



**Brilliance Auto**  
华晨汽车

## Brilliance Auto Front Subframe

The 2017 Brilliance V7 front subframe, an H-shaped structure, originally provided appropriate dynamic stiffness, but did not meet weight requirements. The process to meet those requirements broke traditional design methods, with the application of topology optimization and the goal of achieving the minimum stress combination. Following the size and shape optimization, the resulting structure is now about 2 kg lighter.

Category:  
**Module**

Application:  
**2017 Brilliance V7**

Weight Savings:  
**2.18 kg**

lighter than a  
comparable subframe

Methodology:  
**Structural Optimization**

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