

KAMAZ

KAMAZ PTC is one of the world's top 20 heavy-duty truck manufacturers, famous for its cab over trucks.



"SIMULIA XFlow is a powerful CFD simulation tool that provides precision results for external aerodynamic analysis."

— Dmitri Grenishen, Head of CAE Department, R&D Center, KAMAZ PTC

Challenge

Reducing air resistance has a positive impact on fuel efficiency. For the development of a new generation of vehicles, the K5, it was necessary for KAMAZ to optimize the shape of the cab and the engine compartment to minimize the impact of air resistance on the vehicle's protruding elements.

Solution

The company's R&D Center adopted SIMULIA XFlow to digitally simulate, analyze and optimize their vehicles' external airflow before finalizing the design.

Benefits

KAMAZ was able to run more than 1000 CFD simulations and tested several scenarios, including different shapes and various speeds, with SIMULIA XFlow software. The result is its new K5 family that combines modern design with high fuel efficiency.