



# INDUSTRY

LEADING  
WASTEWATER  
SOLUTIONS



ALL  
FOR  
WATER

**IN-EKO**<sup>®</sup>  
TEAM

# IN-EKO team devices ideal solution for your industry

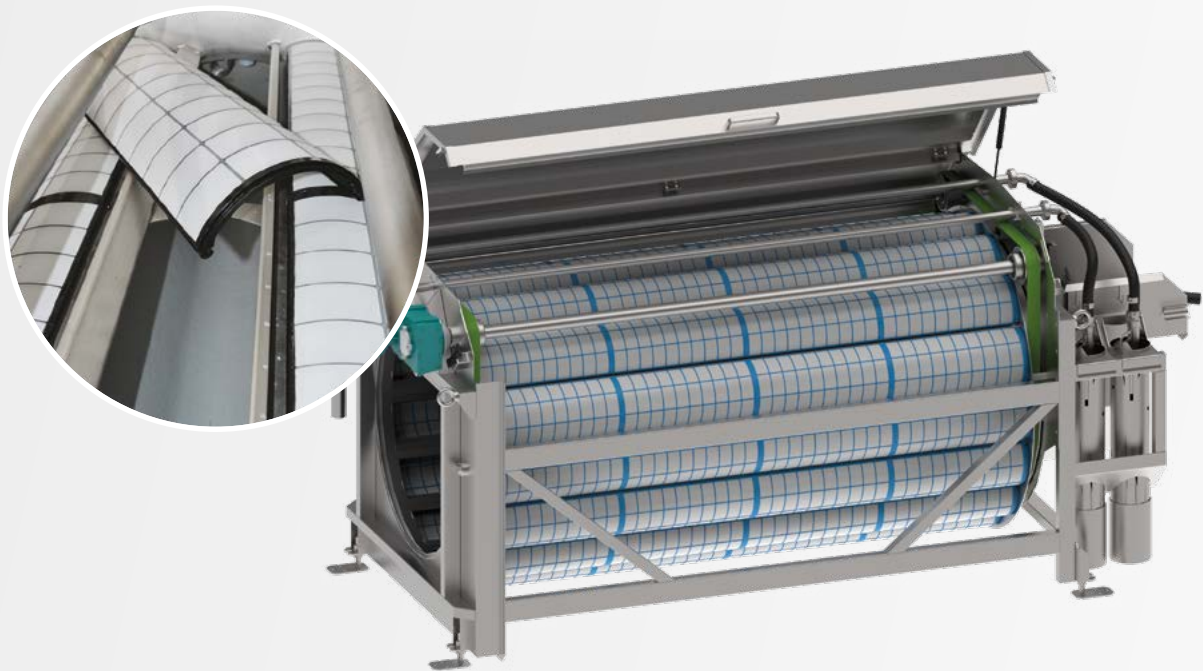
**Water is a key element for each industry.** We know that and therefore we offer you tailor made solution for filtering

waste water from various types of industry. Moreover you have to also deal with the high environmental impact and big

production costs. And IN-EKO TEAM can help you with their reduction!

## Microscreen Drum filter

Very first product done by IN-EKO TEAM was a **Microscreen Drum filter**, which can be used in **different kinds of industry**, such as Cooling water filtration, Paper mills water recirculation systems, Inlet process water and irrigation systems, Fish farms, Koi ponds, Pre-treatment before UV, Pre-treatment of potable water, Food processing and in many other areas involving the water recirculation. This filter is designed for the removal of TSS and micropollutants and reduction of BOD, COD and phosphorus.

