Welcome to ENVICON!
Our roots

ENVICON is a German Company, home in the Ruhr Aera.

The Ruhr Aera has a long industrial tradition. It is a successful example for a transformation to a landscape of technology and service industry.

With its high living quality the Ruhr Aera today is attractive for high potentials and their families.
Diffuser systems – Made in Germany

ENVICON is a family owned company working in the field of wastewater aeration in second generation.

ENVICON diffusers are produced in Germany. Different types of diffusers, a wide range of materials and perforations offer the optimal solution to any application of wastewater aeration.

ENVICON supplies not only diffusers but supports the customers with the specific know-how based on the long term experience in operation and process technology as part of our service.
All-around-service

ENVICON advices the customers in respect of planning, selection of materials and design of the aeration system to ensure a optimal and sustainable result.

Flow conditions before optimization

Flow conditions after optimization
The ENVICON know-how

The extraordinary know-how of ENVICON can be especially noticed with the TAT-IntelliClean – a state of the art real time control system based on fuzzy-pattern technology (similar to security system).

TAT-IntelliClean controls the aeration system of the wastewater treatment plant permanently load dependant, process optimal and efficient. The results are much better effluent values effectively avoiding peaks as well as a reduction of the energy consumption.

TAT-IntelliClean does not use fixed set point values or fixed rules (fuzzy logic). Therefore it is independent from a drifting of the probes and absolute values.
Efficient diffuser for WWTPs bringing a whole river back to life

WWTP Bottrop
1,300,000 P.E.
21,000 units EMS-HT
(Membrane disc diffusers)
Since 1996

WWTP Dortmund-Nord
1,000,000 P.E.
16,000 units EKR10
(Ceramic tube diffusers)
Since 1992

Since 2003

Efficient diffuser for WWTPs bringing a whole river back to life

The Company
ENVICON disc diffuser EMS1 with stainless-steel-clamp

Available membrane types:
- Standard EPDM membrane with low softener (for municipal wastewater)
- HT-membrane (special EPDM for deep tanks up to 10.0 m water depth, higher air temperatures > 90°C and industrial wastewater)
- The patented reinforcing ring keeps the membrane flat during operation and thus prevents aeration from concentrating at the centre of the dome
ENVICON disc diffuser EMS2 with a PAGV-stretch ring

Membrane types:
- EMS (Standard)
- EMS-HT (especially for deep tanks, higher air temperatures at inflow and industrial wastewater)

Advantages:
- No stainless steel in the wastewater (corrosive media)
- Fast and easy membrane replacement without tools
- No replacement of the complete diffuser, only membrane replacement
Mounting adapter type EBA1 for a disc or one tubular diffuser

Assembly onto pipes made from plastic or stainless steel

The single adapter EBA1 fits to rectangular and circular stainless steel tubes

The ENVICON disc diffuser EMS2 mounted on plastic circular tube with a single adapter EBA1

The EBA1 is available for:
• circular pipes (DN50 – DN150) and
• rectangular pipes (minimum 80 x 40 mm)
## Selection of references ENVICON disc diffusers type EMS

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<tr>
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MEMBRANE TUBE DIFFUSERS
ENVICON membrane tubular diffuser EMR

Available membrane materials:
- Standard EPDM membrane with low softener for municipal wastewater
- Silicone
- Polyurethane
- EPDM fibre-reinforced
- (other materials on request)

The special groove of the EPDM-membrane
- allows easy fixing of the clamp
- serves as transport safety device
- protects the membrane from local compression stress
Mounting adapter, Type EBA2 for a pair of tubular diffusers

The EBA2 is available for:
- circular pipes (DN50 – DN150) and
- rectangular pipes (minimum 80 x 40 mm)

The double-sided adapter EBA2

Pairs of diffusers mounted onto rectangular and circular stainless steel tubes with the ENVICON double adapter EBA2

A pair of ceramic diffusers
## Selection of references ENVICON tubular diffusers type EMR

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Thank you for your kind attention!
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