EGR Spatial Uniformity & Cylinder-Resolved Transients – measurements using an absorption spectroscopy probe

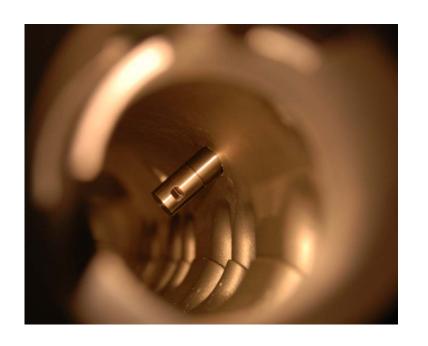
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Poster location: P-27 DEER 2012 October 16th, 2012

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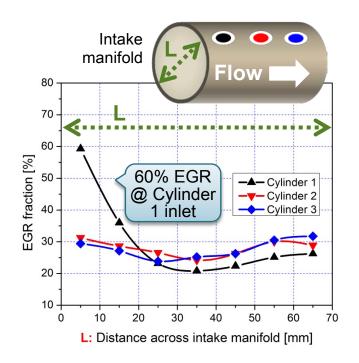




Poster P-27

Specifications

- Small footprint (3/8" OD)
- Fast temporal resolution (1kHz)
- Small spatial resolution (6mm)



Cycle-resolved exhaust events CAD [degree] 900 1080 1260 1440 1620 720 C4 C2 С3 C3 C1 C4 C2 SO₂ signal [a.u.] 10% more fuel in C1 & 4 25 50 75 100 125 150 175 200 Time [ms]

Applications

- Spatial charge uniformity
- Cylinder-specific EGR fraction
- Real-time cycle-resolved combustion performance

Small high-speed sensor to promote faster tech development

