# **Material Handling**

Moving materials from one place to another seems like it should be simple, but to do it quickly and cost-effectively requires specialty equipment which uses a wide array of plastics to meet ever-increasing performance and safety requirements.

## **Applications**

- Bearings, bushings, bearing cages
- Wear pads
- Rollers
- Sheaves/pulleys
- Guides
- Cams/cam followers
- Edge guards/profiles
- Auger edge strips
- Chute liners
- Windows
- Light shields
- Safety sight guards
- Sight glasses (flow control)
- Feed/timing screws
- Starwheels
- Venturi throat liners
- Temperature resistance (hot or cold)

## **Advantages May Include**

- Low coefficient of friction
- Noise and vibration attenuation
- High flexibility for ease of installation
- Abrasion resistant
- Static dissipative and conductive grades
- Corrosion resistant
- Lightweight
- Impact resistant
- Light transmission/clarity



#### Materials

- Acrylic (PMMA)
- Nylon (PA)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyethylene (PE)
- Polypropylene (PP)
- Polytetrafluoroethylene (PTFE)
- Polyethyleneterephthalate (PET)
- Polyurethane (PU/PUR)
- Polyvinyl Chloride (PVC)
- Polyamide-imide (PAI)
- Ultra high molecular weight polyethylene (UHMW-PE)

### Did you know?

Transport of material via conveyor belt dates back to 1795, when belts were made of leather and used to transport grain very short distances. Today, the longest single conveyor belt in the world is used in the phosphate mines of the western Sahara. It measures 60 miles in length!



## **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 material handling applications.

