

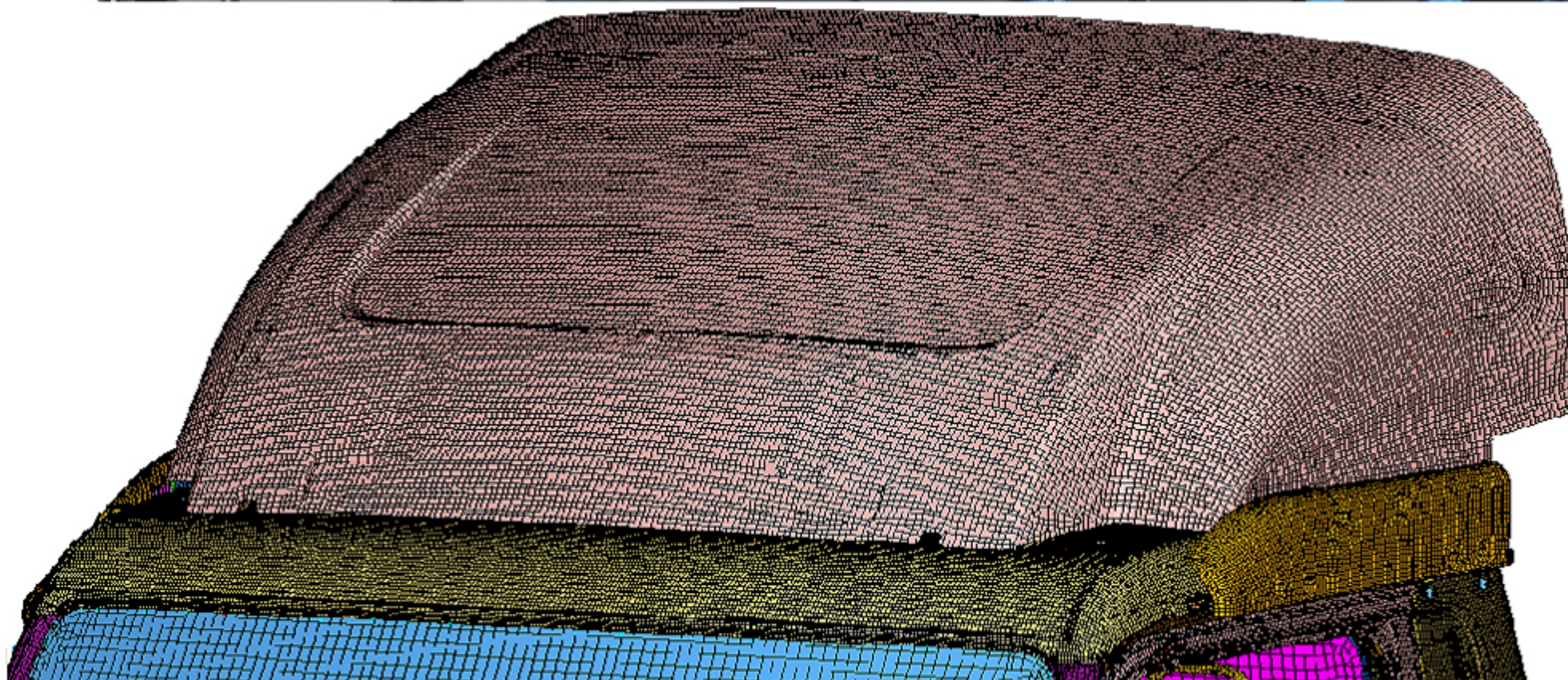


Volvo-Eicher Commercial Vehicle Ltd.

Cabin Wind Deflector

The wind deflector is a device mounting on Cabin Roof of Truck & is used to reduce air drag by its aerodynamic shape, so as to improve fuel efficiency of vehicle. Design optimization techniques were implemented to reduce the weight by 25% when compared to the baseline design.

- Not only reduced the weight of assembly but also the natural frequency which was lower than our target criteria gets improved & cleared the target criteria. Hence, single methodology had benefited dually i.e. weight reduction with improved stiffness.
- As total material consumption has been reduced, hence the vehicle cost were also reduced.
- Fuel efficiency improvements seen in the final design.



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