Drip Irrigation**



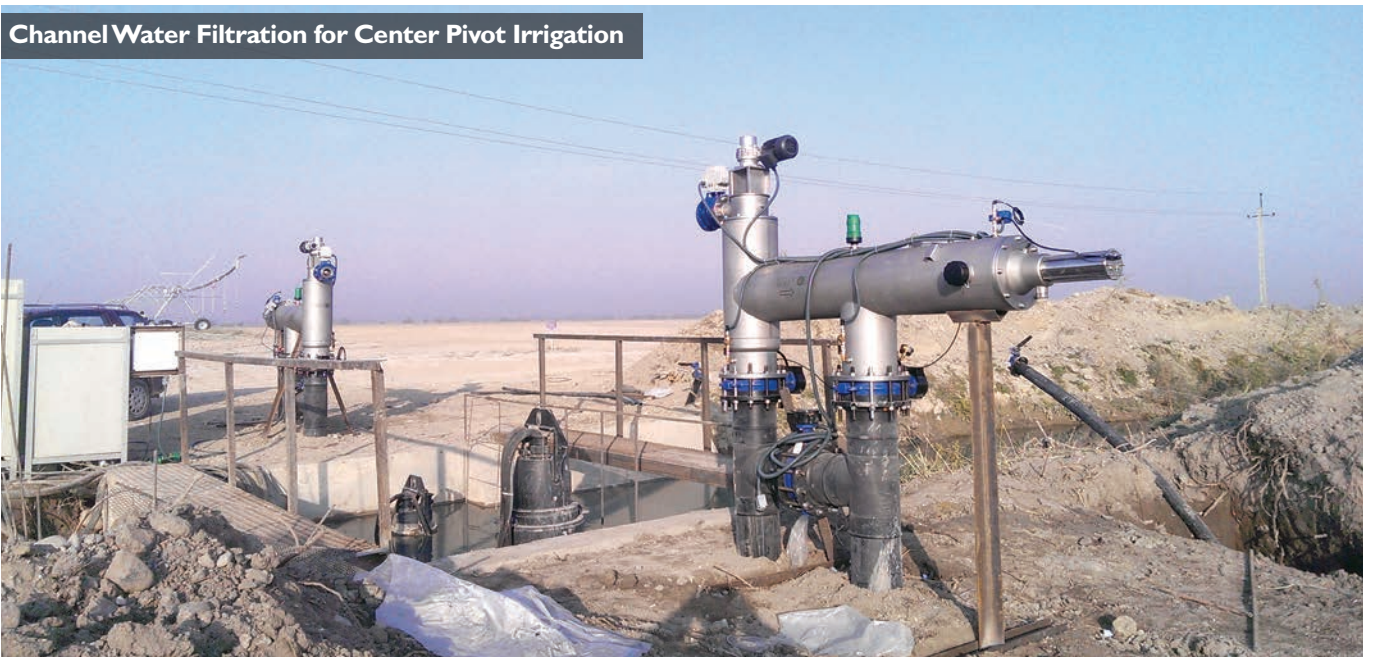
**Water Filtration for Drip Irrigation**



**Water Filtration for Drip Irrigation**



**Channel Water Filtration for Center Pivot Irrigation**





**Water Filtration for Agricultural Irrigation**



**Water Filtration for Golf Course Irrigation**



**Water Filtration for Drip Irrigation**



**Water Filtration for Agricultural Irrigation**





Water Filtration for Drip Irrigation



Water Filtration for Drip Irrigation



Water Filtration for Drip Irrigation



Water Filtration for Agricultural Irrigation





**Water Filtration for Agricultural Irrigation**



**Water Filtration for Agricultural Irrigation**



**Well Water Filtration for Irrigation**



**F1 Course Filter Station**



**Channel Water Filtration for Drip Irrigation**



Water Filtration for Agricultural Irrigation



Water Filtration for Agricultural Irrigation



Water Filtration for Agricultural Irrigation



Water Filtration for Agricultural Irrigation



**Water Filtration for Agricultural Irrigation**



**Dam Water Filtration for Agricultural Irrigation**



**Two Stage Filtration of River Water for Drip Irrigation**





Dam Water Filtration for Agricultural Irrigation



Water Filtration for Agricultural Irrigation



Water Filtration for Drip Irrigation



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**surface water, UF, RO  
applications**

