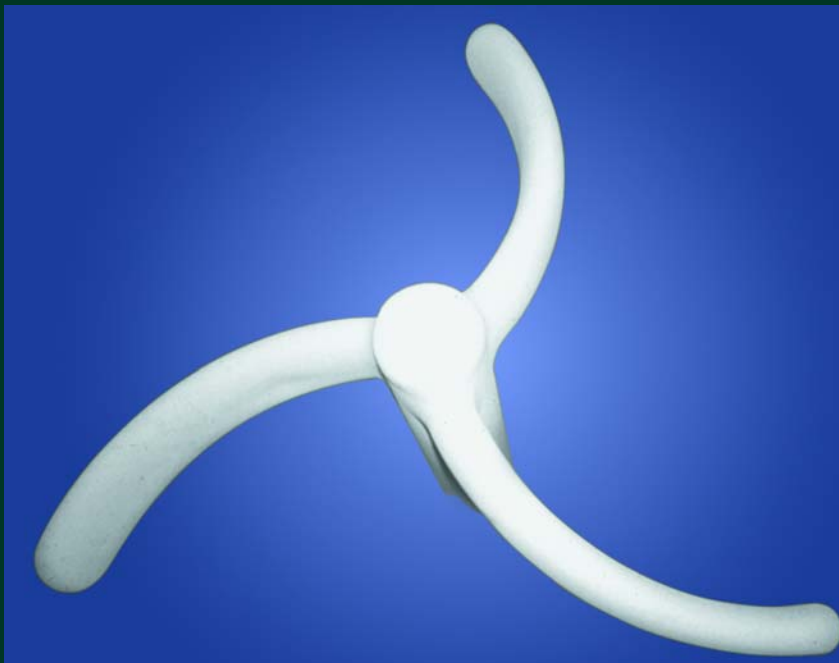
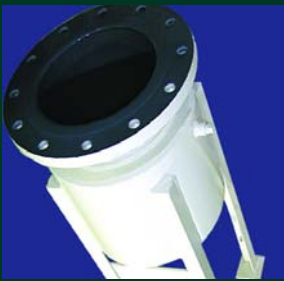




# SERMATECH<sup>®</sup>

International

**FLUOROPOLYMER COATINGS FOR CHEMICAL, PETROCHEMICAL,  
AND PHARMACEUTICAL PROCESSING APPLICATIONS**





**Sermatech International**, headquartered in Pottstown, PA, has more than 40 years of expertise in developing and applying engineered protective coatings. We operate 10 service centers throughout the industrialized world to serve OEMs, 1<sup>st</sup> tier suppliers and end users.

Our metallurgists, chemists and engineers, supported by our own laboratories, work with the best and brightest in the industry to continually provide solutions for challenges facing processing professionals today. We have a broad range of experience, plus the latest research, design and fabrication technology to produce a corrosion-resistant, fluoropolymer-based system engineered to meet your specific guidelines, no matter how complex.

When combined with a product portfolio that includes field-proven formulations and new, state-of-the-art materials, Sermatech engineers have the ability to choose the fluoropolymer coating, lining or liner that best suits your needs.

### FLUOROPOLYMER COATINGS

Sermatech's high-performance, fluoropolymer-based coatings are formulated for optimum impact strength, abrasion resistance, corrosion resistance and purity assurance, and are approved for use on most metallic surfaces capable of withstanding processing temperatures required for the polymers. Common applications include interior vessel surfaces, man way covers and protector rings, baffles, agitators, flush valves and top heads.

Not only do they provide superior interior protection for vessels, tanks and reactors, our fluoropolymer coatings make superior exterior barriers, too. Their smooth surface finishes make them long lasting, cost effective alternatives to paint when it comes to resisting chemical spillage and splashes that occur under harsh operating conditions. All fluoropolymer coatings are repairable and can be applied to existing equipment for extended service life.

### SERMASHIELD™ COATINGS-THE ULTIMATE CORROSION PROTECTION WEAPON

Fluoropolymer resins are ideal for formulating coatings that provide corrosion protection for processing equipment. While partially fluorinated resins such as PVDF, ECTFE and ETFE provide processors with good protection, only coatings made from fully-fluorinated PFA resins can provide the protection necessary to operate in aggressive chemical environments and at extreme temperatures.

Our portfolio of SermaShield Advanced PFA coatings is comprised of six technically advanced systems. Each system is available in a variety of

thicknesses from 40 to 100 mils (1 - 2.5 mm)-capable of providing superior corrosion protection in temperatures as high as 500 °F (260 °C), with full vacuum rating over the entire pH range. Each coating is specifically designed to amplify the corrosion resistant characteristics of its predecessor to provide the ultimate in corrosion protection.

What's more, since SermaShield Advanced PFA coatings are applied as an aqueous dispersion at room temperature, large vessels up to 30,000 gallons in capacity or complex components that cannot be coated with traditional powder coatings are easily coated using SermaShield.

