

DuraTrap<sup>®</sup> AT Filters For proven performance in light-duty diesel system

Vehicle and engine manufacturers worldwide are striving to improve the fuel efficiency and performance of diesel engines while meeting NOx, particulate mass and particulate number emissions limits under real-world driving conditions. Integrating SCR catalysts on our line of Corning<sup>®</sup> DuraTrap<sup>®</sup> AT diesel particulate filters is a leading approach to meet these challenges.

#### **Products with Proven Performance**

	DuraTrap® AT (low porosity product line)	DuraTrap® AT HP (high porosity product line)
Porosity	~45%	~59%
Median Pore Size	13-15 µm	17-19 µm
Microstructure Designed For	Typical oxidation catalyst coatings	Typical SCR catalyst coatings

### Corning DuraTrap<sup>®</sup> AT LP filters

The low porosity and optimized microstructure enables product designs which support better fuel economy, lower  $CO_2$  emissions, and higher engine performance. At the same time, the filters maintain thermal and mechanical robustness allowing for high soot mass limits.

Standard Cell Geometry & Sizes:

- 300 cells per square inch
- 10 mil wall thickness
- Wide range of sizes available

# Corning DuraTrap<sup>®</sup> AT HP filters

The particulate filters are designed with higher porosity which allows for low backpressure at high washcoat loads and excellent filtration efficiency under all driving conditions. An optimized microstructure, innovative cell design and a monolithic structure also enable high deNOx performance under a wide range of test conditions.

Standard Cell Geometry & Sizes:

- 350 cells per square inch
- 12 mil wall thickness
- Wide range of sizes available

### **Excellent Filtration Efficiency**



Particle number filtration efficiency for Corning DuraTrap AT HP filters is in line with current generation DuraTrap AT LP filters. Corning's diesel particulate filters are commercialized in several applications including most stringent Euro 6d regulations.

### Monolithic Advantage

Corning's aluminum titanate material provides low thermal expansion to enable durable monolithic construction that allows for:

- Low pressure drop and excellent regeneration efficiency to help improve fuel consumption
- Increased ash storage capacity and larger filtration surface area compared to segmented filters

# Innovative Design

The extrude to shape monolithic design can be produced in a variety of sizes and optimized for systems with space constraints and diverse configurations. Corning's innovative asymmetric cell technology (ACT) is an option that helps manage lifetime pressure drop requirements and provides ash storage benefits through larger inlet channels.



Asymmetric Cell Technology (ACT): larger inlet, smaller outlet. Unplugged to highlight ACT design. Filters will have alternating plugs.