

Full Vehicle - Hybrid

Engineering Support

- Evaluation Criteria
- Design Review
- Validation Planning
- Benchmarking

Electric Vehicle Specific: FMVSS 305: Electric Vehicles

- Application:
 - Passenger cars, MPV's, trucks, buses with GVWR < 4,536 kg
 - Propulsion power uses 48 nominal volts of electricity or greater
 - Vehicle speed is greater than 40 kph (attainable in 1.6 km on paved surface)
- Test Modes:
 - Frontal Crash - up to 48 kph including oblique angle
 - Side Crash - up to 54 kph (FMVSS 214)
 - Rear Crash - up to 48 kph
 - Optional - 80 kph, 70% overlap
- Requirements:
 - Limitation of electrolyte spillage
 - Retention of propulsion batteries
 - Electrical isolation of chassis

On-Road and Proving Ground Data Collection

- Data Analysis
- Vibration/Fatigue/Component Durability

Vehicle Durability

- Chassis - Battery Mounting
- Powertrain/Drivetrain - Propulsion System
- New Product Shakedown

Airbag & Sensor Development

- Sensor and System Algorithm/Calibration Evaluations
- Passenger Cars, SUVs, Light Trucks
- Frontal, Side, Rollover Systems

Brake Evaluations

- FMVSS 135 - Light Vehicle Brake Systems

