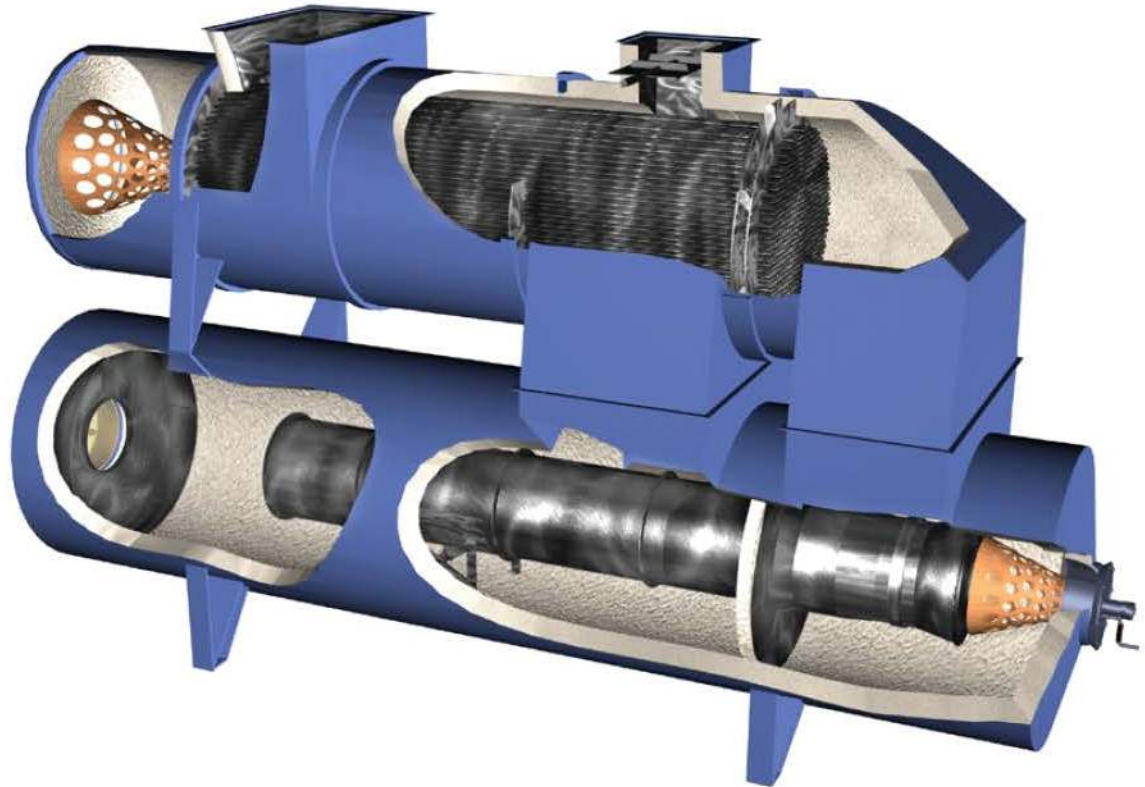


## QUADRANT SR-Series Thermal Oxidizer



Catalytic Products International continues our nearly 50 year history of providing innovative air pollution control equipment by offering our QUADRANT SR-Series Thermal Oxidizer Systems. Catalytic Products International has been designing and manufacturing QUADRANT Self-Recuperative Systems for over 30 years. The evolution of the SR System provides our users with the highest VOC destruction, lowest combustion chamber temperatures, and longest life. No other supplier of recuperative thermal oxidizers can match our extensive knowledge or equipment performance. QUADRANT SR-Series Thermal Oxidizers guarantee success because of these innovative design characteristics:

### *Round Modular Design*

All QUADRANT SR-Series systems incorporate a proven round design that protects against stress and fatigue commonly found in other systems that utilize an antiquated "square box" design. Damaging thermal-mechanical stresses inherent in every thermal oxidizer is eliminated with the QUADRANT NR-Series Thermal Oxidizer and its round design.

### *Internally Insulated*

All QUADRANT SR-Series Thermal Oxidizers incorporate a specialized internal insulation system designed to retain heat for low cost and cool shell temperatures. The internal insulation works in conjunction with the round design to eliminate shell growth for industry-leading uptime reliability and low maintenance. The advancement of internal insulation is just one of the continued enhancements that we have introduced, all in an effort to provide longer-lasting equipment with lower overall operating costs.

### ***FLOATING TUBE Primary Heat Exchangers***

Our introduction of the FLOATING TUBE primary heat exchanger in 1983 is the single, most important advancement in recuperative technology. Antiquated systems that incorporate expansion joints or packed seals provide users one assurance, FAILURE. This simple fact is the basis for our introduction and continued use of the FLOATING TUBE primary heat exchanger. This design eliminates thermal stress and fatigue by allowing each individual tube to expand and contract at its own rate. No one else has this proven technology, no one else can match the stress-free durability, and no one else has the application experience to meet your needs.

### ***Center Combustion Tube and Burner***

One of the most unique features found in any QUADRANT System is the center combustion tube coupled with the preheat burner. This pairing of components has paved the way for QUADRANT Systems to operate at the lowest temperatures while providing the highest VOC destruction. Faced with today's compliance requirements, the old design strategies of time and temperature are not enough. Only the QUADRANT System, by maximizing turbulent mixing, flame impingement, and temperature uniformity, can assure users of low-cost, ultra-high destruction. The preheat burner in every QUADRANT System is selected based on the exact needs of your application. Whether your application calls for nozzle mixing due to low oxygen, raw gas for energy savings, low NOx for compliance needs, or multi-blend fuel types, QUADRANT Systems provide the flexibility you need.

### ***Temperature Safety System***

Every QUADRANT System is integrated with our customized Ethernet based PLC-control panel called Temperature Safety System (TSS). TSS communicates with the QUADRANT and your process for optimal performance, safety, and reliability. TSS optimizes the system's efficiency by managing temperatures, controlling drive, 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.



### ***QUADRANT SR systems offer these standard features:***

- Air volume capacities up to 50,000 scfm
- VOC destruction up to 99.99%
- High volumetric turndowns
- Automatic volume control
- Automated operation via TSS control systems
- Combustion system choices based on application
- Pre-piped and wired components
- Compact design with installation flexibility

### ***QUADRANT SR Systems offer these optional features:***

- Tandem setup for multiple QUADRANT installations
- Infinite process volumetric turndowns
- Ultra-high LEL capability
- Secondary heat recovery solutions
- Silicon-DiOxide (SiO<sub>2</sub>) Series Systems for treating silicone emissions
- Severe Duty (SD) Series System for corrosive air streams
- Multiple fuel blends or oil-fired combustion systems