

# Corning DuraTrap® CO filters

*For reducing diesel engine exhaust emissions*

Corning ceramic filters are being used worldwide to control particulate emissions from diesel-powered engines for on-road and off-road applications. Corning DuraTrap CO filters use a patented ceramic composition to deliver superior particulate trapping efficiency, low back pressure and improved thermal durability, resulting in high-performance reduction of particulates in diesel engine exhaust emissions. DuraTrap CO filters can be used for both original equipment manufacture (OEM) and retrofit applications.



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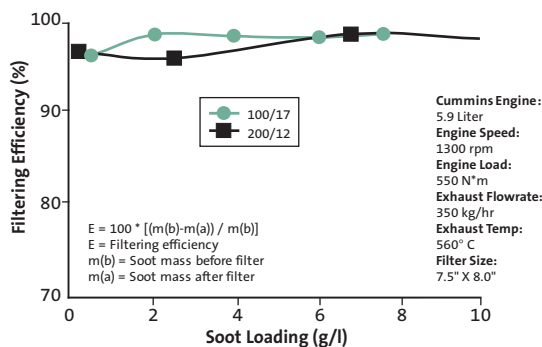
# Corning DuraTrap® CO filters

An advanced material composition is the key to the Corning DuraTrap CO filter's high performance. The thermal fatigue resistance of the DuraTrap CO filter is a result of the material's low coefficient of thermal expansion, combined with its superb material strength and elastic modulus.

## High Particulate Trapping Efficiency

The composition used for DuraTrap CO filters provides consistent particulate trapping efficiency of 90% or greater for both cell geometries.

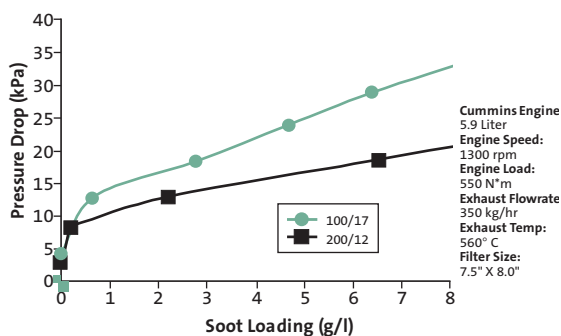
### Efficiency versus Soot Loading



## Low Pressure Drop

DuraTrap CO filters demonstrate low back pressure as a function of grams of soot collected during system operation.

### Pressure Drop versus Soot Loading



## Material Attributes

Property (uncatalyzed)	100/17	200/12
<b>Cell Density</b> (cpsi) (cpscm)	100 15.5	200 31.0
<b>Wall Thickness</b> (in) (mm)	0.017 0.432	0.012 0.305
<b>Open Frontal Area (OFA)</b> (%)	34.5	34.5
<b>Geometric Surface Area (GSA)</b> (in <sup>2</sup> /in <sup>3</sup> ) (m <sup>2</sup> /l)	33.3 1.31	47.0 1.85
<b>Hydraulic Diameter</b> (in) (mm)	0.083 2.11	0.059 1.49
<b>Modulus of Rupture</b> (psi/cpscm)	350*	300*
<b>Porosity</b> (%)	48	48
<b>Coefficient of Thermal Expansion</b> (x10 <sup>-7</sup> cm/cm/°C(25-800°C)) maximum average	5	5
<b>Mean Pore Size</b> (micron)	13	13

\*nominal values

## Select Corning DuraTrap CO filters for Your Diesel Emissions Control Needs

Corning works closely with customers worldwide to develop effective, durable and cost-efficient solutions to help meet ever-tightening emissions standards. For more information on how Corning DuraTrap CO filters can help you meet your demanding emissions control needs, please contact your Corning representative or contact:

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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 on specific operating conditions.



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