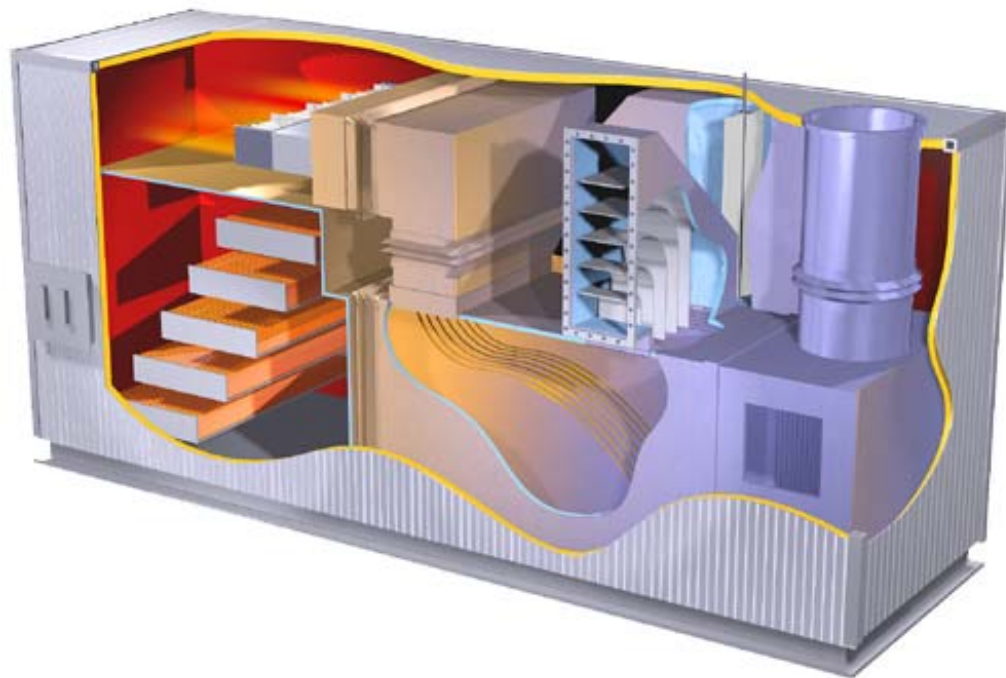


VECTOR-Catalytic Oxidizer



Catalytic Products International has concentrated almost 50 years of experience, knowledge, and innovative air pollution control solutions to offer a unique line of high quality catalytic oxidizers designed to exceed the most stringent air compliance requirements. VECTOR Catalytic Oxidizers meet today's environmental challenges by using the most cost effective manufacturing techniques to bring to industry reliable pollution control systems that offer lower capital costs, simplified installations, and minimal maintenance. VECTOR Systems exceed today's air pollution control needs with:

Integrated Design

Integrating all the major components into one unitized system saves on field installations, improves reliability, and lowers the overall costs for air compliance. The VECTOR System utilizes only the highest quality components. From the all stainless steel mixing and combustion chamber; the heavy-duty, all stainless steel heat exchanger; the specialized burner system; to the catalyst beds; every component is contained within a well insulated, maintenance-free exterior designed for long life and low operating costs.

Catalyst

Each VECTOR System is custom engineered and built for maximum performance and flexibility. Therefore the catalyst is selected based on the ability to provide the highest performance and longest life. The catalyst choices can include platinum group and base metals on a pourable bead or a monolith support. Each group offers individual benefits for each application. For beaded catalyst products, poison-resistant catalyst provides resistance to many common contaminants, while low temperature formulations allow minimal fuel input. The most noticeable advantage about VECTOR Systems is found in the innovative, split-bed containment system. The catalyst is contained in a specially developed catalyst tray that offers partial catalyst replacement, faster inspections, cross-sectional analysis, and longer life. Monolith catalyst groups are used for general industrial applications or for specialized emissions such as halogenated VOCs, Nitrogen bound organics, and others.

Thermal Efficiency

VECTOR Systems lead the industry with the lowest operating costs. The primary heat exchangers are made of all high-grade stainless steels and incorporates our unique floating plate expansion system. This unique design provides for long life, high efficiency, and the ability to accommodate the highest solvent loads. VECTOR heat exchangers can be designed with thermal efficiencies up to 80% and can be equipped with fully automatic hot-gas bypass dampers for self-sustaining operations.

Interior and Exterior Construction

The VECTOR Systems is fabricated entirely of stainless steel alloys designed to prevent embrittlement and fatigue. The entire unit is continuously welded to eliminate hydrocarbon leakage and provide the highest uptime reliability. All of the interior components are fully insulated with a high quality lining system designed to reduce heat losses for continued energy savings. All components are accessible from the outside to provide easy maintenance and internal inspections are accommodated via access doors in all necessary areas. The VECTOR's exterior is clad with a heavy-gauge galv-alum corrugate to provide durable, maintenance-free protection in any environment.

Temperature Safety System

Every VECTOR System is integrated with our customized Ethernet based PLC-control panel called Temperature Safety System (TSS). TSS communicates with the VECTOR System and your process for optimal performance, safety, and reliability. TSS optimizes fuel 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.

VECTOR Systems offer these standard features:

- Air volume capacities up to 50,000 scfm
- VOC destruction up to 99%
- Thermal efficiencies up to 80%
- High volumetric turndowns
- Automatic volume control
- Automatic operation via TSS control systems
- Split-bed catalyst containment
- Forced impingement gas burner systems
- Pre-piped and wired components

VECTOR Systems offer these optional features:

- Tandem setup for multiple VECTOR installations
- Catalyst choices based on your application
- Vitiation loops for reduced operating cost
- Heat exchanger bypass dampers
- Secondary heat recovery solutions
- Multiple fuel blends or oil-fired combustion systems

