

Features

- Reduces the need for harsh, costly chemicals
- Save on maintenance, time and money
- Helps to eliminate eye and skin irritation, hair damage and chemical odours
- Have crystal-clear water that smells fresh, feels softer and is more refreshing
- Utilises aerospace technology that has made purification safe and cost effective for even the smallest applications
- More than 2 million pools and spas use V.U.V. Ozone Systems
- Ozone has been used for over a century by large water systems worldwide

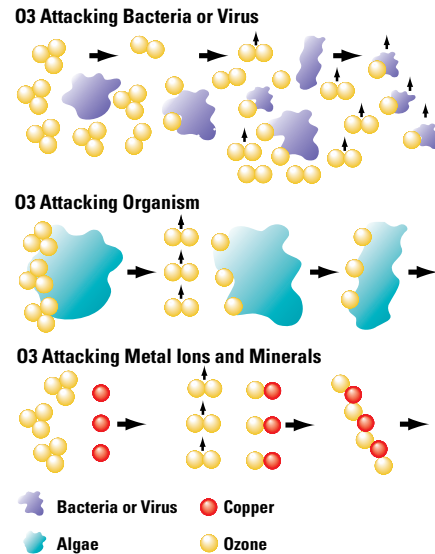
Prozone - Water Purifiers For Pools & Spas



Prozone creates healthier water - the advantages are crystal clear. Prozone purifies pool and spa water, makes it sparkling clean and clear and reduces the need for chemicals by up to 90%. It's the most effective system on the market today.

Here's How Prozone Works

Ozone is generated when a molecule of oxygen is illuminated by high energy ultraviolet light. Ozone is formed when three atoms of oxygen are bound together instead of the normal two. The extra oxygen atom makes ozone a highly energetic oxidiser. Ozone destroys algae, viruses and bacteria on contact – with no harmful by-products. It also breaks down harmful chemicals and acts as a flocculant, causing Total Dissolved Solids to be suspended and easily removed by the water filtration process. Ozone oxidises combined chlorine and bromine, freeing them to be continuously re-used. Therefore the use – and cost – of chemicals is greatly reduced.



Perfect For Pools

Prozone Water Purification Systems can easily be installed in new pools or retrofitted to existing pools. The Prozone system attaches to the water circulation system quickly and easily, generating ozone and injecting it into the the return, where it instantly purifies the water. In the process, ozone biologically destroys bacteria, virus and algae and oxidises metals which bond together for easy removal by the filter.

Ideal For Spas

The Prozone Water Purification System offers clear advantages for spas. The chemistry of a spa can change faster and more dramatically than a pool. High water temperatures – as well as increased amounts of body chemicals and organic matter given off by bathers – creates a breeding ground for contaminants and reduces the effects of chemicals.

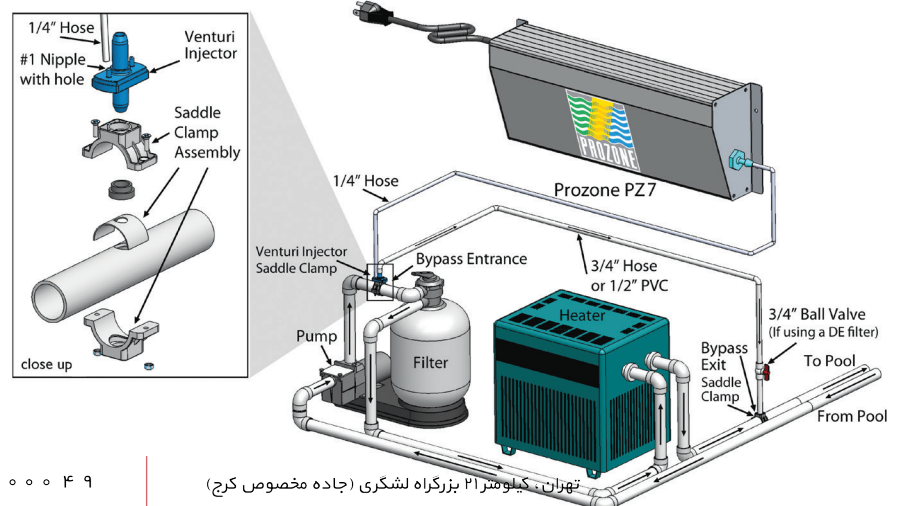
That's why a Prozone system is a better solution. It completely disinfects the water while the circulation is running. So the spa not only stays sanitary, Prozone keeps the water as you expect – clean, clear and safe.

