IN-EKO®

TEAM

THE RAIN
is falling down
and THE LAND,
with gratitude,
embraces
THE GIFT

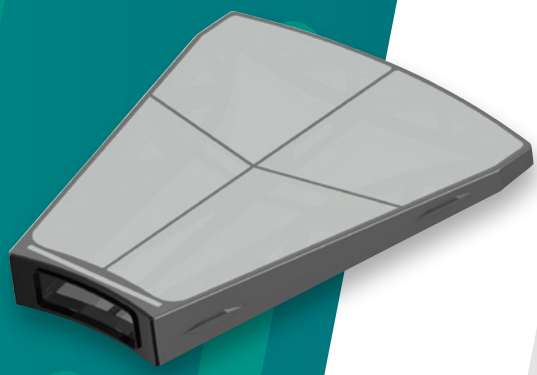
OUR MISSION BEGINS...

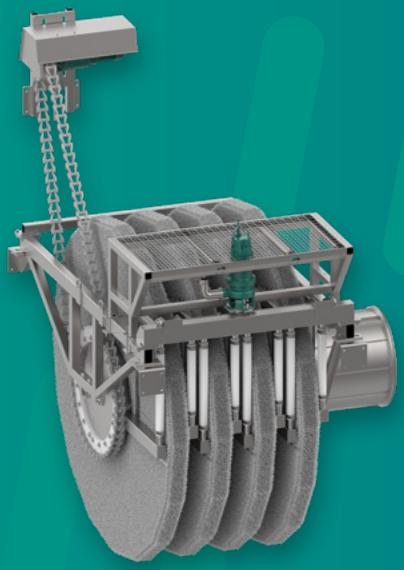
ALL
FOR
WATER

IN-EKO®
TEAM

ALL
FOR
WATER

IN-EKO® TEAM





The filtration SEGMENTS and bags developed by IN-EKO TEAM as a part of our top filtration EQUIPMENTS

TERTIARY TREATMENT

– Microfiltration and Filtration

SECONDARY TREATMENT

– Dissolved Air Flotation

PRE–TREATMENT

– Fine Pre-treatment
– Coarse Pre-treatment
– Integrated Pre-treatment

WWTP (Municipality)

Pulp & Paper

Aquaculture & fish farms

www.in-eko.com

IN-EKO TEAM Ltd. was founded in 1995.

Since our establishment, the company's focus has been on stainless-steel products to turn wastewater into clean water.

We are a long-time manufacturer of water and wastewater management equipments, which are used not only in municipal wastewater treatment plants but also in many areas of industry and aquaculture.

Our business is driven by an emphasis on high quality work, innovative processes, and comprehensive after-sale services.

IN-EKO TEAM successfully operates in the environmental sector worldwide and is a key player for microfiltration in Europe, Asia, Africa and Oceania; we are also present in the Americas with historical and reliable partners.

All our devices have been designed and developed by our in-house engineers. We have used all our knowledge and experience in water filtration to develop efficient and innovative technologies and we are proud to present the following portfolio of products.

Slaughterhouse | Textile & Leather | Food & Beverage

Dairies | Power & Heating | Chemical & Pharmaceutical

Hotel chains & Resorts | SPA | Pools | Cruise ships

MUNICIPAL

APPLICATIONS → Wastewater Treatment Plant

IN-EKO's high tech filter design provides reliable results, cost efficient solutions with a minimal footprint for municipal wastewater sector.

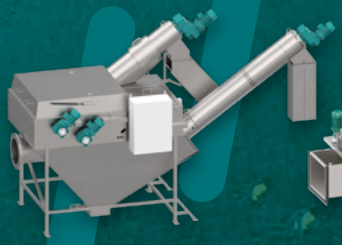
Our innovative filters are largely appreciated in the world for microscreen applications within the municipal market; and with more than 3 500 microscreen filters installed globally we continue to stand by your side to clean the water.

MARKET APPLICATION SECTORS

IN-EKO's microscreen filters reduce phosphorous particles and dissolved phosphorous (via flocculation/coagulation) in wastewater. Phosphorus is one of the main components that need to be reduced before discharging treated wastewater and we have developed the system to cost efficiently reduce the total phosphorous (P) in wastewater.

IN-EKO's effluent innovative filters are a reliable and efficiently barrier in providing to meet ever strict demands parameters on effluents from municipal waste water treatment plants.

