Small General Purpose Corona Discharge Ozone Generator

Proven Reliability
Azure has been designed for continuous operation in domestic and light commercial applications with minimal maintenance. The Azure is available in sizes of 1, 2 & 4 ozone modules.

All components are of high quality and chosen for their durability and resistance to ozone.

The stainless steel housing features a cover that allows the unit to be mounted outdoors in moderately sheltered environments (away from direct sunlight/rainfall).

Azure has 3 ozone outputs depending on the type of feed gas used:

- **Ambient Air**
  - The air you breathe at sea level. Output decreases with altitude.
  - 0.9 g/h*

- **Dry Air**
  - Air from an air dryer with -40 degrees C dew point.
  - 1.5 g/h*

- **Oxygen (95%)**
  - Oxygen from a cylinder or oxygen concentrator such as the Wassertec OX-5.
  - 3.5 g/h*

* Ozone output in grams per hour (g/h) per module.

“A simple yet rugged and reliable Corona Discharge type ozone generator for small water treatment applications. Simple, Efficient, Reliable.”
Features

- Corona Discharge ozone generator
- Suitable for water treatment / disinfection
- Designed for continuous operation (fully serviceable)
- Domestic and light commercial applications
- Available as individual unit or complete water disinfection system
- Indoor / outdoor use (provided there is shelter from rain/direct sunlight)
- Durable ozone resistant components
- 2 Ozone tubes made from Sintered Alumina Ceramic, Stainless Steel & Teflon
- No glass or nylon parts

System Components

1. **High Quality Ozone Modules**
   The Azure has 2 ozone tubes with solid state high voltage power supplies. The ozone tubes are fully ozone resistant, being constructed from sintered alumina (aluminium oxide) ceramic, stainless steel and Teflon. No glass or nylon parts are used.

2. **Ebara Water Pumps**
   Azure systems are supplied with Ebara stainless steel water pumps. These pumps work well with the venturi injectors and have excellent ozone compatibility. Suitable for both domestic and commercial use.

3. **Mazzei Venturi Injectors**
   Water is dosed with ozone from the Azure generator using a venturi injector. We supply the Mazzei brand of injectors which are imported from the USA. These are made from Kynar (PVDF) and are extremely efficient - achieving ozone dissolution in water of between 70-90% depending on pressure and temperature.

Benefits

- Complete water disinfection solution
- Kills bacteria, viruses and pathogens
- Destroys organic and inorganic contaminants
- Custom designed systems to meet specific requirements
- Easy to service and maintain
- Built to the highest standards
- Durable, long lasting components
Water Disinfection System

The Corona Discharge Azure can be supplied as an individual ozone generator or as part of a system which offers a complete water disinfection solution.

The system comprises of the following components:

1. Azure Corona Discharge Ozone Generator
2. Stainless Steel Ebara water pump
3. Mazzei Venturi Injector for dosing ozone
4. System start/stop circuit breaker switch
5. Air filter
6. Ozone resistant teflon tubing
7. Ozone resistant non-return valve

Installation

The system is typically installed as shown in the diagram above.

Water to be treated is stored in a tank (up to 10,000 litres). The pump circulates water in the tank through the venturi. In doing so the venturi creates a vacuum which draws ozone into the water. Ozone disinfects and decontaminates the water.

The treated water can then be pumped to its point of use, preferably via a filter.
## Specifications

<table>
<thead>
<tr>
<th>OZONE GENERATOR</th>
<th>Azure 1G</th>
<th>Azure 2G</th>
<th>Azure 4G</th>
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</thead>
<tbody>
<tr>
<td><strong>SIZE AND WEIGHT</strong></td>
<td>Height: 365mm (14.37&quot;)&lt;br&gt;Width: 295mm (11.61&quot;)&lt;br&gt;Depth: 130mm (5.12&quot;)&lt;br&gt;Weight: 5kg (11.02 lbs)</td>
<td>Height: 365mm (14.37&quot;)&lt;br&gt;Width: 425mm (16.73&quot;)&lt;br&gt;Depth: 130mm (5.12&quot;)&lt;br&gt;Weight: 7kg (15.43 lbs)</td>
<td>Height: 365mm (14.37&quot;)&lt;br&gt;Width: 795mm (31.3&quot;)&lt;br&gt;Depth: 130mm (5.12&quot;)&lt;br&gt;Weight: 12kg (26.45 lbs)</td>
</tr>
<tr>
<td><strong>POWER</strong></td>
<td>230V - 50Hz - 100W, Unit must be earthed.</td>
<td>230V - 50Hz - 200W, Unit must be earthed.</td>
<td>230V - 50Hz - 400W, Unit must be earthed.</td>
</tr>
<tr>
<td><strong>ENCLOSURE</strong></td>
<td>304 Stainless Steel, laser cut.</td>
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<tr>
<td><strong>OZONE MODULES</strong></td>
<td>1 / 2 / 4 x 0.9 g/hr (grams per hour) ozone modules from oxygen feed gas, with short circuit resistant power supplies.</td>
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<td><strong>OZONE CELL CONSTRUCTION</strong></td>
<td>316 Stainless Steel electrode, Teflon end caps, Alumina Ceramic dielectric, Silicone o-rings.</td>
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<tr>
<td><strong>OZONE OUTPUT FROM AMBIENT AIR AT 20°C (68°F) WITH 65% HUMIDITY</strong></td>
<td>0.9 grams/hour at 10 litres/minute flow rate.</td>
<td>1.8 grams/hour at 20 litres/minute flow rate.</td>
<td>3.6 grams/hour at 40 litres/minute flow rate.</td>
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<tr>
<td><strong>OZONE OUTPUT FROM DRY AIR AT 20°C (68°F) WITH -40°C (-40°F) DEW POINT</strong></td>
<td>1.5 grams/hour at 10 litres/minute flow rate.</td>
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<tr>
<td><strong>OZONE OUTPUT FROM OXYGEN AT 95% PURITY</strong></td>
<td>3.5 grams/hour at 4 litres/minute flow rate.</td>
<td>7 grams/hour at 8 litres/minute flow rate.</td>
<td>14 grams/hour at 16 litres/minute flow rate.</td>
</tr>
<tr>
<td><strong>VENTURI INJECTOR</strong></td>
<td>Mazzei Injector Model 684 / 784, Material: Kynar (PVDF).</td>
<td></td>
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<tr>
<td><strong>MOUNTING OPTIONS</strong></td>
<td>Ozone Generator is wall mounted. Venturi can be mounted horizontal or vertical. Connection to ozone generator via 8mm Teflon Tubing.</td>
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