



# PowerFLOW

## APPLICATIONS-VEHICLE DESIGN

Fluid flow simulation for *competitive design*

### Automotive Apps. & *PowerFLOW*

Nine of the top ten global automobile manufacturers are already using Exa PowerFLOW CFD software to analyze critical aerodynamic flow patterns. Due to its superior handling of complex geometries, Exa PowerFLOW can simulate airflow in HVAC ducts, underhood studies, sunroofs and more...its applications just keep growing.

#### Making a Design Impact Throughout the Vehicle

Compressing time-to-market and reducing development costs while increasing market share is the key to success for today's leading automotive and heavy equipment industry leaders. Suppliers and OEMs are integrating Exa PowerFLOW software as part of their product design process for entire vehicle design – from external aerodynamic simulations of concept and production vehicles to fluid dynamic analysis of powertrain, climate control and other components.

#### One Product : Multiple Applications

Using Exa PowerFLOW, it is now possible to make design modifications based on accurate data of CFD simulations on everything from intake ports and HVAC ducting to aeroacoustic noise sourcing and sunroof prototypes. With one powerful tool, focused design engineering teams at automotive plants can collaborate to build tomorrow's automobiles with a significant impact on areas such as warranty cost reduction, increased fuel economy and performance and styling enhancements.



