

# Pollution Control Associates, Inc

## ADCAT™ 3-Way (NSCR) for VOC, CO and NOx Reduction

PCA Inc.'s metal monolith honeycomb catalyst replaces traditional NSCR and CO/HC catalysts. Our 3-Way (NSCR) catalyst has been demonstrated to outperform competing technologies and catalyst in emission reduction efficiency with less pressure drop at a lower cost. PCA, Inc. provides rapid manufacturing schedules and quick shipments for any NSCR application.

Heavy-duty stainless steel module design:

- High temperature nickel alloy substrate.
- Durable, longest-lasting, highest performance catalyst available.
- Catalyst module cell densities up to 700 cpsi.

Discrete trapezoidal bonded cell substrate construction:

- Ensures maximum durability and extreme module mechanical integrity.
- Yields lowest possible pressure drop for the most surface area.
- Prevents plugging of inter-catalyst channels and substrate nesting, which cause exhaust bypass and precious metal loss. No gaps!

Flexibility for meeting future regulations:

- Individually mounted module design, allows for addition and replacement of catalyst modules to existing installations.
- Backed with a one-year warranty and has an expected life of greater than seven years.
- Broad operating temperature range (350 to 1200 °F) allows for simple and seamless integration of CO catalyst systems into all applications.

PCA, Inc is a leading, full-service provider of catalysts and catalytic solutions with resources encompassing every aspect required to satisfy customer needs, from analyzing process conditions to delivering the final product.

PCA, Inc. delivers distinctly-focused, customer-specific engineered solutions within budget and on schedule.

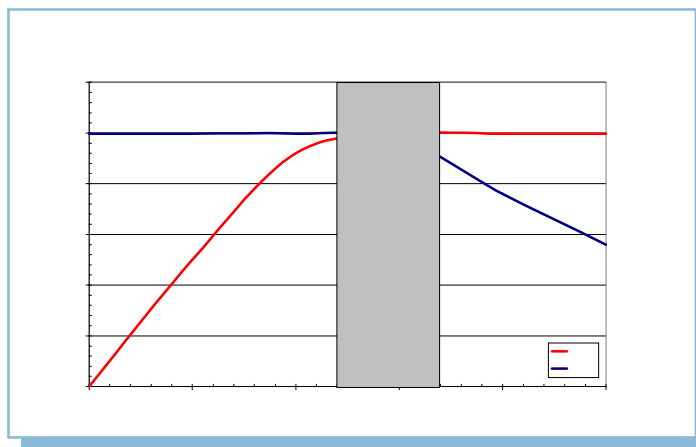
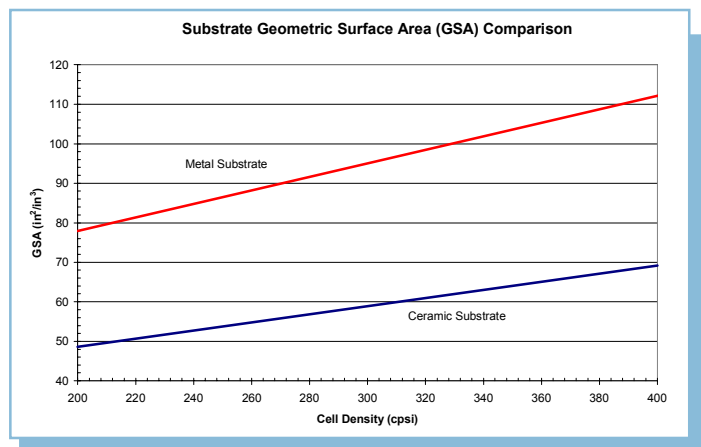
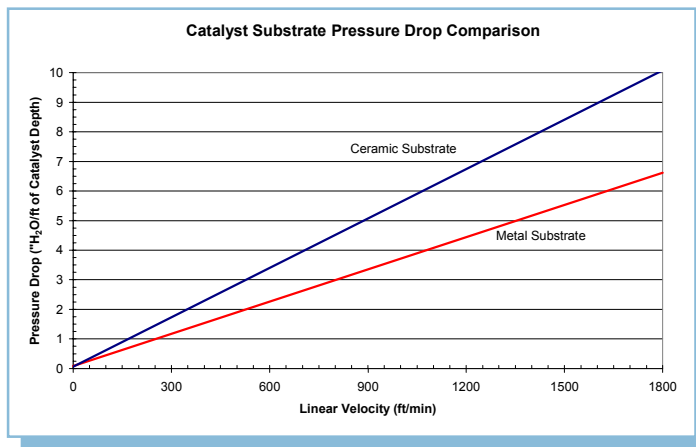


# ADCAT™ 3-Way (NSCR) Catalyst: Technical Specifications

Type	Material	Properties	Units	Specifications							
Honeycomb Monolith	Metal Modules	Cell Density	cpai	200	300	400	500	600	700		
		Wall Thickness	in.	0.002	0.002	0.001/0.002	0.001/0.002	0.001/0.002	0.001/0.002		
		Geometric Surface Area	in <sup>2</sup> /in <sup>3</sup>	76.24	97.70	115.10	124.31	145.32	165.55		
		Maximum Temperature	°F	1,200	1,200	1,200	1,200	1,200	1,200		
		Coefficient of Thermal Expansion	x10 <sup>-6</sup> in/in/°F	5.9-8.0	5.9-8.0	5.9-8.0	5.9-8.0	5.9-8.0	5.9-8.0		
		Range of Dimensions	Blocks	Height	in.	≤36	≤36	≤36	≤36	≤36	≤36
				Width	in.	≤36	≤36	≤36	≤36	≤36	≤36
				Depth*	in.	1-6	1-6	1-6	1-6	1-6	1-6
			Round	Diameter	in.	≤36	≤36	≤36	≤36	≤36	≤36
				Depth*	in.	1-6	1-6	1-6	1-6	1-6	1-6
	Ceramic Modules	Wall Thickness	in.	0.0105	0.0080	0.0070	n/a	n/a	n/a		
		Geometric Surface Area	in <sup>2</sup> /in <sup>3</sup>	48.20	59.70	68.80	n/a	n/a	n/a		
		Maximum Temperature	°F	1,200	1,200	1,200	n/a	n/a	n/a		
		Coefficient of Thermal Expansion	x10 <sup>-6</sup> in/in/°F	3.91	3.91	3.91	n/a	n/a	n/a		
		Range of Dimensions	Blocks	Height	in.	≤42	≤42	≤42	n/a	n/a	n/a
Width				in.	≤42	≤42	≤42	n/a	n/a	n/a	
Depth*				in.	1-18	1-18	1-18	n/a	n/a	n/a	
Round			Diameter	in.	≤42	≤42	≤42	n/a	n/a	n/a	
	Depth*		in.	1-18	1-18	1-18	n/a	n/a	n/a		

Listed numbers are nominal values. PCA engineers catalyst modules in various shapes and sizes, as built by EmeraChem LLC.

\*For greater depths, multiple units may be stacked to obtain desired dimensions.



## Inquiries:

Send us specifications, drawings or gas stream data and we will provide you with a custom-tailored solution to your specific application. PCA, Inc. also provides analytical and technical services to assist in determining your current emissions and catalytic performance.

PCA, Inc. is a proven leader in the catalytic control of NO<sub>x</sub>, SO<sub>x</sub>, CO, VOCs and PM for manufacturing and industrial applications as well as for the power generation industry.

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