

VERT[®] Newsletter 01/2015

Update on the Sino-Swiss Particulate Matter Reduction Program

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China is still gradually tightening its emission regulation. Smog is still a major problem in many of the Chinese Mega Cities.

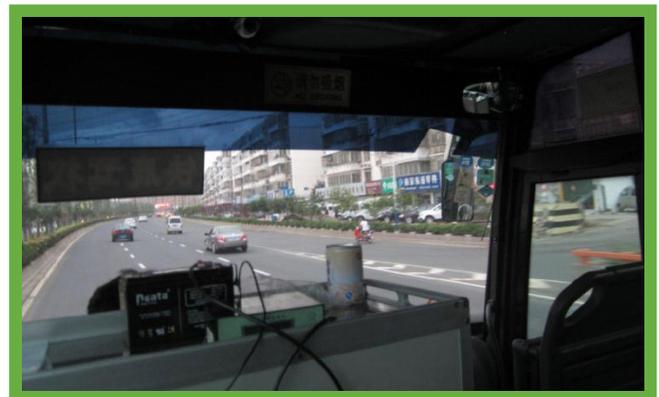
The Beijing Institute of Technology, National Professional Laboratory of Automobile Performance and Emission Test, in cooperation with VERT[®] has measured particle number emissions of In-use Diesel vehicle equipped with DPF in Xia Men. As a result, there are now very interesting comparisons between chassis dynamometer and real driving emission measurements available. Similar test were done in Nanjing.

For the measurements, two particle counters Nanomet3 by Matter Aerosol/Testo were incorporated in chassis dynamometer tests with busses: one for counting particulates before the DPF and the other for counting particulates after the DPF, so that simultaneous measurements were possible. The measurements were always done three times and average values calculated.

The same equipment then was used to count particles of real driving emissions of the busses, while driving through Xia Men in one case, and in Nanjing in the other. Additionally, it was possible to track the vehicles and record speed and other parameters by GPS .

Tests were carried out about 3 to 4 weeks after installation on the busses and then again, after about 100,000 km of operation. Typical busses like KingLong complying with China III emission limits were used. The VERT[®] approved filters used an additive for passive regeneration since the sulfur content in the

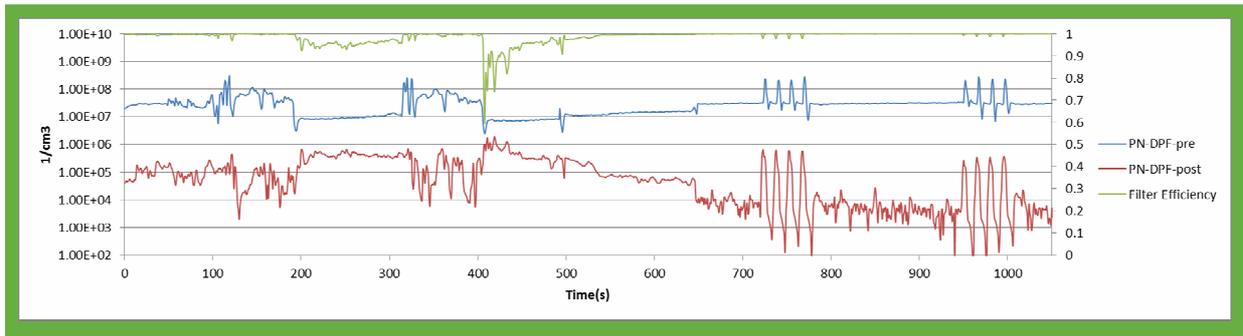
Diesel is very high. Nevertheless, the filters worked reliably and showed almost no difference in filtration efficiency. Once more, these test show that DPF can be applied everywhere in the world.



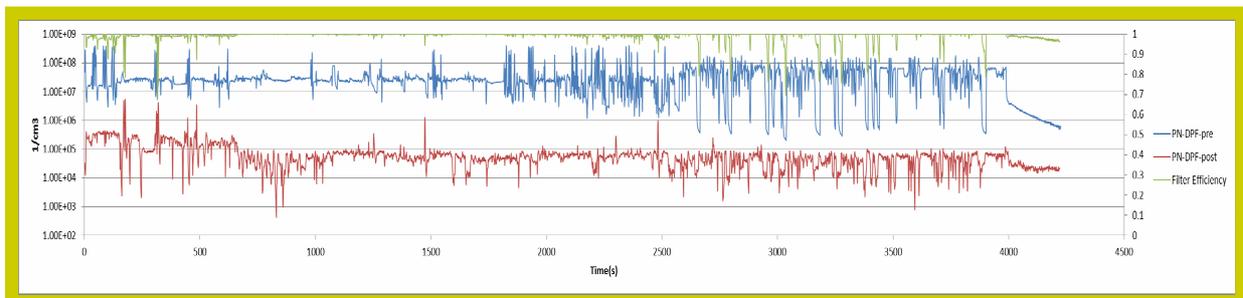
One of the busses used in the Xia Men project for real driving emission and chassis dynamometer measurements



The results of the VERT® approved filters were pretty impressive. Filtration efficiencies well above 99 % were measured. With these encouraging results the VERT® is now trying to convince Xia Men, Nanjing and other regions in China to use filters (for all VERT® approved filter systems see VERT® filter list at www.vert-dpf.eu).



Average particle number concentrations before and after the VERT® approved DPF, as well as filtration efficiency from the chassis dynamometer (above) and the real driving emission measurement (below)



Vehicle identification number of one of the busses used in the Xia Men project for real driving emission and chassis dyno measurements



| | |
|-------------------------------|--------------------------|
| License Number | Min D59281 |
| Vehicle Identification Number | LKLR1DSA59A529376 |
| Type | KINGLONG- KLQ 6856E3 |
| Manufacturer | KINGLONG Bus Corporation |
| Date of Registration | 2010年1月12日 |
| Maximum Total Mass (kg) | 11000 |
| Model of Engine | YC4G200-30 |
| Emission Level | China III |
| Displacement of Engine (L) | 5.20 |
| Reading of Odometer (km) | 206900 |

March 2015

To the President of
VERT[®]-Association
c/o JCA Treuhand AG
Badenerstrasse 9

CH – 5200 Brugg

Application Form For VERT[®] Association Membership

We herewith apply for becoming a full member of the VERT[®] association. The yearly membership fee is 7,500 CHF. Please include the following contact person into the VERT database for newsletters about emission reduction, world wide aftertreatment projects and everything related to verification of emission reduction technologies.

Yours sincerely,

company name:

contact person:

address:

phone:

e-mail:

