Automotive

From mechanical parts to automotive interiors to external applications, plastics are driving safer, more durable, lightweight, fuel efficient designs in today's cars.

Applications

- Mud flaps
- Thermal and sound insulation
- Sheathing and jacketing
- Component housings
- Switches and sockets
- Connectors
- Bearings and bushings
- Gaskets, washers, spacers
- Fluid lines
- Wiring harnesses
- Power train components
- Internal transmission parts including transmission gears
- Bed liners
- Wheel well liners
- Trunk liners
- Car covers and protection panels
- Moisture barriers
- Truck trailer skirts

Advantages May Include

- Lightweight for increased fuel efficiency
- Recyclable
- Corrosion, abrasion and fatigue resistant
- Wide range of stiffness, tensile strength and creep resistant
- Surface finish and appearance
- Low wear
- Low moisture absorption
- Thermoformability
- Weatherability
- High lubricity, self-lubrication, low coefficient of friction
- Low warpage
- Solid color, eliminating painting



Materials

- Acetal (POM)
- Acrylonitrile-Butadiene-Styrene (ABS)
- Acrylic (PMMA)
- Long Fiber Reinforced Thermoplastics (LFRT)
- Nylon (PA)
- Polyamideimide (PAI)
- Polyetheretherketone (PEEK)
- Polybutylene (PBT)
- Polycarbonate (PC)
- Polyethylene (PE)
- Polyethylene Terephthalate (PET)
- Polypropylene (PP)
- Polyurethane (PUR)
- Polyetherimide (PEI)
- Polyphenylene Oxide (PPO)
- Polyphenylsulfone (PPS)

Did you know?

More than 50 percent of a typical car is composed of plastics and polymer composites, but those materials account for only approximately 10 percent of vehicle weight.



Environmental and Safety

Considering the total carbon footprint, including costs of raw ma-terials, manufacture, transport, fabricate, install, maintain, plastics compare favorably with more traditional materials. Also, plastics are safer to handle and install. When you consider that most plastics are readily recyclable, they can become the most environmentally responsible and safest choice for many demanding automotive applications.

