ESMIL EQUIPMENT

EQUIPMENT AND TECHNOLOGIES
for wastewater treatment

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RDS drum screens

The best solution for the fine treatment of industrial and domestic wastewater

- Fine treatment of industrial and domestic wastewater
- For local wastewater treatment plants (LWTPs) in the food and processing industry
- A reliable solution for small and medium-sized wastewater treatment plants
- Closed design and high throughput capacity
- Low consumption of electricity and flushing water

RDS IS AN IDEAL SOLUTION FOR FINE WASTEWATER TREATMENT

- EFFECTIVE FINE TREATMENT, RELIABILITY AND HIGH THROUGHPUT MAKE RDS SCREENS A LEADER IN THEIR CLASS.
- THE PERFORATED SIEVE OR WOVEN MESH USED TO MANUFACTURE THE FILTER CLOTH ALLOWS EFFICIENT REMOVAL OF IMPURITIES FROM DRAINS.
- THE SCREENS ARE CHARACTERIZED BY LOW CONSUMPTION OF FLUSHING WATER AND ELECTRICITY DUE TO THE USE OF ENERGY-EFFICIENT COMPONENTS AND A WELL-THOUGHT-OUT CONTROL SYSTEM.

SCOPE OF APPLICATION:

Wastewater treatment for food and processing industry.

Treatment of wastewater with a high content of solids including fiber's, wool, feathers, and films.

Industrial and domestic wastewater treatment plants.

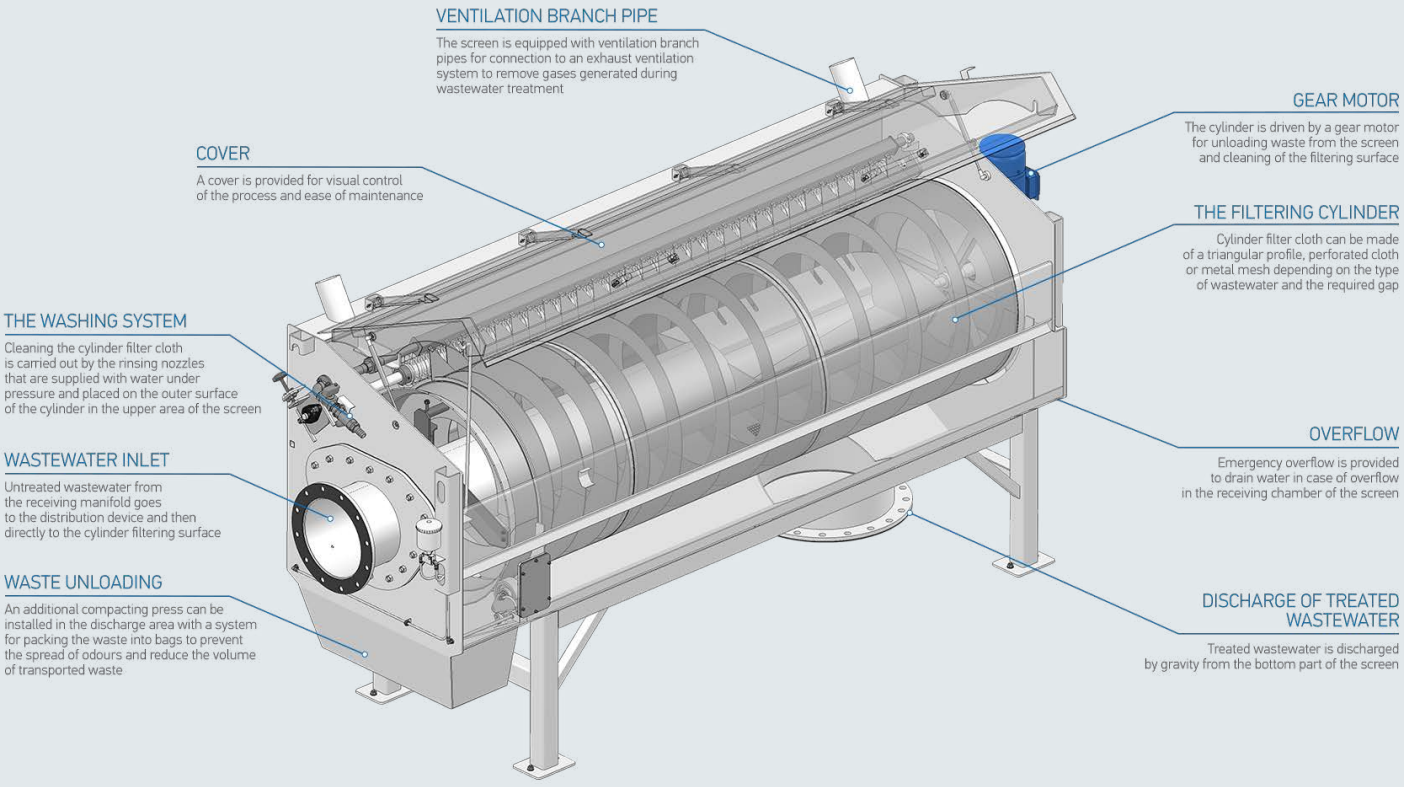
THOUGHT OUT TO THE SMALLEST DETAIL - EASE OF OPERATION AND MAINTENANCE

» The screens are easy to maintain thanks to the accessibility of the main components in operating condition.

