THERMOPLASTIC MATERIAL APPLICATIONS

Bushings & Bearings

Plastic bushings, also known as sleeve or plain bearings, are used to reduce friction between moving parts while supporting shafts. They are typically cylindrical or flanged and are valued for their lightweight properties, smooth motion, and resistance to wear and chemicals.

Also referred to as: Plain Bearings, Sleeve Bearings, Flanged Bushings, Polymer Bearings

DETAILS ON ACETAL:

Lightweight – Easier to handle and install, reducing downtime during replacement.

High Mechanical Strength – Withstands torque and pressure from load-bearing applications.

Dimensional Stability – Maintains tight tolerances in dynamic environments.

Wear Resistant – Performs well without lubrication, lowering maintenance and operating costs.

Chemical Resistance – Compatible with common lubricants and cleaning agents in food and beverage operations.

Machinable – Ideal for precision components such as sprockets.

PTFE-Filled Options – Enhance wear and abrasion resistance.

TYPICAL USAGE: Acetal is preferred for applications that demand high dimensional stability and durability under changing environmental conditions.

DETAILS ON NYLON:

Low Friction and Wear Resistant – Reduces energy loss and replacement frequency.

Self-Lubricating – Many grades eliminate the need for external lubricants, simplifying maintenance.

Strong and Durable – Performs reliably under load and in varying environmental conditions.

Lubricant-Filled Grades Available – Enhances performance in high-friction or abrasive environments.

TYPICAL USAGE: Nylon is used in applications requiring impact and abrasion resistance. Oil and solid-lubricant grades are available to extend service life.



MATERIAL

Acetal, Nylon, UHMW

BENEFITS

- Weight reduction
- Easy to replace
- Low Friction
- Dimensionally stable
- Good moisture resistance
- Self Lubricating

INDUSTRIES

- Alternative Energy
- Food processing equipment
- Robotics
- Railway and Transportation

QUESTIONS

- What is the intended application?
- What is the operating environment? (Temperature, chemical, humidity/moisture)
- What sizes and tolerances are required?









