

Three Way Catalysts (TWC) Non-Selective Catalytic Reduction

Emission Reduction

(very high destruction rates)

- NOx (up to 99%)
- CO (up to 99%)
- HC (up to 90%)
- VOCs (up to 95%)
- HAPs, including HCHO (up to 95%)

Applications

- Rich Burn Natural Gas Engines
- Propane and Gasoline Fueled Industrial Engines
- Chemical Processes

Industries

- Gas Compression
- Power Generation
- Air Compression
- Irrigation and Water Pumps
- Chillers
- Others

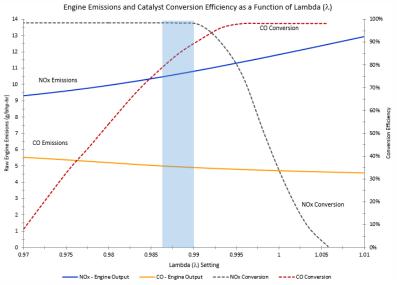
Features & Benefits

Catalyst OEM • Low-pressure drop options • Wide variety of cells densities for all applications

Very wide temperature operating range • CCC cleaning stations across the US to extend the life of your catalyst

Customer support through product life cycle

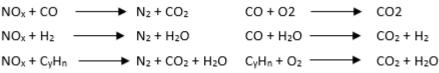
Brazed substrate prevents telescoping even in harsh environments



How does a TWC Work?

Three-way catalysts can only achieve maximum simultaneous conversions of NOx, CO and VOCs when the engine is operated in a fairly narrow band of Air to Fuel ratios near the stoichiometric point. Outside of the range and depending upon which side the engine is operating, either the NOx or CO conversion will drop off rapidly. The chart to the left illustrates this for NOx and CO.

There are many reaction pathways for the conversions of NOx, CO and VOCs. The most common group of reactions are summarized below:





A variety of shapes and sizes to fit virtually any application

Precious Metals

- 1. Platinum
- 2. Palladium
- 3. Rhodium
- Custom formulations available to meet application specific exhaust gas profiles

Housings/Silencers

- Stainless steel
- 2. Carbon steel
- Housing and Silencer combinations with a variety of sound attenuation profiles
- 4. Stainless steel catalyst frames

Accessories

- 1. Air Fuel Ratio Controllers (AFRC)
- 2. Insulation blankets
- 3. Mounting brackets / cradles
- 4. Nut, bolts and gasket kits
- 5. Exhaust rain caps
- 6. Additional exhaust ductwork

Catalytic Combustion Corporation has the experience and manufacturing capabilities to handle all of your Catalyst requirements including:

Design & Development • Foil Corrugating Precision Washcoat • Assembly