» Simplicity of design facilitates the installation and start-up of equipment.

» The screen does not require constant maintenance.

» The work of the screen is fully automated and eliminates the need for the constant presence of maintenance personnel.



DESIGN ADVANTAGES OF RDS ROTARY DRUM SCREENS

» Fine mechanical wastewater treatment with the ability to catch even such specific - contaminants such as feathers, fluff, wool, hair, films, seed coats due to the use of slotted perforated fabric or woven mesh;

» The use of woven mesh with a cell of 0.5-1 mm allows for the effective extraction of specific fine particle contaminants from wastewater, which is especially important for the subsequent biological wastewater treatment using MBR technology;

» The reliability of the equipment is ensured by the applied design solutions: direct drive of the drum, support rollers of the drum on rolling bearings, and most of the bearings are located outside the housing, closed housing, etc.

» Cleaning of the screen filter cloth surface is carried out by a mechanical brush installed on the outer surface of the drum. Due to the use of the brush adjustment mechanism, its tight fit is achieved over the entire surface of the drum, which guarantees high-quality cleaning of the filtering surface.

» The presence of the flushing nozzles installed outside the drum provides additional thorough cleaning of the filtering surface and guarantees trouble-free operation of the screen even when treating wastewater containing fat and oil;

» The compact design of the screen combined with high throughput makes it possible to organize effective mechanical cleaning in a small area, which is extremely important when using container-type block treatment facilities;

» The elongated flights of the spiral of the conveyor screw will cope even with a very large amount of debris extracted from the drain.

» Advanced automation: various operating modes, frequency regulation of the drum, flow sensor, synchronization communication with other types of equipment; it is also possible to install remote control units;

» The presence of an overflow in the screen design allows avoiding an emergency overflow in emergency situations.

» Low consumption of electricity and flushing water.

» Wide range of additional options.

» The fully enclosed screen design prevents the spread of unpleasant odors and dangerous gases.

RELIABILITY AND DURABILITY OF ESMIL ROTARY DRUM SCREENS

- ✔ THE TIME-TESTED DESIGN OF THE SCREEN COMBINED WITH HIGH-QUALITY COMPONENTS IS A GUARANTEE OF HIGH RELIABILITY AND DURABILITY;
- ✔ DURING MANUFACTURING, ALL STAINLESS STEEL PARTS OF THE SCREEN UNDERGO A PASSIVATION STAGE, WHICH INCREASES THE SERVICE LIFE IN AN AGGRESSIVE ENVIRONMENT;
- ✔ CORROSION RESISTANCE IN WASTEWATER: CASING, DRUM, THE LINING OF THE SCREEN ARE MADE OF STAINLESS STEEL;
- ✔ MATERIALS THAT ARE EXTREMELY RESISTANT TO CORROSION ARE ONLY IN CONTACT WITH WATER;
- ✔ ELECTRICAL PROTECTION AGAINST OVERLOAD AND POWER SURGES.

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WE MAKE YOUR WISHES COME TRUE – ADDITIONAL OPTIONS

» SCREENS CAN BE MADE OF STEEL AISI 316, 321

» THE SCREENS CAN BE COMPLETED WITH A FILTER CLOTH MADE OF PERFORATED CLOTH OR METAL MESH

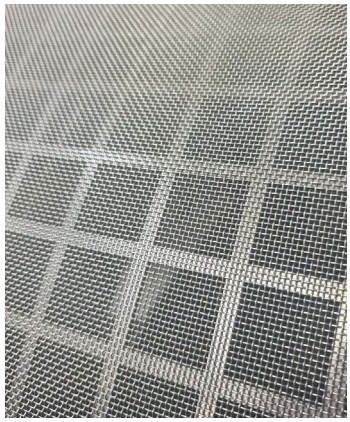
» THE SCREEN CAN BE ADDITIONALLY EQUIPPED WITH A COMPACTING PRESS TO REDUCE THE VOLUME AND WEIGHT OF THE EXTRACTED WASTE.

» WE CAN DEVELOP AN INDIVIDUAL SOLUTION FOR YOU FOR INTEGRATING THE SUPPLIED EQUIPMENT INTO A SINGLE COMPLEX.

Rest assured that we will prepare the most optimal equipment for solving your tasks!

Technical specifications

Parameter	Value
Throughput, m³/h	105 – 900
Clearance, mm	0,25 – 10
Drum diameter, mm	450 – 1 000
Drum length, mm	1 000 – 3 000
Width, mm	300 – 1 200
Unit weight, kg	450 – 1 580
Flush water consumption, l/min	60 – 180
Flushing water pressure, bar	4 – 5
Motor actuator:	
Ingress protection rating	IP55
Power, kW	0,37 – 1,1 3 phases, 380 V, 50 Hz



International Sales Department

+48 87 620 06 02
prodeko@esmil.eu