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Ozone Room Sterilisation Unit

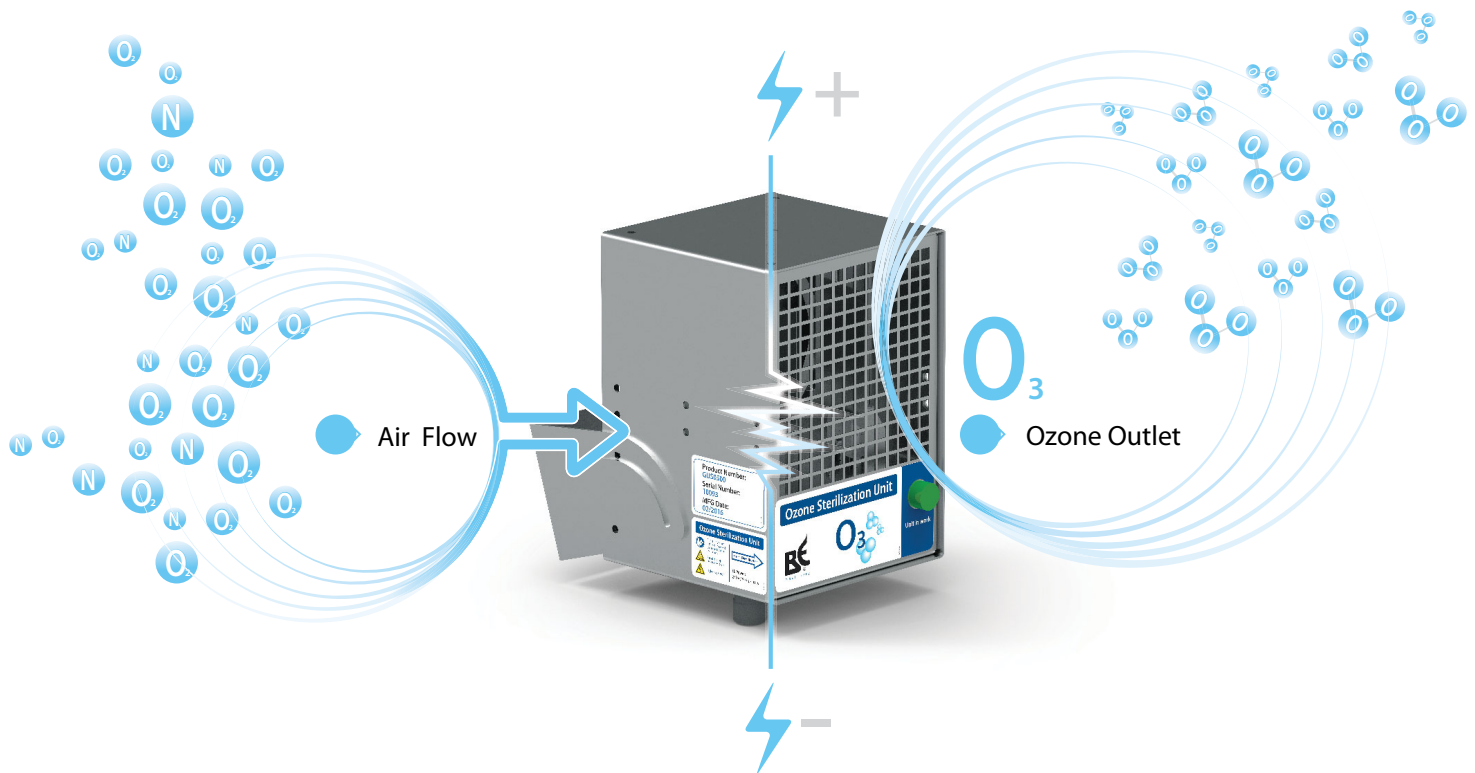
AOR Series



Ozone Room Sterilisation Unit – The Principle Function:

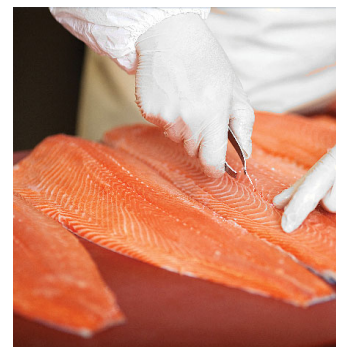
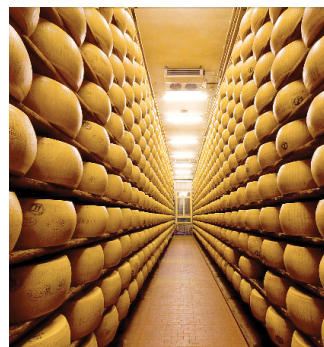
Ozone is the fastest-acting oxidising disinfectant and the most efficient broad-spectrum, microbiological control agent commercially available. Being highly reactive and completely non-discriminating, it immediately starts oxidising anything it comes in contact with. This makes ozone a very powerful bactericide agent.

Unlike any other oxidising agent, ozone decomposes into environmentally friendly oxygen, leaving no toxic residues.



Where to use the Ozone Room Sterilisation Unit?

