



JM

NEW – formaldehyde catalyst developed by JM for lean burn engines

- Johnson Matthey has successfully demonstrated compliant operation in the field on a CAT G3516B NG engine with greater than 95% H₂CO conversion efficiency over an 24-month field trial
- No failed emissions tests
- No chemical cleaning of catalyst element during trial period



Johnson Matthey
Inspiring science, enhancing life

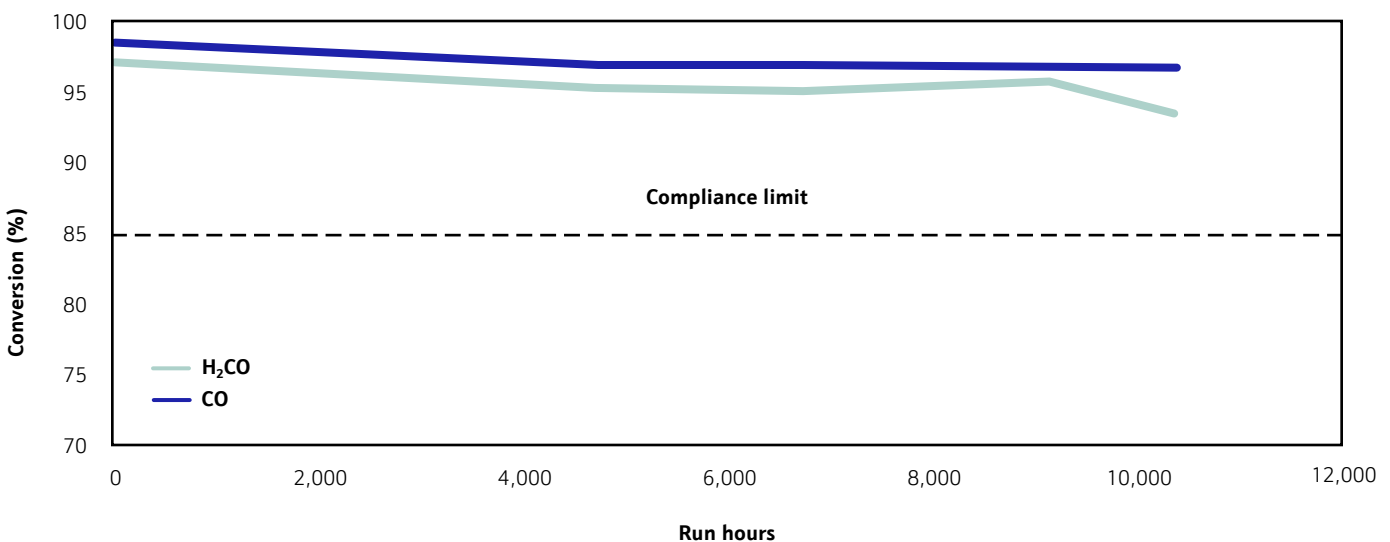
The customer was experiencing less than one year performance for meeting formaldehyde conversion requirements, and at times could only achieve formaldehyde conversion for 6 months. This caused expensive field servicing and catalyst costs. The Johnson Matthey solution was to demonstrate our new formaldehyde catalyst in field service for two years to validate its' efficacy.



During the two-year evaluation of the Johnson Matthey formaldehyde catalyst the performance was well sustained above 94% against the requirement of 85%.

- Caterpillar G3516B NG Engines
- 100% Load Condition -
 - HP – 1380
 - RPM – 1400
 - Exhaust Flow – 9,039 ACFM
 - Exhaust Temp. – 982°F (527°C)
 - NOx engine out – 0.5 g/bhp-hr.
 - CO engine out – 2.49 g/bhp-hr.
 - NMNEHC engine out – 0.54 g/bhp-hr.
 - HCHO engine out – 0.34 g/bhp-hr.
- Expected H₂CO Reduction – 95% (JM Catalyst)
- PA-GP-5 reduction requirements NOx 0%, CO 90%, NMNEHC 54%, HCHO 85%.
- Required Emissions Targets – NOx 0.5g/hp-hr., CO 0.25g/hp-hr., NMNEHC 0.25g/bhp-hr., HCHO 0.05g/hp-hr.

Johnson Matthey's advanced formaldehyde oxidation catalyst



For more information, contact Jack Carroll at jack.carroll@jmusa.com