NEWS

NO MORE BROKEN AND DISCARDED SOOT FILTERS ON DUTCH ROADS

The Netherlands is the first country in the world to specify a procedure for an MOT particle test for diesel vehicles. A particulate concentration measurement takes between 10 and 30 seconds to determine whether or not a particulate filter is filtering sufficiently. TNO has previously found that around 9% of diesel vehicles (cars and delivery vans) have no, or a malfunctioning, particulate filter, for example because the filter has been removed illegally.

The new regulations recently published in the Government Gazette are the result of eight years of TNO research and development in collaboration with NMi and RDW, commissioned by and with active support from the Ministry of Infrastructure and Water Management.

SIGNIFICANT ENVIRONMENTAL BENEFITS

With the introduction of this new MOT particle test, filters will be repaired and replaced or vehicles will simply disappear completely from the road. This is expected to reduce the average effective particulate emissions of diesel vehicles with particulate filters by 40-50% and reduce the total amount of particulate exhaust emissions of all current Dutch road vehicles by about 8%. Roadside inspections can be carried out by the RDW using this new measurement method as early as 1 January 2020. Later, the police and the MOT inspection stations will also work with such a particle counter.

Now that the requirements have been published, manufacturers can develop and

Prototype of the particle counter

produce affordable particle counters and have them certified by NMi. It is expected that in 2020 particle counters will be offered for sale at a price of five to ten thousand euros. Previously available particle counters were very expensive and not designed for measurements in undiluted exhaust gas, making application in the MOT impossible.

In 2021, the Ministry of Infrastructure and Water Management expects to be able to introduce the particle test for diesel vehicles with particle filters in the MOT. The test procedure is not yet suitable for petrol vehicles with particle filters – additional research and development is required for this.

INTERNATIONAL INTEREST

This new test procedure, whose development has been led by TNO, is leading the way in the world and attracting global interest. Belgium wants to introduce the test soon. Germany is working on a similar development and Switzerland is also interested. The test procedure has been presented to people from European member states, South

Korea, Japan, Mexico, Peru, Bolivia, Chile and also at a recent congress of the International Motor Vehicle Inspection Committee CITA. As a global trade association of parties responsible for MOT inspections, CITA has embraced this new test procedure.

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