Today’s tough environmental standards require more than out-of-the-box designs. They demand total integration with heat transfer and boiler equipment.

**WHAT MAKES RENTECH UNIQUE?**

Our approach to achieving lower emissions starts with a thermal evaluation of the combustion turbine, heater or boiler that must be controlled. Unlike emission control suppliers who provide only post-combustion equipment, RENTECH understands all process conditions and can optimize the system in the most cost-effective manner. By incorporating our knowledge of heat transfer, low emissions burners, and catalytic reduction technologies, we are capable of offering a fully integrated solution that complies with all performance criteria and is backed by a single-source guarantee.

**OXIDATION AND SELECTIVE CATALYTIC REDUCTION SYSTEMS**

SCR systems (selective catalytic reduction) that are designed and supplied by RENTECH are used to control NOx emissions from various combustion sources down to single-digit PPM levels. In applications where CO or hydrocarbons must be further controlled, oxidation catalyst systems are additionally employed.
CATALYST SELECTION

Optimum performance of the emission control system involves proper selection of the SCR and CO/oxidation catalysts to determine their suitability to the specific process being controlled. RENTECH offers a catalyst for virtually every service condition that may be encountered. An extensive database of information on various manufacturers, formulations and geometries has been developed to enable our engineers to specify the best catalyst for each application. Selection is optimized for the type of fuel burned, flue gas composition, range of operating temperatures, pressure drop, and spatial limitations that may be encountered.

SERVICE CONDITIONS

- Clean gas
- Low temperature
- Medium temperature
- High temperature

TYPICAL SCR APPLICATIONS

- Fired packaged boilers
- Heat recovery steam generators (HRSG)
- Wasteheat boilers
- Process heaters
- Fluidized catalytic cracking units
- Ethylene furnaces
- Simple-cycle gas turbines
- Aqueous, anhydrous and urea applications

Catalyst pitch and bed arrangement allows for optimum emissions reduction with the lowest possible pressure drops

Honeycomb design ensures high NOx removal while limiting gas pressure drop and ammonia slip