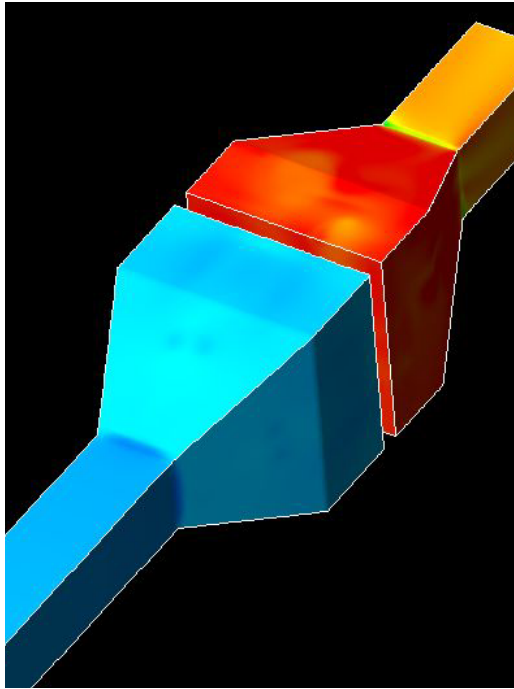




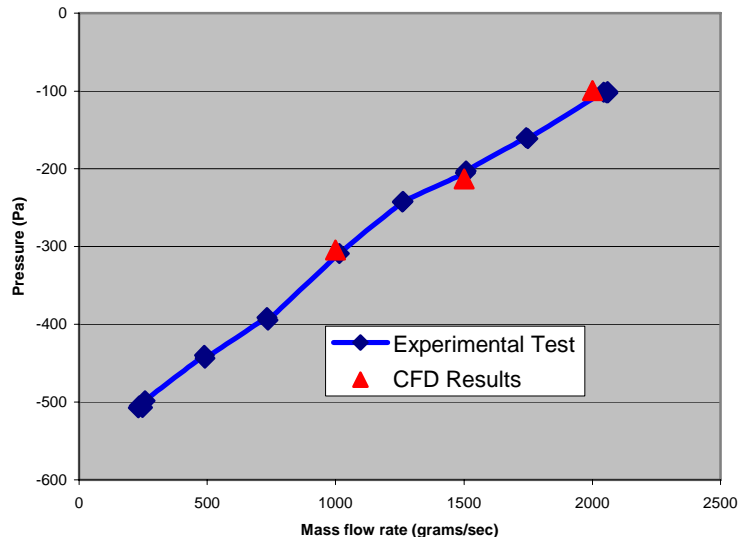
# Validation of CFD Results of an Engine Cooling Fan



Fuel economy and emissions of vehicles with large engines is poor in urban driving. This is partly due to auxiliary systems being driven directly by the engine. Improvements are possible when power to auxiliary systems is carefully managed via electric controllers.

CFD techniques were used to design a new electrically powered engine-cooling fan. No experimental testing was performed and the design was developed purely using CFD simulation. This approach was adopted to generate a fan design within an extremely short project period.

Subsequent testing of the manufactured fan allowed comparisons to be made with the CFD predictions. This was used to assess the quality of the design process and to validate the CFD results and analysis.



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