

A car active wing. Experimental and numerical investigation.

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In this work we present experimental and numerical results on the active car wing and moving plates. The model of a car in 1:2,5 scale, equipped with several moving surfaces is test in a wind tunnel. All force components are measured for various wing and plates configurations. Additionally oil and mini-tufts flow visualisations are described.

Numerical simulation of wind tunnel configuration is conducted. Several turbulence models are used giving good accuracy with wind tunnel results (Fig.1).

Additionally, road test for 1:1 scale full model are conducted and described.

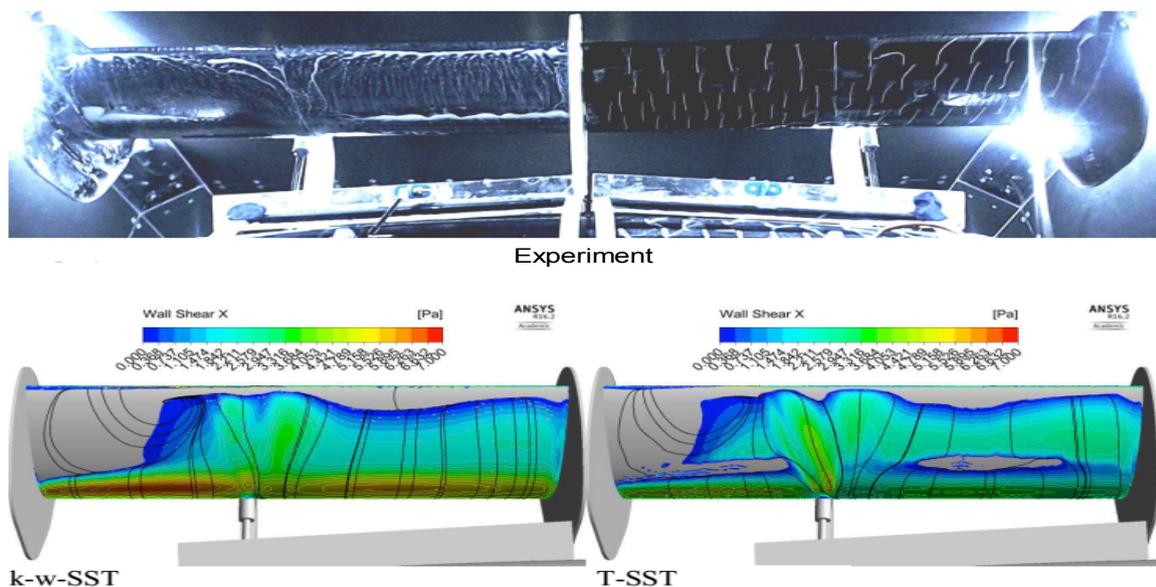


Figure 1: Comparison of oil and mini-tufts visualisation with numerical results of wall-shear