

ozonia* containerized solutions

plug and play ozone systems



ozonia* containerized solutions are fully assembled plug and play ozone systems. Our turn-key solutions allow customers to reduce construction costs and bring production online faster.

ozonia* containerized ozone solutions use industry leading ozone generation technology and smart IGBT-based power supply equipment. Our containerized solutions can be supplied with all the ancillary equipment required to safely operate an ozone system and require only utility connections to begin ozone production.



applications

- Drinking water
- Municipal and industrial wastewater
- Pulp and paper bleaching
- Cooling water systems
- Cooling tower applications
- Ozonolysis
- Leachate treatment

ozonia technology

- Ceramic dielectrics are more robust than glass.
- Each dielectric element is tested at over twice the operating voltage before installation – glass cannot be tested in this manner.
- ozonia's system of individual fuses for each tube is still employed ensuring that a single dielectric failure does not shut down the generator. Without this protection, projected dielectric failure rates equate directly to generator downtime.
- Vessels are compact as a result of the high ozone production per unit area of electrode and contain fewer tubes than glass systems.

the concept

Containerized Ozone Plants have the same outstanding features as ozonia's other plants, when it comes to product quality and are capable of producing ozone at very high concentrations from oxygen and air feed gas.

Although designed and built to minimize capital costs, we never compromise on quality. Only components and materials that ensure a long and reliable service life are used by SUEZ.

To ensure the longest possible service intervals with very low maintenance, stainless steel components and ozone resistant materials are used for the piping and contacting system. The integrity of these systems is suitable for harsh conditions encountered at industrial sites and provide the highest quality solutions for municipal applications. Our containerized solutions are installed with lighting, heating, and cooling systems and can be designed to withstand the most challenging ambient conditions.

scope of supply

Containerized ozone solutions include four main categories of equipment:

- Ozone generation equipment
- Ozone contacting or mass-transfer equipment
- Feedgas preparation equipment
- Cooling water chiller equipment

ozone generation equipment

Ozone generation equipment is the most critical impact on performance and cost. ozonia containerized solutions include:

- Containers
- Ozone generators
- Ambient analysers
- Container cooling systems
- Control cabinets
- Power distribution
- Piping and fittings
- Wiring and fittings

product highlights

- High performance
- Fully assembled and tested
- Minimum installation time
- Minimum civil works
- No building costs
- Highest industrial quality
- Optimized power consumption
- Fully engineered concept
- Backed by ozonia service



optional offerings

ozonia containerized solutions are very flexible allowing the addition of a wide variety of optional equipment and services to meet each client's goals.

ozone contacting or mass-transfer equipment

There are 3 main ways of introducing ozone to a medium: either with an injection system, porous diffusers or a radial diffuser.

After the mass transfer has taken place, both systems require a reaction volume/time to enable the designed reactions to take place. Contact times between 4 and 20 minutes are quite normal in ozone applications. Because these reaction volumes are normally made of concrete and, consequently, fall into scope of the building contractor, they are not included in ozonia's scope of supply.

feedgas equipment

The ozone generators installed can be fed with either dry air or dry oxygen depending on the amount of ozone gas required and, to a certain extent, the ozone concentration. Typically, the dry air is produced on-site with a suitable compressor and dryer arrangement and the dry oxygen is drawn from a LOX or PSA/VSA system.

cooling water equipment

This equipment will be required when the specified amount or quality of cooling water is not available on-site.

The chiller unit is typically supplied as a separate unit for installation outside the container. All other components will be installed inside.

ancillary equipment

In order to give clients the best possible service, ozonia also markets and manufactures ranges of ancillary equipment. This equipment has been especially selected or designed to match the service parameters of the ozonia ozone generators.

installation / service

The plant housing has been designed for outside service. If the container will be exposed to extended periods of extreme temperatures, in direct sunshine, it will be necessary to locate the equipment under a cover similar to a carport.



Ozone generator and pipework installed in container



technical features

- Low power consumption
- High efficiency
- Long service life
- Low maintenance
- High availability
- Small footprint
- Fully assembled and tested
- ozonia quality

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.

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product ranges
certified to
international
standards

over
10,000
installations

over
25
years of
experience



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