

PLASTICS: HELPING U.S. AUTOMAKERS LEAD ON AUTONOMOUS VEHICLE MANUFACTURING AND INNOVATION

Durable Plastics and Polymer Composites Enable Critical Performance and Safety of AV Technologies

Benefits of Plastic Components in Autonomous Vehicles

- **Transparency:** Most plastics allow light imaging and radio waves to penetrate embedded sensors.
- **Detection:** Plastics enable embedded sensors that detect vehicles, pedestrians, animals, obstructions and communications devices.
- **Protection:** Plastics resist and manage heat, humidity, temperature, radio interference and electrical transmission in sensors and other components.
- **Safety:** Durable plastics and polymer composites can improve crashworthiness while reducing vehicle weight.
- **Experience:** Plastics impact hygiene, seating, noise levels, comfort, connectivity and remove blind spots.
- **Flexibility:** Plastics can be molded in endless shapes to evolve with occupant and mobility needs.

Plastic-Based Components in AVs

