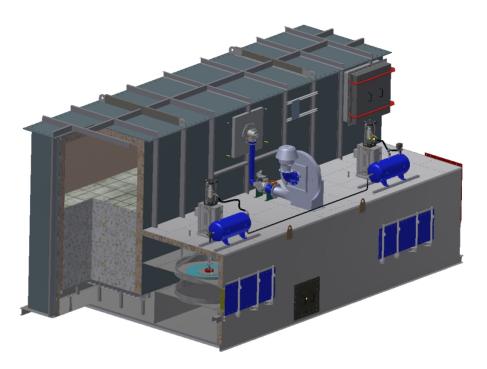




# **TRITON-Series Regenerative Thermal Oxidizer**



For almost 50 years, Catalytic Products International has focused our efforts on supplying customers with the world's best air pollution control solutions. In recent years industries with high air volumes and low VOC concentrations have been under scrutiny by environmental regulators to reduce emissions. The TRITON-Series RTO is the answer to environmental agencies' trends to regulate even the lowest emitters of air-pollution-causing volatile organic compounds (VOCs). The TRITON-Series RTO is not just another thermal oxidizer!

#### Modular Regenerator Technology

TRITON RTOs are custom designed for the highest reliability with the lowest cost of ownership. The complete system is designed with a modular regenerator approach for the most cost-effective solution. The TRITON can be supplied as a two-can regenerator system, a three-can regenerator system, or for larger air streams multiple cans are used. This modular approach satisfies your needs for a cost effective installation, while affording the assurance that future increases in air volume can be accommodated by simply adding regenerators. Complementing the regenerator design is our unique cold-face support system. While other systems merely rely on a perforated plate to support the ceramic media, TRITON Systems utilize a superior supporting grid that allows the lowest pressure drops and highest structural integrity.

#### Thermal Heat Transfer Matrix

Each TRITON System is designed around the specific ceramic heat transfer mix recommended for the application. TRITON-Series Systems are designed for specific applications, utilizing a variety of ceramic media including: ceramic saddles, ceramic honeycomb, structural ceramic, or a combination of these medias. Unique bed designs are also available for particulate-laden exhaust streams. The thermal heat transfer matrix is the key to a well-designed and efficient system. With thermal rate efficiencies (TRE) of up to 97%, you can be assured that even the lowest VOC concentrations can be economically destroyed.



### Posi-Seal Valves

TRITON RTOs are supplied with an industry-leading valve system called Posi-Seal. The Posi-Seal valve relys on a unique seal to ensure zero leakage of the clean (hot) gases with the dirty (cool) gases. Posi-Seal valves work by incorporating a self-centering, soft-seating action. This advancement in valve technology eliminates valve seat wear, provides zero leakage rates, with guaranteed performance and an unmatched 5 year warranty.

#### "EvenFlo" Plenums

All TRITON Systems are designed with our innovative "EvenFlo" plenum design. EvenFlo is a revolutionary technique developed by Catalytic Products International that precisely locates the "Posi-Seal" valves to a specific distance away from the regenerator. The EvenFlo plenums minimize the flushing volume while maximizing flushing efficiency. The EvenFlo Plenums allow TRITON Systems to deliver 99%+ destruction rate efficiencies.

#### Temperature Safety System

Every TRITON System is integrated with our customized Ethernet based PLC-control panel called Temperature Safety System (TSS). TSS communicates with the TRITON and your process for optimal performance, safety, and reliability. TSS optimizes the system's efficiency by managing temperatures, controlling drives, and positioning valves. This user friendly system provides automated operations, one-button starts/stops, self-diagnostics, with data monitoring options for simplified maintenance and compliance verification. Special features developed for TRITON Systems include a precise volume control logic that allows for a wide volumetric turndown at a constant inlet pressure and Posi-Seal valve switching algorithm to maximize both thermal and destruction rate efficiencies.



#### TRITON Systems offer these standard features:

- Shop-packaged systems up to 20,000 scfm
- 99% VOC destruction rate efficiency
- Up to 97% thermal rate efficiency
- EvenFlo plenum technology
- Posi-Seal valves with guaranteed performance
- Superior cold-face supporting grid system
- Automatic operation via TSS control
- Constant inlet pressure and valve switch logic
- Compact design with installation flexibility

## TRITON Systems offer these optional features:

- Natural gas injection for lower operating costs
- Hot gas bypass systems for high solvent loads
- Bake-out logic for self-cleaning of condensable and dirty air streams
- Severe Duty (SD) Series Systems for corrosive air streams
- Multiple fuel blends or oil-fired combustion systems
- Secondary heat recovery solutions
- Media options for Silicone and other particulates