ROTURI® unique inline gas transfer system

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USERS SAY "ONE OF THE MOST EFFICIENT WAYS TO DISSOLVE GAS INTO ANY LIQUID"

The importance of mass transfer

State of the art gas-mass-transfer systems utilise pressure and/or velocity differences, long retention times or specially designed constructions to achieve sufficient transfer rates.

Many gas-mass-transfer technologies are linked to high energy demands, considerable gas losses and in many cases to substantial reaction basin sizes.



Savings in O_3 /anno (example)

Savings in energy for O₃/anno (example)



KEY ADVANTAGES:

- ☑ Inline system
- \mathbf{V} Works at ambient pressure
- ☑ Adjustable to varying wastewater profiles and streams
- ☑ Re-equipping or retrofit
- ☑ Modular Scalable Reliable

Unique inline gas transfer

Our Roturi® is a uniquely designed inline gas transfer system, suitable for re-equipping as well as for integration in existing operations.

Due to its specific shape and form the Roturi® creates a large reaction surface. A finely dispersed ozone dissolution and thus highly efficient gas transfer is accomplished.

Compared to current state of the art techniques, lower energy demands are achieved since the gastransfer device does not need the creation of velocity and pressure differences but operates in the main piping system and flow.

Retrofit-equipment update

A combination with existing gas generators is always possible, independent of type and size. By default, the system works in the main line at atmospheric pressure, resulting in lower energy demands when compared to conventional transfer devices. Power as well as gas amounts are reduced substantially.

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EFFICIENT & INLINE

Ozonation

Many industries as well as municipalities already benefit from the possibilities ozone offers. In the Pulp & Paper Industry ozonation is often used, both for bleaching processes and for pre-cracking of recalcitrant COD, making it biodegradable.

The degradation of micro pollutants by ozone is getting more and more attention in municipalities as well as the pharmaceutical and chemical industry.

Aquaculture and fish farms use ozone for disease control, reduction of TSS, DOC, BOD and COD, hence effluent amounts are positively affected.

Main components

- Roturi® implemented in T-piece with special hood
- Sealing water protection
- \circ Servo inverter
- Gas Connection with flex hose, Ø 8-20mm;
 PTFE-hose with stainless steel jacket

Technical data (DN100)*

Measures (LxWxH): Hydraulic flow: ** Power connection:	27cmx25cmx54cm 0,5 - 20m³/h 380/400V, 1kW, 16A
	3-phase (neutral/ground)
Material:	1.4571 (1.4462 on demand)
Power consumption:	0,5kW** @ 5m³/h
Ambient temperature:	5 - 35°C
pH:	4 - 12

Applications

- \circ Industrial wastewater treatment
- \circ Oil & Gas
- Pharmaceutical Industry
- \circ Chemical Industry
- Aquaculture
- Food & Beverage

System design & standard sizes

Fully implemented in a T-piece the Roturi® is ready for operation. Depending on the specific diameter of a system's existing piping, the Roturi® is connected through reducers.

Available standard sizes:

- DN100
- DN200
- DN300



* Technical changes and/or modifications and errors subject to change.

** Depending on application and gas flow



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