



Matter/OSRAM Featherweight LED Thermal Management Technology

Equivalent Mechanical Stiffness (EMS) is the innovative solution that MOTO-MAQLAB-UC3M applies to reduce weight on automotive components while still preserving the original dynamic behavior. Hybrid EMS structures are built using three different materials and manufacturing techniques, with the main components of the final structure being a 3D printed core, a carbon fiber skin and aluminum alloy series 7XXX inserts for mechanical frictional joints, which ultimately lead to a weight savings of 40-60%.

Category:
Module

Application:
Several Production Vehicles

Weight Savings:
30-80%

Mass reduction compared to traditional systems

Methodology:
Unique Design Construction

Presented in partnership with:



Supported by:

