

Feed Products Manufacturer Selects PSSI High Efficiency Recuperative Oxidizer

Background

Pollution System Solutions was engaged to provide air pollution control technology for a Feed Products Manufacturer that needed to increase production capacity in its Midwest facility. The new equipment was required to effectively reduce odors in 40,000 SCFM of VOC laden process air generated in the production of animal supplements. Additionally, long term reliability and on-going operating cost, particularly energy consumption, was a major consideration in equipment selection and design.

Solution

The system selected was a High Efficiency Recuperative Thermal Oxidizer with an additional 75% secondary Heat Exchanger to substantially reduce on-going operating cost. The recovered energy was designed to preheat air for the manufacturing drying process. Other Oxidizer technologies, including Catalytic and Regenerative, were not appropriate for this application due to potential for particulates in the air stream.



Many other energy saving features, including proportioning air to fuel valves on the gas train and high efficiency fans with variable frequency drives, were incorporated in the system. Overall the system was designed to reduce fuel consumption by more than 50% compared to a typical Thermal Recuperative Oxidizer of the same size.

Pollution System Solutions is the total solution provider for Industrial Air Emission Compliance.