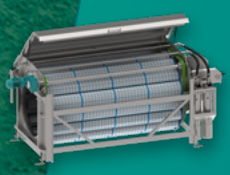
The lifetime of all our filter cartridges and segments is between 12–14 years according to customer data, and we guarantee to provide worldwide long term support directly and through our global network of partners.



MULTIFUNCTIONAL PRETREATMENT UNIT

INTENSIFIED DISC FILTER

"ORSO" PILE CLOTH FILTER



MICROSCREEN DRUM FILTER

VERTICAL BAR SCREEN

PULP & PAPER

APPLICATIONS → Pulp and Paper Mill Industry and its derivates

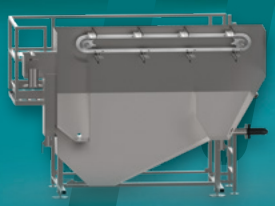
Nowadays is more and more important to treat wastewater and return the treated water back to the process, especially in the pulp and paper industry, where is a need to have high amounts of fresh water for the production process.

For our specialists, it is therefore becoming increasingly strategic to support you in mitigating the high environmental impact and reducing the cost impact of wastewater by returning it back to the production process.

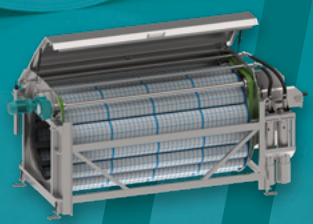
MARKET APPLICATION SECTORS

The paper industry is known for its high investment requirements, with raw materials accounting for a significant portion of its cost structure. Furthermore, among the production factors, energy and the utilization of water resources stand out. Water is essential for producing paper pulp which is used in paper production.

The characteristic incidence of energy costs and the need to optimize water resources are both important parts of paper companies‘ budgets. This has led IN-EKO TEAM on designing and building tailor-made devices that reduce energy costs and increase water reuse. Our devices are the least energy-intensive in terms of electricity available on the global market.



DISSOLVED AIR FLOTATION



MICROSCREEN DRUM FILTER

INTENSIFIED DISC FILTER

“ORSO” PILE CLOTH FILTER

INDUSTRY

APPLICATIONS →

Textile & Leather

Food & Beverage

Slaughterhouse

Dairies

Power & Heating

Chemical & Pharmaceutical

Cruise ships

Water is a key element for each industry, and our filters are the industry standard in suspended solid particle separation reduction.

We offer proven, reliable, robust tailor-made filtration solutions helping industrial customers, solve water challenges.

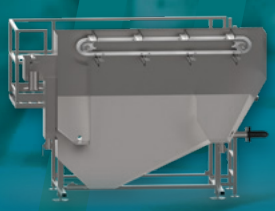
We support you in planning all stages of implementation from the design phase to daily operations to manage risks and eliminate downtime.

We must consider that every human activity contributes some form of water pollution. Once upon a time, when wastewater mainly contained biodegradable organic residues, water basins and the subsoil were easily able to absorb contamination, being able to count on a certain self-purification capacity.

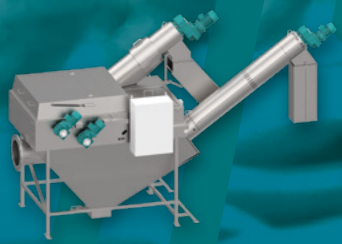
Over the last century, with population growth and industrial advancement, the demand for clear/clean water has increased while, at the same time, the quantity of dirty water released into the environment has grown. But not only that: the ever-increasing use of chemical substances at an industrial level has made waste water decidedly more contaminated and polluting.

MARKET APPLICATION SECTORS

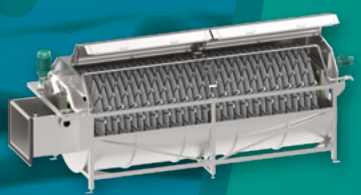
It is precisely here that the IN-EKO purification devices have been operating since 1995, thanks to which the water is treated and „cleaned“ before being reused and/or reintroduced into the ecosystem.



