Fluoropolymer Coatings & Linings.

Praxair Surface Technologies offers a full line of fluoropolymer coatings and linings designed to help today’s processing professionals face the challenges of protecting large and complex containment vessels and related piping systems. Our products and services resist corrosion, abrasion, and wear, while maintaining nonstick and high purity characteristics of equipment used in the chemical, microelectronic, oil and gas, and pharmaceutical processing industries.

SermaShield™
SermaShield 1000 is family of coatings based on Fluoroshield PFA technology and Sermatech’s proprietary bonding technology. This family is comprised of six technically-advanced seamless coating systems that combines both chemical and mechanical bonding technologies to provide superior corrosion protection in temperatures as high as 500°F (260°C), with full vacuum rating over the entire pH range. Each coating system—made entirely from 100% Teflon® PFA—is applied as an aqueous dispersion at room temperature, making it ideal for coating complex components or large vessels up to 30,000 gallons in size.

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 equipment from chemical attack, abrasion and thermal shock in temperatures up to 300°F (149°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.

Nonstick Coatings
Praxair applies a wide range of traditional nonstick coatings made from PTFE, PFA, FEP, SilverStone Supra®, Teflon® S and Whitford Xylan®. We also offer a range of state-of-the-art nonstick coatings for extreme applications including:
- Fluoroshield® Magna™
- Magna TR
- SermaLon™

SermaLon®
The three-part SermaLon coating system was developed primarily to provide anti-fouling and corrosion protection to driven compressor components and industrial gas turbine components exposed to wet chloride attack, as well as steam turbine components. The coating system provides excellent protection to 403 and 410 stainless substrates when exposed to corrosive steam conditions or low pH wet chloride environments.

Sheet Lining Services
Praxair offers 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 a variety of corrosion-resistant fluoropolymer materials, including PTFE, PFA, ECTFE and PVDF, ETFE, FEP and Fluoroshield.
SermaShield™ 100 ETFE
SermaShield 100 ETFE is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and provide abrasion resistance and thermal shock resistance in continuous operating temperatures up to 300°F (149°C). The coating can be used with full vacuum rating over the entire pH range. SermaShield 100 also exhibits exceptional nonstick and impact resistant properties.

SermaShield™ 200 ECTFE
SermaShield 200 ECTFE is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and provide abrasion resistance and thermal shock resistance at continuous operation at temperatures up to 300°F (149°C). The coating can be used with full vacuum rating over the entire pH range.

SermaShield™ 300 PFA
SermaShield 300 PFA is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and provide abrasion resistance and thermal shock resistance in continuous operating temperatures up to 450°F (232°C). The coating can be used with full vacuum rating over the entire pH range. SermaShield 300 also exhibits exceptional nonstick and impact resistant properties.

SermaShield™ 400 PVDF
SermaShield 400 PVDF is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and provide abrasion resistance and thermal shock resistance in continuous operating temperatures up to 250°F (121°C). The coating can be used with full vacuum rating over the entire pH range. SermaShield 400 also exhibits exceptional nonstick and superior toughness along with excellent impact resistant properties.

SermaShield™ 500 FEP
SermaShield 500 FEP is a seamless fluoropolymer coating system designed to protect processing equipment from chemical attack and provide abrasion resistance and thermal shock resistance in continuous operating temperatures up to 400°F (205°C). The coating can be used with full vacuum rating over the entire pH range. SermaShield 500 also exhibits exceptional nonstick and superior toughness along with excellent impact resistant properties.