



AVL EPOS™ Gas

Expert condition monitoring system for large-bore gas and dual-fuel engines

MARKET REQUIREMENTS

Operators of large gas and dual-fuel engines for stationary and mobile applications are affected by worldwide trends:

- Rising energy costs
- Environmental regulations
- Strong growth in demand

This leads to cost driving future requirements:

- Increasing system complexity
- Increasing share of gas and dual fuel engines
- Less time for maintenance and repair

To meet these demands, the market needs technologies like monitoring of subsystems to increase the efficiency and reliability of engine installations – also for gas and dual-fuel engines.

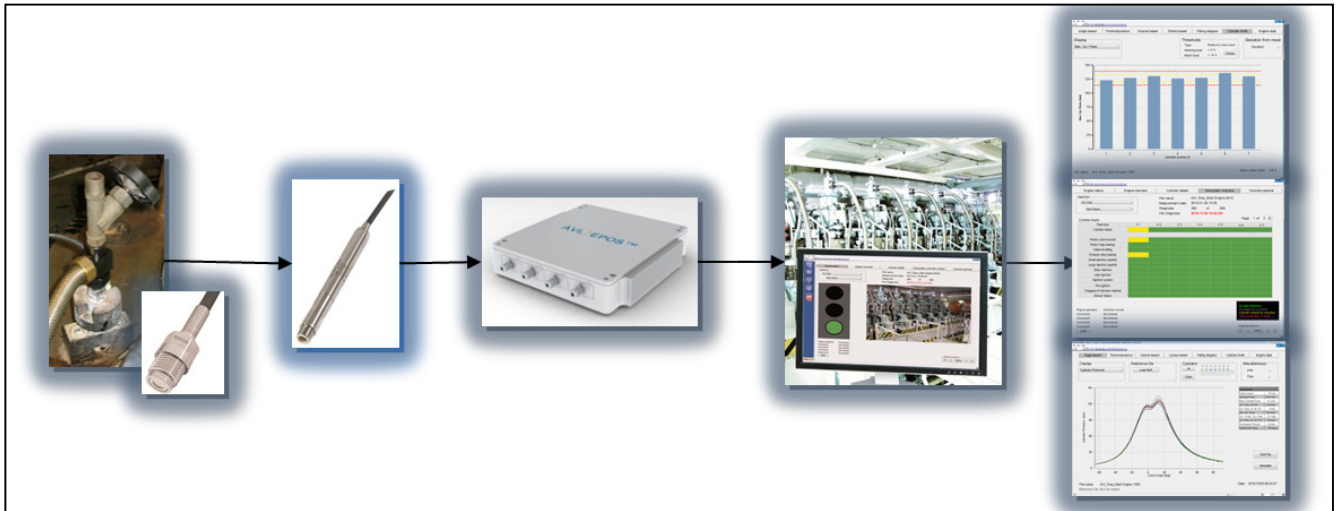
AVL APPROACH

AVL EPOS™ is a well established condition monitoring system for large-bore engines covering HFO and Diesel operation. It monitors and analyses the condition and operational behavior of large-bore engines.

This enables the operators and owners of stationary as well as mobile applications and on board of sea-going vessels to receive valuable information about

- a not optimum engine operation,
- upcoming operational problems or component damages and
- component life times in combination with a respective maintenance planning.

Now, AVL EPOS™ was extended by additional algorithms for monitoring and detection of specific engine failure modes occurring in gas operation.



From sensor to diagnosis - AVL offering the complete measurement chain as gas specific engine know-how and experience

In comparison to most other engine condition monitoring systems on the market, AVL EPOST™ does not leave the evaluation and analysis of data solely to the engine operator. By using expert algorithms, AVL EPOST™ provides valuable information regarding probable malfunctions or upcoming failures.

Special attention is given to differences of the engine behavior and the respective failure characteristic of gas in comparison to Diesel operation.

The condition monitoring of the engine is based on permanently installed cylinder pressure sensors - experiences of installations show sensor lifetimes for gas and dual-fuel operation of > 25.000 h – so far.

HIGHLIGHTS OF AVL EPOST™ GAS

- Automated detection of operated fuel mode
- Detection of gas specific engine failure modes
- Early detection of upcoming faults - avoidance of damages
- Knock monitoring
- Regular engine operation optimization with AVL EPOST™ (support to reduced cycle to cycle- and cylinder to cylinder variations)

Due to its open platform philosophy AVL EPOST™ can also be extended for the monitoring of additional components and subsystems (e.g. emissions, crankshaft, turbocharger).

AVL'S ADDED VALUE

- Long term experience in the development and operation of gas- and dual-fuel engines and complete propulsion systems
- Combustion simulation and advanced testing
- Customer support in stationary and mobile applications (e.g. marine, locomotive, off-road)
- Robust instrumentation and data processing

YOUR BENEFITS AT A GLANCE

- Available information about engine condition and possible faults using expert algorithms
- Easy to use condition monitoring
- Fully automatic operation
- Online, history and trend data available
- No maintenance necessary (sensor lifetime more than 20.000 operating hours)

FOR FURTHER INFORMATION PLEASE CONTACT:

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