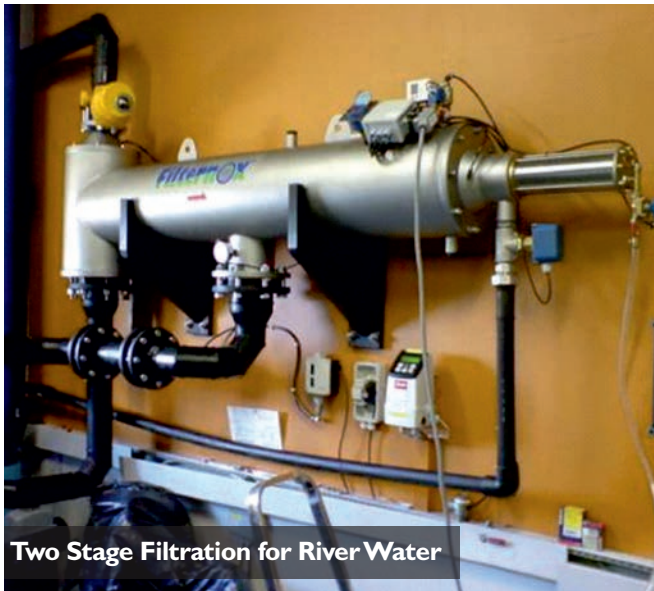




Surface Water Filtration Before UF



Two Stage Filtration for River Water Application



Two Stage Filtration for River Water



Glass Industry, Water Filtration Before RO



Surface Water Filtration

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**power generation  
applications**



**River Water Filtration for Turbine & Seal Equipment Protection**



**Water Filtration for Turbine and Seal Equipment Protection**



**Water Filtration for Turbine and Seal Equipment Protection**



**River Water Filtration for Turbine & Seal Equipment Protection**



**Turbine and Seal Equipment Protection**



Turbine and Seal Equipment Protection



Turbine and Seal Equipment Protection



Turbine and Seal Equipment Protection









**Turbine and Seal Equipment Protection**



**Turbine and Seal Equipment Protection**



**Turbine and Seal Equipment Protection**



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**cooling water & HVAC  
applications**