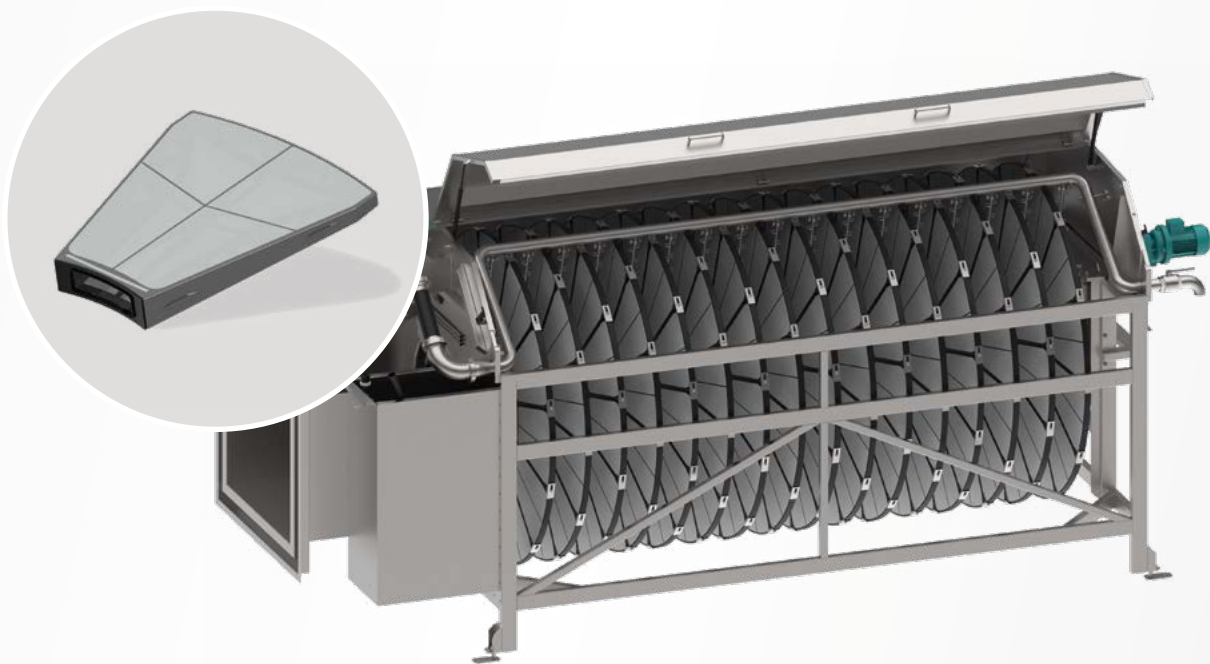


## Technical specifications & Advantages

- Filter cloth is available with mesh opening sizes ranging from 10 to 500 microns
- Filter capacity up to 300 l/s
- Higher quality of effluent water
- Recovery of valuable materials back to the process helps to save initial investment costs
- Low maintenance costs
- Low power consumption
- Exceptionally fast and easy replacement of CLI-CLO cartridges
- Fully automated operation
- Small footprint requirements
- High resistance to wear and damage
- Fast return of investment costs
- Installation variants into the concrete canal and self contained

## Disc filter

Our **Disc filters** can be used in the same application as the Microscreen Drum filters. Their main advantage compared to Drum filters is their bigger filter capacity and also the filtration is possible from 5  $\mu\text{m}$ . This filter is designed for the removal of TSS and micropollutants and reduction of BOD, COD and phosphorus. The innovative filtration technology ensures high effectiveness of filtration with enhanced particles removal and **low consumption of power and backwash water**. This results in savings in the operational costs of the filter as well as in further sludge processing. It also leads to a faster return on investment costs.



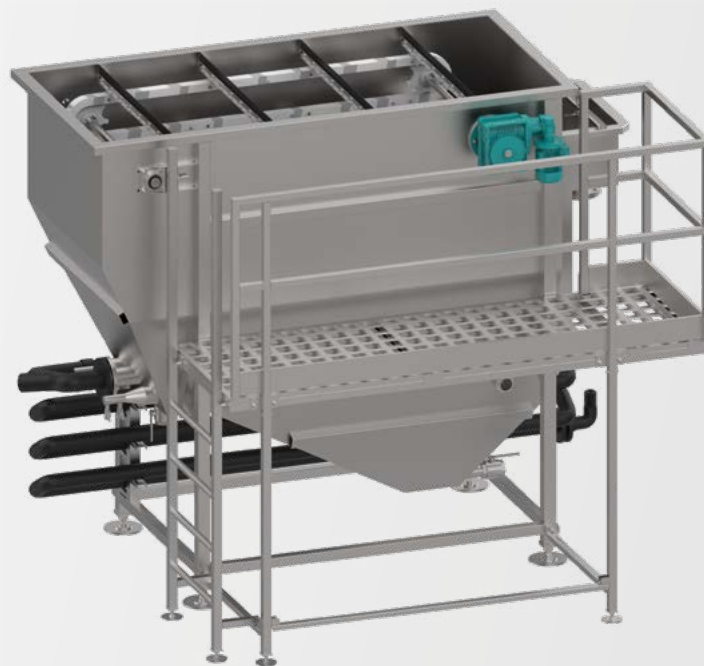
## Technical specifications & Advantages

