

Meet The Heart of the Pinnacle Family of Products

The true quantum leap in Ozone technology



PINNACLE
OZONE SOLUTIONS

Plasma Technology Added Advantages

The QuadBlock™ represents a significant departure from traditional methods of generating large quantities of ozone. Twenty-first century technology is incorporated into a "block" that provides an industrial, hardened, reliable and intelligent method of ozone generation. The QuadBlock™ can automatically adapt to a broad range of pressures, flow rates and power input conditions. The features of the QuadBlock™ described below truly represent a quantum leap in the future of ozone generation.

QuadBlock™ has Pulse Density Modulating

The QuadBlock™ features a unique technology known as Pulse Density Modulation (PDM). PDM allows the QuadBlock™ to provide precise control of the ozone output. The Micro Channel™ cell and power supply is designed to throttle the ozone output like a VFD varies the speed of a motor. Ozone is produced on a linear curve down to 1%. This feature is unique due to the fact that the power consumed (kw/hr) per pound of ozone produced remains constant as the ozone output is turned down. Traditional technologies operate at their maximum efficiency at their full power setting and the efficiency significantly falls off as the ozone output is turned down. The QuadBlock's ability to maintain maximum efficiency over its entire operating range is revolutionary.

High Frequency Operation

Traditional ozone cell designs operate at medium or high frequencies. This generally falls between 400 to 2000 hertz. The human ear is very sensitive to this frequency range and becomes irritated after short durations. The QuadBlock™ operates above 20,000 hertz and is silent to the human ear. As the operational frequency increases, the size of the ozone components decrease. The QuadBlock's high operating frequency enables the use of small high voltage transformers compared to traditional ozone generation technologies. Medium frequency high voltage transformers are large, bulky and require their own independent housing.

Water Cooled Cell Design

The QuadBlock™ technology design is highly efficient due to cooling channels milled into the QuadBlocks. The net result is low water flow usage of 1.5 gallons per QuadBlock™.

Contained 3200 Volt Operation

Each QuadBlock™ operates at 3200 volts within the QuadBlock™ housing. Voltage is totally contained and worker exposure is not possible. The QuadBlock is a UL Listed product and is housed in a UL508A industrial control enclosure.

FEATURES

- Efficient, safe, rugged, silent operation with precise linear turn down control (1%-100%). Constant Kw-hr/lb of ozone over the entire turn down range at a constant O₂ flow rate.
- Reliable, maintenance free operation. On board diagnostics with fault tolerant system operation. Fast efficient diagnosis of system faults.
- Ability to handle large input voltage fluctuations.
- Capable of operating over a broad range of temperature, gas pressure and vibration conditions. The QuadBlock™ is ideal for any ozone application including mobile container systems.
- 100% oxygen capable. No nitrogen mix is required when using LOX. Fully VSA and PSA capable.
- Energy Efficient: 3 Kw-hr/lb of ozone @ 5% by weight and 5.1 Kw-hr/lb of ozone @ 10% weight.
- UL Listed Product. US and International Patents.
- Small footprint of 20" W x 18" H x 4" D.



Energy Efficient