Cooling Tower Side Stream Filtration



Cooling Tower Side Stream Filtration



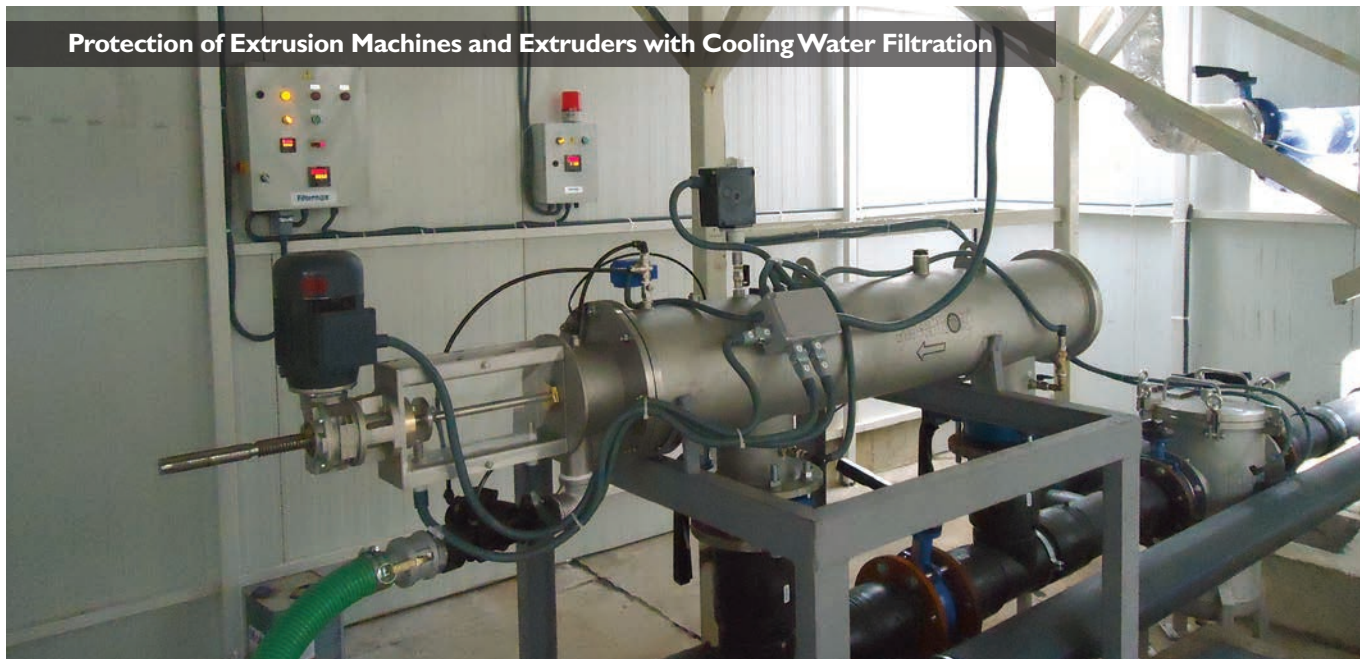
Cooling Tower Side Stream Filtration



Cooling Tower Side Stream Filtration



**Protection of Extrusion Machines and Extruders with Cooling Water Filtration**



**Cooling Water Filtration For Welding Robots**



**Protection of Extrusion Machines and Extruders with Cooling Water Filtration**



**Cooling Tower Side Stream Filtration**







**Plastic Industry, Cooling Water Filtration for Extrusion & Extruder**



**Cooling Tower Side Stream Filtration**



**Protection of Extrusion Machines and Extruders with Cooling Water Filtration**



**Cooling Tower Side Stream Filtration**





**Glass Industry, Cooling Water Filtration**



**Plastic Industry, Cooling Water Filtration**



**Cooling Water Filtration**



**Cooling Tower Side Stream Filtration**



**Glass Industry, Cooling Water Filtration**





**Cooling Tower Side Stream Filtration**



**Cooling Tower Side Stream Filtration**



**Protection of Extrusion Machines and Extruders with Cooling Water Filtration**



**Cooling Tower Side Stream Filtration**





**Glass Industry, Cooling Water Filtration**



**Cooling Water Filtration**



**Cooling Water Side Stream Filtration**



**Pipe Manufacturing Company, Cooling Water Filtration**





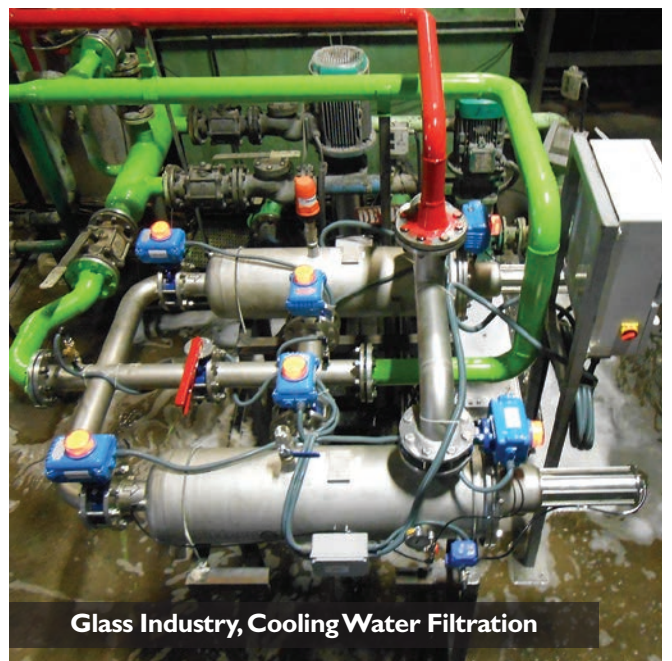
**Cooling Tower Side Stream Filtration**



**Dairy Industry, Cooling Tower Filtration**



**Steel Industry, Cooling Tower Filtration**



**Glass Industry, Cooling Water Filtration**



**Pipe Manufacturing Company, Cooling Water Filtration**





Protection of Extrusion Machines and Extruders with Cooling Water Filtration



Protection of Extrusion Machines and Extruders with Cooling Water Filtration



Protection of Extrusion Machines and Extruders with Cooling Water Filtration



Protection of Extrusion Machines and Extruders with Cooling Water Filtration





Plastic Industry, Cooling Water Filtration for Extrusion & Extruder



Mold Cooling Water Filtration



Plastic Industry, Cooling Water Filtration for Extrusion & Extruder



Cooling Tower Side Stream Filtration

the solution in filtration

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**steel industry & nozzle  
protection applications**



