

AWF-h particulate filter

Active regeneration with Diesel injektion



AT A GLANCE

- Continuous PM trapping efficency > 99 %
- Regeneration at almost all operation conditions
- Light-off temperature around 210 °C
- Fuel penalty < 1%
- Controlled by PTL filter control system and monitoring display
- No additional additives
- Certified system according to Swiss BAFU (LRV) and compliant to TRGS 554

The »Active Wall-Flow HC dosing« (AWH-h) diesel particle filter system (DPF system) is the right solution for engines which have a longer idling and the exhaust temperature does not reach the critical temperature range for regeneration for purly passive.

The system consists of a SIC Wall Flow substrate which is fixed into stailness steel housing by a flexible sealing mat.

The substrate is installed upstream of an oxidation stage. This oxidation catalyst consists of a metal honeycomb which resist the thermal loads in permanent operation.

Because of the compact design the AWF-h system can be installed on stationary engines as well on all mobile applications from 30 kW to 200 kW.

FUNCTION

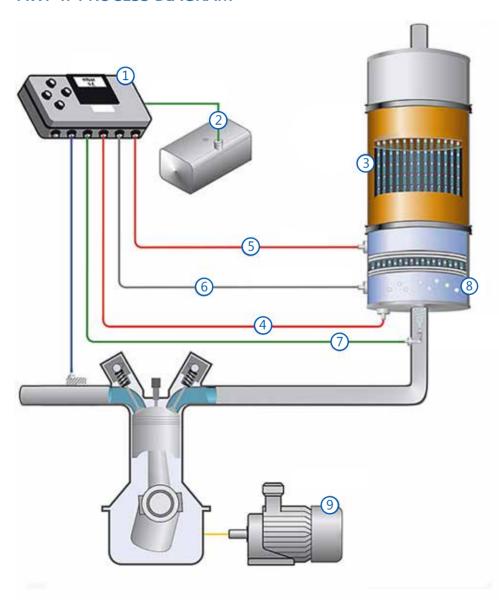
To initiate a regenaration at low temperatures diesel fuel will be sprayed infront of the oxidation stage into the exhaust stream.

The finely atomized fuel evaporates on the surface of the oxidation catalyst and will create extra temperature until the value needed for regeneration of the trapped soot is reached.

These temperature will be controlled by our ECU and the amount of injected diesel fuel.

Depending on the backpressure the ECU will control the system automatically and will start the regeneration based on the set point calibration.

AWF-h PROCESS DIAGRAM



- 1 CPU
- 2 Diesel line
- 3 Diesel Particulate Filter
- 4 Temperature 1
- 5 Temperature 2
- 5 Backpressure
- 7 Injector
- 8 Oxidation Catalyst
- Generator