

## RETROFITTING OF URBAN BUSES IN ISRAEL WITH PARTICULATE TRAPS - FIRST RESULTS

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The main objective of the presented work was to evaluate the possibility of reducing particulates emissions from urban buses in realistic Israeli driving conditions by retrofit with diesel particulate traps. Selection of particulate trap type and estimate of particulates reduction potential were performed based on the experience gained in Switzerland, mainly in the framework of the VERT project. This project established a trap-verification protocol that adapts industrial filtration standards to include the influence of soot charge and trap regeneration phenomena. Based on the VERT findings, continuously regenerating trap (CRT) was selected for retrofit installation, for the first time in Israel, on two Mercedes Benz urban buses, equipped with Euro 2 diesel engines. Before installation on a bus, one new trap was tested on an engine test bench. Measured data confirmed Swiss findings about the high efficiency of CRT at engine operation regimes relevant for most urban bus routes. The buses with the CRT have accumulated, till now, about 60,000 km of traveled distance. During the tests, no registered reclamations of the bus drivers or maintenance technicians have been noted. Periodic measurements of backpressure have not indicated any sensible increase of the pressure. Low temperatures of the exhaust gases were monitored on few city center routes, due to the low speed of the buses. This might pose a problem regarding the CRT regeneration in winter season, when the air conditioning system is not operated and the engine load is lower.