**Steel Industry, Cooling Water Filtration**



**Steel Industry, Nozzle Protection Filtration**



**Steel Industry, Nozzle Protection Filtration**



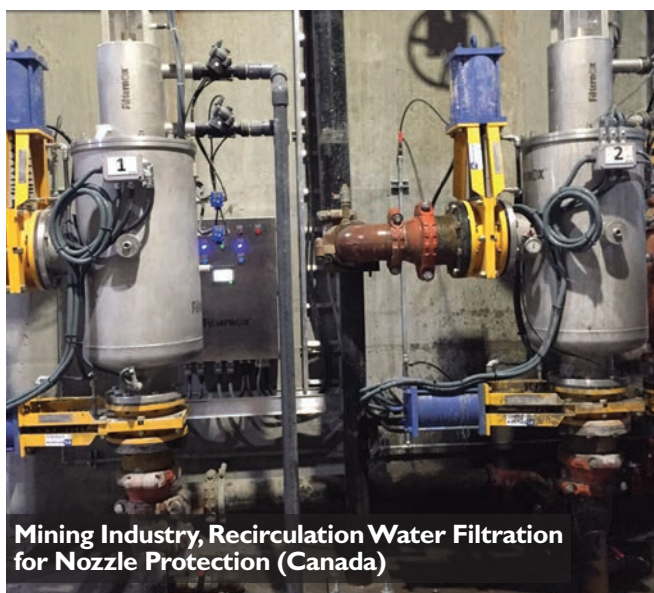
**Steel Industry, Cooling Water Filtration**







**Nozzle Protection Filtration**



**Mining Industry, Recirculation Water Filtration for Nozzle Protection (Canada)**



**Steel Industry, Nozzle Protection Filtration**



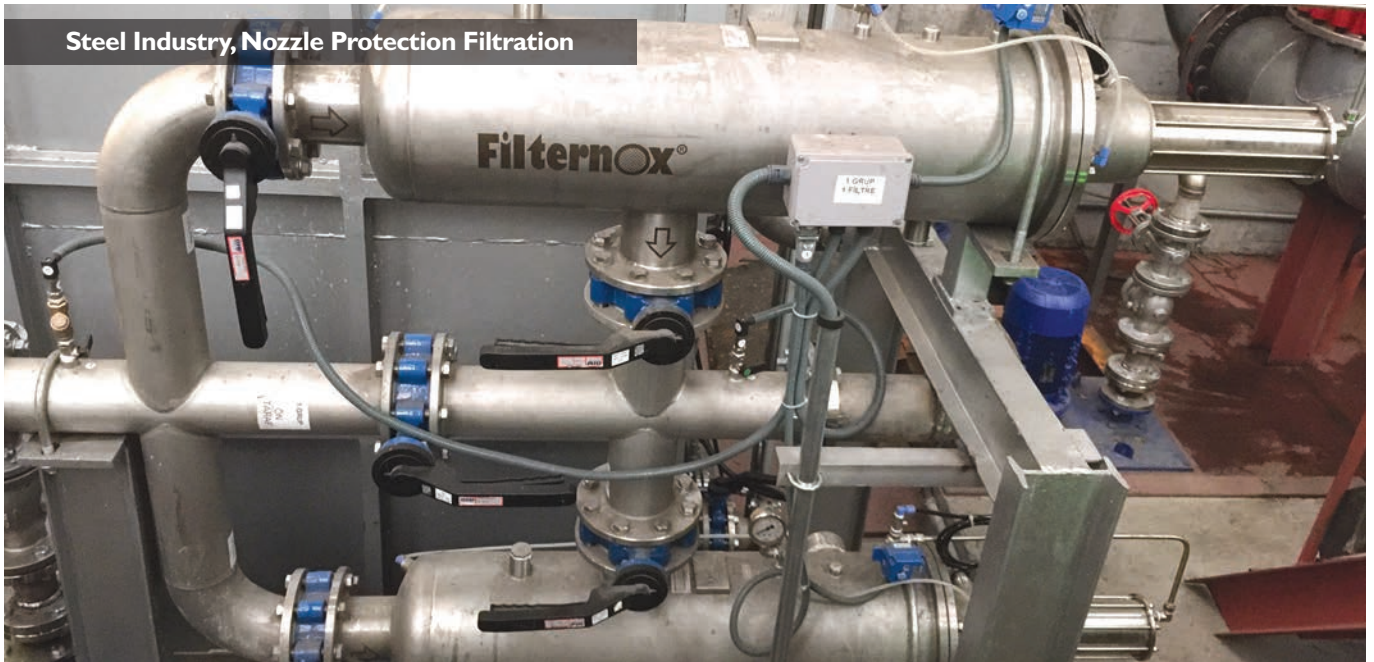
**Steel Industry, Nozzle Protection Filtration**



**Steel Industry, Cooling Water Filtration**



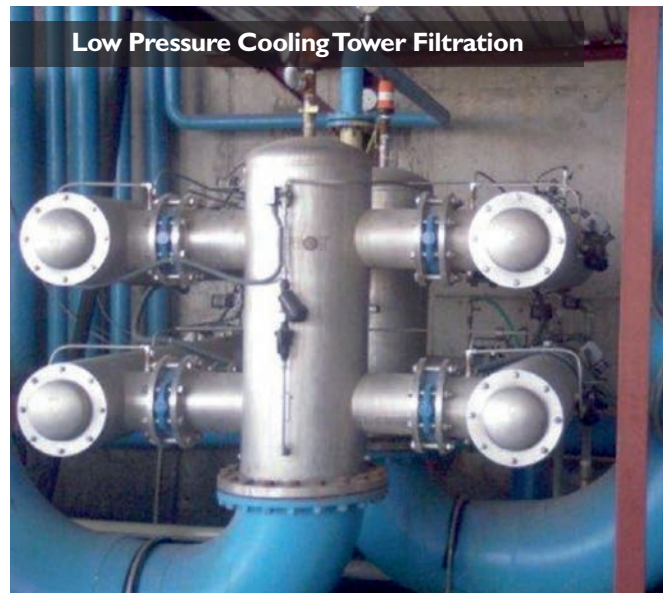
**Steel Industry, Nozzle Protection Filtration**



