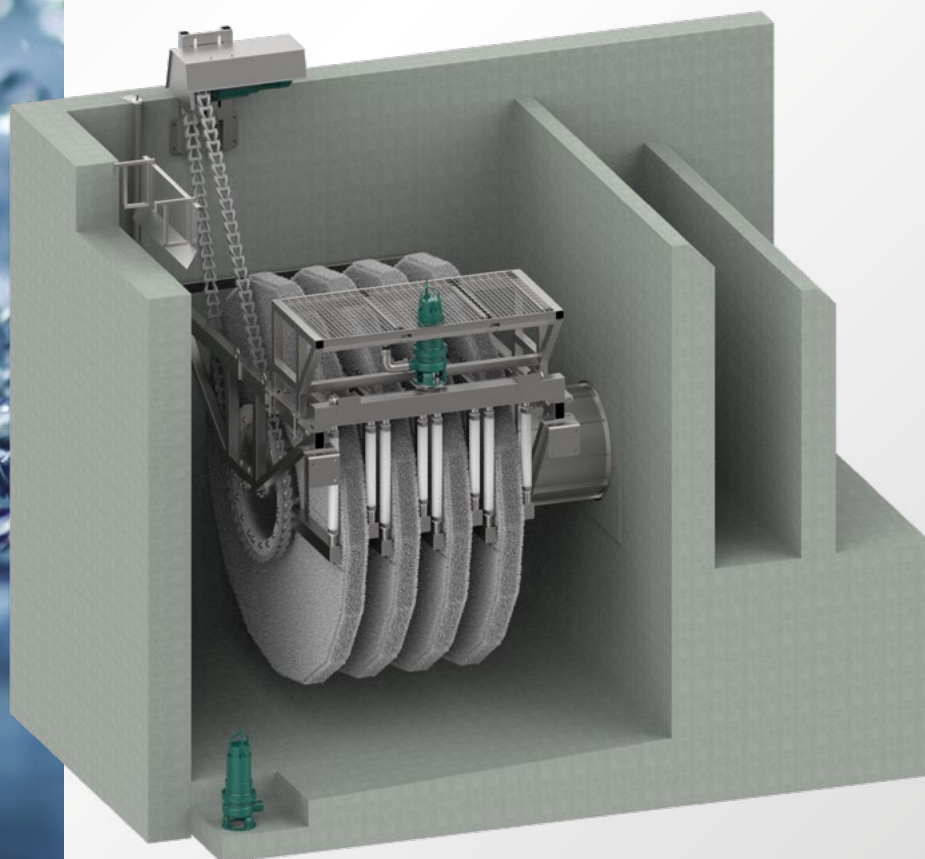




PILE CLOTH FILTER “ORSO”

THE BEST SOLUTION,
IF YOU THINK ABOUT
CLEAN WATER



ALL
FOR
WATER

IN-EKO[®]
TEAM

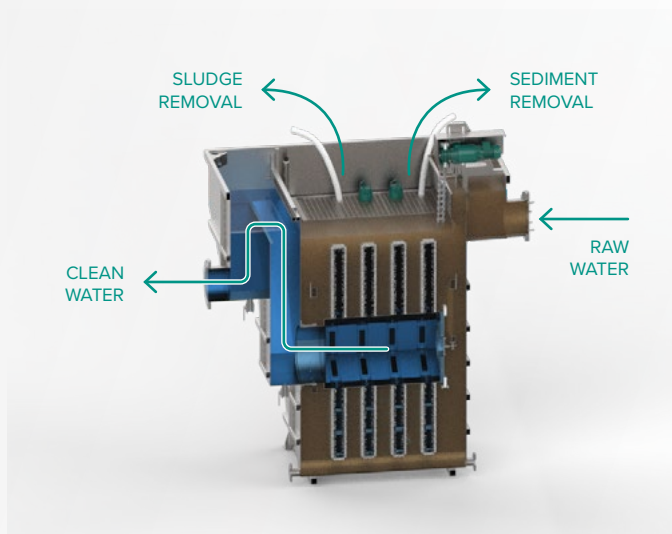
FC “ORSO” – innovation in tertiary water treatment

Our company, IN-EKO TEAM s.r.o. has specialized in the production of waste water treatment units for over 27 years. We have used all of our knowledge

and experience in filtration to enhance our filter portfolio. So after one year of development and trials we bring you our Pile Cloth Filters.

It brings a new filtration possibilities for your tertiary treatment applications.

OUT → IN filtration principle



Design and properties of the Pile Cloth Filter

- To ensure the highest standards in waste water treatment technology we use only **quality materials**.
- Filter cloth is available with mesh opening sizes ranging **from 5 µm equivalent**.
- 100% submerged design in combination with increased filtration surface for higher capacities.
- TSS removal, P reduction, BOD and COD partial reduction.
- Great solution for the micro-pollutants removal applications.
- The non metallic chain doesn't need any lubrication.
- Design of the shaft and its fixing provides extraordinary long sealing span life.

SIZE SERIES

For greater variability and adaptation to the spatial and capacity needs of each project, IN-EKO TEAM has developed

three size series of Pile Cloth Filters.

After long-term testing, we offer smaller compact device with a diameter of 1m, medium sized device with a diameter of 2.2 m, and the biggest sized device with a diameter of 3m providing the biggest filtration area and capacity.

OUT → IN system

This type of filtration comes with 100% immersed disc design involving different type of filtration cloth than used on conventional 65% immersed Disc filters.

Cleaning process involves suction instead of backwashing, so the impurities are caught from the outside in this case.

Exceptional filtration results can be achieved even with the combination of FC “ORSO” filters with our FD and FDG filter series.

How does it work?

The untreated water including the impurities flows into the filter pit. There is a filter including the filtration cloth on the segments, which forms individual discs. Whole system is 100% submerged. Water passes through the filtration cloth inside the hollow shaft retaining the impurities on its surface.

As the impurities get caught on the filter cloth, the flow decreases and the water level in the filter pit rises gradually. When the water level probe is activated, the filter discs start to rotate and initiates the cleaning process. This process involves slow rotation and suction of the impurities.

As the water level decreases to the pre-set minimum water level and the backwash cycle ends, the unit stops rotating and filtration returns to its maximum capacity at minimum level. The filtration cycle repeats. **Filtration goes on continually without interruption.**

FC1 type

- Disc diameter 1m
- up to 14 discs
- ideal for small to medium applications

FC2 type

- Disc diameter 2.2 m
- up to 32 discs
- ideal for medium to large applications

FC3 type

- Disc diameter 3m
- up to 32 discs
- ideal for large and even larger application



Advantages of FC “ORSO” Filters

- Continuous filtration even during the backwash
- High capacities on small footprint (100% submerged)
- Higher filtration area per disc
- Lower power consumption during backwash
- Low operational cost
- Possibility of sedimentation in the filter pit
- No aerosol pollution during backwash cycle
- Exceptionally low noise pollution
- Long span life of filtration cloth - doesn't threat to tear the cloth
- 2.2m diameter with 1m² more of filtration surface area, than available untill today on the market.

Tertiary treatment

- Treatment of effluent water
- Pretreatment before UV
- Pretreatment of potable water
- Fish farms and Koi ponds
- Paper industry
- Cooling water in various industries
- Inlet process water
- Food processing
- Recovery of valuable materials in different types of industry

✓ Right choice

For the right filter size it is necessary to take into consideration the maximum influent hydraulic flow (Qmax), the expected loading and particle size of suspended solids (SS), and then mesh size in combination with surface loading to achieve the best effluent water quality.

Optimal operation of multiple filters can be managed in parallel by a PLC or other computerized system.

The Pile cloth filter can be supplied in a concrete channel version or steel tank version.

We also offer different optional accessories to “ORSO“ filters such as covers, organ pipe emergency overflow, etc.

+ Benefits for customers

- Higher quality of effluent water
- Great solution for industrial applications
- Gravity flow saves energy costs
- **Exceptionally low power consumption**
- Filters can be adjusted to suit customer's needs/project
- Possibility to combine with woven cloth Disc filters at two-stage filtration systems
- Low maintenance costs
- The unit can be put into operation immediately after its installation
- Better resistance to handle the influent disbalances/peaks

More information about our Pile cloth filters, Microscreen drum filters and other units from our complete product line of pretreatment and filtration of waste water can be found at www.in-eko.com.

If you have any queries, please contact us by email, phone or in person.



IN-EKO TEAM s.r.o. has specialized in the production of filtration and wastewater treatment units for over 25 years



IN-EKO TEAM App on Google Play & App Store