

ADCATTM CO Catalyst for CO and VOC Removal

EmeraChem's Advanced Catalytic Technology (ADCATTM) CO/VOC oxidation catalyst are custom manufactured to your specifications to achieve reliable emission compliance, durable long life, and low maintenance cost. EmeraChem stocks many sizes for fast shipment. Ask about our extensive reference list. Science developed in America, all products made in America.

Heavy-duty stainless steel catalyst elements with discrete cell substrate geomtry:

- Substrate is diffusion-bonded prior to coating for maximum strength, preventing loose foil. Bonding and anti-telescoping bars eliminate blow-outs and exhaust bypass.
- Discrete cell geometry provides highest catalytic surface area (<40% more than herringbone) yielding the most active catalyst, the lowest pressure loss, and elimination of substrate "nesting".
- Manufactured in many cell densities (200 to 700 cpsi) and a wide range of shape and dimensions for new installations and replacement of elements from other manufacturers.

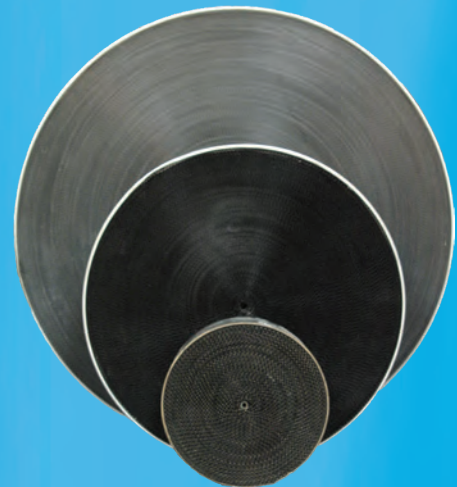
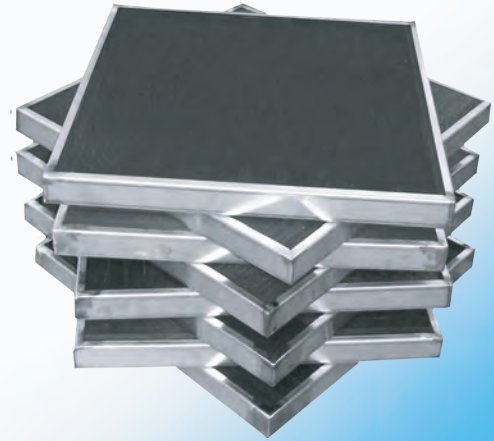
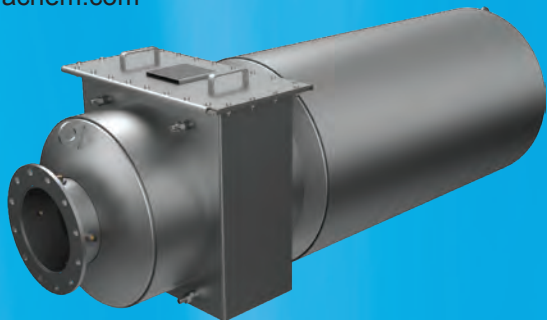
Durable ceramic coatings with platinum assure EPA NESHAP compliance:

- Provides high performance, control of low-temperature start-up emissions, and resistance to poisoning and masking.
- Demonstrated solutions for dirty, low-temperature 2-cycle engines.
- Specific catalyst formulations for reduced oxidation of SO₂ and NO.
- Demonstrated life expectancies in excess of 3-5 years backed with warranties up to 3 years.

Integration with EmeraChem's Housing & Silencer Products:

- Strong, heavy-duty materials of construction in carbon and stainless steels provides long life, minimizes warping and eliminates cracked welds.
- Catalyst installation method makes it fast and easy for field crew to mount the element and seal in tight.
- Available in a wide range of sizes for all engines. Critical and hospital grade noise attenuation.

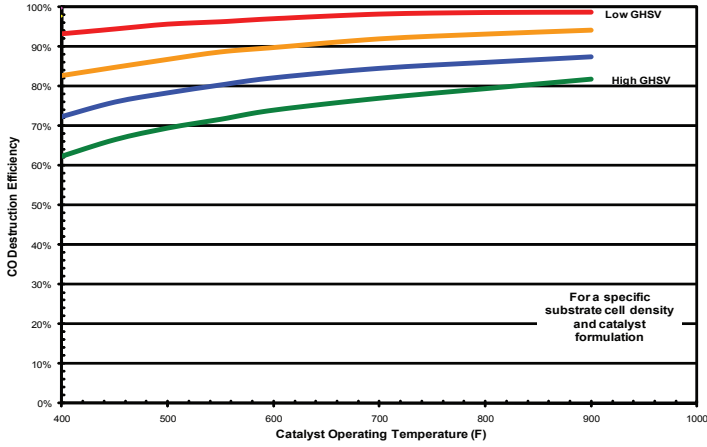
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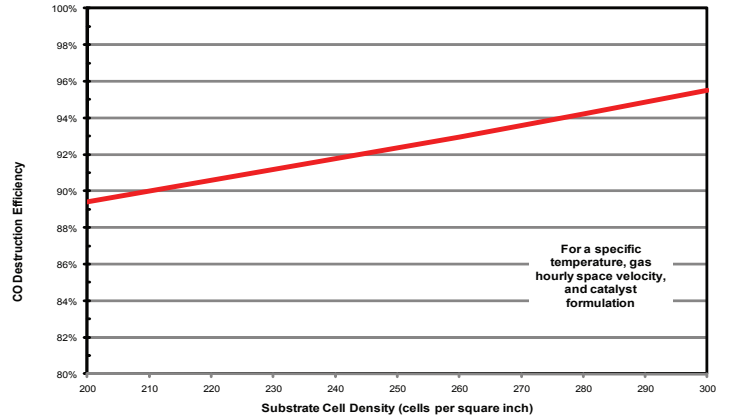