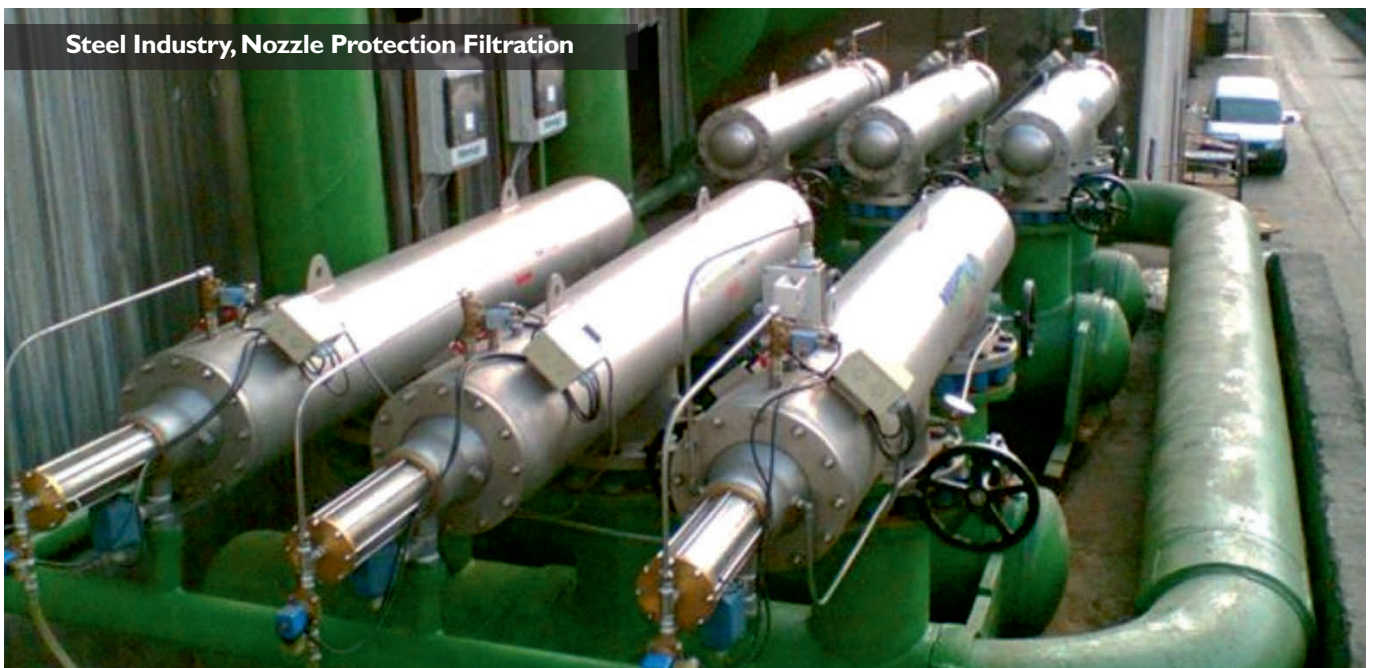
**Rolling Mill Water Filtration**



**Low Pressure Cooling Tower Filtration**



**Steel Industry, Nozzle Protection Filtration**



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**sea water  
applications**



Sea Water Filtration Prior RO



Two Stage Filtration of Sea Water Before RO and Desalination



Two Stage Filtration of Sea Water Before Heat Exchangers





**Sea Water Filtration Before Heat Exchangers**



**Sea Water Filtration Before UF**



**Two Stage Filtration of Sea Water Before RO and Desalination**



**Two Stage Filtration of Sea Water Before RO and Desalination**



**Sea Water Filtration Before Heat Exchanger**







the solution in filtration

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**pulp & paper industry  
applications**



