



REWARD

REal World Advanced Technologies for Diesel Engines

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H2020-MG-2014-2015 – 636380 – REal World Advanced Technologies foR Diesel Engines

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Publishable Executive summary

Future 2-stroke B/C class Diesel engine

Architecture of the Diesel 2-Stroke engine has been chosen in order to provide the best brake specific fuel consumption (BSFC) and the best scavenge. Alternative architectures were rejected (reverse uniflow configuration, simple intake ports, low stroke / bore ratio) by intensive OD, 1D and 3D calculations. Deliverable D4.1 depicts the recommended architectures for both twisted single stage intake ports and double stage intake ports as well as results of investigations achieved. We learned how to break the trade-off between swirl targets and scavenge efficiency. We learned the key parameters for the intake ports design.