

Engineered Surface Tubing

Enhanced Extrusions To Accelerate Production

Overview-

Accelerate your production with Zeus engineered surface tubing. When Zeus scientists engineered a process to increase lubricity while decreasing drag force through micro-structured channels, or “reeds,” we immediately thought applications could be exponential in various industries. We have seen success as customers in industries such as automotive, aerospace, fiber optics, fluid management, energy, and medical have eagerly explored uses for this exciting technology.

The “reeds” created by our manufacturing process lower the coefficient of friction by reducing surface contact area. Without additives or fillers, our engineered surface process enhances the lubricity on either the inner or outer (or both) tubing surface. Zeus can apply engineered surface on a complete range of high-performance extruded products, including PTFE, PEEK, FEP, PFA, PVDF, ETFE, and Nylon.

Independent testing found that Zeus PEEK engineered surface tubing was up to 42% more lubricious than standard PEEK tubing. Per ASTM G115, friction coefficients of material couples obtained on one type of test apparatus may be significantly different from coefficients of the same material couples tested on a different apparatus.



CHEMICAL RESISTANCE



LUBRICIOUS



ABRASION RESISTANCE



Engineered Surface tubing lowers friction of the inner or outer tubing wall.

APPLICATIONS

- Custom profile slot liners
- Sheathing for fiber optics
- Push / pull cables for automotive and aerospace
- Fluid handling tubing
- Medical tubing

CAPABILITIES AND SIZING

- No additives or fillers to leech
- Available in multiple resins

KEY PROPERTIES

- Reduced surface contact area
- Strain-free movement

