

# Advanced High Efficiency Clean Diesel Combustion with Low Cost for Hybrid Engines

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*Government:  
Environment  
Energy Security*

Customers:  
*\$Fuel Economy  
Performance*

**HOW ?**

Reduce Engine Cost  
Add Battery Capacity

Engine OEMs:  
*\$Profit  
\$Low cost  
Customers needs*



# P8

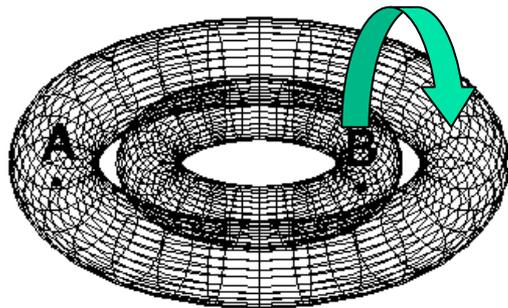
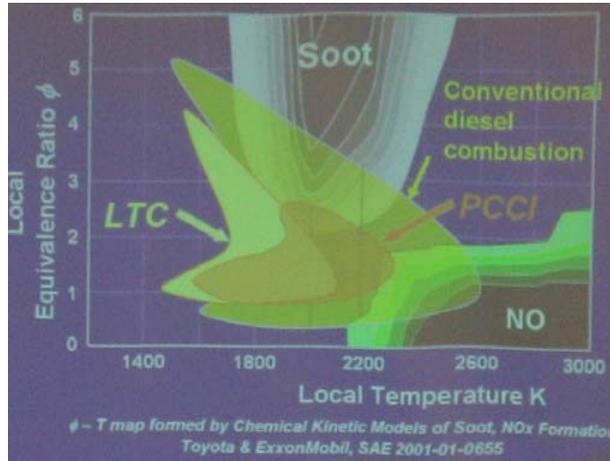
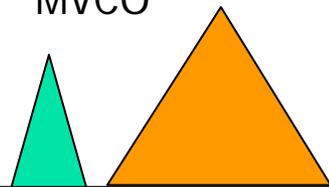
## Clean In-cylinder Combustion

*with Low Cost, High Efficiency*

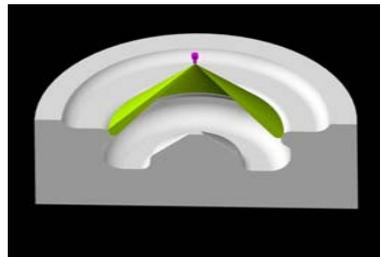


MVCO

HRR

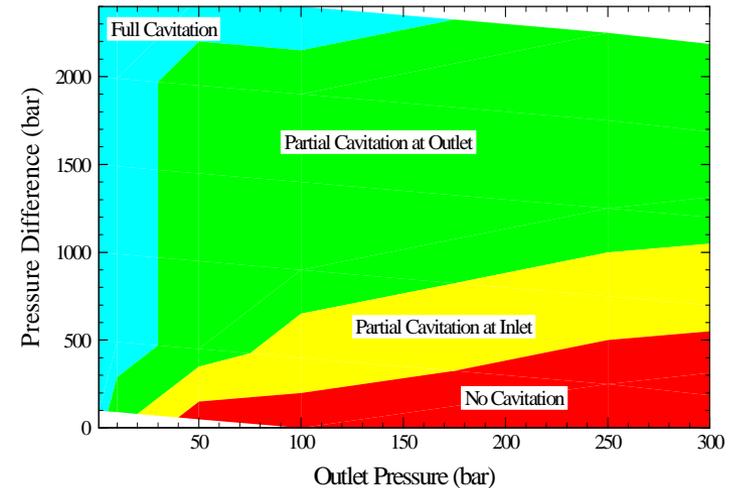


MCS (patent pending)



### Key Enablers:

- *MVCO, why low pressure is sufficient*
- *Dual-mode PCCI*
- *Dew-film Combustion*
- *Novel Chamber (MCS)*
- *Optimized Speeds*



Hou et al, SAE 2007-01-0249

*Conceptual or Practical?  
Find out by yourself @ P8*

*Promote Premixing + Premixed Combustion, Stratification,  
Reaction Rate and Pressure Rise Rate Control*