

<p>SimTech delivers Research and Innovation carrying out innovative projects for its customers. SimTech added values lies in the use of the technologies of scientific computing (optimization, software development, ...) to analyze and solve the customer's problem. In SimTech approach the solution technique is always chosen after analysis of the physics of the problem and of the industrial constraints. Optimization techniques from simple sensitivity analysis to simulated annealing or genetic algorithms can thus be used depending on the particular project. Major companies such as ARCELOR, DASSAULT AVIATION, RENAULT, SNR, as well as advanced research laboratories such as FIAT RESEARCH CENTER or INRETS have relied on SimTech for the development of innovative solutions.</p>				optimization	stochastic	evolutionary	DOE	multi-objective	multi-scale	Geometry opt.	Topology opt.	non-linear	algos dvptt.	ENKIDOU
year	customer	skill	deliverable											
09	Automotive OEM	Welded assembly	Environment for the simulation of a full-scale, multi-station assembly line (final geometry, residual stresses)									⊗		⊗
08	Automotive OEM	Crash	Environment for the design of crushed beams				⊗						⊗	⊗
08	OEM	Structures Thermal Crash ...	Environment for the Multi-Disciplinary Optimization (MDO) of complex systems for the transport industry	⊗				⊗				⊗		⊗
07-08	Automotive OEM	Metal forming	Software tool for upfront prediction of metal forming springback.										⊗	⊗
95-08	auto-aero – space OEMs, suppliers	Structures	Design and optimization of component (inner panels, suspension brackets, fuel tanks, casings, ...) under constraints of stiffness, vibration, fatigue, acoustics, etc ... About 50 components and units designed.	⊗						⊗	⊗			
03-08	Automotive OEMs	Pedestrian safety	Upfront design of bonnet units (inner panel, hinges, restraining systems, ...) for multiple objectives: stiffness, vibration, pedestrian safety (EU and Japan regulation). Eight bonnets designed so far.	⊗			⊗	⊗		⊗	⊗	⊗		⊗

