



REWARD

REal World Advanced Technologies for Diesel Engines

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Project partners:

- 1 - AVL - AVL List GmbH - AT
- 2 - REN - Renault SAS - FR
- 3 - VCC - Volvo Car Corporation - SE
- 4 - CRF - CRF SCpA - IT
- 5 - CNRIM - Istituto Motori – Consiglio Nazionale delle Ricerche (CNR) - IT
- 6 - JM - Johnson Matthey Plc - UK
- 7 - RIC - Ricardo Plc - UK
- 8 - SCF - Schaeffler Technologies GmbH & Co. KG - DE
- 9 - LMM - Le Moteur Moderne - FR
- 10 - DELPHI - Delphi Automotive Systems Luxembourg S.A.- LU
- 11 - UNR - Uniresearch BV - NL
- 12 - IFPEN - IFP Energies Nouvelles - FR
- 13 - VIF - Virtual Vehicle Research Center - AT
- 14 - CTH - Chalmers Tekniska Högskola - SE
- 15 - CTU - Czech Technical University - CZ
- 16 - UPVLC - Universitat Politecnica de Valencia – Motores Termicos - ES

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Publishable Executive summary

Task 4.5 Experimental Tests on Single Cylinder Engine

This task is dedicated to the optimization of the combustion system, by carrying out tests with injectors nozzle variants (number of holes, static flow), with new piston bowl design defined previously by 3D calculation and by determining optimum engine parameters in terms of fuel consumption and pollutant emissions in order to be compliance with post EU6 RDE.

Due to engine breakdown in M25, the objectives of this experimental phase were redefined. In addition to the purpose mentioned above we have to continue task 4.4 which means to determine experimentally the optimum air management in terms of engine hardware (4 intake port geometries and 2 exhaust camshaft definitions) and settings (exhaust VVT timing, intake/exhaust pressures).