

# ULTRAZONE

## Ultraviolet Ozone Advanced Oxidation System (AOP)

### Solving TOC/COD Reduction Challenges in Water and Wastewater Applications

Removing organic carbon from water (TOC/COD/BOD) is becoming important in many industries because of stricter discharge requirements or increased water quality standards for internal water use. Ultraviolet (UV) Ozone based advanced oxidation processes can remove organic compounds from water in an environmentally sustainable fashion.



ULTRAZONE System with Optional On-Line TOC Analyzer

The **ULTRAZONE** process is a cost effective self-contained advanced oxidation process. It has been jointly developed by SPARTAN Environmental Technologies and UV Sciences. SPARTAN is a specialist in ozone based systems and skid level integration, and UV Sciences manufactures proprietary UV reactors and controls. Together they have created a compact fully integrated Ozone/UV advanced oxidation system for small to medium flow rates.

### Features

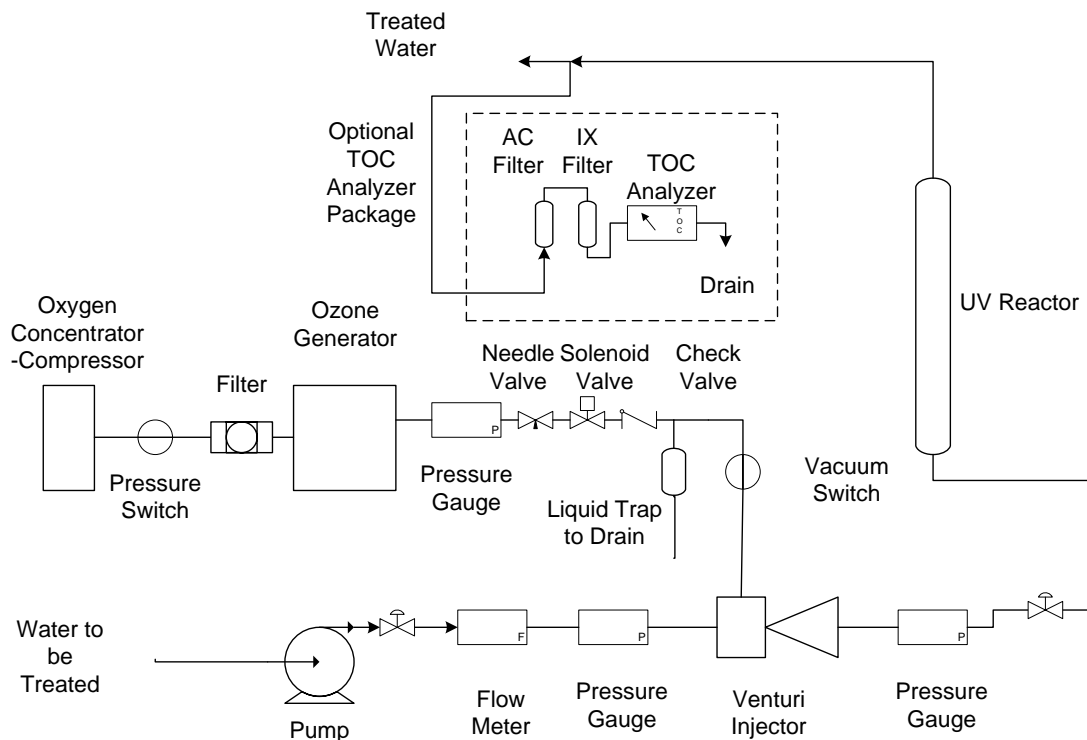
The **ULTRAZONE** system includes the following equipment:

- Oxygen Concentrator/Compressor
- Ozone Generator
- Venturi Based Ozone Water Mixing System with Booster Pump
- Advanced Three Level Back Flow Prevention System
- UV Reactor and UV Intensity Monitor
- NEMA 4 Control Panel with Touch Screen PLC
- Optional Instruments Include On-Line TOC Monitor, ORP Monitor and Dissolved Ozone Monitor with or without integrated PID control

The ULTRAZONE system is available from Spartan Environmental Technologies, LLC  
Phone : 800-492-1252, Fax : 440-368-3569, e-mail : [info@SpartanWaterTreatment.com](mailto:info@SpartanWaterTreatment.com)  
Web : [www.SpartanWaterTreatment.com](http://www.SpartanWaterTreatment.com)

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### ULTRAZONE Process Flow Sheet

## Benefits

While all AOP produce hydroxyl radicals capable of destroying most organic compounds, Ozone/UV provides hydroxyl radical without the need to purchase or store chemicals. The process comes fully integrated with automatic controls on a skid, container or trailer for easy installation and use. Instrumentation packages make it easy to follow the progress of the treatment process and document performance. Systems are custom sized for individual applications for maximum value.

## PILOT System Available for Testing

An **ULTRAZONE** pilot system is available for testing at customer sites to evaluate the applicability of the ozone UV process to treat specific customer water. This permits clients to “try before they buy” a system to insure the process meets treatment objectives.

**Call SPARTAN to see if the **ULTRAZONE** process can solve your water treatment challenge.**

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