



# AUTOMOTIVE PLASTIC AND RUBBER APPLICATIONS

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

## ADVANTAGES

- 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

### 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.

## TYPICAL 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

### 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)

### Manufacturing & Fabrication Services

Redwood Plastics and Rubber is dedicated to the specialized requirements necessary to turn stock plastics, rubber and composites into precision mechanical components of the utmost quality.

We can design, machine, mill, weld, route, and drill to produce prototypes, short runs, production runs or maintenance parts.

Save time and money by utilizing our experienced fabricators and plastic and rubber specialists.

