Mining

Plastics help reduce noise, prolong equipment life and protect miners. From safety equipment to truck bed liners to parts such as gears, rollers, sprockets and so on, try mining plastics for long-lasting applications.

Applications

- Grating systems
- Wear pads/straps
- Thrust washers
- Conveyor components — gears, rollers, bushings, sheaves, sprockets
- Chemical delivery pipe systems
- Dewatering systems
- Star wheels
- Lantern rings in centrifugal mining pumps
- Vibrating bin dischargers
- Leachate systems
- Front end loader bucket liners
- Specialized precious metal recovery systems (froth floatation)
- Off-road truck beds, truck liners
- Hopper car liners
- Safety windows/windshields
- Belt scrapers, tooth locks, impact pads
- Chute liners

Advantages May Include

- Available in static dissipative and conductive versions
- Low coefficient of friction
- Self-lubricating
- High pressure/velocity performance
- Superior abrasion, chemical and wear resistant
- Zero to low moisture absorption
- Noise reduction
- Impact and corrosion resistant
- Heat stabilized
- Strength and toughness
- Very low coefficient of linear thermal expansion
- Weight reduction
- Reduces/eliminates arching, ratholing and erratic flow
- Flame retardant versions available
- Dimensional stability
- Resistant to high energy radiation
- Minimizes wear on mating metal parts
- Smoother system operation

Materials

- Acetal (POM)
- Acrylonitrile-Butadiene-Styrene (ABS)
- Acrylic (PMMA)
- Epoxy
- Ethylene-Chlorotrifluoroethylene (ECTFE)
- Fibre-Reinforced Polymer (FRP)
- High-Density Polyethylene (HDPE)
- Nylon/Cast Nylon (PA)
- Phenolic (Industrial Thermosets)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyphenylene Sulfide (PPS)
- Polypropylene (PP)
- Polyurethane (PU/PUR)
- Polyvinyl Chloride (PVC)
- Polyvinylidene Fluoride (PVDF)
- Ultra-High Molecular Weight Polyethylene (UHMW-PE)

Did you know?

Enormous volumes of fresh air are required in large and deep metal mines to provide safe working conditions for workers and their equipment. At some Canadian mines, up to 1,200 cubic meters (42,377.6 cubic feet) of air is supplied every second.

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 mining applications.