



DEL: AOP PRO



OZONE + UV-C SANITIZER

CMP COMMERCIAL
PRODUCTS

OZONE + UV-C IN ONE SYSTEM

Introducing a total game-changer in commercial water sanitizers. The Advanced Oxidation Process (AOP) combines Ozone and UV-C to create a powerful sanitizer that is more than the sum of its parts.

With the use of AOP microorganisms are destroyed, chloramines are broken down and chlorine dependence is significantly reduced. Non-organic contaminants are also oxidized and water clarity is fully optimized.

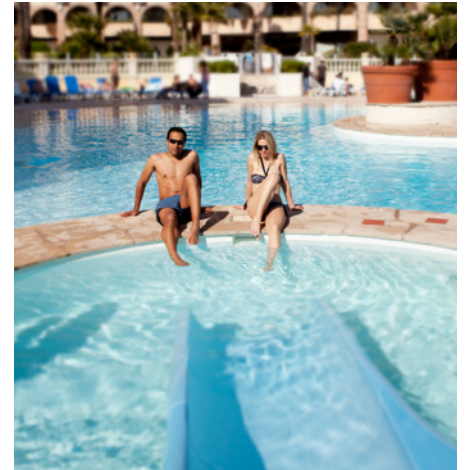
AOP TECHNOLOGY

- Destroys 99.9% Of Harmful Contaminants: 3-Log Water Disinfection
- Oxidizes Crypto, Giardia & Other Chlorine Resistant Microorganisms
- Reduces Chemical Demand & Increases Effectiveness Of Chlorine
- Destroys Chloramines, Eliminating Chemical Odors and Irritation
- Improves Water Clarity & Biofilm Control

DEL AOP PRO SYSTEMS

There are two distinct AOP system options from DEL to properly match your specific sanitizer requirements. Systems can be sized by required flow rates, with options including full PLC control.

- Certified to NSF/ANSI Standard 50 as a Supplemental Sanitizer
- Typical System Cost 50% Less than a Properly Sized Ozone System
- Simple, Economical Annual Service Requirements



AOP PRO 50, 100

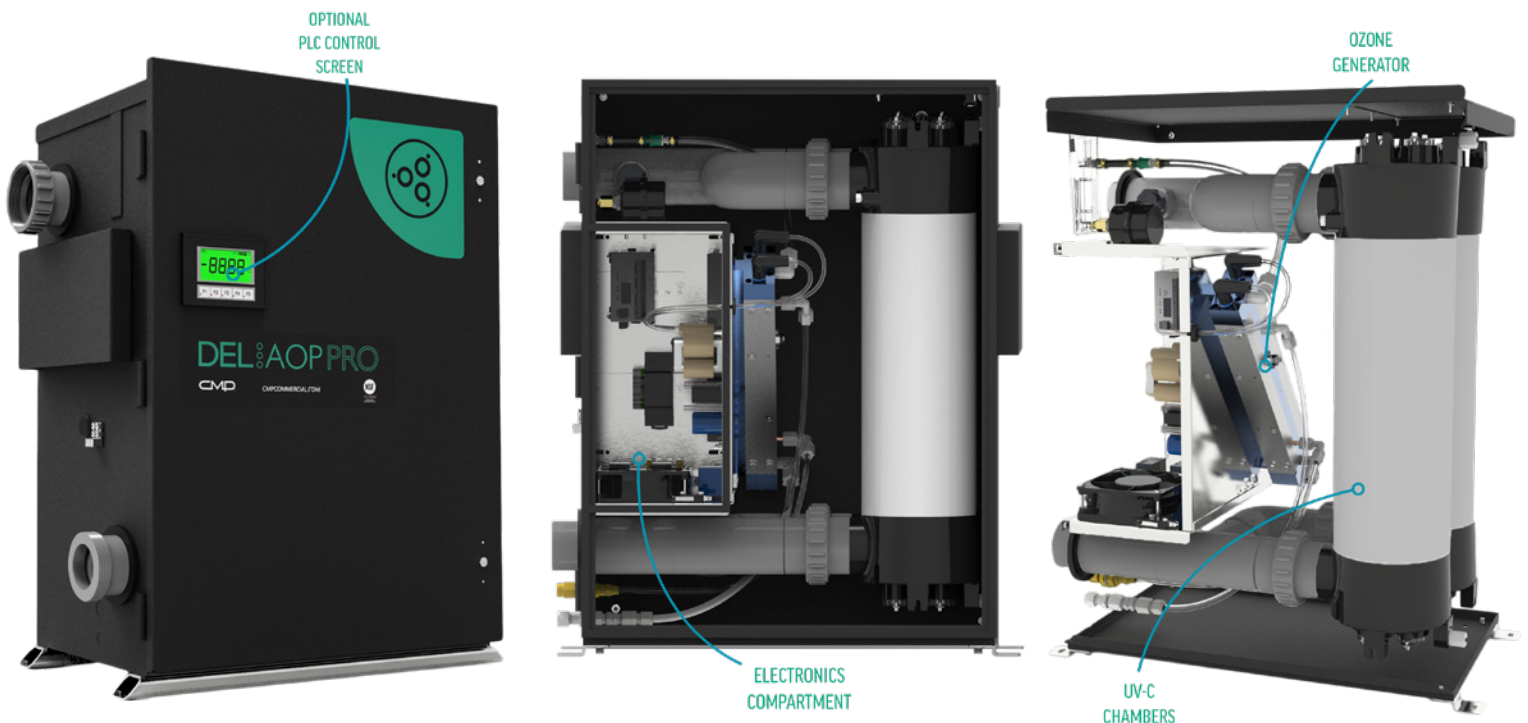
- Self-contained "system in a box"
- Flow rates up to 100gpm
- Ambient air oxygen feed
- Optional PLC control

AOP PRO 200, 350, 500

- High-flow systems up to 500gpm
- PLC Control Screen fully integrated
- Integrated O2 Concentrator



AOP PRO SYSTEM DESIGN



Booster pump not included with booster pump plumbing. Must be supplied separately.

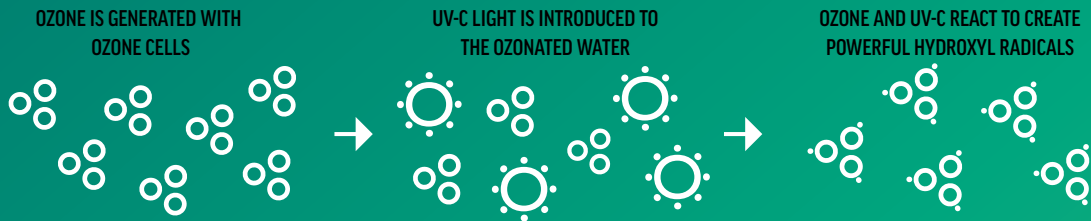
AOP Units are designed for pools that are in compliance with the U.S. Model Aquatic Health Code (MAHC). Installed flow rates must not exceed listed flow rates to maintain NSF product listing as well as ensuring proper microbial performance.

AOP: THE MOST POWERFUL ADVANCED SANITIZER

THE SCIENCE OF AOP

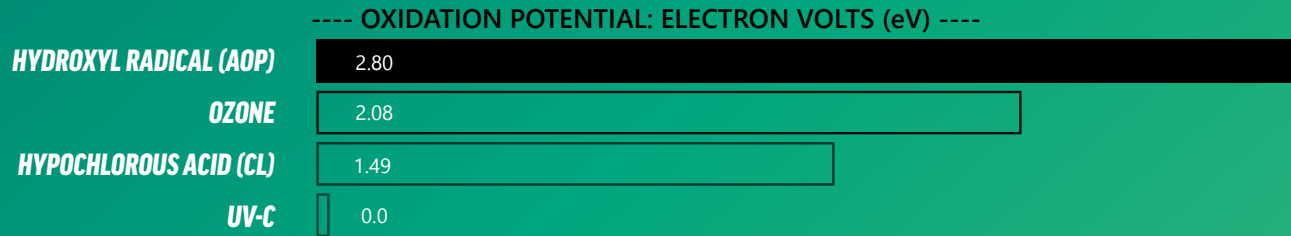
When germicidal UV light (UV-C) and ozone react the result is the production of hydroxyl radicals. This reaction is known as Advanced Oxidation Process, or AOP.

