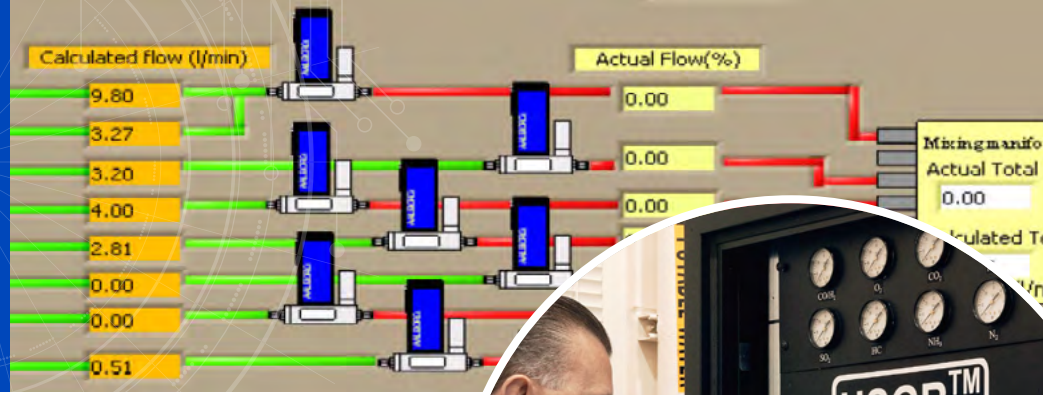




SOUTHWEST RESEARCH INSTITUTE



Catalyst and Aftertreatment Research and Development (CARD)

Exhaust aftertreatment research and development is a core competency at Southwest Research Institute® (SwRI®). Programs range from a wide variety of testing methodologies, component-level research and development, and system integration of advanced control strategies into vehicles. These activities include all types of aftertreatment systems and fuels.

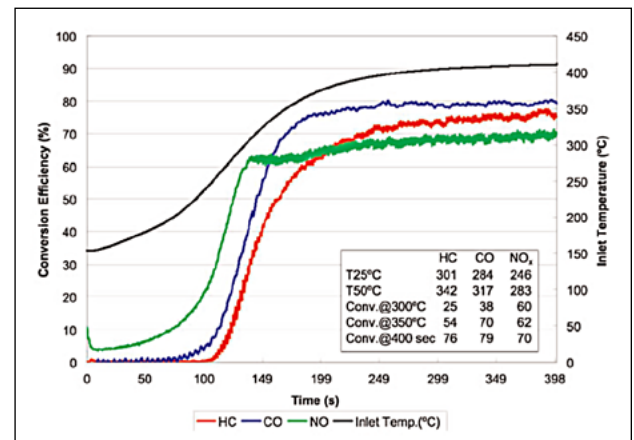
Areas of focus include programming and development of data acquisition and controls for various diesel aftertreatment solutions including post-injection controls and advanced urea-dosing controls. SwRI has developed technologies and facilities to improve catalyst performance evaluations and accelerated aging methods, including:

- SwRI's standard engine bench rigs
- Universal synthetic gas reactor® (USGR®) system for evaluating catalyst samples
- SwRI's stoichiometric multi-fueled burner-based system, FOCAS®, for accelerated aging of full-size catalysts
- SwRI's diesel HGTR system for evaluation of aftertreatment system performance.