- › Disinfect air in operating rooms, doctors' offices, and healthcare facilities
- › Deodorise clothing and fabrics from smoke or pet smells
- › Kill bacteria on food and food packaging areas
- › Remove mold spores and yeast from the air for food processing
- › Kill insects in storage areas

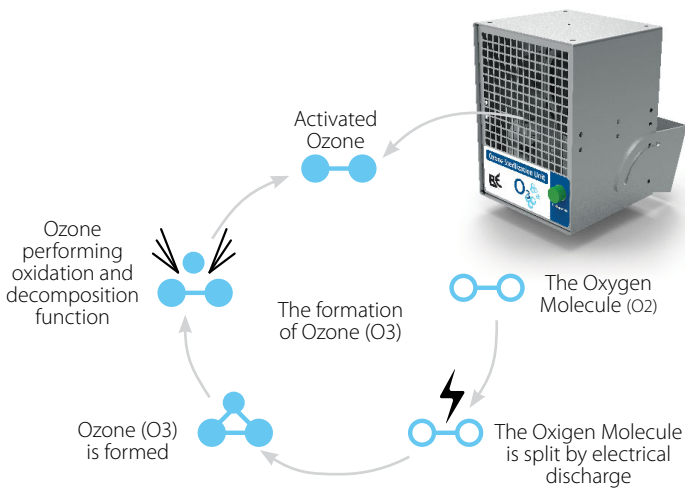


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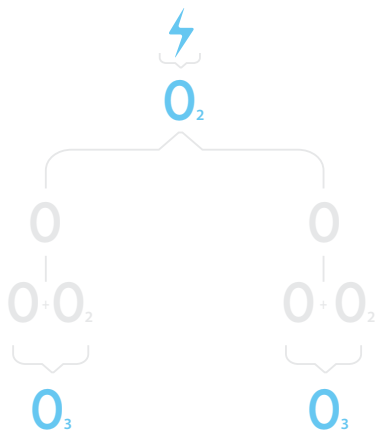
Ozone, or trioxygen, is a fast-acting oxidising disinfectant made up of three oxygen atoms, O_3 . Ozone occurs naturally in the upper atmosphere, or stratosphere, when the sun's light splits oxygen molecules, O_2 , into separate atoms. When these single atoms bond with other oxygen molecules, they form ozone, protecting us from the sun's harmful ultraviolet rays.

Commercially, ozone can be used to disinfect, deodorise, and sanitise the air, sterilise equipment, and remediate mold. Ozone also kills microorganisms, such as bacteria, in drinking water, pools, and spas.

Ozone Production



Physical Working Principle



The Corona discharge method is the most common method used to generate ozone for commercial use, due to its low cost and high reliability. This method uses an electrical charge to split oxygen molecules into individual atoms. An air dryer or an oxygen concentrator will lower the amount of nitrogen in the air and reduce the risk of forming nitrogen oxides or nitric acid.

Ozone is less stable than oxygen. When ozone comes in contact with bacteria, an oxygen atom breaks away from the ozone molecule, oxidising and thereby neutralising the bacteria.

As ozone disinfects, it naturally decomposes into oxygen, O_2 , leaving no toxic residues.

AORT system



The AORT system contains a mechanical timer that enables you to set in advance the ending time of the Ozone sterilization process.

AORS system



The AOR Stand enables the combination of up to four AOR systems, in a flexible and highly mobile adjustment for a maximum cover of the designated space for sterilization.

solidly built &
easy to operate





Beth-El Machinery Product Lines Include

The AFR and ACR series High Clean Rotary Filler and Capper

With extremely high hygienic standards, our machines provide filling and capping for products with a long shelf-life. Available with an output speed of between 1000 and 6000 containers per hour, depending upon the product.

A servo driven CNC filling machine's functions are fully servo or, pneumatic driven, and controlled from the control panel.

The High Clean Continuous Bottle Cleaner

From the AWC series, these machines have a highly flexible set-up which can accommodate containers with a variety of sizes and shapes.

Incorporating a range of capabilities, the High Clean Continuous Bottle Cleaner has an output speed of up to 15,000 containers per hour.

The AFR series High Clean Filling

These machines are designed for an extremely high hygienic standard, and enable products to maintain a long shelf-life.

The inline filling lines are capable of output speeds up to 3600 containers per hour.

Custom Processing Line Engineering and Manufacturing

Beth-El Machinery produces turnkey projects in the engineering and manufacturing of custom processing lines, pasteurisation, deaeration, product recovery systems, and homogenisation systems.

Applications include fermentation, carbonation, control systems, and batch and continuous mixing and blending systems for various fields in the food, chemical, and pharmaceutical industries.

Beth-El Machinery's process units, systems, solutions, and complete processing plants are a direct result of engineering expertise within core disciplines. Our goal is to apply these varied technologies in the most efficient and reliable ways to produce the highest quality process systems and plants available. Beth-El Machinery designs and manufactures the systems that, in turn, do the work for you.



Core Expertise:

Liquid processing

Packaging machines

Mass & heat transfer

Sterilisation units

Controls & automation

Ozone water units

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