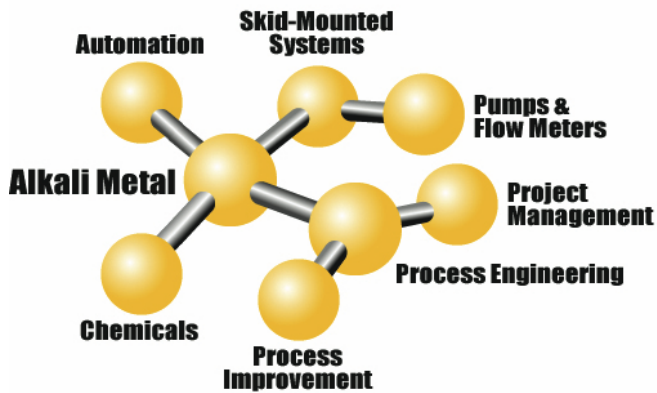




Fluoropolymer Etching Systems & Services



Creative Engineers, Inc.

www.creativeengineers.com

Typical Properties of CEI Etching Solutions

C-Etch A: (Monoglyme)

Color: Green to Black

Odor: Sweet

Form: Liquid

Active Na Available: 1-2%wt. (approx.)

C-Etch B: (Monoglyme)

Color: Black to Green

Odor: Sweet

Form: Liquid

Active Na Available: 4-5%wt. (approx.)

C-Etch C: (Diglyme)

Color: Black to Green

Odor: Sweet

Form: Liquid

Active Na Available: <1%wt. (approx.)

C-Etch D: (Diglyme)

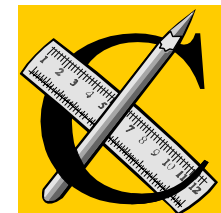
Color: Black to Green

Odor: Sweet

Form: Liquid

Active Na Available: 1-2%wt. (approx.)

Other Formulations Available Upon Request



Creative Engineers, Inc.

361 N. East Street
York, Pa 17403

Phone: 717-666-3252

Fax: 717-431-8222

E-mail: chad@creativeengineers.com

Quality Etching Systems

Engineered, Built & Tested
By Qualified CEI Engineers

Years of Experience!

At Creative Engineers, we understand that providing a quality product for etching Fluoropolymers is only a part of the services needed to help our customers succeed.

Using our extensive knowledge and experience with etching compounds we can design and build custom etching systems that improve results and increase output.

All Types of Products.....

Tubing, Coated Wire, Sheets or Film and much more. If it's coated with a Fluoropolymer we can build a Custom System to provide effective etching.

- *Inline, Spool to Spool*
- *Batch or Spot Etching*
- *Automated or Manual*

Purchase? Lease? We work to make chemical etching cost effective for our customers!!!



Frequently Asked Questions

- Q: Can I do in-line tube etching from extruder to spool?
- A: Yes, with a custom designed etch system built by CEI. We have extensive experience building in-line etching systems to handle wire, tubing and more. We design systems with proven results!
- Q: What is the shelf life of etched tubing?
- A: Chemically etched fluoropolymers typically retain bond strengths for months after the etching process. This, of course, depends heavily on how the polymers were prepared and stored. Contact CEI for specific information pertaining to your etching needs.
- Q: Can I send CEI samples for etch testing?
- A: Yes! Contact CEI today and we can formulate a test procedure that meets your needs. Etching will be completed at the CEI facility in York, PA so no hazardous material handling is required by the customer.
- Q: What type of chemistry does CEI use for etching the fluoropolymers?
- A: CEI manufactures both Monoglyme and Diglyme based etchants at the York, PA facility. All etchants are made on an "as needed" basis to ensure fresh and reliable material.

Have a specific question??? Call us today!

For more information on etching and etch services please contact Creative Engineers at 717-666-3252 or visit our website at WWW.CreativeEngineers.com

NOT INTERESTED IN DOING IN-HOUSE ETCHING???

Let CEI do the etching for you!!!!

Sometimes it is better to let the experts do the work. CEI can do custom etching at our YORK, PA facility providing top notch etch services without the hassles of in-house jobs.....

- No hazardous chemical handling
- No waste disposal issues
- No large capital investments
- Top notch R&D and Quality



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