MONASAND[®]

CONTINUOUS WASHING SAND FILTER



SFA enviro

SUSPENDED FINE PARTICLES REMOVAL

Enviroline



The continuous backwash sand filter MONASAND[®] provides a continuous filtrate production, without requiring periodic stops for sand cleaning. It ensures highquality liquid/solid separation by efficiently removing suspended fine particles.

Additionally, it distinguishes itself with low water and energy consumption. It has a cylindrical-conical shape with a deep bed.

DESCRIPTION / OPERATION

MONASAND[®] filter through the inlet flow by an upwards movement of the pipe at the top and travels down to the wash water which acts as an impurities radial water distributor where it will separator. Clean sand falls back to the be spread uniformly at the base of the **isolation box** to serve later as a filter sand bed.

top through the filter bed where solids prevents any contact between filtrate are trapped, and filtered water passes and sand. over the overflow wire and is led away through the filtrate outlet pipe. The contaminated sand moves down in the filter towards the bottom of the cone to be sucked into the external air-lift.

The air-lift pump moves the sand to the top into the sand washer.

Raw influent flows into the There, it is cleaned in a countercurrent medium again.

Here, the water travels from bottom to This specially designed sand isolator

The dirty washing water is discharged through a designated adjustable outlet pipe, which can be regulated manually but remains always below the filtrate outlet level.





MONASAND[®] filters are made of stainless steel for medium flow rates and can be installed in a parallel system.

For high flow rates, they are integrated into concrete modules.

NOMENCLATURE

- 1 Inlet Effluent
- 2 Clear Water
- **3** Filtrated Effluent
- 4 Sand Bed
- 5 Drain
- 6 Filter Reject
- **7** Cleaning Box
- 8 Isolation Box
- 9 Air-lit









	Model	Filtration area (m²)	Diameter (m)	Nominal Flow (m³/h)	Air Consumption (Nm³/h 4 to 5 bar)	Wash water flow
1	MDS 07	0.70	0.95	5 to 10	1.5	
1	MDS 15	1.60	1.45	10 to 20	2	
1	MDS 30	2.90	1.95	15 to 40	4 to 5.5	
1	1DS 40	3.90	2.25	30 to 50	6 to 8	7 4 2 10 0/
1	1DS 50	5.10	2.55	40 to 75	8 to 12	3 to 12 %
MDS	30 GC/cell	2.90 - 4.25	-	30 to 40	4 to 7	
MDS	40 GC/cell	4.25 - 5.75	-	40 to 65	6 to 10	
MDS	50 GC/cell	5.25 - 6.75	-	50 to 85	8 to 12	

MAIN APPLICATIONS

- Industrial water recycling
- Phosphorous removal
- Biofiltration
- Chemical processing
- Paper industry
- Drinking water production
- Process water production
- Tertiary treatment



- Operation and continuous washing
- Excellent filtration efficiency
- Easy maintenance
- Adjustable washing flow
- Very low energy consumption
- Easy installation













PERFORMANCE BY APPLICATION

Application	Inlet raw water	Outlet filtrate	
Tertiary treatment	SS: 30 - 70 mg/l	SS: < 5 mg/l	
Recir. of process water	SS: 40 - 100 mg/l	SS: 5 - 15 mg/l	
Potable water	Turbidity: 2 - 10 NTU	Turbidity: < 0,5 NTU	
Phosphorous removal	P: 2 - 5 mg/l	P: < 0,5 mg/l	
Paper mill waste water	SS: 20 - 80 mg/l	SS: < 10 mg/l	







A STEP AHEAD IN WATER TECHNOLOGY

SFA enviro is born from the merger of Europelec (France), Aquasystems International (Belgium) and Aquaturbo Systems (USA), consolidating their expertise to form the environmental division of the SFA Group.

Operating under the Aquaturbo and Europelec brands, SFA enviro designs and manufactures a wide range of equipment for industrial and municipal wastewater treatment. Alongside our products, we offer a range of services including on-site installation, commissioning, equipment rental and the spare parts supply.

For more information, contact us:

Aquasystems international

Brusselsesteenweg 508, B-1500 Halle - BELGIUM +32 2 362 02 62 / asi@sfa-enviro.com

Europelec 209, rue de l'université 75007 PARIS - FRANCE +33 1 44 82 39 50 / eur@sfa-enviro.com

Aquaturbo systems 1754, Ford Avenue, Springdale, AR 72764 - USA +1 479 927 1300 / ats@sfa-enviro.com

or visit our website:

sfa-enviro.com in ⊡ ©