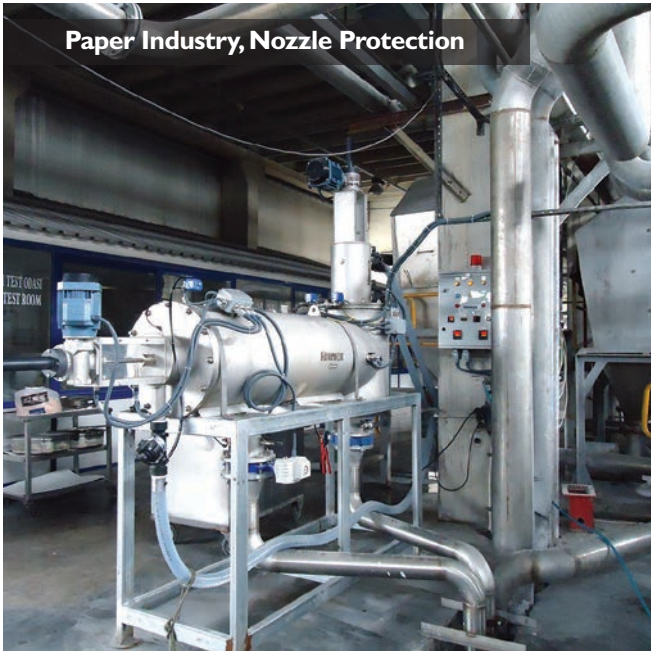
**Process Water Filtration**



**Paper Industry, Process Water Filtration for Nozzle Protection**



**Paper Industry, Nozzle Protection**



**Paper Mill Factory, Prefiltration of River Water**



**Paper Industry, Process Water Filtration for Nozzle Protection**



**Paper Industry, WWT Effluent Water Filtration**





Paper Industry Recycle Filtration



Pulp&Paper Mill Factory, River Water Filtration



Paper Industry, Nozzle Protection





the solution in filtration

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**other  
applications**

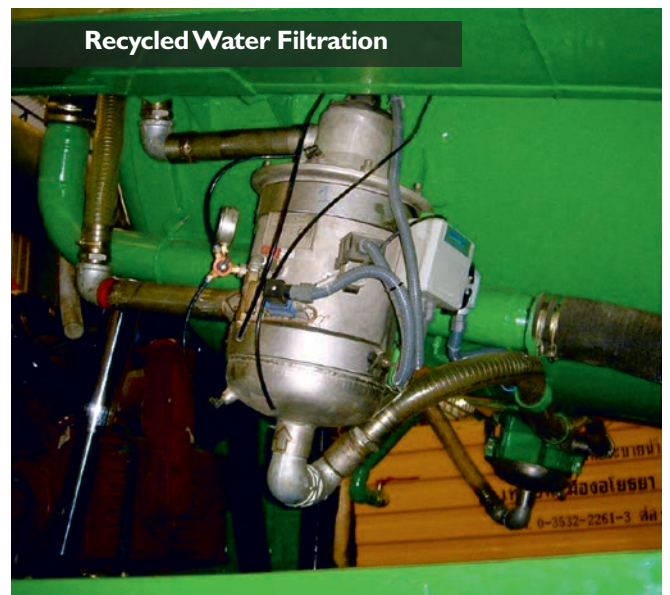




Waste Water Treatment Plant Filtration



Treated Waste Water Filter Station

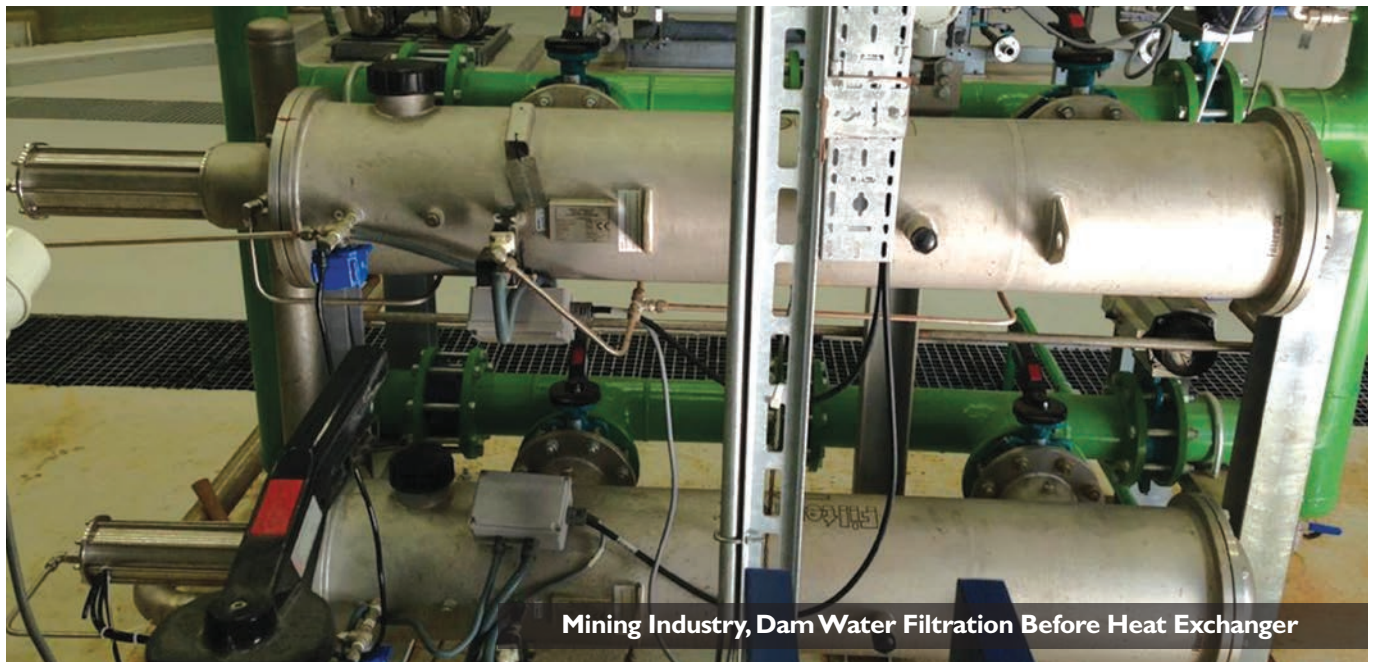


Recycled Water Filtration



Beverage Industry, Washing & Recirculation Filtration





