



Fluoroplastic Chemical Etching

Fluoroplastics are known for their non-stick properties. However, we can offer a chemical etching service for all fluoropolymers, so they can be easily and safely bonded.

The chemical etching treatment changes the surface finish by altering the polymers properties, making them very suitable for bonding with most adhesives, such as epoxy resins, polyurethanes, silicone RTVs.

Our chemical etching process is ideal for use with our fluoropolymer tubing and heat shrink sleeving, especially in FEP, PFA and PTFE for roll covers or rubber hose lining applications.

We can chemically etch the surface of PTFE, FEP, PFA, PVDF, E-CTFE, ETFE and other fluoropolymer tubing, heat shrink sleeving and films.



Typical Applications

Wherever there is a use for fluoropolymers, there can be a need for the etching process to be applied. From wire and cable products to PTFE and FEP sheet and tape, from chemical tank liners, to printed circuit boards, engineering components and electronic potting.

Bond Strength

Etched samples stored for several years indoors showed no decrease in bondability. If you are storing the etched component, the surface must be protected from grease contamination and UV exposure.

Typical peel strengths of bonds range from 13 to 22 kilos per inch of width, depending upon the type of adhesive, the thickness of the adhesive and the surfaces being joined. Shear strengths can range from 27 to 58 kilos per inch of width.

Etching capabilities

- Overall etching of components
- ID & OD surface of fluoroplastic tubes up to 400mm
- Sections of tube ID & OD
- Complex profiles: We are able to mask off the areas that are not to be treated.

For more information about Chemical Etching, please visit [adtech.co.uk](https://www.adtech.co.uk)

For other custom sizes or technical assistance, contact our customer service team:

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