Pioneers Of Ozone Technology

Prozone, pioneers of the original ozone generator cartridge, produced the first Ultra Violet Ozone Generating cartridge in 1977 for the swimming pool and spa industry. Since then, Prozone engineered systems integrating the cartridge configuration into applications such as swimming pools, aquasculptures, cooling towers and drinking water.

Prozone also pioneered the patented Bypass Venturi mixer and Micropore diffuser. Prozone's Bypass Venturi systems provide the ultimate in ozone absorption while operating in conjunction with the existing circulatory system. Its simplicity and effectiveness have become the industry standard for low-cost, easily implemented ozone systems. The diffuser provides superior mixing and absorption by continuously injecting tiny ozone bubbles into the water.

Combining these elements with our ozone generators provides the industry's most simple and reliable systems.



Venturi Systems for Residential In-Ground Pools

The PZ7 Series generator features our unique patented Bypass Venturi configuration for quick installation on the return line of the pool. This allows maximum ozone/water mixing to purify the water before it reaches the pool. The heavy extruded aluminium adds to its durability with clear gasketing that glows when the system is on.

The PZ7-1 is rated for up to 15,000 gallons (68m³) residential in-ground pools. The PZ7-2 is rated for pools up to 33,000 gallons (150m³).

Dynamic Venturi Injector Bypass Theory

A bypass contactor system gets its water directly after the circulation pump where pressure is high and returns the water to the last low pressure point returning to the pool. This pressure drop drives an injector venturi, which draws ozone/air from the ozonator and mixes it with the water returning to the pool. Additional contact tubing is added to ensure all of the ozone is absorbed before the water returns to the pool.



Specifications		
	PZ7-1	PZ7-2
Electrical	230 VAC/0.4 amps/92 Watts	230 VAC/0.8 amps/184 Watts
Shipping Weight (approx)	3.6kg	4.5kg
Size	431mm x 158mm x 85mm	431mm x 158mm x 85mm
Nominal Air Flow	25 CFH	50 CFH
Maximum Airflow	35 CFH	75 CFH
Arc Life (nominal)	20,000 hours	20,000 hours
Max Ozone Output	12 grams/day	20 grams/day
Storage Temperature	5mg / litre	5mg / litre
Operating Temperature	-1°C – +70°C	-1°C – +70°C
Housing	-4°C – +49°C	-4°C – +49°C



PZ2 - 1 & 2

Compressor System for Pools, In-Ground Spas and Commercial Water Purification Systems

The PZ2-1 & 2 are fitted with high output compressors for maximum ozone production. Installation is fast and easy by simple saddle connection to the return line. They feature our patented bypass for optimal ozone absorption and extended system life. A degassing column is available to remove excess air bubbles

Specifications		
	PZ2-1	PZ2-2
Electrical	230 VAC/1.5 amps/345 Watts	230 VAC/2.1 amps/483 Watts
Shipping Weight (app)	8.3kg	9.5kg
Size	152mm x 228mm x 533mm	152mm x 228mm x 533mm
Air Flow	20 CFH / or 40 with Bypass Venturi	20 CFH / or 40 with Bypass Venturi
Arc Life (nominal)	20,000 hours	20,000 hours
Max Ozone Output	12 grams/day	24 grams/day
Ozone Contact Density	5mg / litre	1mg / litre
Compressor Life (nominal)	20,000 hours	20,000 hours
Storage Temperature	-1°C – +70°C	-1°C – +70°C
Operating Temperature	-4°C – +57°C	-4°C – +57°C

Sizing For Pools & Spas

	Chlorine	Bromine
PZ2-1 (for pools)	20,000 Gal (90m ³)	40,000 Gal (181m ³)
PZ2-2 (for pools)	40,000 Gal (180m ³)	80,000 Gal (363m ³)
PZ2-1 (for spas)	800 Gal (3.6m ³)	160,000 Gal (727m ³)
PZ2-2 (for spas)	1600 Gal (7.2m ³)	240,000 Gal (1090m ³)



PZ2 - Large Commercial Systems

PZ2 units provide superior ozone generation by pressurising the lamp cartridges and superior ozone mass transfer into water from the turbulence created by the compressed air stream. PZ2 units require no operator interface once they are set-up. No recurring maintenance or special skills are required. The PZ2 Series has a hardware warranty for a full one year on residential and commercial systems.

