

MICRO DRUM FILTER

INECO™

Equipment for Tertiary Treatment
State of the Art Filtration Technology



For our nature and our future

INECO™ Micro Drum Filter: Advantages

- Significant increase of filtered water quality
- High reliability and long life span
- Easy and simple replacement of filter cloth
- Available in AISI 304 or 316 L
- Filter pore with sizes of 10 μ up to 300 μ
- Inlet water gravity feed
- Very low energy consumption
- Continuous back wash process and back wash water self priming
- No standby filter required

- No down time during back wash
- Filter cloth assembled in segments
- Channel or stand alone installation available
- Small foot print
- No consumption material like quartz sand required
- No clogging because of fast and efficient back wash by using two nozzle rows.
- Reject water pump part of MDF
- Flow rate up to 860 l/sec depending on TSS content and pore size



Stand alone MDF with inlet and outlet flanges



Small channel installation of a domestic STP

INECO™ Micro Drum Filter: Applications

- power plants
- paper mills
- domestic treatment plants for tertiary treatment process
- filter to protect RO plants from TSS

- fish farms
- zoos
- steel mills
- textile factories and more



Custom made battery channel installation. Simple to maintain during operation.



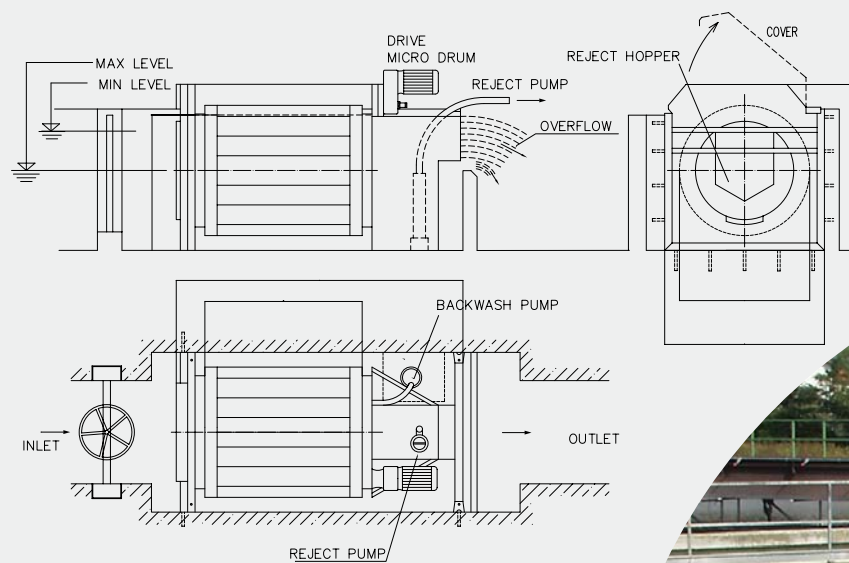
INECO™ Micro Drum Filter: Basic Data

MICRO DRUM FILTER						
Model	Filter surface (m²)	Channel width (mm)	Hydraulic load (l/s)	Rinse water pump (kW)	Sludge pump (kW)	Drive of drum (kW)
5MDF5K	0,76/0,50	700	7,5	0,55	0,55	0,25
5MDF5B	0,76/0,50		6	0,55	0,55	0,25
5MDF10K	1,52/1,00	700	15	0,55	0,55	0,25
5MDF10B	1,52/1,00		12	0,55	0,55	0,25
10MDF10K	3,62/2,50	1300	30	0,9	1,1	0,37
10MDF10B	3,62/2,50		30	0,9	1,1	0,37
10MDF20K	7,20/5,00	1300	68	2x0,9	1,1	0,37
10MDF20B	7,20/5,00		49	2x0,9	1,1	0,37
10MDF25K	10,25/7,50	1300	150	2x0,9	1,1	0,37/0,75
15MDF30K	17,25/10,50	1900	135	2x1,1	1,5	0,75

Supplied filter cloth with 10 µ - 300 µ pore size * Filter capacity with 40 µ cloth pore size ** K = Channel
B = Stand alone type

TE ENGINEERING specializes in equipment of the latest technology for water and wastewater treatment. Domestic or industrial use – we are everywhere at home.

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INECO™ CHANNEL TYPE



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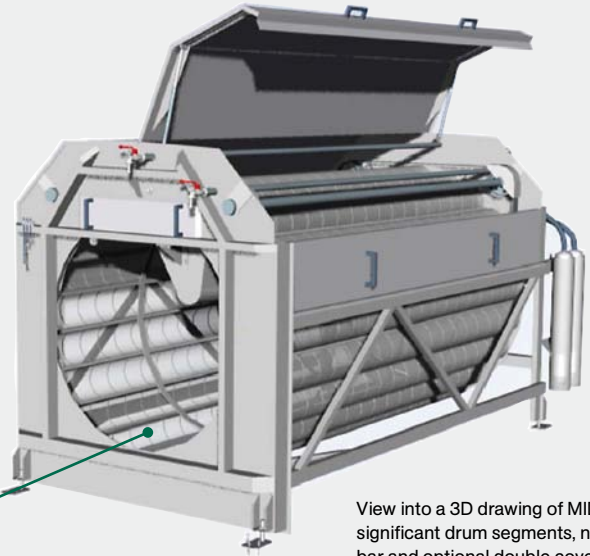
INECO™ Micro Drum Filter: Description

General

For tertiary treatment, INECO™ produces and offers Micro Drum Filters (MDF) as so called micro strainers. Furthermore INECO™ produces pre-treatment equipment for the removal of coarse material, fibres, and garbage/screenings in municipal and in various industrial treatment plants.



The micro drum with filter cloth segments and discharge hopper of reject



View into a 3D drawing of MID with significant drum segments, nozzle bar and optional double cover.

What is available?

INECO™ Micro Drum Filter (MID) with pore sizes 10 – 300 μ are available as a channel type with optional covers or as a stand alone system within a stainless steel tank and inlet/outlet flanges. The simple replaceable filter cloths are available in PP or stainless steel material depending on pore sizes. The MID concept increases the life span of the wire part as filter cloths of up to 2 years.

How does it work?

The rotating segment drum, available with different filter cloth pore sizes and centred fibre/reject collecting hopper is unique. A level sensor detects the gravity flow water level within the drum. By reaching its maximum level the drum starts rotating while simultaneous water rinsing takes place to prevent the filter cloth segments from clogging. The nozzle bar pair spray system washes the cloth. The remaining solids (of the inner segments) is collected in the inner central hopper. Through gravity, the reject is feeded into an integrated pit. Feeding pumps for reject and rinse water make the system independent. A control panel controls fully automated the process. The INECO™ Micro Drum Filter replaces all sand filter applications and gives better filtration results. Comparable sand filter have an equivalent pore size of only 30 μ – 40 μ , compared to 10 μ to 300 μ of the INECO™ Micro Drum Filter.



Top view into MDF with segment filter cloths, nozzle bar for cloth rinsing and double drum belt drive