DISSOLVED
AIR FLOTATION



MULTIFUNCTIONAL
PRETREATMENT UNIT



INTENSIFIED
DISC FILTER

“ORSO”
PILE CLOTH FILTER

AQUACULTURE & FISH FARMS

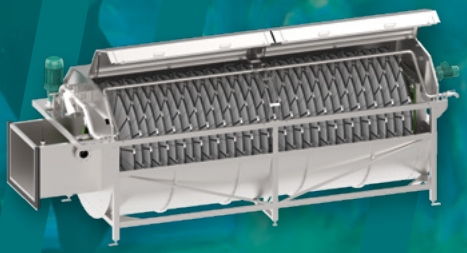
APPLICATIONS → KOI ponds ZOO‘s Fish farms

While the world population increases, the water quality control will become key to ensuring more sustainable fish farming. Clean water is not important for people only, but our systems release environmental pressure from our natural resources, guarantees animal well-being, and contributes to the safety of our food chain.

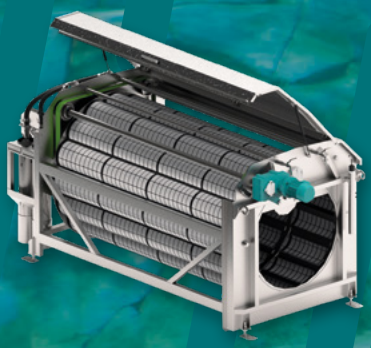
We have plenty of experience and applications with the filtration of the water not only in fish farms and KOI ponds, but also in ZOOs, recirculating aquaculture systems (RAS) or flow-through systems (FTS), for removing parasites, algae filtration, aquaponic systems.

MARKET APPLICATION SECTORS

The innovative filtration technology ensures high effectiveness of filtration and low consumption of backwash water, sludge production and power consumption.



INTENSIFIED
DISC FILTER



DRUM FILTER

"ORSO"
PILE CLOTH FILTER

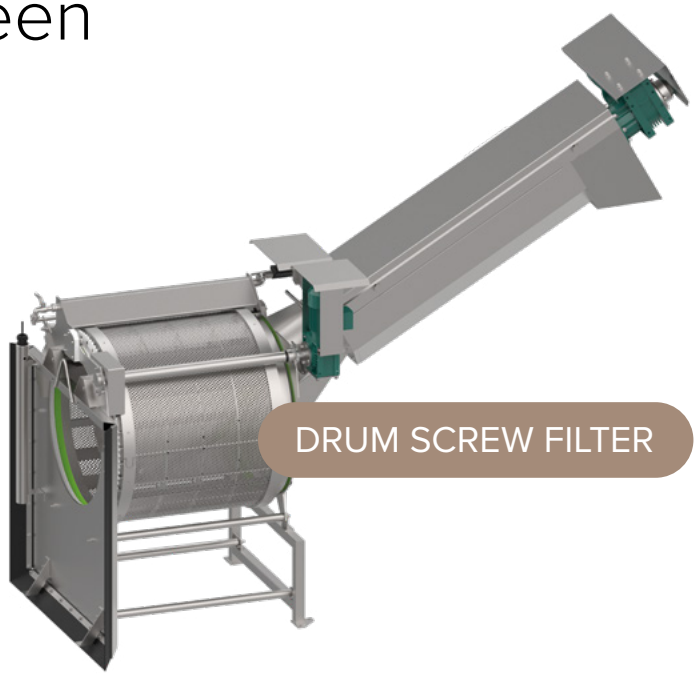
FINE PRE-TREATMENT

Water pre-treatment removes pollutants and contaminants that can affect the quality of the water. It is important on several levels.

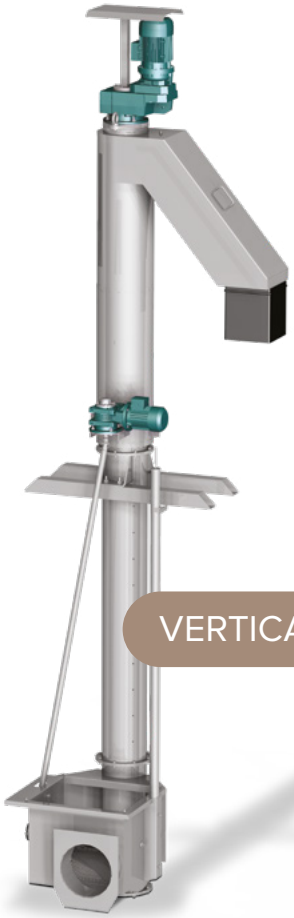
A necessary part of all municipal and industrial wastewater treatment plants, wastewater screening retains solids found in the wastewater. These solids must be removed at the very beginning of the water treatment process, as these solids could make the whole system less efficient, damage expensive and essential water treatment equipment or contaminate water, causing small to large scale natural upsets for a region's entire ecosystem.

