Clean Diesel Made Possible

CORNING

Corning[®] DuraTrap[®] AT LP Filters

Particulate filters for next-generation diesel systems



Vehicle and engine manufacturers worldwide are striving to improve the fuel efficiency and performance of diesel engines while meeting particulate mass and particulate number emissions limits. Corning® DuraTrap® AT LP filters help our customers meet their objectives.

Next-generation Corning DuraTrap® AT LP 300/10 and Corning DuraTrap® AT LP 300/13 filters are designed with a lower porosity and optimized microstructure to enable product designs for low pressure drop or high soot mass limit.

Next-Generation Product Benefits*

	DuraTrap [®] AT 300/13	DuraTrap® AT LP 300/10	DuraTrap [®] AT LP 300/13
Pressure Drop	Base	-20-25%	=
Soot Mass Limit	Base	=	+2-3 g/l
Filtration Efficiency	Base	=	=

Corning DuraTrap[®] AT LP 300/10 for Low Backpressure

Thinner walls and low porosity:

- Allow for better fuel economy, lower CO2 emissions, and higher engine performance
- Maintain thermal and mechanical robustness that allows for high soot mass limits

Corning DuraTrap® AT LP 300/13 for High Soot Mass Limit

Higher thermal mass:

- Reduces regeneration frequencies and fuel consumption
- Increases thermal and mechanical robustness for higher soot mass requirements

Corning® DuraTrap[®] AT LP Filters

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.

Standard Cell Geometry & Sizes

- 300 cells per square inch
- 13 mil and 10 mil wall thicknesses
- Wide range of sizes available

Backpressure Performance*

Corning DuraTrap[®] LP 300/10 for low pressure drop designs





Temperature Response during Uncontrolled Regeneration*

Corning DuraTrap® AT LP 300/13 for higher soot mass limit designs





Asymmetric Cell Technology (ACT): larger inlet, smaller outlet**





Corning DuraTrap® AT LP 300/10 filter

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*Except as otherwise noted, the charts and graphs used in this publication are based on data from experimental and limited tests conducted under controlled laboratory conditions sponsored by Corning Incorporated. Corning can provide additional calculations or test results based Can provide adultional calculations of test results based on specific operating conditions. Published in SAE paper No. 2011-01-0816. "Unplugged to highlight ACT geometric design. Filters will have alternating plugged channels.

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