

EURO VI EMISSION STANDARDS

Particle filters for engines in heavy
vehicles



Euro VI Emission Standards

Development of particle filters for Euro V engines in heavy vehicles.

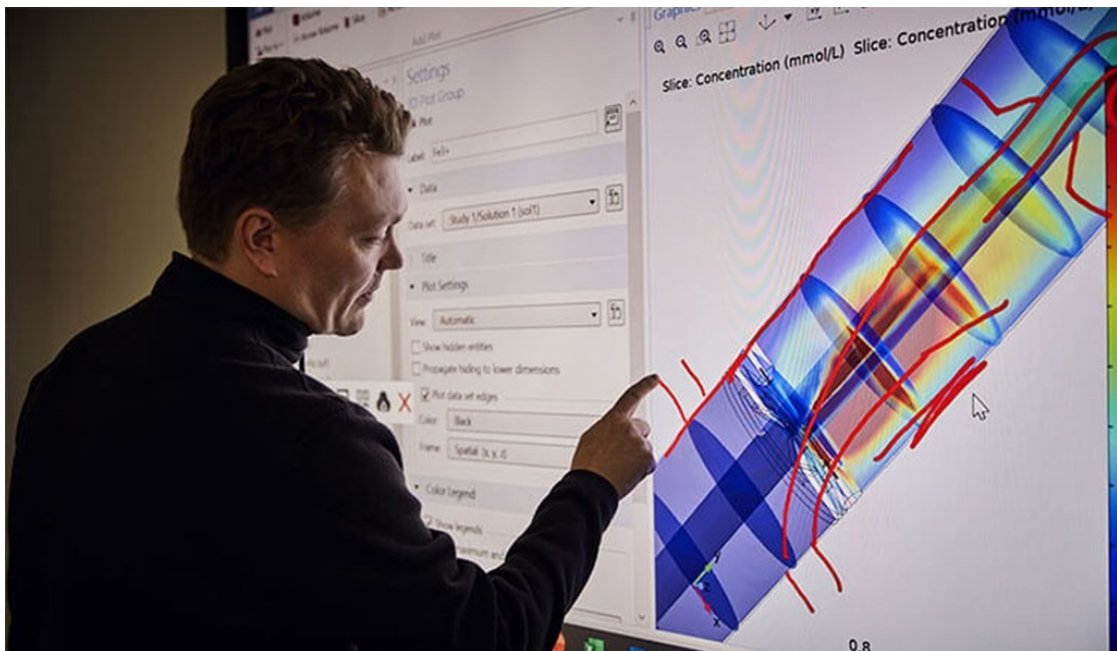
Story & Objective

LiqTech has been working on the development of particle filters for engines in heavy vehicles for several years. Optimizing filters to meet the latest Euro VI emission standards for heavy vehicles is a major challenge. Euro VI has introduced requirements for the number of particles to be discharged – not only the discharged particulate mass. LiqTech wants to solve this challenge together with the Technological Institute and Purefi A/S. Optimization of the older Euro IV- and V-engines resulted in a significant reduction in the particle mass compared to previous Euro norms. However, the amount of the larger visible particles was primarily reduced while the number of ultrafine particles remained almost at the same level.

The project's objectives are to develop and optimize the properties of LiqTech's silicon carbide (SiC) particle filters to reduce the number of ultrafine particles discharged effectively. The development targets installation of new Euro V engines to comply with the latest Euro VI emission standards.

Project & Results

The project must find an optimal relationship between the size of the filters, filtration capacity, and the drop of pressure. The development work will be focused on optimizing the porosity of the filters combined with a lower cell density. Practical implementation of filters on Euro V vehicles will occur, as extensive measurements will be carried out continuously throughout the project.



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