



AEROFLEX

Aerodynamic and Flexible Trucks for Next Generation of Long Distance Road Transport

EUROPEAN COMMISSION
Horizon 2020 | GV-09-2017 | Aerodynamic and Flexible Trucks
GA - 769658



AEROFLEX

Publishable Executive Summary

Fout! Verwijzingsbron niet gevonden.

Table 0-1 Estimated and targeted drag reduction for the considered vehicle combinations in WP3 (ref [1])

Case	Estimated $\Delta C_D \times A$ [m ²]	Estimated $\Delta C_D \times A$ [%]	Targeted $\Delta C_D \times A$ [%]

Table 0-2 ΔC_D predictions by different partners, with different methods, for the CFD Baseline model with and without Boat-Tail at yaw -5° (crosswind right to left from drivers viewpoint) (ref [1])

Partner	CFD SoftWare	Method	ΔC_D (cts)
1			

Fout! Verwijzingsbron niet gevonden.

Fout! Verwijzingsbron niet gevonden.

Fout! Verwijzingsbron niet gevonden.

Fout!

Verwijzingsbron niet gevonden.

Δ

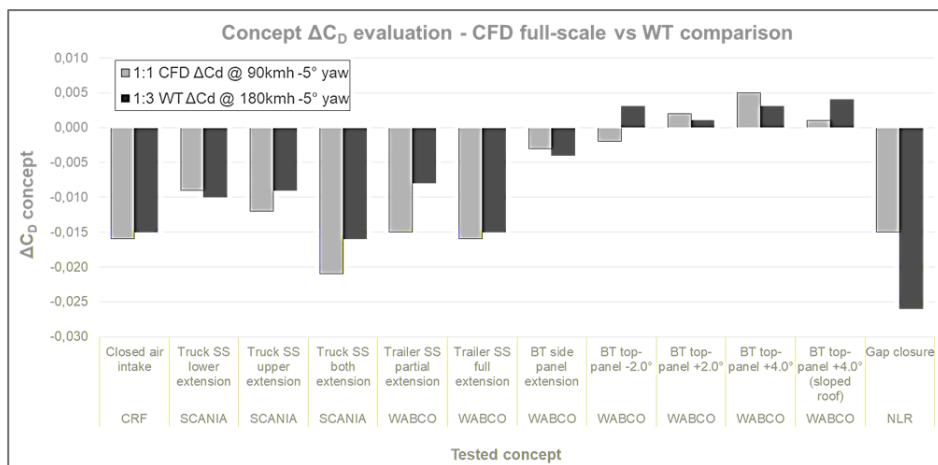


Figure 0-1 Comparison of ΔC_D due to concepts predicted by CFD full scale and measured data in wind tunnel (ref [1])

Δ

Fout!

Verwijzingsbron niet gevonden.

Table 0-3 Calculated wind averaged $\Delta C_D \times A$, compared to the Reference models, for the considered vehicle combinations (ref []))

Realistic Combination	Maximum Performance	Realistic Combination	Maximum Performance
Concepts	Concepts	Concepts	Concepts

Table 0-4 $\Delta C_D \times A$ for the Demonstrator EMS1 equipped with different concept combinations, compared to reference models (ref [])

	$\Delta C_D \times A @ \text{yaw } -5^\circ$					
	<i>High potential</i>		<i>Moderate combination</i>		<i>Feasible combination</i>	
	[m2]	[%]	[m2]	[%]	[m2]	[%]
Vs. Reference EMS1	-2.07	35.4	-1.58	27.0	-1.87	32.0
Vs. Demonstrator EMS1	-1.48	28.1	-0.98	18.7	-1.28	24.4

Feasible combination Fout! Verwijzingsbron niet gevonden.

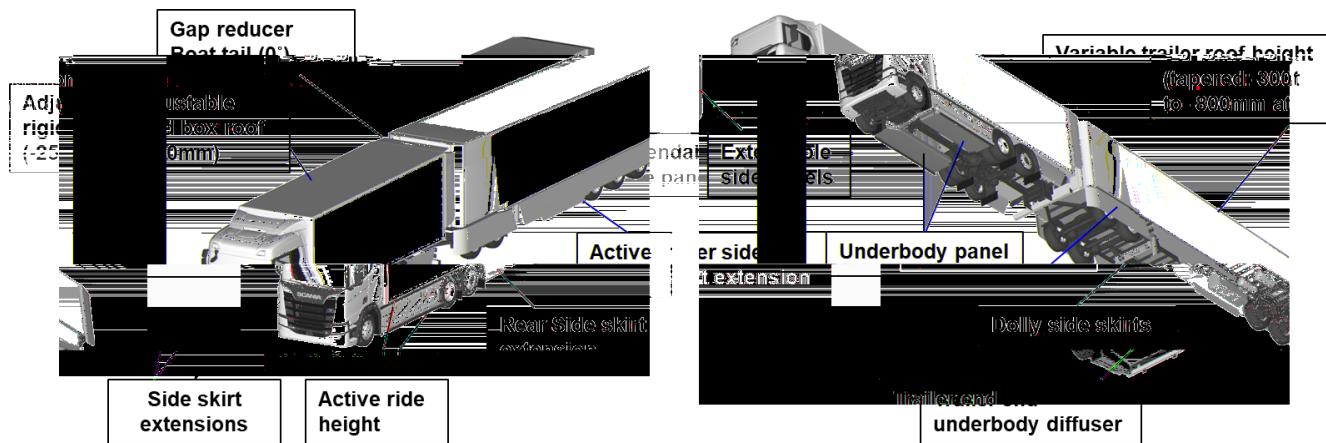


Figure 0-2 Recommended concepts for implementation on the Demonstrator EMS1 vehicle (ref [])

Fout! Verwijzingsbron niet gevonden.

Fout! Verwijzingsbron niet gevonden.

