

Diesel Engine Diagnostics Using Exhaust Gas Emissions

Diagnostics fundamentals

Modern engine diagnostics depend upon three fundamentals:

1. Mechanical checks
2. ECU interrogation
3. Exhaust emissions

With diesel, it has been possible to measure only “smoke”, not gas emissions... until now!

New Diesel Emissions Analyzer

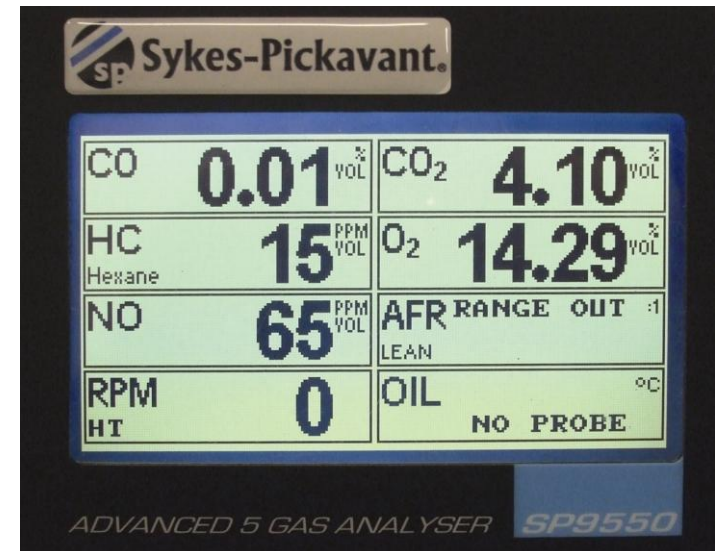


Unique 5 Gas Analyser for true diagnostics on diesel, gasoline, and LPG engines' exhaust gas emissions

The "Missing Link" in diesel engine diagnostics and testing

Diesel Emissions Analysis

- Diesel engines produce a significant amount of Nox which varies as conditions change
- Use the 5-gas analyzer to:
 - Compare against known good examples
 - Save time and money by eliminating issues quickly
 - Use in warranty authorization process

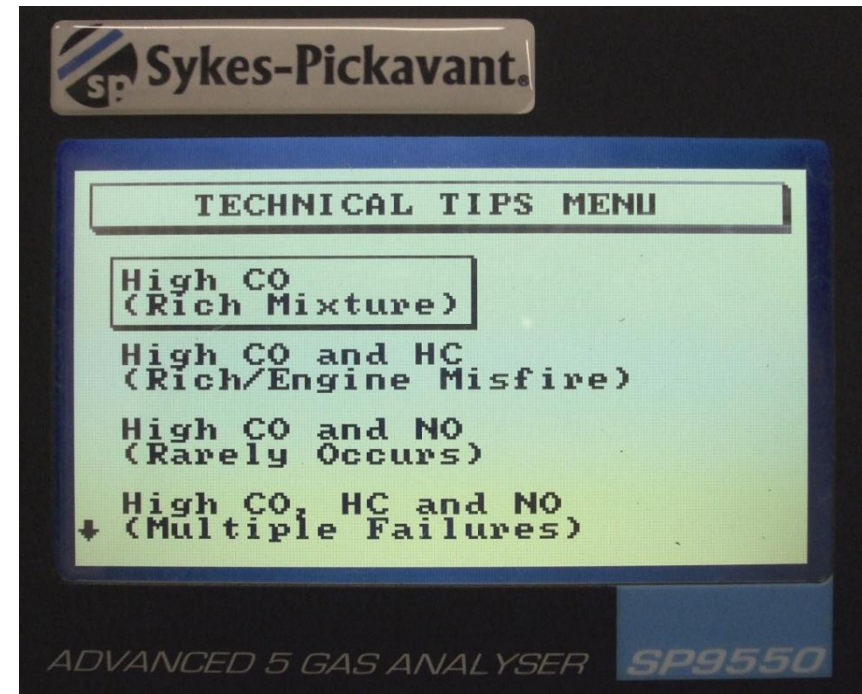


This analyzer measures and displays 5 gases at same time. The patented diagnostics process measures NOx and it's relation to other gases in real time!

New Diesel Emissions Analyzer

DESIGN FEATURES:

- ✓ Built-in user guide containing tips
- ✓ Compact – good for fixed operations or mobile use
- ✓ Works on all diesel engines – car, truck, factory, marine, agricultural, and industrial
- ✓ Removes all Smoke Particles from the Emissions
- ✓ Allows gases only to pass through for sampling
- ✓ Contains an infra-red gas analysis bench
- ✓ Displays gas sample test results



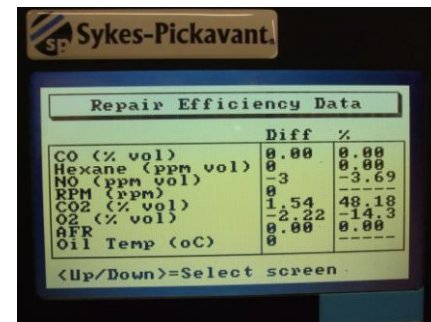
New Diesel Emissions Analyzer

READINGS/RESULTS:

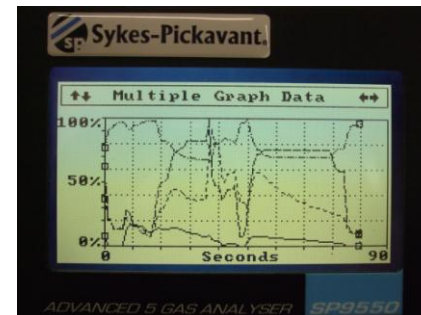
- ✓ Emission control system failures – is the EGR operational?
- ✓ Injection issues affecting fuel atomization
- ✓ Engine oil consumption (piston rings, turbo)
- ✓ Lack of service (air filter, aged oil etc.)
- ✓ DPF / SCR blocking, causing reduced flow and affecting combustion
- ✓ Add blue control effective, mixture ratio correct – not tampered with
- ✓ Presence of after market “chipping device”



5 gas display



Before and after results



Logging and graphing