



REWARD

REal World Advanced Technologies for Diesel Engines

EUROPEAN COMMISSION
Horizon 2020
H2020-MG-2014-2015
GA No. 636380



Deliverable No.	REWARD D3.3	
Deliverable Title	Identification of optimal pretreatment for valve train	
Deliverable Type	DEMONSTRATOR	
Dissemination level	Confidential – member only (CO)	
Written By	Dr. Ricardo H. Brugnara (SCF)	2016-06-22
Status	FINAL	2016-06-22
Checked by	Dr. Ricardo H. Brugnara (SCF) WP3 Leader	2016-06-24
Submitted to Executive Board	Submitted to meeting EB12	2016-07-01
Approved by Executive Board (EB)	Approved and accepted by all members of Executive Board at meeting EB12	2016-07-21

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

Acknowledgement:

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

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 AG - 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 Politècnica de Valencia – Motores Termicos - ES

Disclaimer:

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 636380.



Publishable Executive summary

Within the REWARD project, there is a task, which is focused on engine efficiency improvement through friction reduction. An important step in this task is to identify suitable pretreatment for valve train components, which will be coated in a next step. Different pretreatment methods and parameters were tested and a suitable process was found. Afterwards, parts with optimized surface properties for coating deposition were produced.