



**A Diesel Oxidation Catalyst with Low T50
Properties and a Wide Operating
Temperature Range**

Presented by:

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**A Diesel Oxidation Catalyst with Low T50
Properties and a Wide Operating
Temperature Range**



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Active-X™



A patented washcoat formulation –
technology originally licensed from NASA
and modified for diesel emission applications



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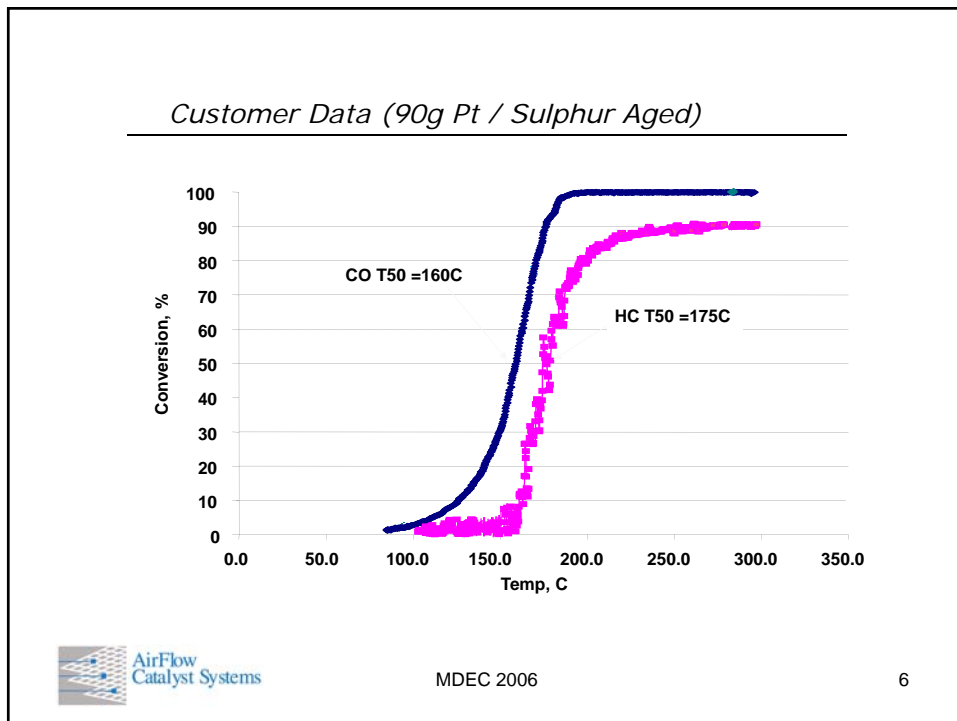
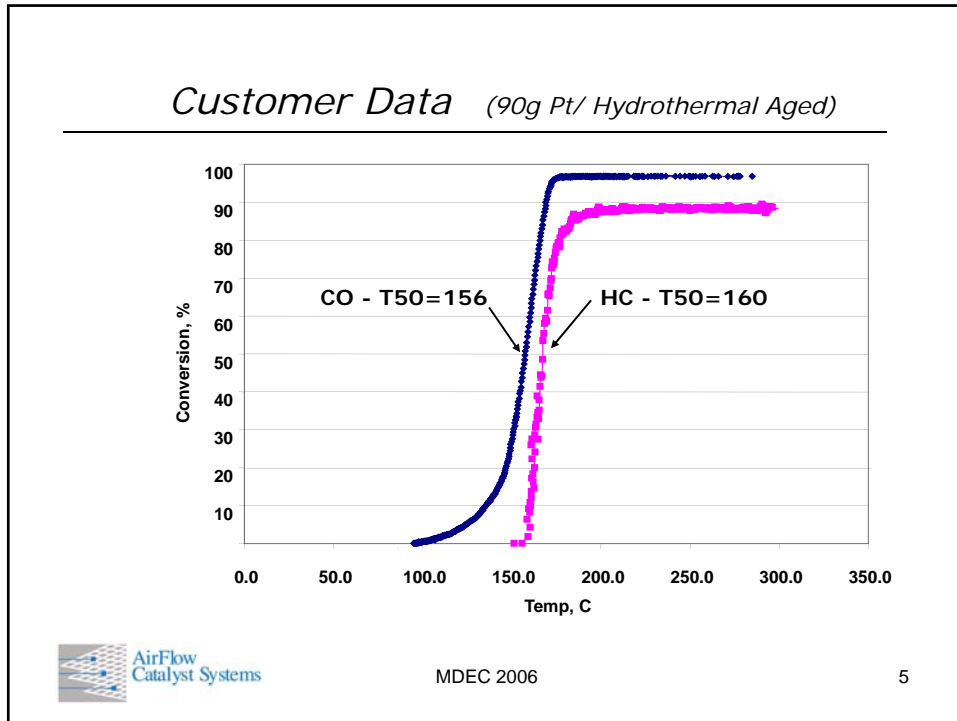
Unique Features:

