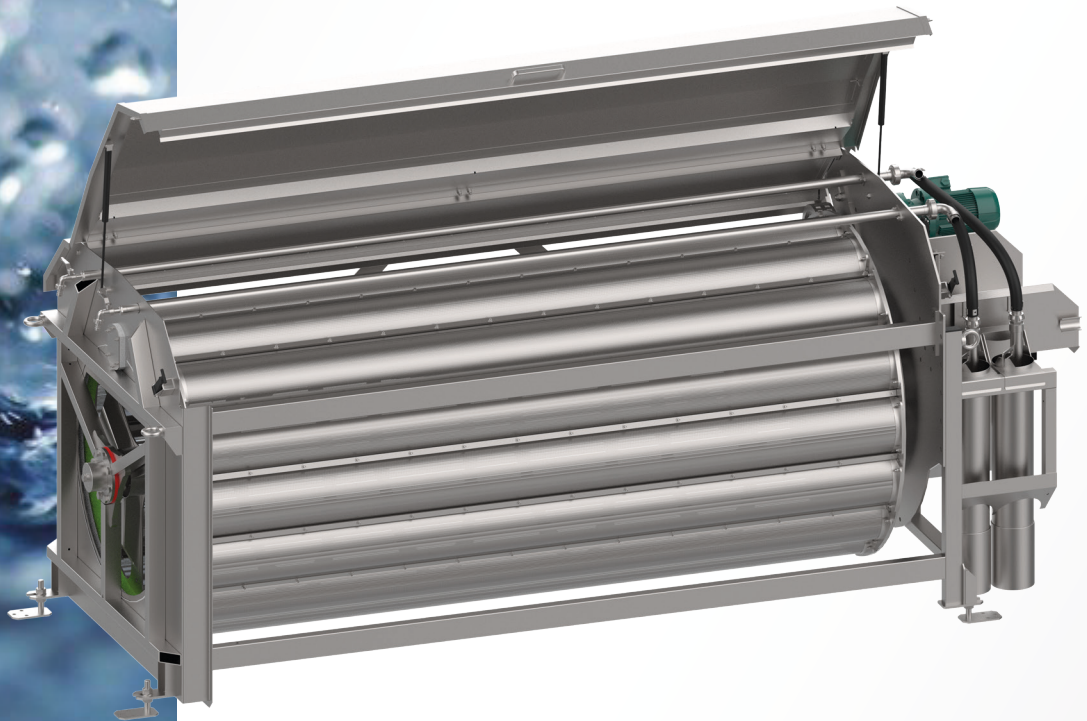




# ROBUST DRUM FILTER

THE BEST SOLUTION,  
IF YOU THINK ABOUT  
CLEAN WATER



# ROBUST Drum filter

## – suitable for tertiary treatment

IN-EKO TEAM s.r.o. has been your partner for water management equipment and advanced wastewater treatment technologies since 1995. The first device manufactured by the company was Microscreen Drum filter, which underwent a series of

innovations based on many years of experience and the requirements of various applications. Based on this experience, the ROBUST Drum filter with stainless steel filtration cloth was designed. The ROBUST Drum filter is ideal for industrial applications,

which require mechanical, thermal and chemical resistance and can reliably handle high substance loads. Achieve a new level of filtration and water purity with us.

### Design and properties of the ROBUST Drum filter

- To ensure the highest standards in waste water treatment technology we use only **quality materials**.
- **The stainless filter cloth is available with mesh opening sizes ranging from 40 µm.**
- Maintaining water levels head loss of 100–250 mm **enhances the filter capacity** up to 300 l/s.
- The drum sealing is resistant to abrasion.
- Unique construction of efficient rinse nozzles to prevent clogging.
- The central drum position from high quality gliding materials.
- The drum is driven by a highly durable stainless steel chain.
- The stainless steel chain for mechanical, heat and chemical resistance of the filter.

### IN → OUT system

This time-tested system ensures maximum possible efficiency of filtration. Water flows into the drum, impurities are caught inside the cartridge and clean water flows out through the filter cloth.

### Applications

- Suitable for high-load applications
- Treatment of effluent water
- Pre-treatment before UV
- Pre-treatment of potable water
- Aquaculture
- Pulp and Paper industry
- Cooling water in various industries
- Inlet process water and irrigation systems
- Food processing
- Recovery of valuable materials

# How does it work?

The untreated water flows by gravity to the drum. The drum of the filter is idle at the beginning of the filter cycle – it does not rotate. The impurities are caught inside the cartridge of stainless steel filter cloth.

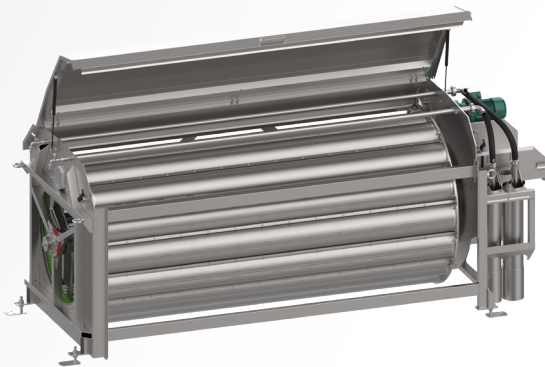
As the impurities get caught on the filter cloth, the flow

decreases and the water level in the drum rises gradually.