ADCAT™ CO CATALYST

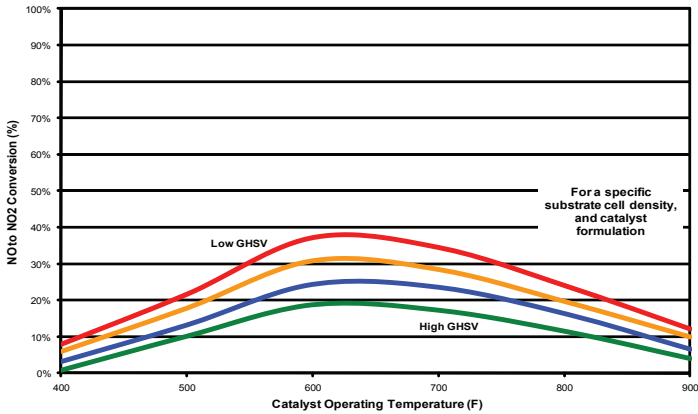
Effect of Temperature on CO Destruction Efficiency over a Range of Gas Hourly Space Velocities



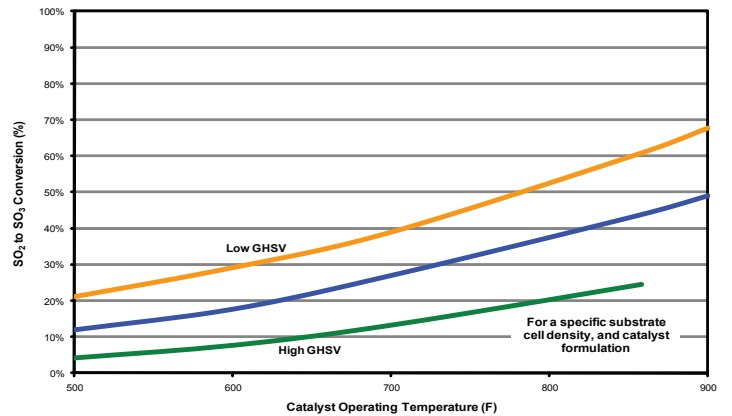
Effect of Substrate Cell Density on CO Destruction Efficiency



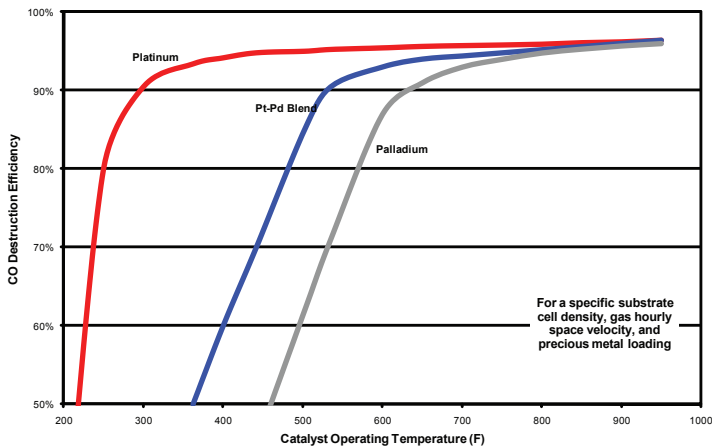
Effect of Temperature on NO to NO2 Conversion Rate Over a Range of Gas Hourly Space Velocities



Effect of Temperature on SO2 to SO3 Conversion Over a Range of Gas Hourly Space Velocities



Effect of Precious Metal Selection on CO Destruction Efficiency



Comparison of Platinum and Palladium

	Platinum	Palladium
CO DRE	Best	Good
VOC DRE	Best	Good
Light-off Temperature	250-450F	400-650F
Catalytic Activity	High	Moderate
Thermal Stability	Good to 1110F	> 1150F
Poison Resistance	High	Low
Durability	High	Low to moderate
Cost	\$\$-\$\$\$	\$

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