UVAZONE 300-1500 Advanced oxidation process

The UVAZONE 300-1500 offers the unique process of advanced oxidation for treatment of commercial swimming pool water. This process combines the disinfection properties of ozone and UV making the UVAZONE 300-1500 the most advanced pool water purification system available.

APPLICATIONS

· Swimming pool disinfection

MAIN CHARACTERISTICS

 Advanced oxidation system combining ozone and UV treatment within a self contained unit

MAIN FEATURES

- Proven ability to safely lower free chlorine residual
- Effective against chlorine resistant micro-organisms
- Reduced skin and eye irritation
- Very low THM levels
- Significant improvement in water clarity
- Low cost capital and installation cost
- Simple to install and operate with minimal plant room space requirement

ADVANCED OXIDATION: UVAZONE

The UVAZONE 300-1500 is designed for advanced oxidation of commercial swimming pools. UVAZONE combines ozone and UV treatment within a single system to maximise disinfection and chloramine destruction. The UVAZONE also contributes to enhanced flocculation resulting in top class water clarity.

The UVAZONE 300-1500 package comprises:

- Corona discharge ozone generator with oxygen concentrator, injector, booster pump, ozone vent system, thermal off-gas destructor and air flowmeter
- Reaction vessel
- Thermal off gas destructor
- · High power low pressure UV lamp
- Water flowmeter
- Two UV deozonation reactors

HOW IT WORKS

Ozone is produced when oxygen is passed over a ceramic dielectric ozone generating module containing a stainless steel electrode. The module is powered by a high voltage/high frequency power board. The high power low pressure UV lamp is powered by an electronic ballast. UV not only provides disinfection but also deozonises the treated water, eliminating the need for carbon deozonising material within the reaction tank.

Chlorine is effective against most bacteria but reacts slowly with viruses, cysts and amoebae. UVAZONE combines ozone and UV to provide excellent control against all micro-organisms. Hydroxyl radicals, produced in the advanced oxidation reaction, effectively destroy organic materials including chloramines with no risk of the accumulation of reaction by-products.









| TECHNICAL DATA | Pool Volume | | Bypass Flow Rate | | Ozone Production | Feed Gas Production | Power Consumption | Power Supply | Weight (empty) | | Weight (flooded) | |
|-------------------|----------------|---------------|---------------------|-----------|---------------------|------------------------|----------------------|-----------------|-------------------|--------|---------------------|--------|
| MODEL | m³ | US Gallons | m³/h | US gpm | g/h | ltr/min | kW | υ/ph/Hz | kg | 1b | kg | 1b |
| UVAZONE 300 | 300 | 79 250 | 12.50 | 55 | 12.5 | 5 | 1.6 | 230/1/50 | 255 | 562.2 | 405 | 892.9 |
| UVAZONE 600 | 600 | 158 500 | 25.0 | 110 | 25.0 | 10 | 3.2 | 400/3/50 | 490 | 1080.3 | 790 | 1741.7 |
| UVAZONE 900 | 900 | 237 750 | 37.5 | 165 | 37.5 | 15 | 4.8 | 400/3/50 | 725 | 1598.4 | 1175 | 2590.4 |
| UVAZONE 1200 | 1200 | 317 000 | 50.0 | 220 | 50.0 | 20 | 6.4 | 400/3/50 | 960 | 2116.4 | 1560 | 3439.2 |
| UVAZONE 1500 | 1500 | 396 250 | 62.5 | 275 | 62.5 | 25 | 8.0 | 400/3/50 | 1200 | 2645.6 | 1950 | 4299.0 |

TECHNICAL FEATURES

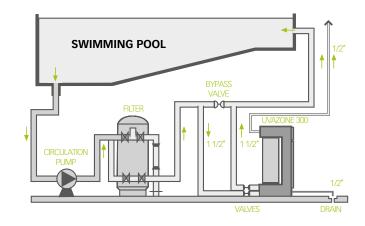
- BS EN ISO 9002:94
- CE Approval

MATERIALS

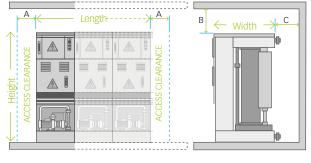
- Enclosures: mild steel, epoxy coated
- Ozone Module: 316 stainless steel electrode assembly inside a ceramic dielectric tube
- Oxygen Concentratorl

REMOTE CONTROLS AND SIGNALS

- Fault: green and red illuminated indicators
- Service Required: yellow illuminated indicator
- Digital Input: interlock for main circulation pump
- Digital Output: system running system Fault/Off system required Hours run meter
- Gas and water flowmeters



TYPICAL INSTALLATION OF UVAZONE



| RONT VIEW | SIDE VIEV |
|-----------|-----------|
|-----------|-----------|

| MODEL | Module(s) number in | Pai (mm/ | | LxHxW | | | |
|--------------|------------------------|-------------|----------|-------------------|------------------------|--|--|
| | parallel | A - C | В | mm | inch | | |
| UVAZONE 300 | 1 | 400/15.7 | 900/35.4 | 600 x 1800 x 600 | 23.62 x 70.87 x 23.62 | | |
| UVAZONE 600 | 2 | 400/15.7 | 900/35.4 | 1300 X 1870 X 950 | 51.18 X 73.62 X 37.40 | | |
| UVAZONE 900 | 3 | 400/15.7 | 900/35.4 | 1950 X 1870 X 950 | 76.77 X 73.62 X 37.40 | | |
| UVAZONE 1200 | 4 | 400/15.7 | 900/35.4 | 2600 X 1870 X 950 | 102.36 X 73.62 X 37.40 | | |
| UVAZONE 1500 | 5 | 400/15.7 | 900/35.4 | 3250 X 1870 X 950 | 127.95 X 73.62 X 37.40 | | |

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