### SHEET LININGS PROTECT AND SAVE MONEY IN FABRICATION COSTS

More and more engineers are realizing the benefits of using high performance polymers-instead of high-grade stainless steels and exotic alloys-to prevent corrosion in processing vessels, piping and piping systems. Fluoropolymers demonstrate better chemical resistance in many applications and are less expensive than corrosion resistant metals. In addition, vessels lined with high performance fluoropolymers can save money in fabrication costs because a less corrosion resistant and consequently, less expensive metal, can be used.

Sermatech provides both bonded and non-bonded fluoropolymer sheet linings designed to provide corrosion protection for all types and sizes of processing equipment - from small receivers and columns to large storage tanks 40,000 gallons in capacity or larger. Engineered to meet your specific application requirements, our linings are available





in thickness from  $\frac{1}{16}$ " to more than  $\frac{1}{8}$ ", and can be fabricated from a variety of corrosion-resistant fluoropolymer materials, including PTFE, PFA, ECTFE and PVDF.

### FABRICATION CREATES TURNKEY ENVIRONMENT

Sermatech not only engineers and applies fluoropolymer coatings and linings, we also offer fabrication and exterior corrosion resistant paint services that allow your vessels to leave our facilities in a condition ready for immediate use.

### TOTAL COMMITMENT TO QUALITY

To meet the demanding requirements of processing applications, Sermatech, integrates quality into our operations. We monitor and manage the quality process using Six Sigma tools and a complete set of lean manufacturing techniques including: kaizen, set-up reduction, standard work, variance reduction and statistical process control. The result: consistently engineered materials applied to your specifications, time after time.

### DEPENDABLE COATINGS YOU CAN COUNT ON WHEN PERFORMANCE MATTERS

That's Sermatech's reputation and commitment: Proven results. Pioneering new coatings and linings. Perfecting the development and application process. Committed to the success of our processing partners.

### Blue Armor®

Blue Armor is a proprietary seamless fluoropolymer coating system based on ECTFE and modified for improved processability and abrasion resistance. It is designed to protect processing

Halar® is a registered trademark of Solvay Solexis.  
Xylan® is a registered trademark of Whitford.

equipment from chemical attack, abrasion and thermal shock in temperatures up to 300° F (150° C), with full vacuum rating over the entire pH range. The stable molecular structure and low porosity of Blue Armor make it an outstanding corrosion barrier ideal for coating complex components and processing vessels.

### ETFE

Coatings made from ethylene tetrafluoroethylene (ETFE) are extremely tough and abrasion resistant coatings ideal for extending the useful life of and providing excellent chemical resistance to processing equipment continuously operating in temperatures up to 300° F (150° C). Coatings made from ETFE are spray applied as a powder to hot components where it melts and flows to a dense, well-bonded coating. FDA compliant.

### Halar®

Coatings made from Halar provide excellent chemical resistance and good electrical properties to equipment operating in temperatures up to 300° F (150° C). Suitable for full vacuum applications, Halar coatings combine outstanding abrasion resistance with excellent impact strength. Coatings made from Halar are also available to comply with FDA regulations.

### Nonstick Coatings

Sermatech applies a wide range of traditional nonstick thin film coatings made from PTFE, PFA, FEP, and other fluoropolymer resins. We also offer a range of state-of-the-art nonstick coatings for extreme applications including:

- Xylan® • SermaShield Magna™
- Magna TR

### COATING CAPABILITIES

Abrasion Resistant Coatings  
Blue Armor®  
ETFE

### Architectural Coatings

Polyester  
Polyurethanes

### Chemical Resistant Coatings

Blue Armor®  
ETFE  
SermaShield™  
Halar®  
PVDF

### FDA-Approved Coatings

SermaShield Magna™  
Halar®  
ETFE  
PVDF

### Nonstick Coatings

SermaShield™  
SermaShield Magna™  
Magna TR  
PFA  
PTFE  
Xylan®

### Other Polymer Powder Coatings

Epoxy  
Polyester  
Nylon

### Other Coatings From Sermatech

Thermal Spray  
Diffusion  
Corrosion Control

**Dependable Coatings and Services You Can Count on When Performance Matters**

Sermatech International, headquartered in Pottstown, PA, has more than 40 years of expertise in developing and applying engineered protective coatings for specialized applications. We operate 10 service centers and 12 mobile service centers throughout the industrialized world to serve original equipment (OE) manufacturers, 1<sup>st</sup> tier suppliers and end users. Our metallurgists, chemists and engineers, supported by our own laboratories, work with the best and brightest in the industry to continually provide engineered surface solutions for our customers.

Our protective coatings are used in a variety of markets where resistance to corrosion, erosion, fouling, and high temperatures is essential. Our products and services are known to enhance the performance and increase the life of your critical components as well as minimize expensive downtime at your facility.



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