Water pre-treatment thus improves the efficiency of water treatment in general.

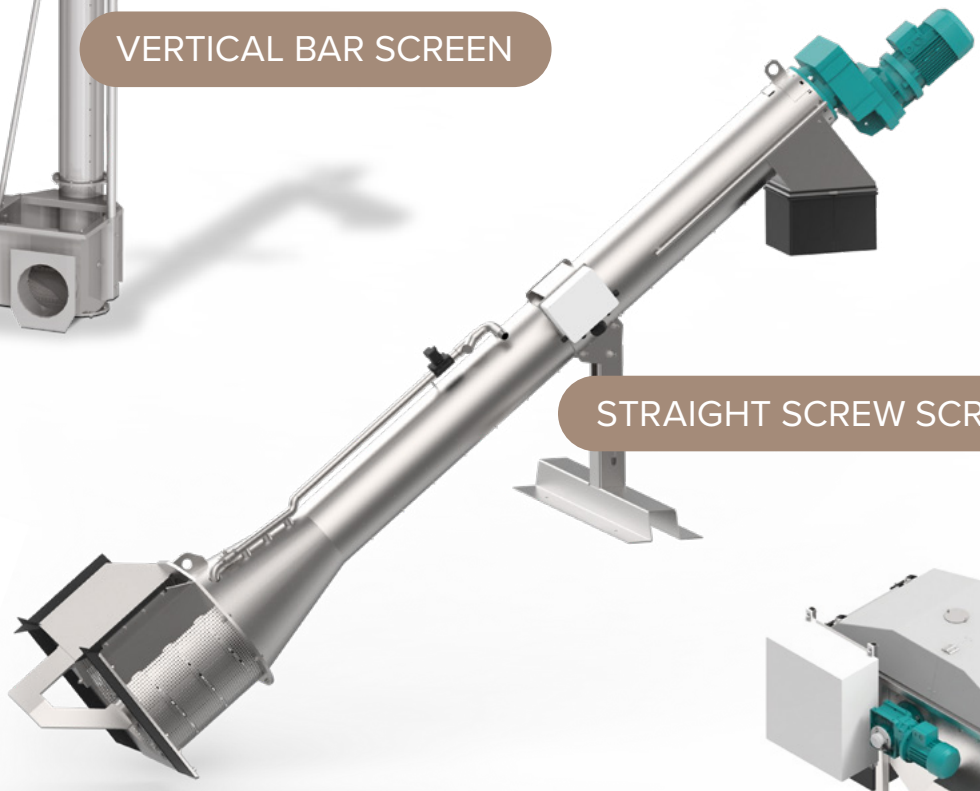
Vertical & straight & drum screen



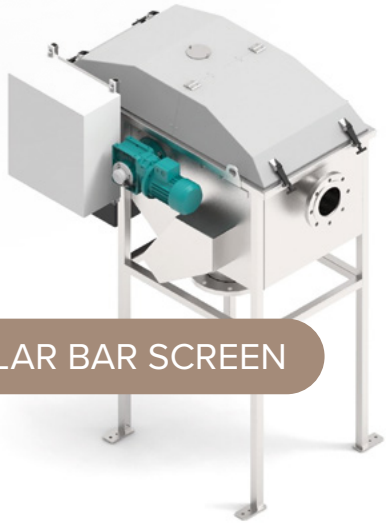
DRUM SCREW FILTER



VERTICAL BAR SCREEN



STRAIGHT SCREW SCREEN



„BUG“ CIRCULAR BAR SCREEN

COARSE PRE-TREATMENT

Coarse Screen is the device used to retain solids found in the influent wastewater to the treatment plant. The main purpose of screening is to remove solid materials that could cause damage to other process equipment, cause reduction in efficiency of the whole system, contaminate waterways.

It is installed at the intake of wastewater before pumping, primary settling, or grit chamber. It is often referred opening ranges between 3 and 6 mm. Belt screen is a continuous, self-cleaning screen that can remove fine and coarse solids. The number of screening elements generally depends on the depth of the screen channel.

