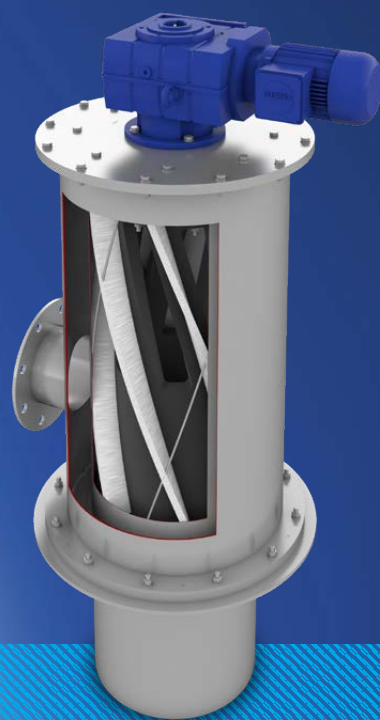




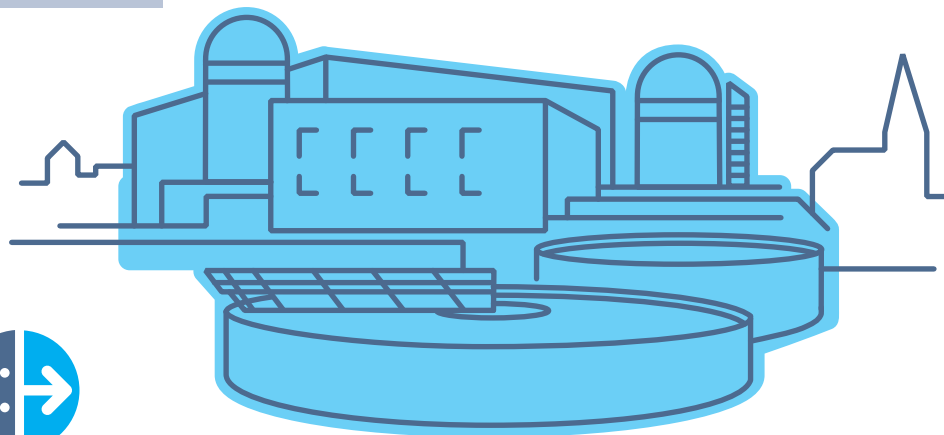
Mechanical pre-treatment with siClaro[®] fine screen



Life is good – with clean water

Mechanical pre-treatment for MBR plants

with siClaro® fine screens



Field of use

- Mechanical pre-treatment in decentralised water treatment plants
- Fine screening through openings with a diameter of less than 3 mm makes it ideally suited for membrane aeration systems
- Maximum flow rate of 7 l/s

Advantages

- Simple and low-cost compact design
- High hydraulic throughput with even the smallest opening diameters since the screen's entire circumferential surface area is effective
- Combines the functions of screening wastewater, separating grit and washing out organic matter all in one device
- Upgradeable with a discharge screw including dewatering and hygienic packaging