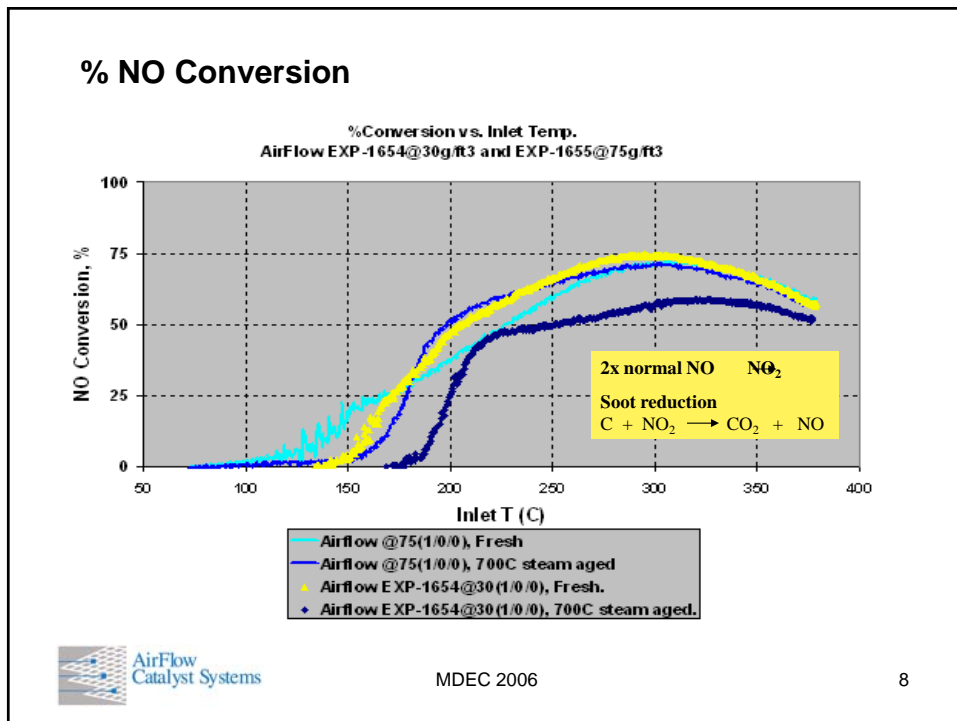
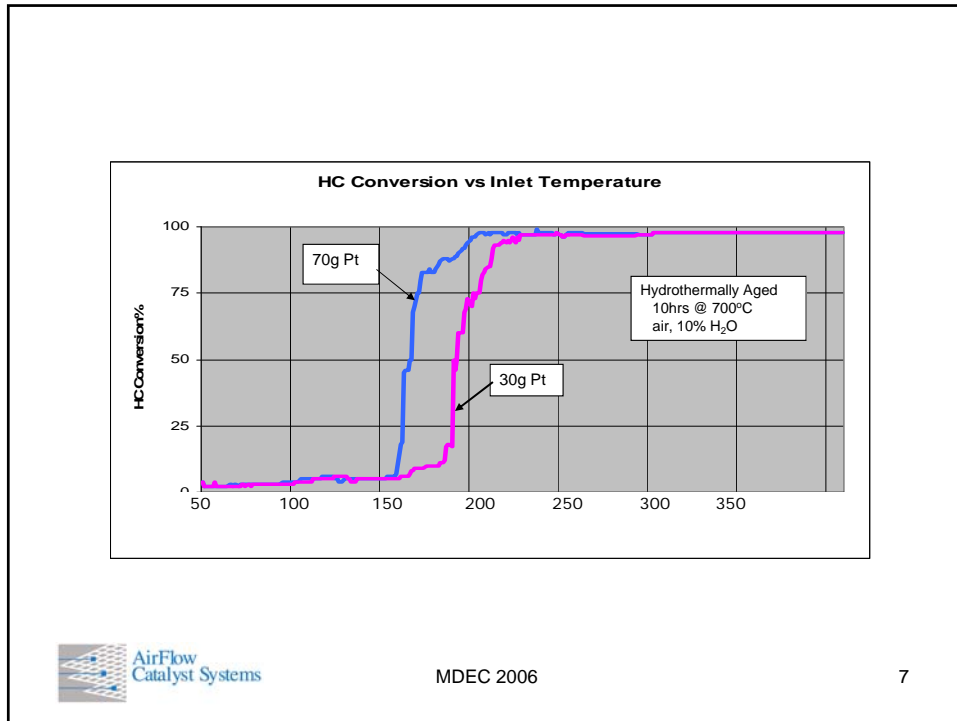
- Low temperature oxidation of CO and hydrocarbons (T50 <200°C)
- High NO to NO₂ conversion
useful for soot oxidation
$$\text{NO}_2 + \text{C} \longrightarrow \text{CO}_2 + \text{NO}$$
- Provides excellent thermal stability
- Allows lower PGM loadings



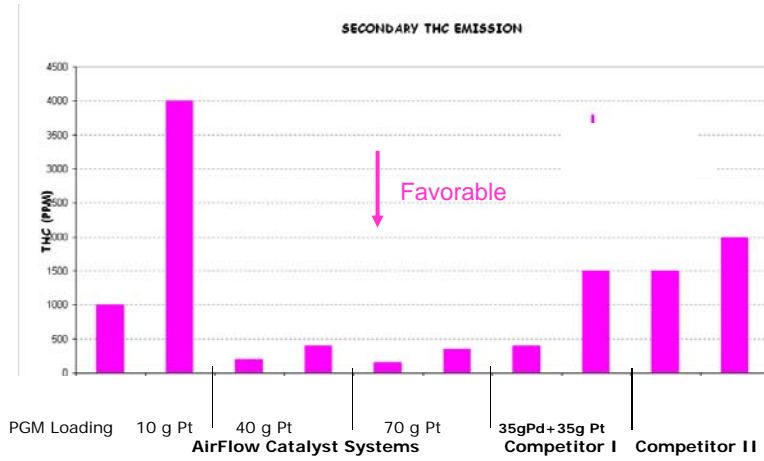
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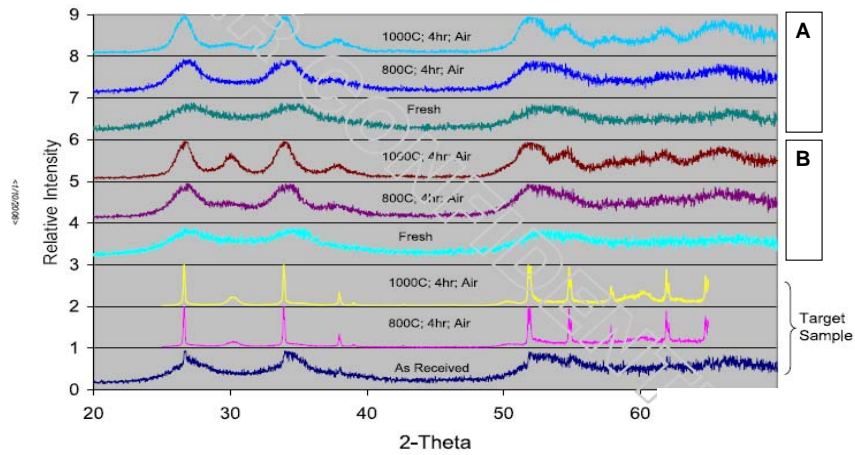




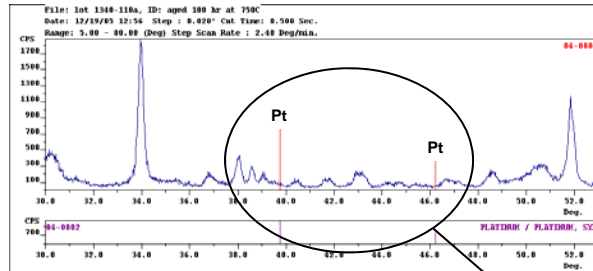
Customer Test Data



X-Ray Diffraction Patterns of Washcoat Material



AirFlow's DOC Durability

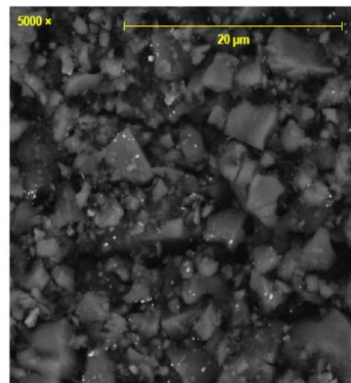
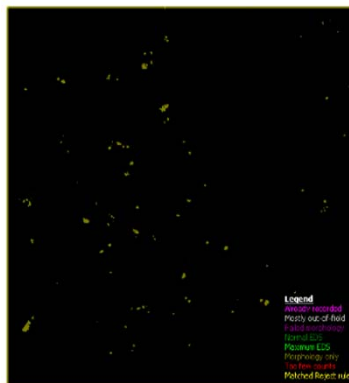


X-Ray Diffraction (XRD)

Absence of peaks @ 39.5 & 46.2 deg. indicates no platinum (Pt) sintering



SEM of ACS Washcoat + Pt After Hydrothermal Aging



Pt is uniformly dispersed and stabilized to thermal sintering



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AirFlow Catalyst Systems

ACTIVE-X™ WASHCOAT

**Provides enhanced catalytic activity for
DOC & CDPF components of the emission control system**

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