Case Study
HTT Supercar

ARC, the Best Kept Secret in Efficiency!

When HTT Automobile from Quebec Canada was looking to improve the aerodynamic characteristics of their HTT Pléthore LC-750 supercar, they turned to ARC to assist with development. They put forth the goals of significantly reducing drag, making the aerodynamic balance more drivable and increasing thermal cooling without harming the aesthetic character of the car.

By utilizing both the ARC scale model wind tunnel and ELEMENTS CFD software, ARC developed a multiple stage program, starting with CFD analysis first and then combining wind tunnel testing. In addition the correlation between CFD and wind tunnel results were very good and well received by HTT.

Working directly with HTT, ARC produced manufacturable aerodynamic gains. The drag was reduced by 21%, at 200mph, this meant 100 less hp was needed to overcome drag resistance, while keeping downforce levels the same. Thermal cooling was improved by 65%, solving overheating issues and finally the aero balance was improved to create a safer ride for the driver.