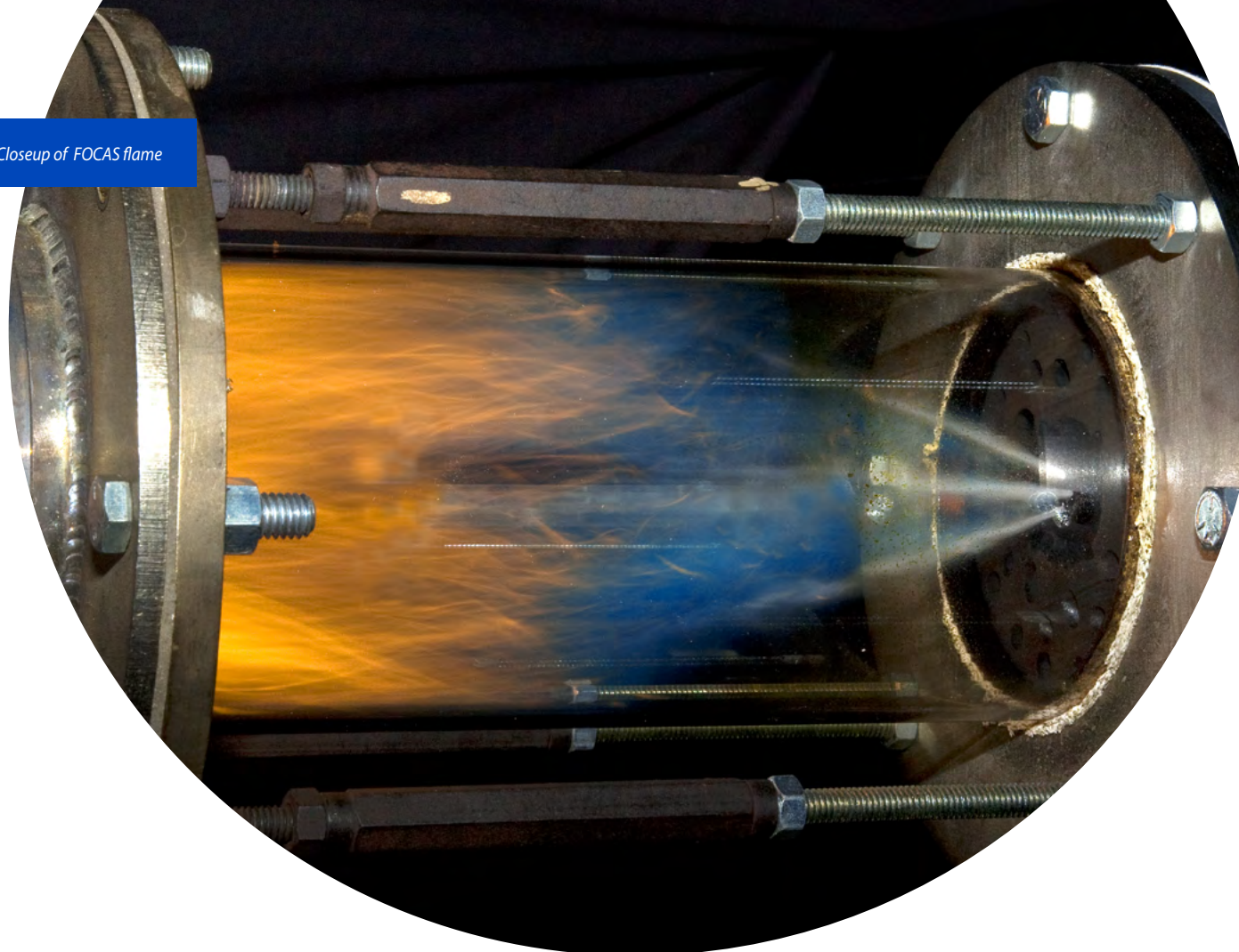
Evaluation and development technologies are available to our clients, in either our laboratories or their own.

Exhaust Aftertreatment Technical Strengths

- Aftertreatment technology design, development, testing, and integration
- Catalyst aging, durability, and performance evaluations
- Catalyst R&D, all engine and fuel applications
- Selective catalytic reduction (SCR) catalyst system evaluations
- Lean NO_x trap (LNT) system regeneration and desulfation strategy development
- Exhaust gas recirculation (EGR) cooler and system evaluations
- Lubricating oil effects on diesel aftertreatment and sensors



Closeup of FOCAS flame



We welcome your inquiries.

For more information, please contact:

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SOUTHWEST RESEARCH INSTITUTE

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