Hydroxyl radicals ($\cdot\text{OH}$) are the most powerful oxidation agents available, quickly destroying bacteria, viruses, pathogens and other contaminants that occur in water.

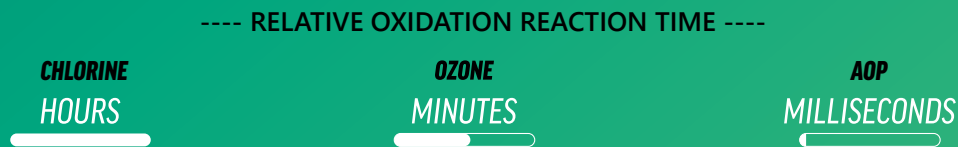


THE POWER OF AOP

AOP is dramatically more powerful than Chlorine and other sanitizers, and even more powerful than Ozone alone. When Ozone and UV-C react, the result is far greater than the sum of its parts.



In AOP systems, the highly unstable hydroxyl radicals react with dissolved waterborne contaminants in a series of strong oxidation reactions. This process happens *almost instantaneously*. AOP is millions of times more reactive than Ozone.



THE ADVANTAGES OF AOP

AOP Systems outperform alternatives at a lower cost, and improve performance of other system equipment.

OZONE VS. UV-C

Ozone oxidizes contaminants

Ozone destroys biofilm

Ozone Acts as a microflocculant, improving filter performance

UV leaves behind bodies that must be filtered out of the water

Ozone is effective regardless of water clarity or turbidity

OZONE VS. CHLORINE

Ozone is truly effective as an oxidizer

Ozone rapidly destroys Cryptosporidium

Ozone destroys biofilm

Ozone Acts as a microflocculant, improving filter performance



SYSTEM SPECIFICATIONS

	AOP PRO 50, 100		AOP PRO 200, 350, 500		
	50 GPM AOP-PRO-50 AOP-PRO-50D	100 GPM AOP-PRO-100 AOP-PRO-100D	200 GPM AOP-PRO-200D	350 GPM AOP-PRO-350	500 GPM AOP-PRO-500D
INLET/OUTLET	2in	2in	3in	4in	6in
UV-C CHAMBER QTY (2 BULBS PER CHAMBER)	1	2	4	8	10
OZONE CELL QTY	1	2	1	1	2
OZONE CONCENTRATION	1.1 gr/hr	2.0 gr/hr	4.5 gr/hr	7.9 gr/hr	11.4 gr/hr
FEED GAS	Ambient Air	Ambient Air	O2 Concentrator	O2 Concentrator	O2 Concentrator
PLC CONTROL	Optional	Optional	Standard	Standard	Standard
POWER	115VAC	115VAC	230VAC	230VAC	230VAC

CLEAN, CLEAR & SAFE: DESIGNING A COMPLETE MODERN POOL™

A modern pool is about complete system design that allows each component to operate at peak performance. Every piece contributes to water that is safe, clean and clear. The addition of AOP is the final component needed on many bodies of water to take water quality to the next level.

DESTROY WHAT CHLORINE MISSES IN A FRACTION OF THE TIME

Advanced Sanitizers like AOP are excellent for destroying or inactivating dangerous contaminants that can be present in any pool. They are effective on microorganisms, viruses, bacteria and other pathogens. AOP also breaks down biofilm inside filters and plumbing that chlorine cannot touch. And unlike chlorine, AOP is effective in a wide pH range.

IMPROVE CHLORINE PERFORMANCE

Chlorine has been the most popular pool sanitizer for over 100 years because it is an excellent sanitizer. However, it's actually a very poor oxidizer. AOP is the most powerful oxidizer available for pool sanitization. AOP continuously "shocks" the water, reducing the organic load and freeing up chlorine to focus on sanitizing the water. Chlorine is also hindered by chloramine build-up in the water. AOP rapidly destroy chloramines, freeing up available chlorine. Chloramine removal also eliminates bad pool smells and increases bather comfort.

ENHANCED SYSTEM FILTRATION

AOP acts as a micro-flocculent in the water, trapping small particles that would otherwise bypass the filter. This process also increases filter media efficiency by breaking up biofilm that gather inside the equipment.