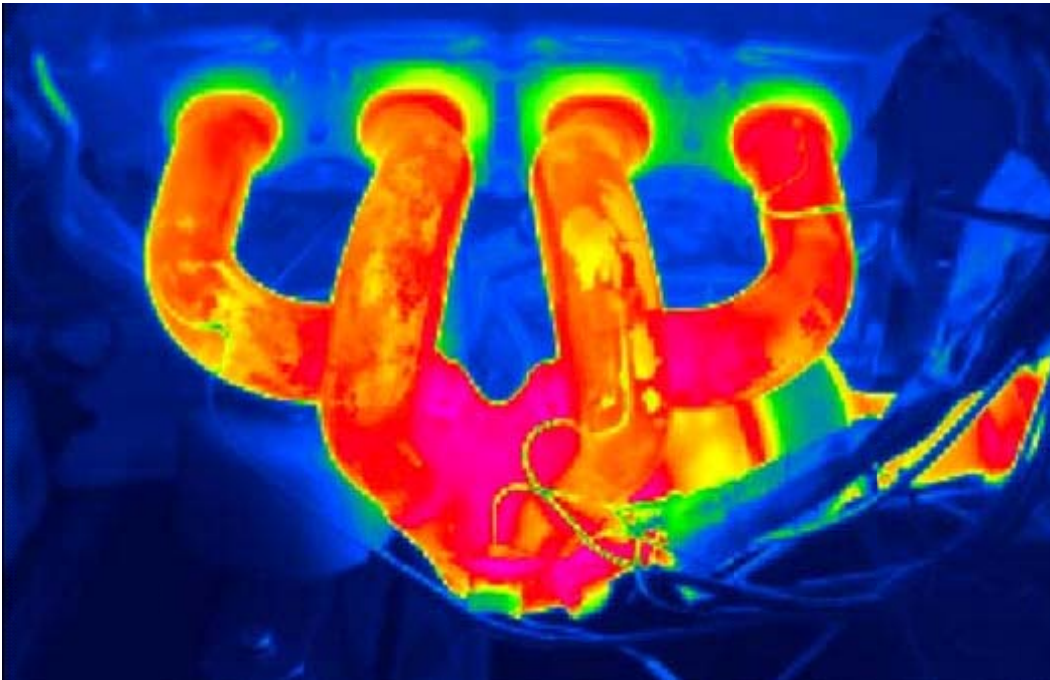


Emissions & Emissions Development



KST supports the entire development process by developing a functional model by calibrating the ECU on the test bench, as well as by optimizing functional algorithms after road trials.

Engine Tuning

The following are available to optimize the engine management system:

- Application software (e.g., Inca, ATI-VISION, etc)
- Exhaust gas measurement technology 2-line, FTIR, soot sensor
- Particulate matter & particulate count
- Smoke measurement (up to 750 hPa)
- NH₃ analyzer for NH₃ slip measurement (for measurement of SCR systems)
- Multiple sampling (up to 12x)
- Engine characteristic optimization programs (DoE-based), e.g., AVL Cameo
- Transient test benches/road-load simulation (RLS) to simulate cycles of operation, including gear changing processes

Diesel particulate filter: Development and aging

KST supports investigation of the regeneration behavior of various soot and ash loading situations, as well as with the assembly of the Canning and the application of the temperature measuring points.

Catalytic Converter: Development and Aging

KST is experienced in the area of catalytic converter aging runs and analysis of catalytic converter functioning during aging. KST also supports the production of the Canning, professional insertion of the substrate and performance of aging.

For both areas, the following is available:

- Exhaust gas measurement technology 2-line, FTIR
- Soot sensor and smoke measurement (up to 750 hPa)
- Lambda monitoring
- Oxygen enrichment in motoring
- Additional air injection (lambda peaks) to represent extreme increases in temperature

High temperature oven

For external regeneration of diesel particulate filters, as well as for aging of catalytic converters, a high temperature furnace of up to $T_{max}=1200\text{ °C}$ and artificial atmosphere are available (N₂, O₂ and H₂O injection).