

Fitting Instructions for FEP and PTFE heat shrink

Selection & Use - PTFE or FEP

FEP heat shrink sleeve is the easiest to use followed by 2:1 PTFE then 4:1 PTFE. Therefore, if other factors are not critical, select in this order of preference.

Select the correct size by allowing a generous amount of shrinkage rather than using a tight sleeve if possible.

Hot air guns are the preferred method of applying heat. FEP shrinks down easily at 110°C, PTFE needs 330°C, so gun temperatures should be at least 200°C and 400°C respectively. To obtain the higher temperature we suggest a hot air gun of 1.5KW capacity. Adtech can supply a hot air gun suitable for both materials.

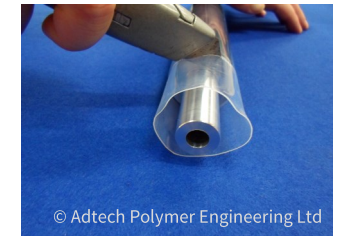
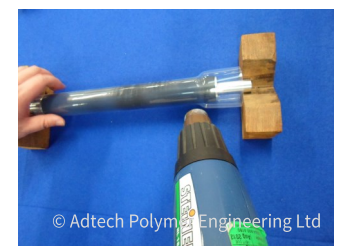
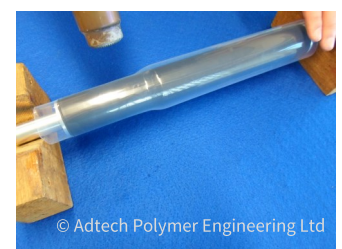
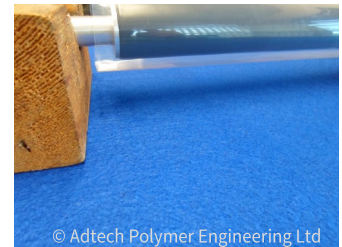
Parts to be covered that have a large thermal mass e.g. a solid steel roller, may need preheating when PTFE heat shrink is applied, to prevent chilling of the PTFE, causing a loose fit. Heating an object in an oven at 400°C can be used to advantage to shrink the PTFE sleeve, particularly when a number of parts are to be covered.

Our technical department are always pleased to offer advice, or cover sample items for customers. We also offer a covering service for large numbers, or difficult items.

- Apply the chosen heat shrink sleeve over the component to be coated.
- Start shrinking at one end of the component with a hot air gun on the high setting (200-300°C). Point the gun slightly away from the direction you are shrinking to avoid premature shrinking which may cause wrinkles.
- Slowly rotate the component and gradually move along the length of the part, shrinking about 12mm each revolution. TAKE CARE to allow the free end of the sleeve to stay loose and not to bind on the component. The sleeve normally lengthens during shrinking and you should observe the lengthening free end.
- Continue to shrink past the end of the component and the sleeve will neck down to a smaller diameter. The excess material can be trimmed with a sharp knife blade.

Fume Precautions during heat shrinking

Like all plastics and rubber, fluoroplastics decompose at high temperatures and give off unpleasant fumes. Unlike other polymers, the fumes from fluoroplastics are odourless and therefore, may not be noticed during overheating of the material. Ample ventilation must always be provided when heating these heat shrink materials above 300°C. Where they are used in a production process, extraction equipment is recommended.



Still need help?

Contact our technical customer service team by phone on +44 (0) 1285 762000 or email sales@adtech.co.uk