Belt Screen

BELT SCREEN

Belt screen represents a reliable and efficient equipment for various applications including industrial ones. The equipment excels in high pre-treatment efficiency with the ability to transport screenings even from greater depths and to remove objects of larger dimensions. It is made of high-quality stainless steel and highly resistant plastics, ensuring its long service life and resistance to mechanical wear.

The device is equipped with an overload protection system for the endless belt drive. Thanks to its overall structural design, it offers low operating costs, reliable operation and long life span.

INTEGRATED PRE-TREATMENT

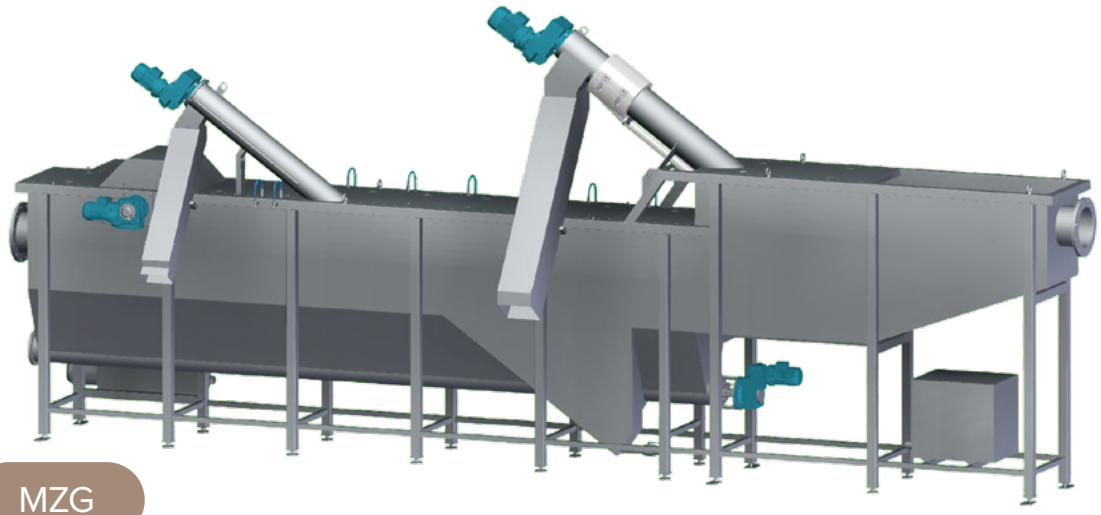
Multifunctional pre-treatment units are an important part of modern wastewater treatment and are designed for the preliminary treatment of waste water.

Their main purpose is to remove gravel, sand and heavy sediment trap; with aeration and automatic grease removal eliminates the grease and fat.

Transport of entrapped material to containers is the final step in the process of this compact device for multifunctional treatment.

Multifunctional pre-treatment units

MZ



MZG

Multifunctional pre-treatment units offer a comprehensive and compact coarse pre-treatment solution within a small footprint, making it suitable for installations with limited space. These sophisticated devices boast a wide range of programmable functions and variabilities, providing flexibility and customization options to meet specific needs.

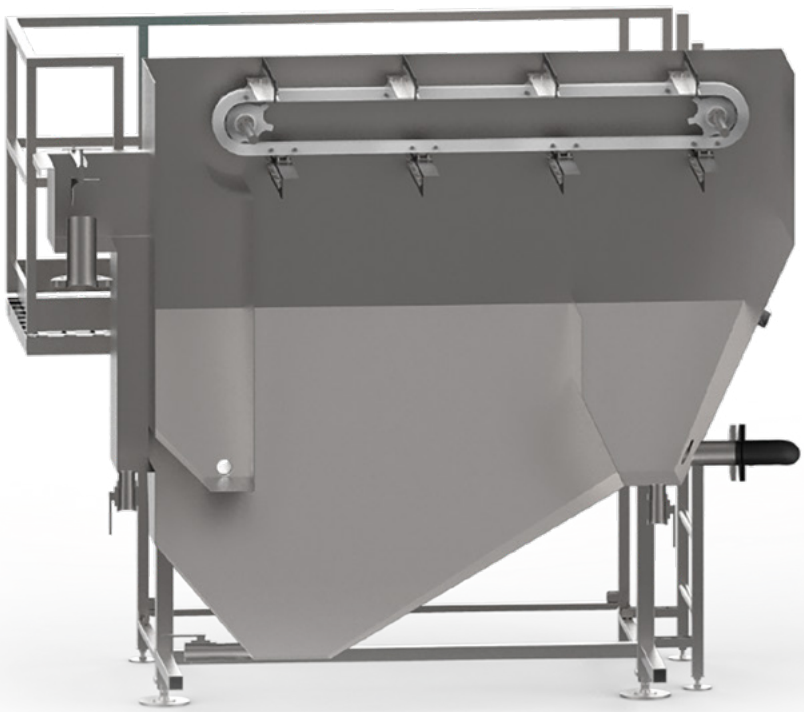
The equipments ensure high-effective pre-treatment of wastewater, delivering reliable performance. Maintenance is made easy, contributing to hassle-free operation and servicing. These devices are characterized by exceptional reliability and space saving. Additionally, its quick realization time ensures swift installation and commissioning, minimizing downtime and maximizing productivity.