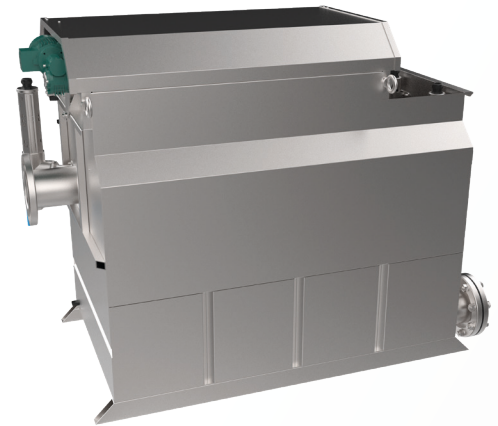
When the water level probe is activated, the filter drum starts to rotate and initiates backwash. High-pressure backwash nozzles direct the trapped impurities to the sludge trough. As the water level decreases to the pre-set

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.

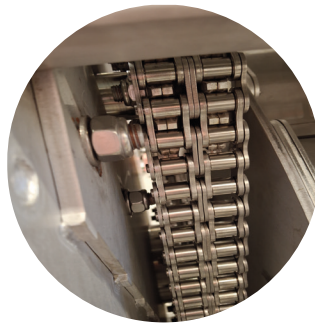
**Filtration goes on continually without interruption.**



Concrete channel  
FBR\_B

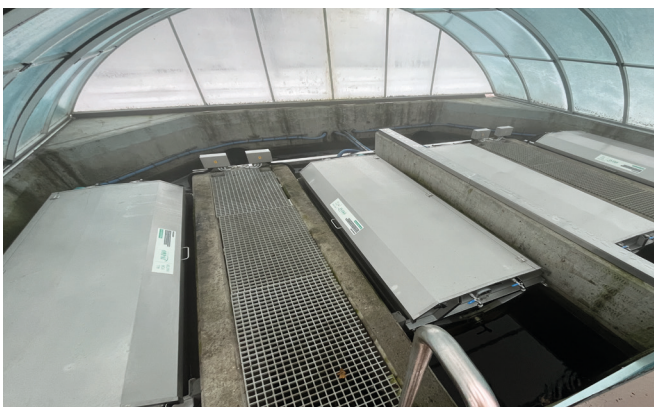


Self-contained  
FBR\_O

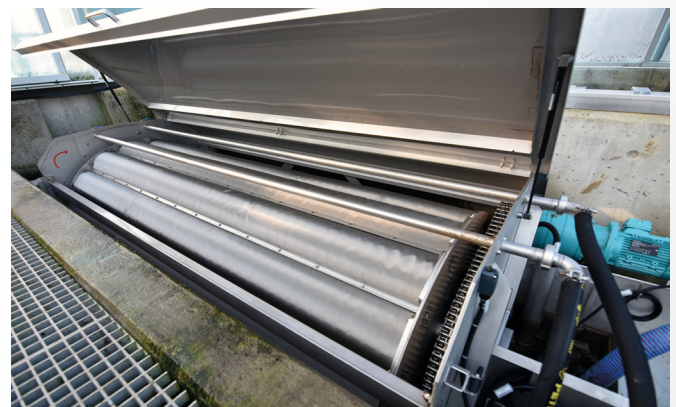


Stainless steel chain  
drives the drum

## Applications



WWTP Uherské Hradiště, Czech Republic



WWTP Uherské Hradiště, Czech Republic

# ✓ The right choice

For the right filter size it is necessary to take into consideration the maximum influent hydraulic flow (Q<sub>max</sub>), the expected loading and particle size of suspended solids (SS) and their character. The size of the filter cloth openings is selected according to the required water quality at the outlet. Optimal operation of multiple filters can be managed in parallel by a PLC or other computerized system.

Depending on the specific situation, filters can be supplied in a concrete

channel version or steel tank version. For outdoor installations, we offer an

insulated version that can be supplemented with heating.

## + Benefits for customers

- Higher quality of effluent water
- A great solution for industrial applications
- Gravity flow saves energy costs
- **Reliable filter for high material loads**
- Excellent mechanical, thermal and chemical resistance of stainless steel chain and stainless steel filter cloth
- Possibility of filtration with higher temperature and huge range of pH
- Possibility of regeneration of filter cloth by using a high-pressure cleaner
- **Long life span of stainless steel filtration cloth**
- Recovery of valuable materials back to the process helps to save initial investment costs
- **Low operational cost**
- The device is ready for immediate operation after installation

More information about our ROBUST Drum filters, Microscreen Drum filters, "CLEVER" Disc filters and other units from our complete product line of pre-treatment and microfiltration 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.



IN-EKO TEAM s.r.o. has specialized in the production of filtration and wastewater treatment units since 1995.