

# CATALYTIC COMBUSTION

EMISSION TECHNOLOGIES

## Power Emissions Group

Oxidation Catalysts for Natural Gas Turbines



# Oxidation Catalysts for Natural Gas Turbines and Heat Recovery Steam Generators (HRSG)

## For Control of:

- CO-Carbon Monoxide
- VOCs-Volatile Organic Compounds
- HAPs-Hazardous Air Pollutants

## Applications:

- Combined Cycle Gas Turbine Power Plants
- Simple Cycle Gas Turbine Power Plants
- Baseload and Peaker Operations
- New Install, Replacement, or Retrofit

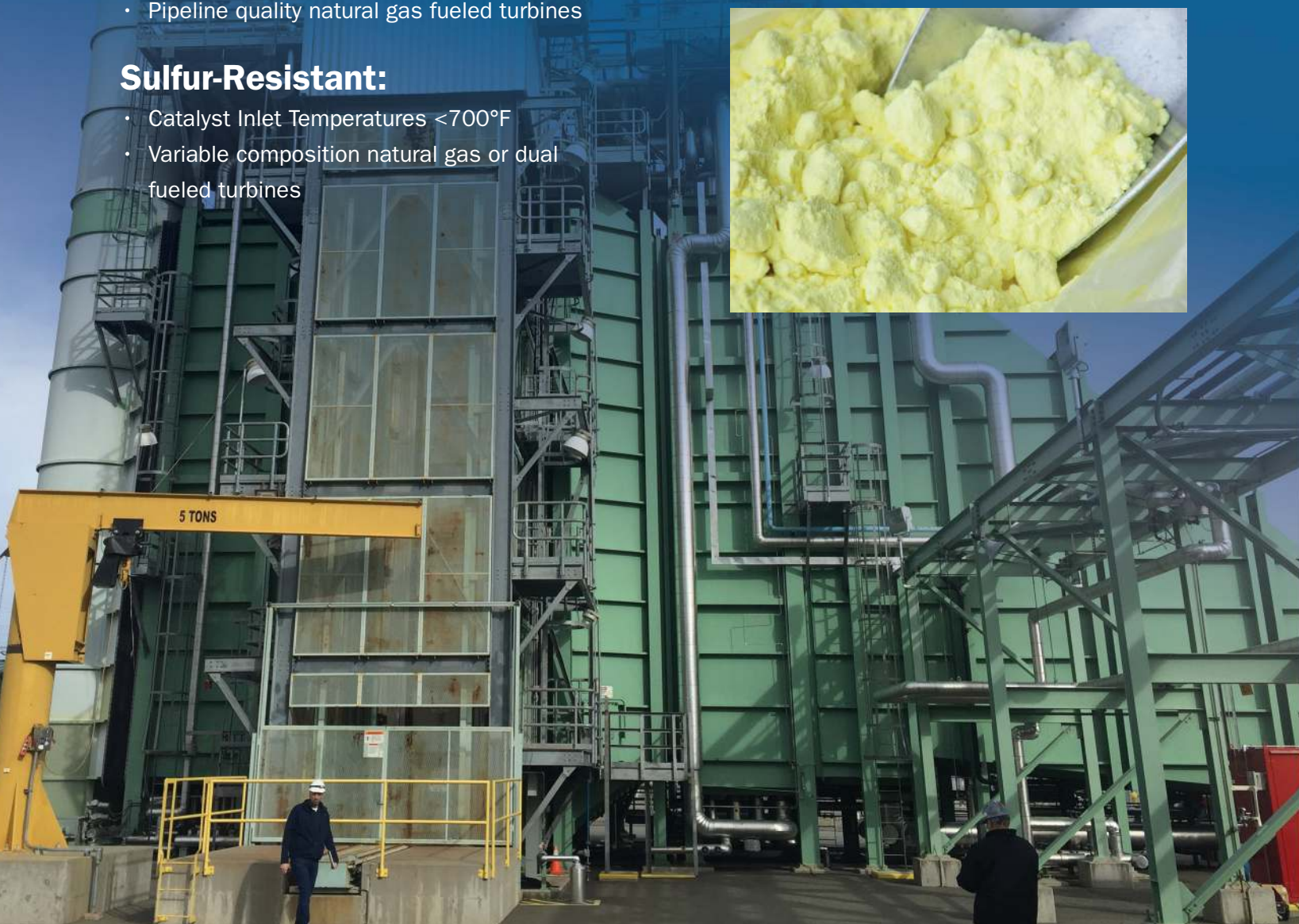
## Two Options to meet varying installation needs