FLOTATION

Physical flotation is a process enabling the removal of a larger quantity of undissolved matter and fats from wastewater.

Flotation is applied where any other method of filtration and sedimentation cannot be used. Thickening of excessive sludge in municipal wastewater treatment plants, purification of industrial wastewater, etc. represent typical examples of this.

Flotation unit



DISSOLVED AIR FLOTATION

Dissolved air flotation (DAF) is one of the most effective methods whose specific gravity is close to 1.0 from water.

DAF is liquid/solid or liquid/liquid separation process to remove tiny suspended solids that density close to the water, colloid, oil and grease.

DAF plays an important role in solid-liquid separation (simultaneously reduction of COD, BOD, chroma, etc).

First, mix flocculating agent into raw water and stir thoroughly. After the effective retention time (our lab and technologists determine the time, dosage and flocculation effect), the raw water enters into the contact zone where microscopic air bubbles adhere to the floc and then flows into the separation zone. Under the buoyancy effects, the tiny bubbles float the flocs to the surface, forming a sludge blanket. A skimming device removes the sludge into the sludge hopper. Then the lower clarified water flows into the clean-water reservoir through the collecting pipe. Some of water are recycled to the flotation tank for the air dissolving system, while others will be discharged.

MICROFILTRATION & FILTRATION

Step into the new age of water treatment with our excellent filtration systems.

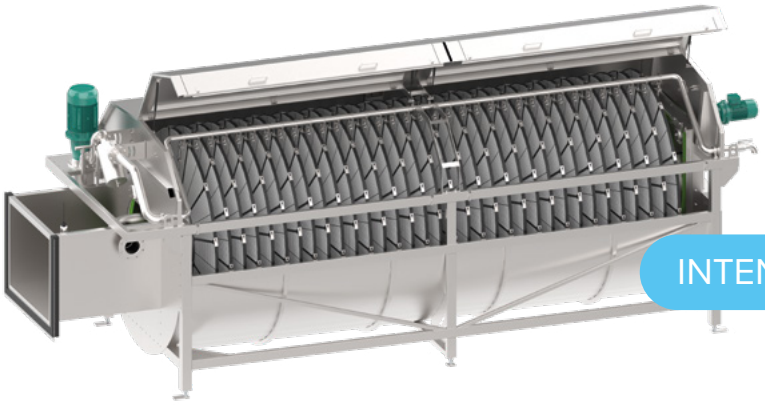
Our in-house design department has set up a superior-performing filtration system with innovative drum and disc filters based on both IN-OUT & OUT-IN principles.

IN-EKO innovative filtration systems are engineered for superior performance and boasts an outstanding TSS removal efficiency, reaching up to an impressive 95%.

As we embrace the environmental responsibility, our filters don't stop there. Our filters excel in phosphorus removal, addressing crucial water quality concerns.

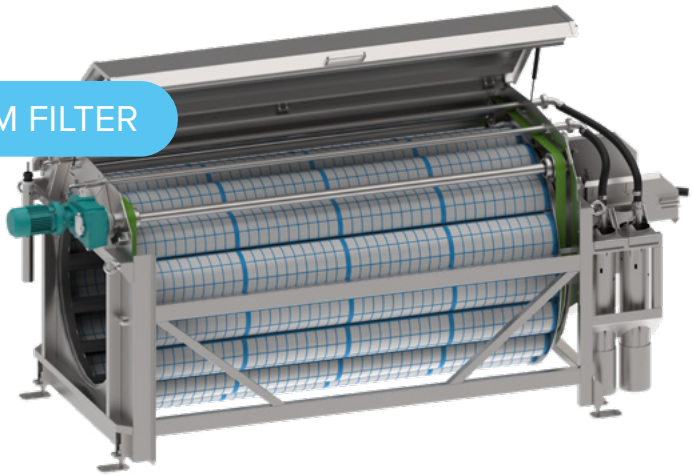
Our standard is optimal phosphorus removal and reducing total phosphorus levels down to 0.1 mg/l, and with NTU levels around 2, our devices offer precision, reliability and efficiency to water purity in wastewater treatment upgrades.

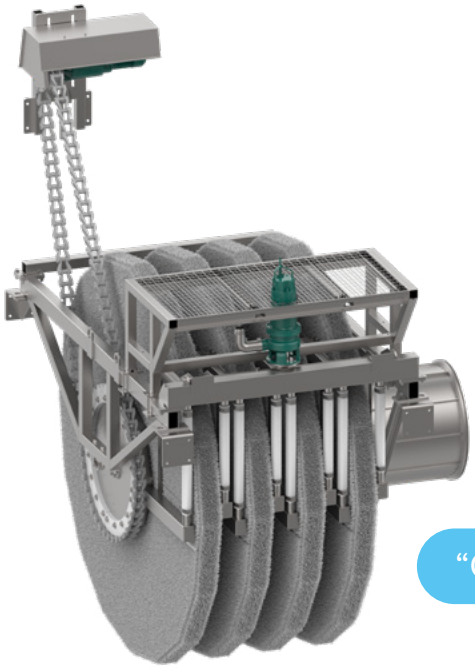
Filters



INTENSIFIED DISC FILTER

MICROSCREEN DRUM FILTER





“ORSO” PILE CLOTH FILTER

The remarkable performance underscores the effectiveness of our advanced technology in transforming wastewater quality, emphasizing our commitment to delivering high-performance results in water filtration.

The hydraulic loading of our filters is carefully optimized to balance efficiency and performance and this ensures an optimal balance between water treatment capacity and effective filtration, making our products a versatile solution for various wastewater treatment applications.

SUSTAINABILITY

Many people consider clean water for granted and assume it as an available unlimited offer, but unfortunately, this is not true. On a worldwide scale, pure water is a valuable commodity.

For this reason, we constantly work for solutions for wastewater treatment, to achieve the highest possible water quality for each type of application – to be able to bring water back to nature.

Water is life. For us, this fact is well known since 1995 when environmental sustainability and water protection were still topics covered by very few.

Our research and development, our laboratories and our production are focused mainly for primary and tertiary water microfiltration using mechanical cleaning and removal of impurities from wastewater, preserving the environment according to the strictest international guidelines about pollutants and phosphorus.

With our devices, which are improving the condition of water, we are able to subsequently return water back to nature: clean water benefits us all.

Our sustainable project is concretely based on:

- Conserving and returning water to nature, including water reuse.
- Utilizing renewable energy for our production site, with 65% of internal energy produced by solar panels.
- Limiting waste and pollution in water.
- Developing and using energy-efficient equipment.

I have always considered how to improve and change the world through technology. As the founder and CEO of IN-EKO TEAM, I am committed to fostering continuous improvement and innovation in all that we do. Looking back on our journey since 1995, I am immensely proud of the innovations and achievements that have brought us closer to our goal of delivering exceptional and resilient water management and green technology solutions.

I have been drawn to this field because I believe it holds the key to achieving sustainable development and effecting meaningful change in water management. Each product we design and service we implement is a critical step towards a cleaner, more sustainable environment. Beyond our day-to-day business, our mission is to return clean water to our rivers, to the Earth and contribute to a better world.

We are always at the beginning of something new as our mission is a continuous journey. Consistent ongoing improvements through research, teamwork and responsibility are the cornerstones of our company. At IN-EKO TEAM, we are more than colleagues—we are a team driven by a shared passion for sustainability and innovation. Our guiding values—courage, faith, reciprocity and beneficence — serve as the driving force behind our endeavours.

Fuelled by the understanding that collective action is essential for protecting and enhancing our planet‘s precious water resources, we remain dedicated to upholding the values that define us and guide our daily activities and decision-making.

Eva Komárková, CEO

OUR MISSION CONTINUES...

ALL
FOR
WATER

IN-EKO® TEAM

ALL FOR WATER

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