ENLIGHTEN®
AWARD 2018
PRESENTED BY ALTAIR

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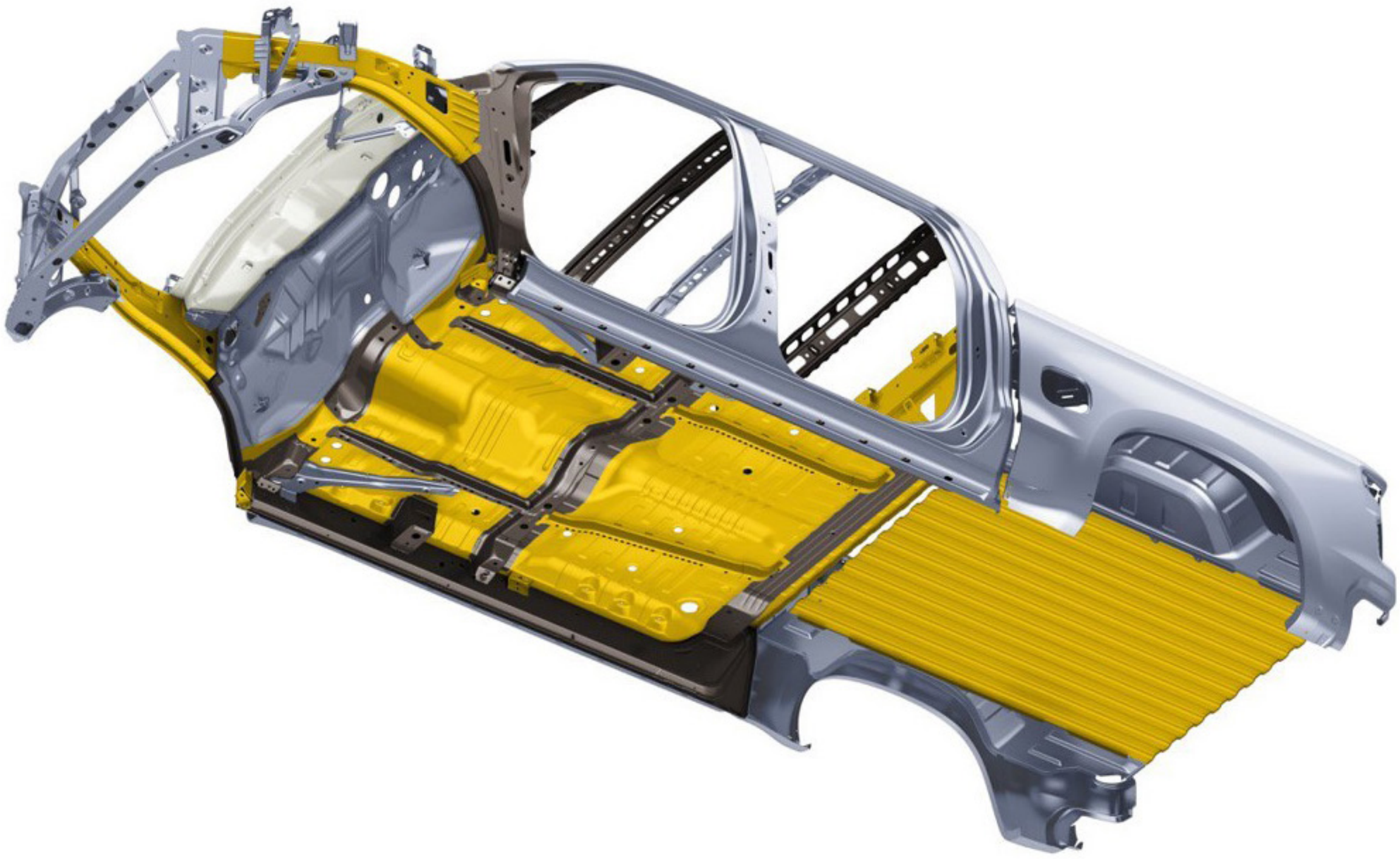

Winner : Enabling Technology

United States Steel Corporation

Martensitic Advanced High Strength Steels for Low Mass Structural Components

Martensitic steels are being introduced into the automotive market with ultimate tensile strengths exceeding 1500 MPa. These new martensitic steels are manufactured from lean chemistries that in years past would not be expected to deliver high strength. However, advances in continuous annealing technology have enabled the Gigapascal strength to be achieved consistently and repeatedly in mass production. In addition, advanced process controls deliver these martensitic steels with superior shape control. The manufacturer and the customer benefit from the martensitic steel sheet's flatness and strength with improved dimensional accuracy of their high strength, low mass structural automotive components.

Category:
Enabling Technology

Application:
2019 Chevrolet Silverado

Weight Savings:
10%
Lighter than other steels

Methodology:
Design Optimization

Presented in partnership with:
CAR CENTER FOR AUTOMOTIVE RESEARCH
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