



DEL:AOP

ADVANCED OXIDATION PROCESS



APG OZONE + UV-C OXIDATION
DESTROYS 99.9% OF DANGEROUS CONTAMINANTS
THE MOST POWERFUL ADVANCED SANITIZER

CMP POOL PRODUCTS

c-m-p.com/DEL

AOP: THE MOST POWERFUL ADVANCED SANITIZER

THE ADVANTAGES OF AOP

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 to produce crystal clear results.

- Destroys 99.9% Of Harmful Contaminants
- Quickly Oxidizes Crypto, Giardia, & Other Chlorine Resistant Microorganisms
- Dramatically Reduces Chemical Demand & Increases Effectiveness Of Residual Sanitizers
- Eliminates Chemical Odors, Irritation and Damage To Pool Systems

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.

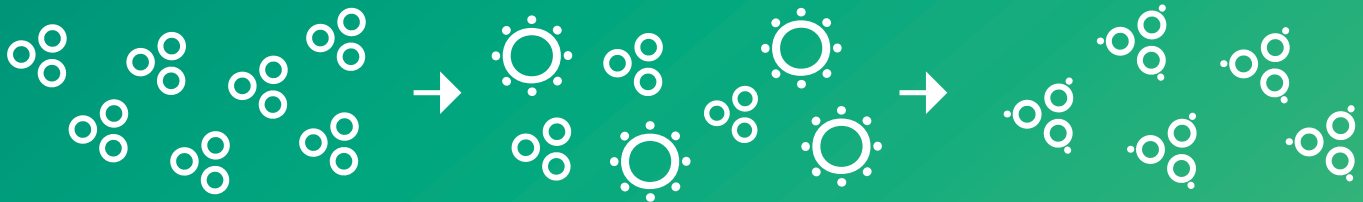
Hydroxyl radicals also destroy chlorine resistant microorganisms, such as Cryptosporidium Parvum, Giardia and E.Coli.



OZONE IS GENERATED WITH
APG OZONE CELLS

UV-C LIGHT IS INTRODUCED TO
THE OZONATED WATER

OZONE AND UV-C REACT TO CREATE
POWERFUL HYDROXYL RADICALS



THE POWER OF AOP

AOP is dramatically more powerful than Chlorine and other sanitizers, and even more powerful than Ozone alone. 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*.

---- OXIDATION POTENTIAL: ELECTRON VOLTS (eV) ----

HYDROXYL RADICAL (AOP)

2.80

OZONE

2.08

HYDROGEN PEROXIDE

1.78

HYPOCHLOROUS ACID

1.49

SODIUM HYPOCHLORITE

1.36

CHLORINE DIOXIDE

0.95

DEL:AOP25

- LIGHTWEIGHT AND COMPACT DESIGN
- AOP POWER FOR SMALLER POOLS
- TREATS POOLS UP TO 25,000 GALLONS

PRODUCT DETAILS

- Patented APG Ozone Cells
- Germicidal UV-C Lamp
- 110/240 VAC Universal Voltage
- 20 GPM Max Flow Rate
- UL, cUL Certified
- CSA/NEMA 3 Metal Enclosure



DEL:AOP50

- COMPLETE NSF CERTIFIED AOP OXIDATION
- THE ORIGINAL RESIDENTIAL AOP SOLUTION
- AOP POWER FOR POOLS UP TO 50,000 GALLONS

PRODUCT DETAILS

- Patented APG Ozone Cells
- Germicidal UV-C Lamp
- 240 VAC
- 50 GPM Max Flow Rate
- NSF, UL, cUL Certified
- CSA/NEMA 3 Metal Enclosure



CMP P/N		DESCRIPTION
SEC-50		DEL AOP 25
SEC-110-26		DEL AOP 50

DEL AOP 25 FORMERLY SOLD AS SOLAR ECLIPSE 50

DEL AOP 50 FORMERLY SOLD AS SOLAR ECLIPSE 100

SPECIFICATIONS

	DEL AOP 25	DEL AOP 50
VOLTAGE	110/240VAC 50/60 HZ, 1Ø, 0.3 Amps	240 VAC, 60 HZ, 1Ø, 0.6 Amps
PLUMBING	Inlet and Outlet 3/4 inch PVC Socket	Inlet and Outlet 2" PVC Unions
MAX FLOW RATE	20 GPM	50 GPM
MOUNTING	Wall Mount	Floor or Wall Mount
ENCLOSURE	CSA/NEMA 3 Indoor/Outdoor Installation	CSA/NEMA 3 Indoor/Outdoor Installation
DIMENSIONS	16.7" H × 11.9" W × 3.2" D	17" H × 9.5" W × 13.5" D
WEIGHT	9.2lbs	45lbs
UV-C LAMP	Low Pressure/High Output UV-C Germicidal	Low Pressure/High Output UV-C Germicidal
OZONE CELLS	APG Cells; 5 Year Life Expectancy	APG Cells; 5 Year Life Expectancy
MDV UNIT	MDV	MDV XL



DEL AOP uses patented Advanced Plasma Gap™ (APG) ozone cells that last longer and outperform UV and traditional CD style ozone generation.



All DEL products are quality certified through a multi-step process to ensure seamless operation and complete customer satisfaction.



DEL products are environmentally friendly, reduce dependence on chemicals and are safe for every pool.



COMPLETE YOUR AOP INSTALLATION

By eliminating any possible off-gas, an MDV unit reduces the potential for corrosion or deterioration of pool accessories like a pool cover. It also allows the use of an "oversized" ozone generator to ensure a greater disinfection margin and larger reduction in chemical use. In each MDV a Granulated Activated Carbon (GAC) destruct cartridge destroys excess gas removed by the MDV.