### Conventional CO Oxidation Catalyst

- Catalyst Inlet Temperatures  $>700^{\circ}\text{F}$
- Pipeline quality natural gas fueled turbines

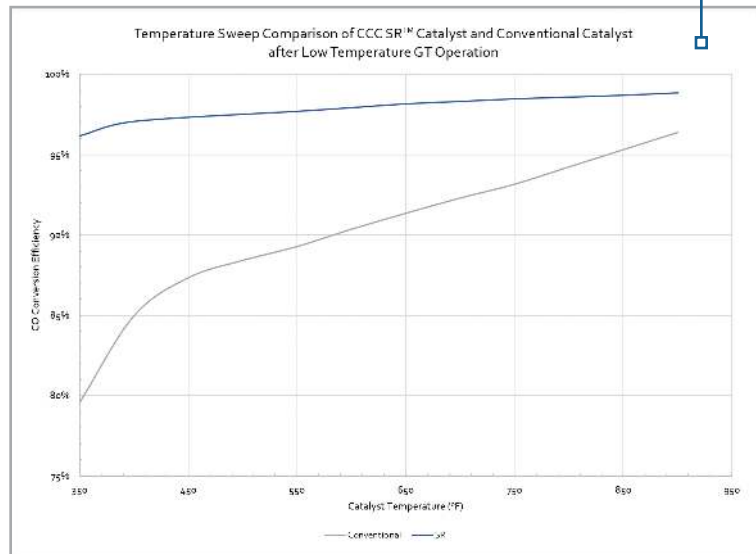
### Sulfur-Resistant:

- Catalyst Inlet Temperatures  $<700^{\circ}\text{F}$
- Variable composition natural gas or dual fueled turbines



## Product Performance

- High activity catalyst formulations
- Compact footprint
- Low backpressure
- Proven coatings provide superior lifespan
- Low oxidation of  $\text{SO}_2$  to  $\text{SO}_3$
- Low oxidation of  $\text{NO}$  to  $\text{NO}_2$
- Sulfur-Resistant formulation option for low temperature gas turbine sites or for sites with variable fuel quality
- Wide operating temperature range 450°F to 1250°F
- Catalyst Management Plans to extend useful life



## Metallic Substrates Engineered to Boost Performance

- Features stacked foil layers of micro-corrugated foils
- Herringbone foil pattern induces faster mass transfer yielding higher performance compared to straight patterned foils
- High heat transfer and low thermal inertia
- High resistance against thermal and mechanical shocks
- Cell densities from 100 to 320 cpsi are available
- Flexible flow depths are available
- 100% stainless steel frame construction, easy to integrate into the ductwork



## Proven Reliability and Ongoing Support

Catalytic Combustion's process of producing folded catalyst substrates is a proven method of fast manufacturing robust catalysts that match your existing catalyst element.

Planned testing and maintenance will extend the lifetime of your catalyst assets. Catalytic Combustion uses our patented Activity Value Test System (AVTS™) to evaluate the catalyst for activity performance. The Oxidation Catalyst can be regenerated via our proven cleaning method. We also provide reclamation service for precious metals when your spent catalyst reaches the end of its lifespan.

# Catalytic Combustion Corporation's primary focus is **EMISSIONS CONTROL TECHNOLOGY**

Catalytic Combustion Corporation, headquartered in Bloomer, Wisconsin, patented the first catalyst for control of CO and VOCs in 1951. Since that time our firm has focused our efforts on furthering technological advances in emissions control. We are agile in responding to our client's needs in the face of an ever-changing regulatory environment.



## **Catalytic Combustion Corporation**

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