FEP Lay-Flat™
FEP Heat Shrink Extrusions

Overview

FEP Lay-Flat™ heat shrink is the replacement of choice for processes using FEP thin film or seamed tape in the lay-up and cure of unique shapes for composite structures. FEP Lay-Flat™ heat shrink easily slides onto mandrels as a sleeve to aid in composite manufacturing. Native, or virgin, FEP is an approved resin for composite fabrication and is preferred in many industries including aerospace, automotive, and wind energy.

FEP Lay-Flat™ heat shrink provides a superior finishing result for composite manufacturing and is available in very thin walls. Providing a glove-like fit, this product excels as a customized option for applications requiring thin walls compared to film.

In addition to its insulating properties, FEP Lay-Flat™ can be used to cover a variety of obtuse shapes such as battery packs, bus bars, capacitors, and fragile light bulbs offering protection from heat, chemicals, and shatter proofing. FEP Lay-Flat™ is UV transparent and resistant, thus it is frequently used for encapsulation over UV light bulbs for germicidal and sterilization applications.

Applications

- Battery pack encapsulation
- Bus bar insulation
- Capacitor encapsulation
- Fluorescent light bulb encapsulation
- Composite release aid
- Light bulb shatter proofing
- UV germicidal and sterilization

Capabilities and Sizing

- Spooled up to 500 ft (152 m) lengths
- Available in long seamless lengths
- ¼” (6.35 mm) to 3½” (89 mm) OD
- 0.002” (0.051 mm) to 0.010” (0.254 mm) wall thickness
- Expansion ratios up to 1.6:1 (customized for each application)
- T5, T8, and T12 bulb sizes

Key Properties

- UV resistant
- Chemically resistant
- Low solvent absorption
- Sterilizable
- Working temperature up to 400 °F / 204 °C