PZ2 - Specifications	
Electrical	220/240 VAC / 60hz
Universal Solid State Inverter Ballast	110-290 VAC
Arc Life (nominal)	20,000 hours
Compressor Life	Nominal: 40,000 hours
Storage Temperature	-15°C – +70°C
Operating Temperature	-4°C – +60°C

Commercial Sizing			
	Chlorine	Bromine	Max Ozone Output
PZ2-4	80,000 Gal (363m³)	40,000 Gal (181m³)	2 grams per hour
PZ2-8	160,000 Gal (727m³)	80,000 Gal (363m³)	4 grams per hour
PZ2-12	240,000 Gal (1090m³)	160,000 Gal (727m³)	6 grams per hour
PZ2-16	320,000 Gal (1454m³)	240,000 Gal (1090m³)	8 grams per hour
PZ2-24	480,000 Gal (2181m³)	320,000 Gal (1454m³)	12 grams per hour
PZ2-48	960,000 Gal (4363m³)	480,000 Gal (2181m³)	24 grams per hour



PZ1 - Portable Spas Or Custom Installations

The PZ1 portable spa ozone generator features a patented arc tube mounted in a rugged aluminium case. The system is compatible with all major spa brands and can be supplied for ozone ready spas or with Prozone's patented bypass installation kit.

Specifications	
Electrical	230 VAC / 3 amps / 70 Watts
Shipping Weight (approx)	2kg
Arc Life (nominal)	20,000 hours
Max Ozone Output (gms per day)	6
Storage Temperature	-1°C – +70°C
Operating Temperature	-4°C – +50°C
Connector	(std) 3 Wire Pigtail
Ballast	Solid State
Arc Lamp	Hybrid Arc Tube
Ozone Purity	100% – No Nitrogen Byproducts
Size	205mm x 90mm x 76mm Dia
Housing	Extruded Anodised Aluminium

Eco Master

The Eco Master® combines state of the art, germicidal UV-C with Ozone and Advanced Oxidation Processing (AOP) all in one compact system for pools and spas.

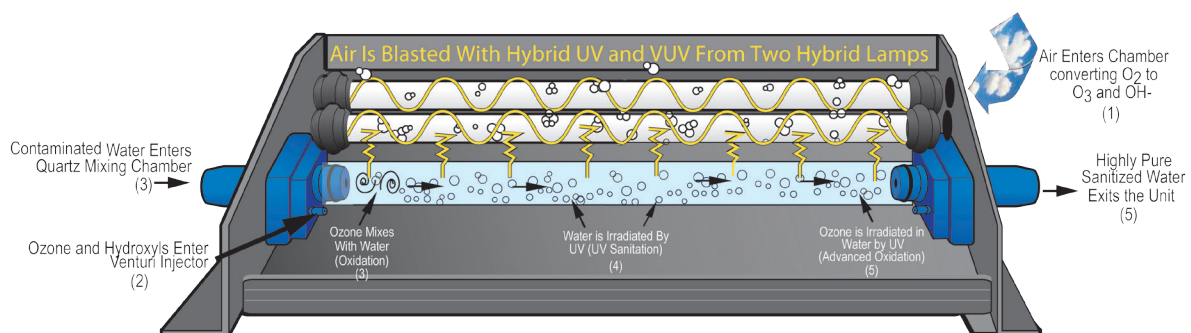
The Eco Master provides a chemical free cleaning of pool water as it goes through the filtration system and it should be used alongside a sanitiser such as chlorine or bromine in order to provide a residual sanitiser level in the swimming pool or spa. A degasser is recommended for use with the Eco Master, particularly for indoor pools.



Benefits

- Complete oxidation of organics and chloramines
- Destroys toxic organics and chemicals
- Converts oils to filterable solids
- Compatible with all chemicals, pH neutral
- Provides high ORP and peroxide residual
- Reverts back to oxygen
- Eliminates odours and scaling

	Specifications	
	PZEMPOOL	PZEMSPA
To Suit Pool / Spa Size	Domestic Pools up to 33,200 gallons (150m³)	Domestic Spas up to 666 gallons (3m³)
Shipping Weight (app)	4.5kg	4.5kg
Size	43cm x 16cm x 9 cm	22cm x 16cm x 9cm
Warranty	2 Years	2 Years
Chamber	Pure Quartz glass AOP chamber to maximise UV	Pure Quartz glass AOP chamber to maximise UV
Arc life (nominal)	20,000 hours	20,000 hours