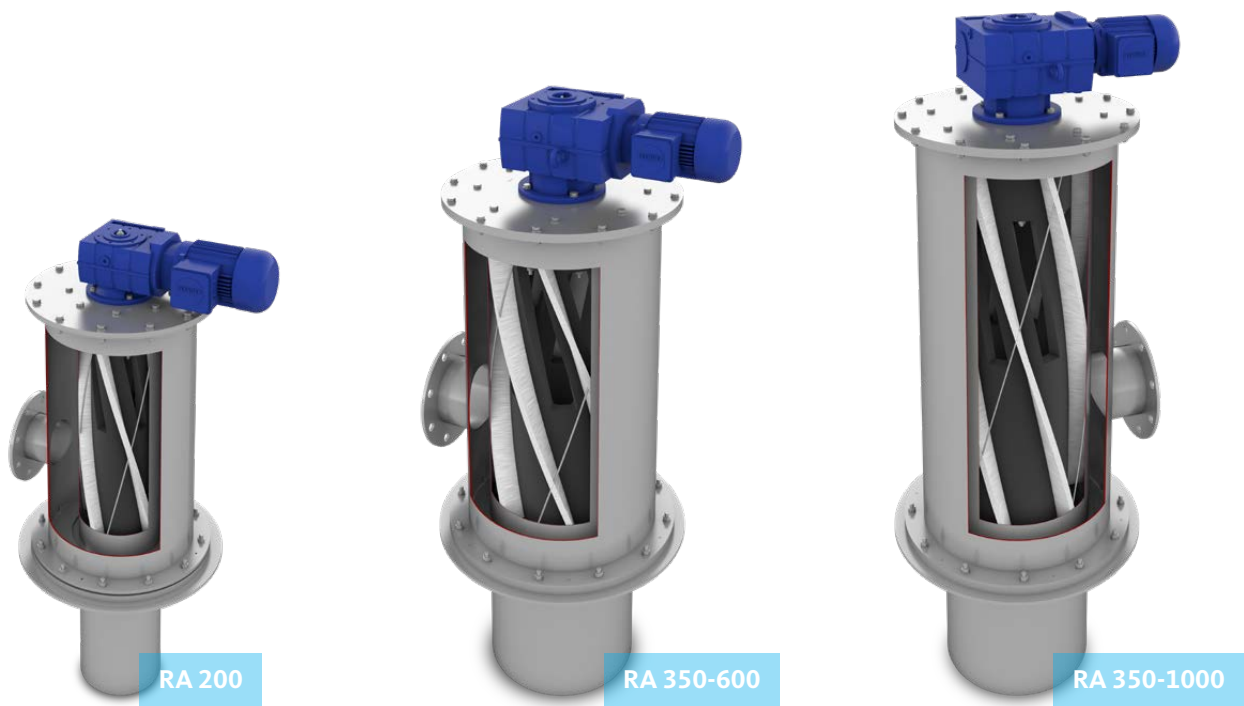
Objective

Hairs, fibrous materials, etc. can form unwanted agglomerations and clog the membrane bioreactor and therefore have to be separated from the raw wastewater to ensure the membrane aeration plant's safe and low-maintenance operation. But the organic contents of the screenings should be returned to the biological treatment stage as a carbon source.

Decentralised membrane wastewater treatment plants need a simple and low-cost mechanical pre-treatment to separate screenings and sand.

The siClaro® fine screen combines a vertical fine screen with screenings washer and a circular grit chamber and thus satisfies these requirements.

The separated solid matter can be discharged via a dewatering screw press but the collected screenings and sand can also be sucked off directly from the tank with a suction vehicle.



RA 200

RA 350-600

RA 350-1000

Function

The wastewater enters the screen unit tangentially and is forced into a cyclic flow (teacup effect) whereby the resulting vertical force moves the sand grains to the hopper throat. Light suspended and solid matter rise in the centre of the circular grit chamber and are retained by the cylindrical screen element.

Several spirally arranged brushes clean the screen cylinder. The solid matter is transported to the raw water tank opposite to the inflow. The raw wastewater washes organics out of the rising solid matter during its multiple circulations.

Our patented screen system has proven successful for the separation of solid matter in marine applications and upstream of membrane aeration plants for many years.

Technical specifications

Medium	Wastewater containing solid matter		
Designation	siClaro® fine screen		
	RA 200	RA 350-600	RA 350-1000
Material	1.4301/ 1.4571**/ PP		
Max. flow rate [l/s]	2	5	7
Screen length [mm]	440	813	1000
Screen pipe diameter [mm]	200	350	
Screen openings [mm]	0,5 / 1 / 3		
Inflow (through roughing cell)	Flange DN 50		
Sampling tap	Ball valve 1"		
Outlet	Flange DN 100	Flange DN 150	
Drive	Electric motor with spur gearing		
Designation	CAF38-LA71B4	CAF68-LA71M4	
Output [kW]	0,12	0,37	
Voltage [V] / Frequency [Hz]	400/50 440/60	400/50 440/60 400/50 440/60	
Speed [rpm]	15	15	
* painted, ** salt water resistant			





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