Mining Industry, Dam Water Filtration Before Heat Exchanger



Raw Water Filtration for Fish Farm



Log Rinsing Circulation Water Filtration

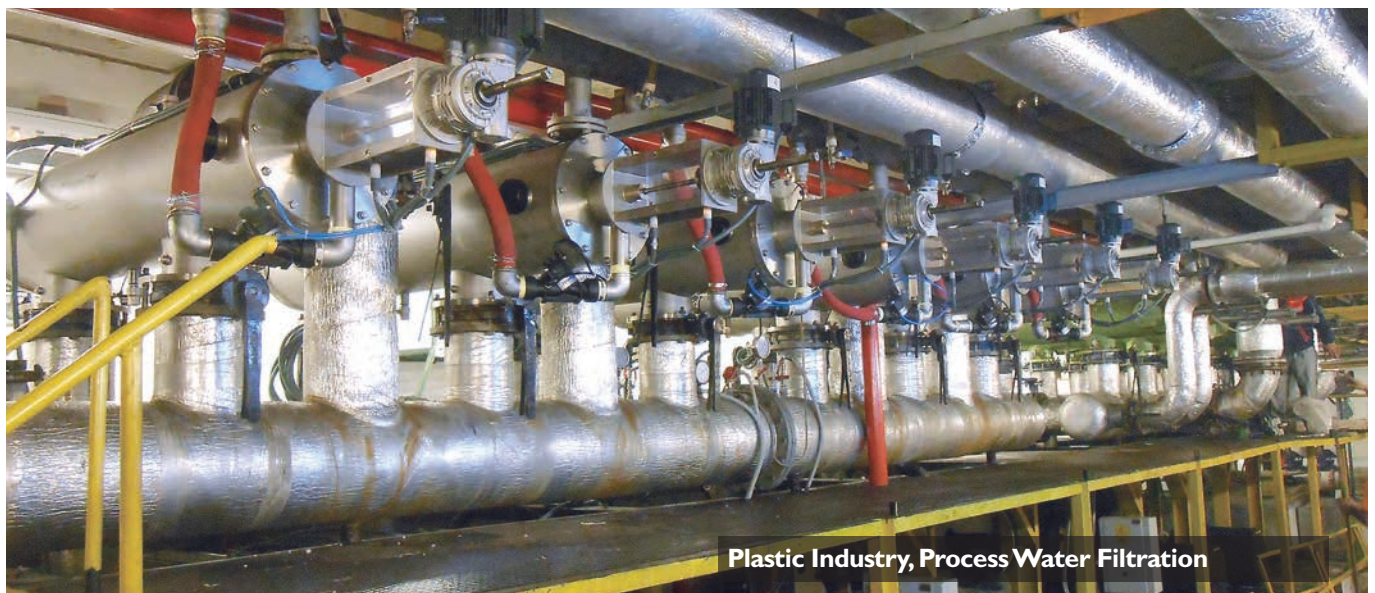


Treated Waste Water Filtration Before RO

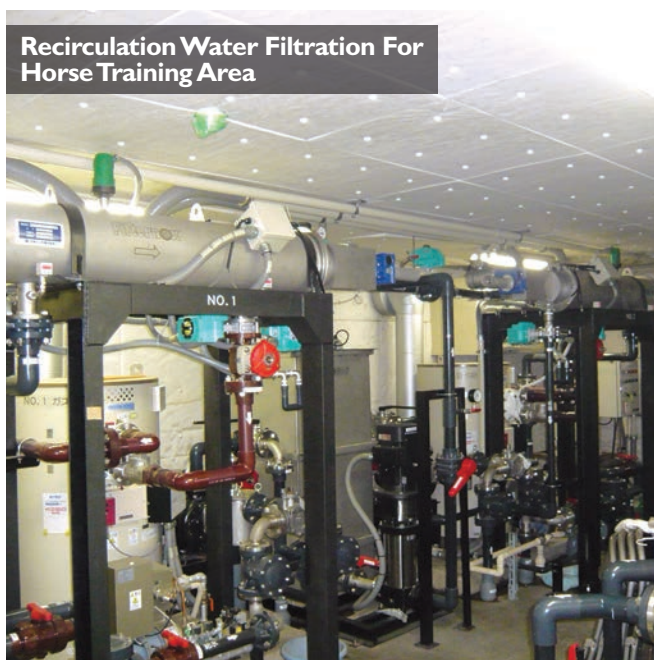




**Food Industry, Filtration for Apple Grading Process**



**Plastic Industry, Process Water Filtration**



**Recirculation Water Filtration For Horse Training Area**



**Other Applications**





Other Applications



Other Applications



Textile Industry, Process Water Filtration



Other Applications



Other Applications









Other Applications



Other Applications



Other Applications



Treated Waste Water Filtration



Prefiltration of WWTP Inlet Water









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