







Soueast Motor 2016 Soueast DX3

Under constraints of the existing body structure and material of the DX3, global lightweight thinking was required to reduce its weight. To simplify the process, a 1D model replaced a finite element model in the body-in-white simulation, resulting in a body structure that is 7.3% lighter. In addition, each bracket in the suspension system was analyzed independently using topology optimization, and cast-iron was replaced with aluminum alloy to provide 63% weight savings,

Category:

Full Vehicle

Application:

2016 Soueast DX3

Weight Savings:

23 kg

lighter than the baseline design

Methodology:

Design Optimization

Presented in partnership with:





