

7th VERT Forum

March, 18th 2016
Dübbendorf/Zürich
Volker Hensel

Created to eliminate particle emissions from internal combustion engines (ICE) by means of best available technology



Our Mission 2016

- Dedicated to the promotion of Best Available Technology for emission control
- The Core objective of VERT® is the minimization of health burden caused by combustion engine emissions, esp. the elimination of Ultra Fine Particles (UFP)
- VERT® stresses and recommends the application of particle number measurement against a pure particle mass count as very light Ultra Fine Particles (UFP) cause a major threat to health
- We set the highest quality standards for emission control technology by certifying emission control technologies (VERT® Label) and publishing the VERT® filter list
- VERT® supports traffic pollution reduction programs all over the world, esp. in megacities





VERT Association Road Map VERT Support for legislation with BAT

Switzerland

PM Legislation for construction equipment

USA/California

CARB Show Case New York City

Chile

DPF regulation for Euro III buses

Euro 6

Regulation bei PN

China, Bogotá, Tehran, Tel Aviv...

Demonstation of DPF efficiency, pilot tests, public authority support, guidelines for Air Quality

Present



VERT ww recognition

Switzerland: BAFU, SUVA, ASTRA Austria: AUVA; Tyrol construction Germany: BG Bau; UBA; TRGS 554 USA: MSHA; NY City; CARB partly

Netherlands: VROM Italy: alto Adige Canada: Mining

UK: London TFL and LEZ Denmark: for all applications Chile: Santiago Bus, Gensets China: Hong Kong busses; Beijing

UN-ECE

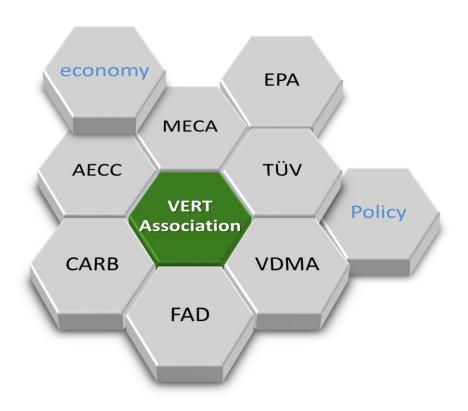




VERT Association Road Map VERT Network

VERT-network is worldwide and covers all technologies, includes all levels of research from medicine to aerosol physics. This wide dialog comprises knowledge to exchange with governmental policy.

Within the next years VERT will intensify exchange with associations linked to exhaust aftertretament and mobile combustion driven equipments and vehicles







Work on Standards and procedures

Standards

SN 277206

Internal Combustion Engines Exhaust Gas After-treatment Particle Filter Systems Testing Method

VERT Filter list

FBC Standard

Use of fuel borne additives in combination with diesel particulate filters

OBC Standard

Use of electronic filter control

Procedures

Engine Tests

for international Retrofit programs (for release)

Tests on chassis dynamometer

for international Retrofit programs (in preparation)

Vibration tests

for field durability (in planning)

Inspection and Maintanace

(in progress)

Temperature Management

for international retrofit programs (in preparation)

Idling Management

and operator training for international retrofit programs (planned)

Fleet Analysis

for international retrofit programs (planned)

Systematic aproach for Pilot testing

to retrofit fleets (for release)

Risks, health and safety concepts

(in planning)

Job description

Installation of Filter devices

(in planning)

Evaluation of duty cycles

(in planning)

Failures and trouble shooting

(for release)

final acceptance snd inspection

measurement under fiels conditions:

efficiency, exhaust gas, noice emission, backpressure, soot loading...







Nanoparticle Conference Haifa, June 21st, 2016 VERT Project day
Dresden
November 2nd
(VERT Members only)

VERT Workshop Tehran AQM Conference January 2017

June July August September October November ... March

ETH-Conference Zürich June 13th – 16th, 2016

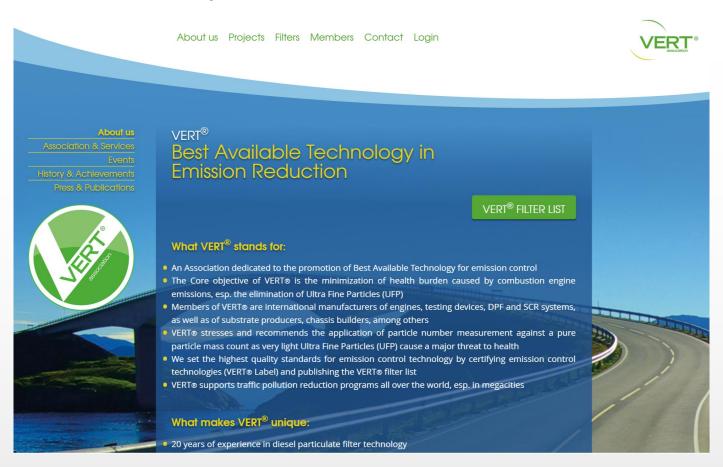
VERT Project
Events during ETH
Conference
(VERT Members only)

7th international VERT-Forum 17.03.2017





VERT Website 2016 | www.vert-certification.eu





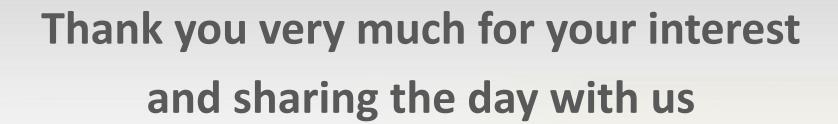












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