



Aerospace

Plastics are used in numerous aerospace applications to improve safety, reduce costs, save fuel and improve passenger comfort.

Applications

- Landing gear components
- Good insulators
- Transparency to electromagnetic signals
- Windows, canopies, dust covers
- Interior wall panels and luggage compartments
- Ventilation ducting and seals
- Trays and tray tables
- Pipes and tubing
- Fasteners
- Mirrors
- Wiring conduits
- Bushings and bearings
- Seals
- Collapsible air duct rib



Advantages May Include

- Lightweight
- Reduced maintenance
- Design flexibility (colors, textures)
- Thermoformability
- Corrosion resistant
- Chemical and impact resistant
- Good insulator
- Easily fabricated
- Broad range of being temperature resistant
- Flame, smoke and toxicity resistant

Materials

- Acetal (POM)
- Acrylic (PMMA)
- Acrylonitrile-Butadiene-Styrene (ABS)
- Fluorinated Ethylene Propylene (FEP)
- Perfluoroalkoxy (PFA)
- Polyamide (PA)
- Polyamide-Imide (PAI)
- Polyarylsulphone (PAS)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyetherimide (PEI)
- Polyethylene (PE)
- Polyimide (PI)
- Polyphenylene oxide (modified PPO)
- Polyphenylene sulfide (PPS)
- Polytetrafluoroethylene (PTFE)
- Polyvinyl Chloride (PVC)/Acrylic
- Thermoplastic composites (phenolics)

Did you know?

Thanks to plastics, the A380 burns fuel per passenger at a rate comparable to that of an economical family car.



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 aerospace applications.

