

## AVL FIRE ${ }^{\text {TM }}$ M

Novel capabilities in CFD pre-processing, main program and post-processing integrated in the AVL Simulation Desktop.

## THE CHALLENGE

- Shorter development cycles and increasing cost saving pressure
- Stringent requirements for product functionality, quality, safety and environment friendliness
- Growing number of interacting, even contradicting design targets
- Increasing complexity of simulation models representing systems rather than components
- Need to exchange and share large amounts of information


## THE SOLUTION

- Simulation driven development and frontloading fully integrated in the product development process
- Predictive simulation models
- Multi-disciplinary simulation solutions
- Seamless data exchange across component boundaries
- Automated result analysis and reporting



## AVL FIRE ${ }^{\text {TM }}$ M - TURNING VISIONS INTO SOLUTIONS

AVL FIRE ${ }^{\text {TM }} \mathrm{M}$ offers faster model setup, execution and post-processing resulting in its ability to investigate large numbers of design variants more efficiently and with superior outcome.

## THE BASIS FOR MORE

- Simple to learn and to use, fast and robust
- Multi-domain modelling capabilities
- Simultaneous execution of fluid flow, heat transfer and thermal load analysis
- Readily available for large volume simulations
- Parameterized input, case explorer, data pooling, job submission and monitoring, material property database for common fluids and solids
- One tool for computing, visualization and communication
- Cost effective solution for standard CFD Simulations


## EXCELLENCE IN DOING

Typical applications include the analysis, development and optimization of fluid flows in:

- intake and exhaust ports
- manifolds and lines
- ventilation and air conditioning equipment
- internal and external aerodynamics
- cooling systems and
- heat transfer and thermal load of structural parts.