MDV

When used with the AOP 25 the MDV prevents virtually all ozone bubbles from returning to the pool. It can prevent bubbles from gathering under the cover or inside plumbing.

MDV XL

The MDV XL should be used in all indoor, covered, and vinyl lined pools where there is an AOP 50 installed. It can also be used in outdoor applications to eliminate bubbles in your return flow.



MDV

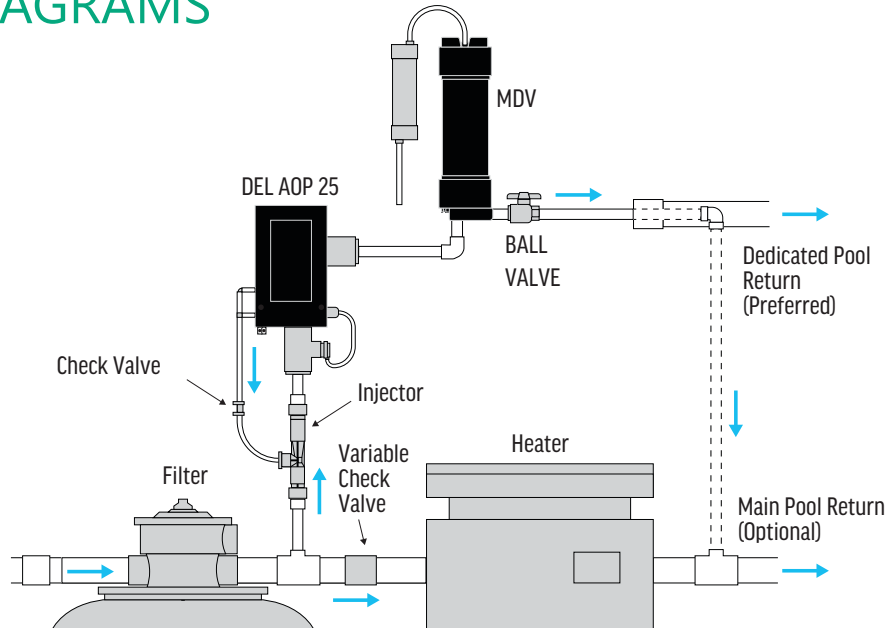


MDV XL

INSTALLATION DIAGRAMS

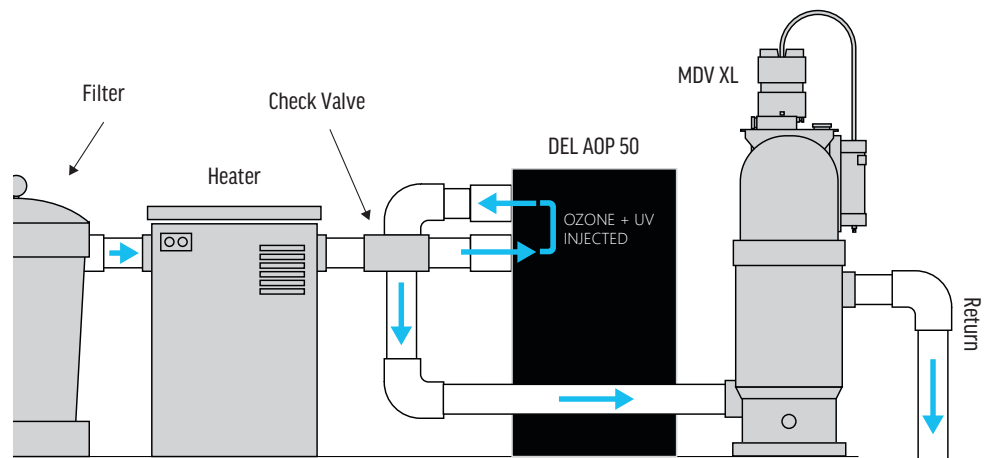
DEL:AOP25

- Wall Mount Only
- Outlet Installs After Heater
- Injector Included
- 3/4 inch PVC Socket
- MDV Recommended



DEL:AOP50

- Ground or Wall Mount
- Install after Pump, Filter and Heater
- Variable Speed Check Valve and Injector Manifold are Built into the Unit
- 2" PVC Unions
- MDV XL Recommended





DESIGNING A SAFE MODERN POOL

Technology has come a long way, and so have pool sanitizers. By combining the best available technologies every pool can be crystal clear and absolutely safe.

DESTROY CHEMICAL RESISTANT BACTERIA

Some of the most dangerous pool contaminants are also resistant to chlorine and other chemicals. Organisms such as Cryptosporidium require long term exposure to high chlorine levels to be destroyed. AOP oxidizes these types of contaminants for a safer pool.

WORK WITH YOUR RESIDUAL FOR THE BEST PERFORMANCE

Chlorine and other chemicals are good at keeping pool water actively safe even when the pump is off. AOP is the best at micro-sanitizing the water. AOP even breaks down chloramines that increase demand and add to unpleasant pool smells. Working together, a residual and AOP create a complete modern pool system.

REDUCE CHEMICAL DEMAND

By allowing AOP to work at quickly oxidizing organic and inorganic compounds, chlorine is free to work better. This reduces the chemical demand and greatly reduces the amount of chemicals that have to be added to the water. Every pool can experience a reduction in chemicals and a reduction in the annual chemical costs.

DEL  **AOP** + **POWERclean**
 **ULTRA VS**

Combine Powerful AOP Sanitizing With The First Chlorinator Designed For Variable Speed