Advanced High Porosity Ceramic Honeycomb Wall Flow Filters

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POSTER LOCATION: P-15
High Porosity Filters For c-DPF And 4-way Filter Applications

Low backpressure due to porosity & permeability

High nano-particle trapping efficiency
avg pore-size = 15μm

Surface structure leads to interaction between catalyst and soot cake

Cake filtration

- Composite-bonded material
- Unique microstructure
- High porosity
- High temperature resistance
- Oxide and SiC chemistries

<table>
<thead>
<tr>
<th></th>
<th>GEO_2M</th>
<th>Cordierite (Corning 200/12)</th>
<th>SiC (NGK 300/12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porosity, pore-size (%)</td>
<td>67%, 15μm</td>
<td>47%, 13μm</td>
<td>43%, 13μm</td>
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<tr>
<td>MoR (MPa)</td>
<td>8.6</td>
<td>2.2</td>
<td>9.4</td>
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<tr>
<td>E Modulus (GPa)</td>
<td>7.8</td>
<td>4.8</td>
<td>13.3</td>
</tr>
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