

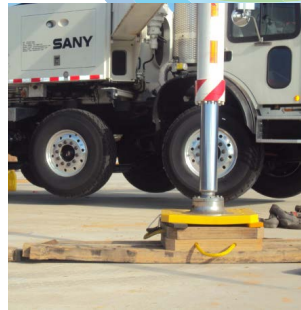


# Heavy Equipment

Despite the extremely heavy loads and challenging work environments of most heavy equipment, plastics offer performance superior to many traditional materials in vital applications.

## Applications

- Bushings and bearings
- Wear pads
- Sheaves
- Guides for electrical and hydraulic lines
- Rollers
- Liners
- Chutes
- Seals
- Outrigger pads
- Slide bars/cam actuators
- Cushion pads (pile-driving equipment)
- Guards and fenders
- Glazing (windows)
- Grating
- Stairs



- High strength
- Dimensional stability
- Wide service temperature range
- Reduced maintenance cost

## Did you know?

Groundwater is the primary source for more than 80 percent of the community drinking water systems in the United States (US EPA 1994). The use of self-lubricating engineering plastic wear parts can reduce or eliminate lubricant “wash-out” in heavy equipment bearing applications, greatly reducing non-point source pollution which seeps into the groundwater. One gallon of refined oil products can contaminate 100,000 gallons of groundwater.

## Advantages May Include

- Lightweight
- Corrosion resistant
- Low friction
- High wear resistant
- High impact resistant
- No external lubrication required
- Reduced wear on mating parts
- Ease of installation and assembly
- Low conductivity, thermally and electrically

## Materials

- Acrylic (PMMA)
- Fiberglass Reinforced Polymers (FRP)
- High-Density Polyethylene (HDPE)
- Nylon (PA)
- Polycarbonate (PC)
- Polyethyleneterephthalate (PET)
- Ultra-High Molecular Weight Polyethylene (UHMW-PE)



## 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 heavy equipment applications.

