Altair
enlighten award

GM

Cadillac CT6

Cadillac

For the 'Omega' architecture of the 2016 Cadillac CT6, innovative computer aided engineering (CAE) tools and methods were developed and used to create an efficient, lightweight, high-performance, mixed-material vehicle structure. These tools, which included immersive lattice topology optimization, mixed material selection optimization, and multi-disciplinary loadcase optimization, were used, along with expert interpretation of the results, to lead the design development of the architecture and lead vehicle structure.Weight Savings: 157 lbs (71.5 kg) compared to an equivalent sized traditional BFI construction

Category:	Application:
Full Vehicle	**Cadillac CT6**

Weight Savings:	Methodology:
157lbs compared to an equivalent sized traditional BFI construction	**Multi-Disciplinary Optimization and Material Replacement**

CAR
CENTER FOR AUTOMOTIVE RESEARCH