Food and Beverage

Plastic materials are used in a variety of food processing and packaging machinery applications including friction and wear parts. Plastic tubing/piping is to handle fluids. Plastic sheet materials are used for safe, easy-to-clean cutting boards.

Applications

- Bushings bearings, cams
- Conveyor parts
- Feed screws
- Guide rails
- Machine guards, windows
- Pipes and tubes for fluid processing
- Pistons/plungers
- Rollers
- Seals, seats, gaskets
- Gears, sprockets
- Star wheels
- Thermoformed machine housings
- Wear strips
- Forming dies
- Scraper blades
- Cams and cam guides
- Nozzles/dispensing heads

Advantages May Include

- Lightweight for high speed production using smaller drive motors
- Reduced maintenance and reduced contamination by eliminating lubrication
- Resistance to clean-in-place (CIP) and sanitize-in-place (SIP) cleaning chemicals
- Resistant to hot water and steam
- Long wear life
- Limited wear on food packaging and/or mating machine parts
- Transparency for easy viewing of machine during operations







 Grades are available that comply with FDA, NSF, 3A dairy and other federal agency regulations

Materials

- Acetal (POM)
- Acrylic (PMMA)
- High-Density Polyethylene (HDPE)
- Nylon (PA)
- Polycarbonate (PC)
- Polyethyleneterephthalate (PET)
- Polyetheretherketone (PEEK)
- Polyetherimide (PEI)
- Polyamide-imide (PAI)
- Polypropylene (PP)
- Polyvinyl Chloride (PVC) rigid and flexible
- Polytetrafluroethylene (PTFE)
- Ultra high molecular weight polyethylene (UHMW-PE)
- Visual and Metal detectable materials available

Did you know?

Polytetrafluorethylene (PTFE, most commonly known by the DuPont tradename Teflon®), one of the first plastics used in food processing, was discovered by accident. The DuPont engineers were experimenting with TFE as a new refrigerant, but when the gas was stored in cylinders it polymerized into PTFE resin!



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 food and beverage applications.