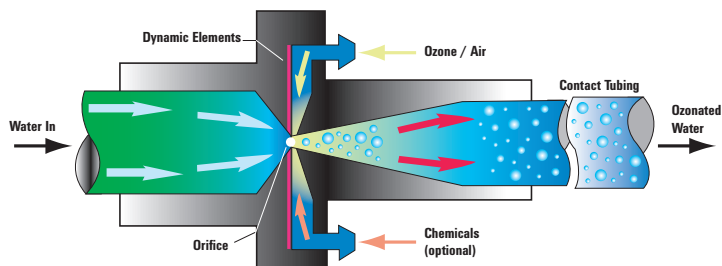
How It Works...

1. Air enters the unit where the Hybrid lamp converts it to Ozone (O₃) and Hydroxyls (OH-)
2. Water enters the unit through the Dynamic Venturi Injector drawing O₃ and OH- from the Hybrid lamp chamber
3. Static mixer combines water, O₃ and OH- in a scrambled flow
4. Water is irradiated by Germicidal UV-C which converts O₃ to Hydroxyl Radicals and Peroxides through Advanced Oxidation Processing
5. Contaminants are destroyed by intense Germicidal UV-C, Ozone and Hydroxyl Radicals, using up the Ozone and adding ORP and residual sanitation to the water.

Ozone Production Theory

All ozone is produced directly or indirectly by oxygen gas (O_2) being energised to split and reform into Ozone (O_3). This is accomplished by applying an alternating voltage across a gas. The higher the frequency the higher the energy in the gas and the lower the voltage required to energise the system. In the case of VUV ozone producing amps, the energy of the alternative current is applied to a tube of quartz containing mercury gas which then excites the oxygen outside the quartz tube to form ozone.

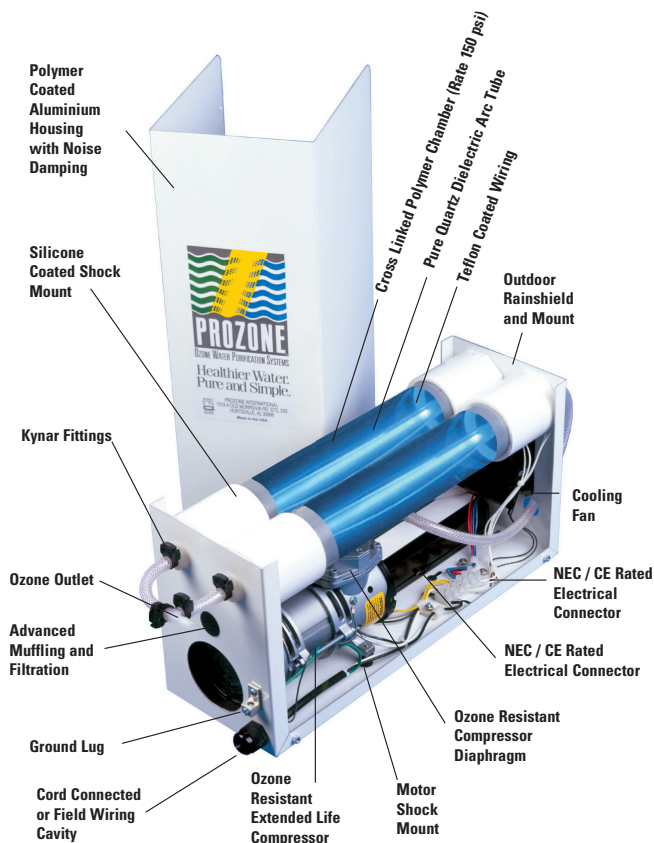
Important: Prozone ozone generation systems must be used in conjunction with either chlorine or bromine. Ozone oxidises combined chlorine and bromine freeing it to be continuously re-used. This reduces chemical consumption and eliminates eye and skin irritation.



Degassing Column

The Prozone degassing column is designed to remove 99% of excess air and ozone before the water returns to the pool. The unit consists of a column with an air vent attached to the top. Excess air is removed by using the natural buoyancy of bubbles with a counter flow design.

A degassing column is optional for use with all Prozone systems, but it is especially recommended for indoor



If you require further technical information please do not hesitate to contact us