

ozonia[®] radial diffuser

ozone transfer accessories



ozonia[®] radial diffuser provides high-efficiency mass transfer in a compact footprint, from easy drinking water to difficult wastewater applications.

applications

- ▶ drinking water
- ▶ wastewater
- ▶ process water

LENNTECH
WATER TREATMENT SOLUTIONS

info@lennotech.com Tel. +31-152-610-900
www.lennotech.com Fax. +31-152-616-289

ready for the resource revolution



ozonia® radial diffuser technology



ozonia® radial diffuser technology can be used in a wide range of applications. It is important that the ozone is introduced to the process in the most efficient way. **The radial diffuser is an excellent alternative to traditional bubble column components such as porous diffusers and, in certain circumstances, is to be considered preferential.** The application, process medium flow rate and ozone dose rate are critical factors which determine the size and positioning of the radial diffuser unit.

After leaving the generator, the ozone containing feed gas is routed to the process as quickly as possible. **Ozonia® radial diffusers** offer plant designers an elegant method of introducing ozone to process mediums and are **particularly advantageous when there are space restraints, risk of dogging or when a more dynamic mixing effect is required.**

how it works

The main component of an **ozonia® radial diffuser** system is the injector, which mixes the ozone containing feed gas with a relatively low motive water flow. In turn, this motive water flow is routed to a radial diffuser head. The throwing power of the diffuser head ensures that the motive water containing the ozone is intensively mixed with the process medium.

The **ozonia® radial** diffuser elements are designed so that in addition to the ozonated motive water, a cloud of homogeneous small-sized bubbles are produced, creating a large bubble/water contact area to ensure a maximum mass-transfer rate. Radial diffusers are easily integrated in pipe systems as well as in contact chambers. If the operating parameters allow, it is also possible to use the **ozonia®** mixing tube.

product highlights

- ▶ very high mass-transfer rate
- ▶ homogeneous bubble formation
- ▶ highly resistant component materials
- ▶ extreme stability over long service periods
- ▶ dynamic mixing /contacting
- ▶ widely accepted technology

main features

- ▶ over 95% Mass Transfer Efficiency
- ▶ easy to install in pipelines or contacting tanks
- ▶ highly reduced energy consumption
- ▶ long service life

model	suction volume (Nm ³ /h)	water motive flow (m ³ /h)	treated water flow (m ³ /h)
ozonia [®] RD 50 to 1,100	1 to 400	1 to 600	1 to 5,600

Suction volumes and motive flows depend on operating pressures. Contact us for actual design parameters.



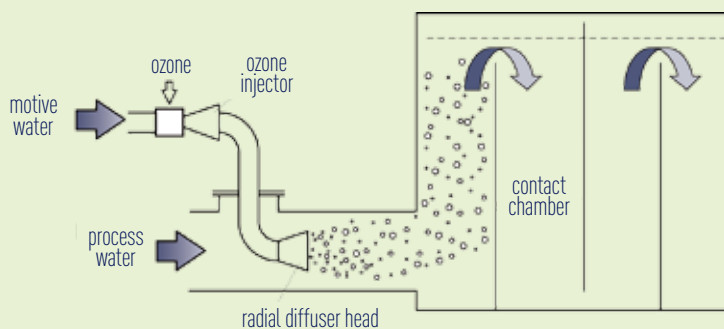
technical features

- **gas:** mixed Oxygen/Ozone or Air/Ozone
- **conformity:** IEC, ISO, CE, SN, ASME, SEL0
- **ambient temperature conditions:** 5 to 40° C

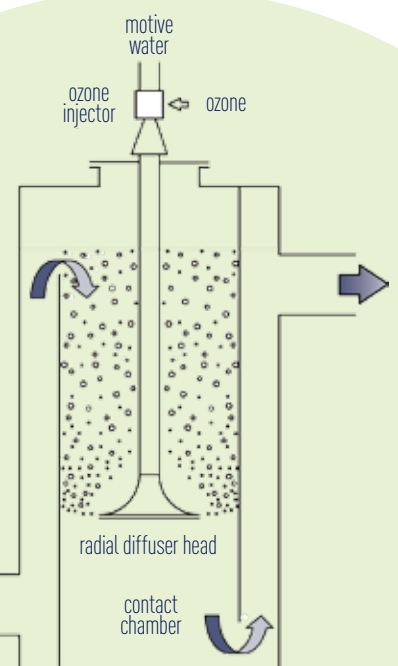
materials

- **injector:** stainless steel 316L
- **diffuser:** stainless steel 316L
- **pipng:** stainless steel
- **other material depending on application on request**

inlet pipe with radial diffuser



contact chamber with radial diffuser



SUEZ's **ozonia**® ozone technology portfolio includes products from the laboratory scale to the largest ozone systems ever built. Suez uses our extensive ozone technology experience to provide the industry's most reliable and robust products.

Our unique ability to deliver the most reliable and robust systems is why thousands of customers around the world have chosen **ozonia**® ozone systems.

We have been the ozone industry pioneer for over 25 years. Trust SUEZ to deliver the highest quality ozone solutions to meet your treatment challenges.

7
product ranges
certified to
international
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10,000
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years of
experience



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