

## VECTOR CATALYTIC OXIDIZER



A custom web coating facility recently installed a VECTOR-Series Catalytic Oxidizer to eliminate the VOC emissions exhausted from three different coating lines. After an extensive technology review the VECTOR Catalytic Oxidizer was installed because it offered the highest reliability, lowest installed cost, and lowest operating costs.

The application called for a system that could provide continuously high VOC destruction with the lowest overall operating costs. A properly designed Catalytic Oxidizer is able to provide +99% VOC removal efficiency, even during very low VOC loading conditions. Many coating applications present challenges to air pollution control systems because of the wide range of VOC loadings that can be exhausted. The advantage a VECTOR Catalytic Oxidizer offers these users is an ability to treat high and low VOC loads cost effectively. This is accomplished through the use of a highly efficient primary heat exchanger coupled to an effective hot gas bypass. Furthermore, CPI utilizes our unique combustion system that is ~ 45% more efficient than standard gas fired burner systems.

When compared to a RTO, the VECTOR Oxidizer is able to offer higher clean up efficiencies with little to zero natural gas consumption in a maintenance friendly package. Additionally our split bed catalyst trays and guard bed system extend catalyst life and maximize the users investment.

The system pictured here is capable of providing +99% removal of VOC loadings ranging from 2% LEL to as high as 23% LEL. The outlet VOC concentration is a steady state with no impact on the inlet concentration. The gas consumption is automatically controlled and the system will move to self-sustaining operation with as little as 3% LEL.

For more information about this or any of our other custom engineered solutions, please contact us.

***Thermal Oxidizers, Regenerative Thermal Oxidizer's, Catalytic Oxidizer's, Heat Recovery System's, Energy Conservation, Repair and Retrofit Services, Maintenance Services, Engineering***