

Fluoropolymer Etching

Solutions that Stick.



Technetics PTFE & Polymer Solutions is a leader in sodium ammonia fluoropolymer etching with over 45 years experience to ensure you receive the long lasting, durable, uniform surface modification you require. When compared to sodium naptolene processes, our sodium ammonia etching have been proven to be the preferred solution with its superior performance and design to give you the bondable surfaces you need on any fluoropolymer quickly and efficiently.

EXPERIENCED WITH ALL FLUOROPOLYMERS

We prepare a wide range of fluoropolymer materials for bonding to metal, plastic, or other substrates. Whatever type of virgin or filled fluoropolymer you are using, (PTFE, PFA, FEP, ETFE, PCTFE, PVDF, ECTFE) you can count on Technetics PTFE & Polymer Solutions for the precise surface treatment required for an excellent bond every time. Whether you're working with close tolerances on films, sheets, tubing or other three-dimensional shapes, we can provide the surface that has the high coefficient of friction, high purity or excellent chemical resistance you want.

OUR CAPABILITIES

Our process attacks fluorine atoms, replacing them with bonding sites that make material more "wetable"(better able to accept silicone or acrylic adhesives). This allows the product to retain its dimensional stability throughout the etching process. And it provides complete and uniform etching across the entire surface area, creating the conditions needed for strong, uniform lamination.

We can treat one or more surfaces — including selective spot etching — on continuous roll films, flat sheet or the compound contours of three-dimensional parts. Our equipment can accommodate most commonly used formats, including:

- Film rolls up to 50" wide
- Narrow tapes and thin-walled tubing
- Irregularly shaped items as large as 5 cubic feet in volume, up to 48" x 96" x 3/4"

Whether we work on material you provide or acquire and prepare the material for you, you can count on Technetics PTFE & Polymer Solutions for quick turnaround, whatever your specifications.

CUSTOMIZED SOLUTIONS

Our staff can design and produce customized jigs, fixtures, tooling and equipment to meet your particular job requirements.

DOCUMENTATION

- Water Wettability Testing
- AMS 2491-E Certification
- Certificate of Compliance
- Shear Strength Testing
- ISO 9001:2008 Certified

STORING RECOMMENDATIONS

- Clean – So there is no material to tie-up bond sites
- Dry – So there are no –OH molecules to bond to
- Cool (less than 100°F (38°C)) – higher temperatures cause molecules to migrate to the surface where they can tie-up bonds
- Away from UV light

TECHNICAL SUPPORT

Technetics PTFE & Polymer Solutions offers complete technical support to ensure you feel comfortable at every step of the in house etching process.