

FLUOROTHERM POLYMERS INC

PTFE

FEP

PFA

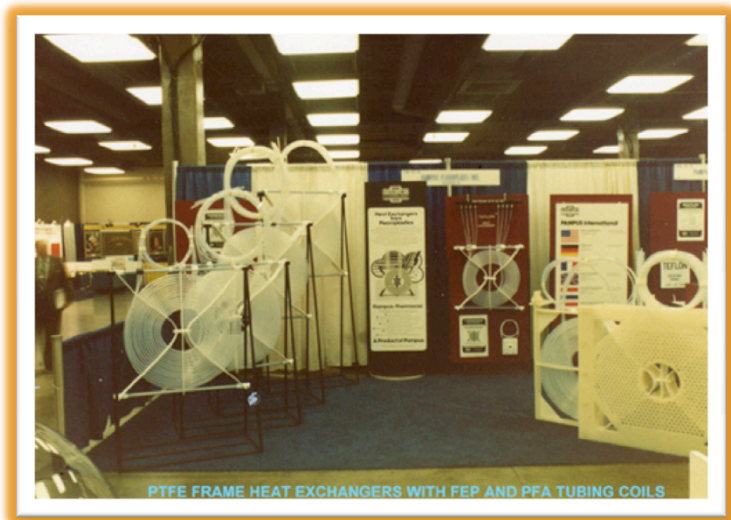
PVDF

ETFE

CTFE

ECTFE

A Letter from Fluorotherm



To Our Valued Customers:

Fluorotherm started out as a specialty manufacturer of fluoropolymer products in 1992, under the aegis of Norton Performance Plastics, now St. Gobain Performance Polymers. That was 16 years ago!

With a strong R&D background in fluoropolymers, gained by our key people during their employment with DuPont; we have continued to progress toward a wider product range to serve a broad range of applications in diverse markets.

Now, not only have we moved to expand our operations here in the US and overseas, but are responding to customer demand more than ever. Our newest products include:

- Expanded tubing line to cover a broad range of sizes in PTFE, FEP, PFA, ETFE and PVDF
- Immersion Coil Heat Exchangers in high temperature usage PVDF frames and either FEP or PFA tubing
- Custom fabricated tube products with flared, flanged, and custom shapes

We hope that you will join us in helping Fluorotherm pave a successful path for the future. We are grateful to all of our

Issue 2, March 2009

Product Spotlight

Beginning this month we would like to selectively pick one of the unique characteristics of fluoropolymers and briefly elaborate on the reasons why they are the materials of choice versus other polymers for specific applications.



Chemical Resistance:

- PTFE
- FEP
- PFA

2

sales@fluorotherm.com

333 New Road, Building # 1
Parsippany, NJ 07054
(973) 575 - 0760



Chemical Resistance

Fluoropolymers; specifically perfluorinated materials such as PTFE, FEP and PFA contain only carbon and fluorine with single chemical bonds in the chemical structure. Their hydrocarbon counterparts, such as polyethylene and polypropylene; contain carbon and hydrogen.

The morphology or structural shape of the fluoropolymer molecule containing strong C-F single bonds is uniquely tailored to prevent chemical attack of the carbon-carbon backbone by most common chemicals. Think Caesar's Roman army with rectangular shields that received better protection against flying spears than the round shields of the opposing armies.



Fluorotherm's Chemically Resistant Tubing

PTFE, FEP, & PFA



Original Heat Exchanger

PTFE (polytetrafluoroethylene) is very resistant to attack by most highly corrosive chemicals. Fluorotherm has many instances of heat exchangers and other products that continue to operate in hot sulfuric, nitric and hydrochloric acids. Our design of heat exchangers were originally introduced to the market in the mid-1960's. An example of such a heat exchanger frame initially installed in 1982 is shown.

FEP (polytetrafluoroethylene-co-hexfluoropropylene) and PFA (polytetrafluoroethylene-co-perfluoroalkoxyvinyl ether) have chemical resistance similar to PTFE. Tubing made of these materials have a long life in aggressive environments in the simultaneous presence of harsh chemicals and high temperatures in comparison to other plastics and materials where failure may occur as a result of either structural or thermal degradation.

The particular chemical inertness of perfluorinated polymers serve well in a broad range of industries and applications. Some of these include the chemical process industry (CPI); the oil well and oil services industries; refinery and petrochemicals, pharmaceutical applications; pulp and paper mills, environmental sampling and laboratory environments, among others.

For additional information please click on the following link:

http://www.fluorotherm.com/chemical_resistance.html