

Engineered Plastics for High Motion Transportation Systems



Smart plastic alternatives play a critical role in modern transportation systems by reducing weight, improving durability, and lowering overall system costs. We design and manufacture injection-molded components for automotive, aerospace, public transportation, and logistics applications, delivering parts engineered for performance, safety, and long-term reliability.

Plastics perform exceptionally in dynamic, repetitive motion systems. Reduced friction improves efficiency and component life. Engineers can design smoother, quieter mechanisms. We also produce fire-resistant parts, chemical-resistant components, durable and impact-resistant parts that are essential to the transportation industry.

These characteristics and more can protect both your drivers and your freight from serious harm in case of an emergency. We specialize in delivering advanced plastic injection molding solutions tailored to the unique demands of the transportation industry.

Transportation Industry Requirements

- Lightweight, durable, high-strength materials that help reduce vehicle weight, shipping loads, and overall freight costs
- Cost-effective, scalable manufacturing to support both low and high-volume production
- Design flexibility and customization to meet performance, safety, and application-specific requirements



Injection-Molded Applications by Sector

1. **Automotive Components**—Interior and exterior components including interior panels, dashboard surrounds, air vents, bumpers, structural reinforcements, engine components, and electrical housings. Seating components such as headrests, armrests, and seat movement control panels are also commonly injection molded.
2. **Rail and Mass Transit**—Seating components, window enclosures, mounting brackets, and safety-related equipment designed for durability and long service life.
3. **Aerospace and Aviation**—Lightweight interior panels, cabin components, ducting, electrical housings, and bulkhead components. Additional applications include luggage racks, bumpers, safety screens, and window assemblies for aircraft and transit vehicles.
4. **Marine and Recreational Vehicles**—Waterproof enclosures, protective covers, ergonomic fittings, and corrosion-resistant components designed for harsh marine environments.
5. **Trucking and Heavy Equipment**—Engine components, protective casings, and durable exterior parts built to withstand vibration, impact, and demanding operating conditions.



Why Plastics for Transportation Applications?

Engineered thermoplastics can match—and in some cases exceed—the strength and performance characteristics of many metals while significantly reducing weight. This makes plastic injection molding ideal for transportation. Reduced component weight contributes directly to lower fuel consumption, improved mileage, and increased overall efficiency across transportation platforms.

We specialize in delivering advanced plastic injection molding solutions tailored to the unique demands of the transportation industry. Operating from our four state-of-the-art facilities based in the US, we provide high-precision molding capabilities that produce durable, high-quality, and cost-effective components. Our expertise supports a wide range of transportation sectors contact us today to discuss how our expertise can help your next project 978-567-1000 or sales@plasticmoldingmfg.com.



America's Technology Molder

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