- Filter cloth is available with mesh opening sizes ranging from 5 to 100 microns
- Filter capacity up to 1 300 l/s
- Higher quality of effluent water
- Recovery of valuable materials back to the process helps to save initial investment costs
- Low maintenance costs
- Low power consumption
- Large filtration area in small space
- Exceptionally fast and easy replacement of filter cassettes
- Fully automated operation
- High resistance to wear and damage
- Fast return of investment costs



## DAF unit

Physical flotation is a process enabling the removal of a larger quantity of undissolved solids from wastewater. Flotation is applied where any other method of filtration and sedimentation cannot be used. Flotation units can be applied to thickening of sludge at municipal wastewater treatment plants, separation of substances from industry - dairies, slaughterhouses, meat factories, leather factories, chemical industry. Effluent quality can be even enhanced by combination of DAF unit and Drum filter or Disc filter.



## Technical specifications & Advantages

- Two variants of design – rectangular and circular
- Removal of higher amount of undissolved matter from waste water with a density close to that of water
- Easy for transport
- Expected reduction of COD, BOD 65–75% and TSS and fats and oils 80–95%
- Formation of thickened sludge
- Separation of hardly sedimentable particles
- Ideal design for existing space limited premises

# References



## PABOD Brewery, Nigeria

- Microscreen Drum filter, type 6FBO, 1 pc
- Max. capacity: 57 l/s, Filtration cloth: 30  $\mu\text{m}$
- Loading of solids: 100 mg/l
- Location: Waste water filtration after beer production. Filtration NL, BOD and COD. The water is then discharged into the sewer and due to its quality saves costs that the brewery would pay the water company for discharging polluted water.



## SYNTHOS Kralupy nad Vltavou, CZ

- Microscreen Drum filter, type 4FBO\_atyp, 3 pcs
- Max. capacity: 15,3 l/s per one filter, Filtration cloth: 100  $\mu\text{m}$
- Loading of solids: 200–500 mg/l
- Location: Filtration of process water with granular raw rubber leaks. The granules are returned back to the process. The filtered water is used for backwash of the vibration screens. The return of filter investment is very fast. The filters save the cost on draining polluted water to the sewer, and also on capturing the material and returning it back to the process. Part of the filtered water is also used for backwashing of the sieves in the production.



## IST s.r.o. Rožnov pod Radhoštěm, CZ

- Microscreen Drum filter, type 1FBO, 1 pcs
- Max. capacity: 0,55 l/s, Filtration cloth: 25  $\mu\text{m}$
- Loading of solids: 100 mg/l
- Location: Filtration of wastewater from the production of various sensors etc. The filter is located downstream of the chemical dosing system to precipitate  $\text{TiO}_2$ , PZT,  $\text{SiO}_2$ . This pre-treated water is currently discharged in an acceptable quality to the sewer. In the future, an ultrafiltration unit will be placed behind the filter, which will provide the with sufficient quality at UF inlet.



## KABANOS Jablonka, Poland

- Flotation FT\_5,5, 2 pcs
- QMax: 36  $\text{m}^3/\text{h}$
- Unit dimensions: 5500×1500 mm
- TSS: 2500 mg/l
- Material: stainless steel AISI 316L
- Location: DAF units in the slaughterhouse are used for the reduction of fatty substances, up to 95 %, from the processing of beef and pork meat. They also removes TSS, BOD and COD. Such treated water is discharged into the company WWTP. DAF units allowed to reduce the size and thus the investment cost of company WWTP and also to reduce the risks of technological problems on plant.

# Types of industry



## Power & heating

Recycling of cooling water at power and heating plants.  
Ideal solution – Microscreen Drum and Disc filters.



## Textile & leather

Treating waste water from textile factories - removal coarse impurities, especially non-woven as well as the fiber materials. Ideal solution – Microscreen Drum and Disc filters, DAF unit.



## Food & beverage

Treating waste water from slaughterhouses, dairies, sugar factories, meat processing factories and others.  
Ideal solution – Microscreen Drum and Disc filters, DAF unit.



## Chemical & pharmaceutical

Treating waste water from chemical and pharmaceutical factories. Ideal solution – Multifunctional pre-treatment unit, Microscreen Drum and Disc filters, DAF unit.

More information on our disc filters, microscreen drum filters and other units from our complete product line of pre-treatment and filtration of waste water can be found at [www.in-eko.com](http://www.in-eko.com).

You can contact us by phone, email or in person.