



Transportation

Trains, buses, trucks, boats and RVs are lighter weight, more durable, safer and more comfortable thanks to plastics. In both aesthetic and structural / bearing applications, plastics help you travel further for less money.

Applications

- Marine — seating, switch board panels, relay bases, bearings, bushings, port hole windows, cabinetry, seals, trays, decking, bimini surrounds, cutting boards, anchor shrouds, fuel / fluid handling tubing
- Mass transit (rail car and bus) — bearings, pedestal liners, coupler carrier wear plates, brake bean guides, center bowl liners, luggage compartment components, folding trays, bus windows, wall panels, mirrors, driver security glazing, air conditioning housings, lighting covers, electrical wear shoes
- RV — windshields, interior components, wear pads, lighting covers, body panels, hinge pins
- Trucks — dump truck liners, flooring, wear pads, step ups, light housings, covers, fan shrouds, snow plows, mud flaps, fifth wheel bearing plates



Advantages May Include

- Lightweight, resulting in better fuel efficiency
- Impact, weather, chemical, corrosion and fire resistant
- Easy to fabricate
- Reduced maintenance and downtime
- Sound dampening
- Low friction
- Design flexibility, offered in a variety of colors and decorative caps
- Easily manipulated into complex fabricated or thermoformed parts

Materials

- Acetal (POM)
- Acrylic (PMMA)
- Acrylonitrile-Butadiene-Styrene (ABS)
- Epoxy
- High-Density Polyethylene (HDPE)
- Liquid Crystal Polymers (LCP)
- Nylon/Cast Nylon (PA)
- Phenolics (Industrial Thermosets)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyetherimide (PEI)
- Polyethylene (PE)
- Polyethylene Terephthalate (PET)
- Polytetrafluoroethylene (PTFE)
- Polyvinyl Chloride (PVC)
- PVC/Acrylic Alloy
- Silicone (SI)
- Styrene Maleic Anhydride-Polycarbonate (SMA-PC)
- Thermoplastic Elastomer (TPE)
- Thermoplastic Polyesters
- Ultra-High Molecular Weight Polyethylene (UHMW-PE)

Did you know?

Polycarbonate and acrylic glazing weighs half that of glass of the same thickness and can offer up to 30 times the impact strength.

Plastic composite panels in Swiss trains has led to a 25 percent reduction in weight, leading to significant energy savings.



Environmental and Safety

Considering the total carbon footprint, including costs of raw materials, 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 transportation applications.

