### CORNING

# **Product Information**

#### Benefits

Vehicle and engine manufacturers worldwide are striving to improve the fuel efficiency and performance of diesel engines while meeting NOx, soot particle mass, and soot particle number emissions limits under real-world driving conditions. Integrating SCR catalysts on diesel particulate filters is a leading approach to meet emerging challenges with a compact, fuel-efficient, high-performance solution.

Corning<sup>®</sup> DuraTrap<sup>®</sup> AT HP filters are designed with a higher porosity and optimized microstructure. This enables low backpressure at high washcoat loads and excellent filtration efficiency under all driving conditions.

	DuraTrap AT LP (existing low porosity product line)	<b>DuraTrap AT HP</b> (new high porosity product line)
Porosity	~45%	~60%
Washcoat load at equivalent ∆p	Base	>5x
Filtration efficiency	Base	=





#### Low Backpressure



Corning<sup>®</sup> DuraTrap<sup>®</sup>

AT HP Filters

Corning's high-porosity filters showed significant pressure drop benefits over commercially available silicon carbide products with similar coatings and coating levels.

### **Excellent Filtration Efficiency**



Particle number filtration efficiency for Corning DuraTrap AT HP filters is in line with current generation DuraTrap AT LP filters.

#### Monolithic Advantage

Corning's aluminum titanate material provides low thermal expansion to enable durable monolithic construction. Our monolithic design allows:

- Low pressure drop and excellent regeneration efficiency to help improve fuel consumption
- Increased ash storage capacity and about 12% larger filtration surface area compared to segmented filters
- More effective utilization of washcoat

#### Innovative Design

Filter shape can be optimized for systems with space constraints and diverse configurations.

Corning's innovative asymmetric cell technology (ACT) option can help manage lifetime pressure drop requirements and provides ash storage benefits through larger inlet channels.



Asymmetric Cell Technology Larger inlet, smaller outlet Unplugged to highlight ACT design. Filters will have alternating plugs.

#### Standard Cell Geometry and Sizes

- 350 cells per square inch/12 mil wall thickness
- 300 cells per square inch/13 mil wall thickness
- Wide range of sizes available

#### Global Supply: DuraTrap AT HP Filters

Supporting automotive manufacturers worldwide



## CORNING

Contact us today to learn more. Environmental@corning.com www.corning.com/EnvironmentalTechnologies

The charts and graphs used in this publication are based on data from experimental and limited tests conducted under controlled laboratory conditions, measurements, and calculations sponsored by Corning. Corning can provide additional calculations or test results based on specific operating conditions.

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