



## Competence and experience in the aeration of waste water.

ENVICON is your specialist for the use of diffuser elements and for the optimization of aeration in wastewater technology. With the use of advanced process technology and experience in plant construction and the component production, we offer sophisticated and flexible solutions to your wastewater treatment.

### Contact us at:

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This product flyer and more information, see also the convenient PDF download:

[www.envicon.net](http://www.envicon.net) -> **Products/Downloads**



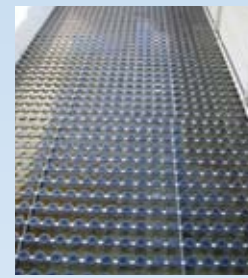
### Optimizing operation of wastewater treatment plants:

The ENVICON innovative control system TAT-IntelliClean®, based on a fuzzy-pattern recognition technique, precisely reproduces the processes in the biological stage of a wastewater treatment plant and permanently switches the aeration system of the treatment plant in a load-dependent manner. The efficiency of the treatment plant is increased, effluent values are lowered and evened out, and energy is saved. The performance is confirmed by a free trial operation.

Please contact us for our non-binding advisory service.



## The Diffuser Specialist



## Based on over twenty years' experience, ENVICON offers you qualified advice and diffusers for all types of application:

Membrane materials available for our diffusers:	Suitable for wastewater (1)				Potable water
	as per DWA-M115 (municipal)	from trade and industry	with organic fats and proteins	with mineral oils	
EPDM with reduced softeners	✓	(✓)			
Silicone	✓	✓	✓		
EPDM with fabric insert	✓	✓	✓		
Polyurethane	✓	✓	✓	✓	
NBR	✓	✓	✓	✓	
Ceramic, glass-sintered	✓	✓		✓	✓
PVC (tubular)	✓	✓	✓	✓	
Stainless steel (tubular)	✓	✓	✓	✓	✓

(1) Please contact us if in doubt. We will advise you based on our long experience.

### Adapters for nearly all pipe sizes:

Type	For connecting	Suitable for the following pipes	
		Rectangular pipe <input type="checkbox"/>	Round pipe <input type="radio"/>
EBA1	1 disc diffuser or tubular diffuser	80 x 40 mm and over	DN50 – DN 150; oD63 – oD154
EBA2	2 tubular diffusers		
ENVGH	Rubber sleeve for 1 disc diffuser EMS-B9	Not suitable	oD90 and oD110 (plastic pipe)
ENVS	Saddle for 1 disc diffuser EMS-B9		oD63; oD75; oD90; oD110

**Advice and configuration:** Each situation and all wastewaters are unique. ENVICON has a wide range of membrane materials, diffusers and perforations and of course we advise you in the selection of the optimum materials and best types of diffuser for you. Our services include, if desired, the following engineering of diffuser system.

**Expert opinion (status report):** We offer a free-of-charge appraisal of our membranes. You send us your used diffusers free ENVICON and receive a status report, that can help you to decide whether to replace them or continue to use them.

**Formic acid dosing station:** We offer mobile formic acid dosing stations for the low-cost and easy removal of lime deposits on diffusers during operation.

### Tubular diffusers:

Type	Membrane material (1)	Bubble sizes	Standard lengths in mm	Special lengths	Wd up to approx. m
EMR-ls	EPDM	Fine, coarse	750, 1000	Many special lengths are possible upon request	7.0
EMR-sil	Silicone	Fine			
EMR-mol	EPDM	Fine, coarse			
EMR-pur	Polyurethane	Fine			
EMR-nbr	Nitrile rubber	Fine			
EKR	Ceramic	Fine			
ERS-K	PVC	Coarse (slit)	(2)		
ERS-A4	Stainless steel	Coarse (slit)	(2)		

(1) All tube qualities are also available as replacement membranes. Mechanical tongs for the stainless steel clamps can be purchased; we lend pneumatic pliers free of charge against payment of a deposit.

(2) Available in diverse versions and lengths with different numbers and sizes of slits, as well as a front and top air supply.

### Disc diffusers:

Type	Ø in inches	Membrane material	Wd up to approx. m	Membrane change	Material and special features K = Plastic VA = Stainless steel
EMS1	12	EPDM	7.0	Easy	K+VA, very rugged
EMS1-HT	12	EPDM	10.0	Easy	K+VA, very rugged, up to 130 °C
EMS2	12	EPDM	7.0	Very easy	K, very rugged
EMS2-HT	12	EPDM	10.0	Very easy	K, very rugged, up to 130 °C
EMS-B12	12	EPDM	6.0	Possible	K
EMS-B12-sil	12	Silicone	6.0	Possible	K
EMS-B9	9	EPDM	6.0	Possible	K
EMS-B9-sil	9	Silicone	6.0	Possible	K

**Fixed bed, Type BIOPAC®** with the surface areas 100 m<sup>2</sup>/m<sup>3</sup> and 150 m<sup>2</sup>/m<sup>3</sup> for submerged use in biological wastewater treatment and for substrate digestion in biogas generation. Block sizes 540 x 540 x 400 to 550 x 550 x 1200 mm. The ENVICON fixed bed is characterised by very good three-dimensional flow-through, excellent capacity, as well as optimum microroughness for the easy and permanent colonisation of microorganisms.