THE CHALLENGE

1. The client had insufficient engineering resources with lightweight body and closures design experience.

2. Executing the body in white (BIW) and closures design within the unique parameters defined by the client.

3. Working with the packaging, exterior surface development and other engineering disciplines to meet tight development timeline.

4. Designing a structure that meets both computational fluid dynamics (CFD) and aerodynamic requirements.

THE COMPANY

A startup advanced vehicle group and design studio working to create a line of fuel-efficient plug-in electric fleet vehicles designed to reduce fuel costs for corporations with a large commercial fleet.
THE SOLUTION

- Onsite/offsite program management and client interface with offsite design execution
- Dedicated team, experienced in automotive lightweight materials design
- Established a body and closure design group to support, and work in parallel with, the client’s other vehicle design disciplines allowing the vehicle development to proceed on schedule
- Advanced usage of CATIA V5 methods
- Rapid response capabilities
- Developed a full unibody (monocoque) aluminum structure to be compatible with vehicle packaging and engineering requirements.

THE RESULT

Completion of a full unibody (monocoque) aluminum structure

Established a body and closures design group

Vehicle development was on schedule

Design met all vehicle packaging and engineering targets

Tata Technologies makes product development dreams a reality by designing, engineering and validating the products of tomorrow for the world’s leading manufacturers. Our clients are under increasing pressure to create more products, faster than before, and better than ever to stay competitive. For more than 20 years, we have empowered them with the tools, technology, and processes to meet – and exceed – market demands. To learn more, visit www.tatatechnologies.com today.