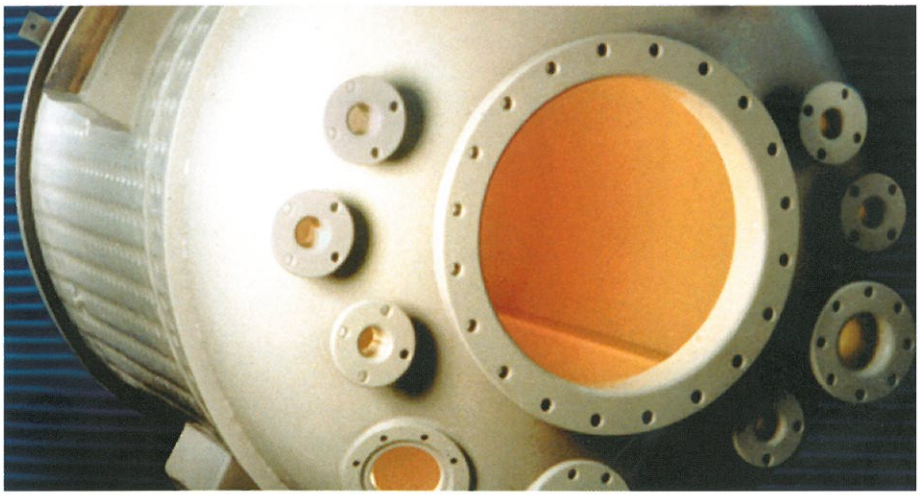
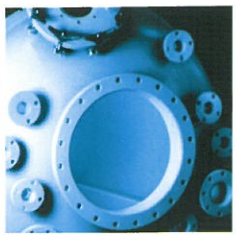
*Smart**Solutions***



Smart Solutions

EDLON





Coatings

Edlon's series of fluoropolymer coating options has been engineered for resistance to chemical and mechanical damage in corrosive environments and high purity applications. Edlon offers coatings in **EcTFE, PVDF, ETFE,** and **PFA** up to 1.0mm thick. Our coatings are for use on virtually any metallic surface capable of withstanding processing temperatures (400c). Coatings are field-repairable and can be applied to complex shapes through both manway and open access to both tanks and columns. Coatings will withstand full vacuum and high speed agitation. Our coatings are successful in many different chemical services, including caustics, acids, and organic solvents

ECTFE
(Halar® or ethylene chlorotrifluoroethlyene)

Edlon's SC-2001(TM) is a proprietary ECTFE-based powder spray composite coating. **SC-2001** offers excellent impact strength and abrasion and chemical resistance. **ECTFE** is resistant to most acids, bases, and organic solvents at moderate temperatures and at higher temperatures to some select chemicals.

PVDF (polyvinyldifluoride)

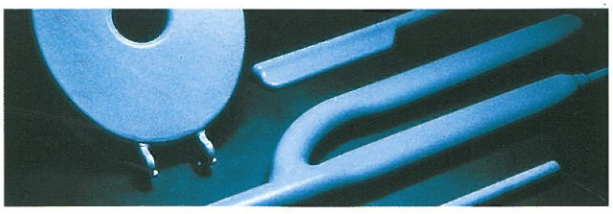
Edlon's SC-3001(TM) is a proprietary **PVDF**-based powder spray composite coating. **SC-3001** offers superior resistance to abrasion and mechanical damage and to many corrosive environments. **PVDF** is resistant to most acids, bases and offers excellent resistance to bromine.

ETFE (ethylene tetrafluoroethylene)

Edlon's SC-5001(TM) is a proprietary **ETFE**-based powder spray coating. **SC-5001** offers superior resistance to attack by most chemicals and solvents at moderate temperatures.

PFA (perfluoroalkoxy)

Edlon's SC-7005(TM) is a proprietary **PFA**-based composite coating. **SC-7005** is engineered to have superior corrosion resistance, increased resistance to permeation, improved abrasion and scratch resistance, excellent release properties, and a superior bond to the steel substrate. **SC-7005** is inert to most chemicals except molten alkali metals and fluorine and certain halogenated compounds at elevated temperatures. **SC-7005** is also **FDA** compliant.



Fluoroshield®

Fluoroshield® PFA-based dispersion (wet spray) coating. These coatings use 100% melt processible fluoropolymers spray-applied to the substrate and baked after each successive layer. Fluoroshield® offers near universal chemical resistance, superior resistance to mechanical damage, and performs well at elevated temperatures. Fluoroshield® is field repairable and can be applied to most metals, except those alloys which contain a high copper content.

GSC-C

Fluoroshield® GSC-C utilizes a proprietary fusion layer between the metal substrate and the coating for a total thickness of 1.0mm. This intermediate layer provides the coating system with bond strength well in excess of that required to withstand full vacuum.

GSC-M

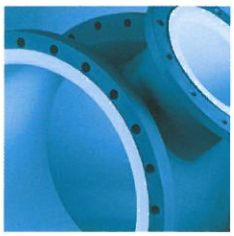
Fluoroshield® GSC-M is reinforced with a wire mesh for an even more tenacious bond between the coating and substrate. The wire screen is welded to the metal substrate prior to coating; the fluoropolymer then flows in and around the wire mesh, resulting in bond strength greater even than the polymer's tear strength and a thickness of 1.5mm.

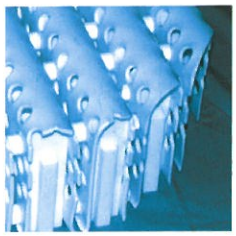
GSC-MS

Fluoroshield® GSC-MS combines the properties of both the **GSC-C** and **GSC-M** coatings in order to achieve the best of both worlds. **GSC-MS** is reinforced with a wire screen for a mechanically-bonded coating, while also containing an activated carbon layer to increase the longevity of the coating and mitigate the effects of permeation in even the most severe applications. This coating is available in a total thickness of 1.5mm.

GSC-CE

Fluoroshield® GSC-CE takes advantage of a static-dissipating graphite barrier. This layer can be applied to **GSC-C, GSC-M,** and **GSC-MS** systems.





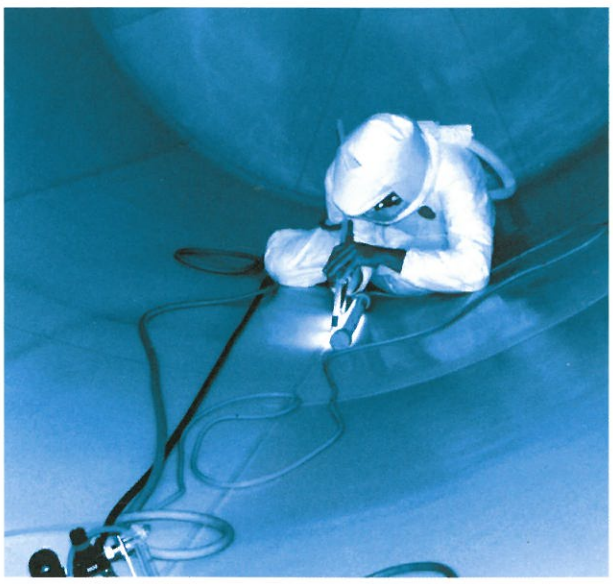
Loose Liners

Edlon offers custom loose linings fabricated from **Teflon® PTFE, FEP,** and **PFA** in thicknesses ranging from 1.5mm to 6.0mm. They provide unsurpassed resistance to corrosion and permeation even in severe chemical environments at temperatures up to 200c. Additionally, their smooth interior surfaces provide excellent release properties for reduced material build-up. Liners can be vacuum formed to accommodate dished vessel heads and more complex shapes. Loose linings can be fabricated to fit inside plastic, steel or metal alloy structures.

Edlon's custom loose liners are inert to most chemicals, except for molten alkali metals and certain halogens or halogenated compounds at elevated temperatures. Our loose linings are successful in a wide range of chemical services including, caustics, acids, and organics.

Advantages of a loose liner:

- Fusion welded seams. Edlon's loose liners are fabricated using 100% fusion welded seams. This results in seams with tensile and elongation properties equal to the virgin film. This valuable technique is unrivaled in the industry
- Low fabrication cost
- High temperature rating. Loose liners offer the best performance at elevated temperatures, higher either than coatings or bonded liners
- Edlon is also able to offer a "low-stress" design for loose liners. At elevated temperatures, this variation on a loose liner offers higher resistance to stress cracking than any other liner.

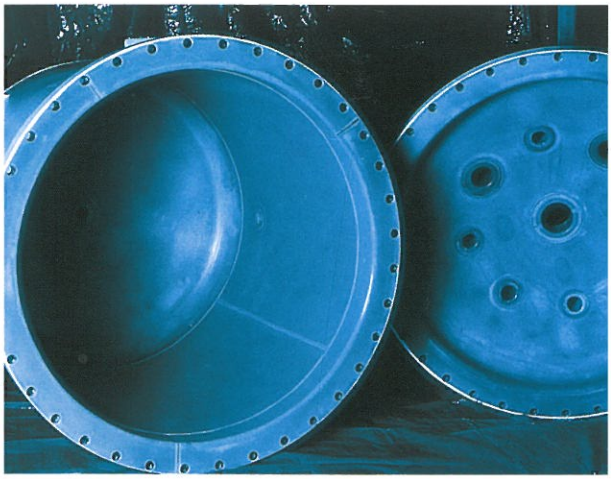
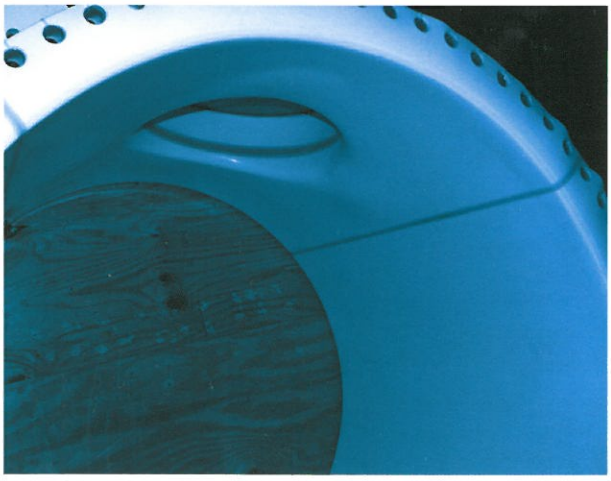


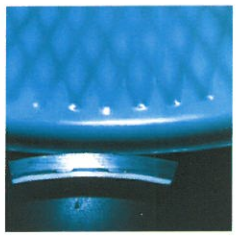
Bonded Liners

Edlon's custom bonded linings are fabricated by laminating virgin fluoropolymer film on to a glass knit or polyester backing and are available in **Polypropylene, Halar, PVDF, ETFE, FEP, PFA** and **PTFE** in thickness 1.5mm to 6mm. These liners are fabricated using our proprietary fusion welding technology and are bonded into the vessel utilizing Edlon's high strength adhesive system to ensure liners can withstand both agitated and vacuum conditions. Edlon supply either complete steel lined equipment or line existing metal equipment.

Bonded linings protect equipment such as:

- Mixing and storage tanks
- Columns
- Vessel covers and heads
- heat exchanger shells and heads
- Pipe sections
- Transport tanks.

Rotational Molding

Rotational molding is a method of creating a seamless liner with thickness from 3.0mm to 6.0mm. Plastic resin is placed inside the vessel which is heated to the fluoropolymer's melting point and rotated on multiple axes. When the plastic is melted, it flows around the inside of the vessel coating the entire interior surface evenly. The vessel is cooled while still rotating to create a uniform thickness throughout the interior.

Edlon uses 6 different fluoropolymers for this fabrication method:

- **PE and PP** - excellent chemical resistance at low cost
- **PVDF** - offers resistance to many chemicals, including bromine, at a low cost. PVDF is often used in ultra-pure water systems
- **ECTFE** - offers chemical resistance and results in a very smooth surface when rotomolded. ECTFE is often used in ultra-pure water systems and high purity applications
- **ETFE** – is useful for high purity applications
- **PFA** – PFA offers universal chemical resistance.

Typical applications for rotomolding and rotolining include:

- Filter housings
- Columns
- Vessels and vessel covers and heads
- Transport tanks + IBC's
- Spool sections
- Complex shapes
- OEM free standing parts.

Fluorolock

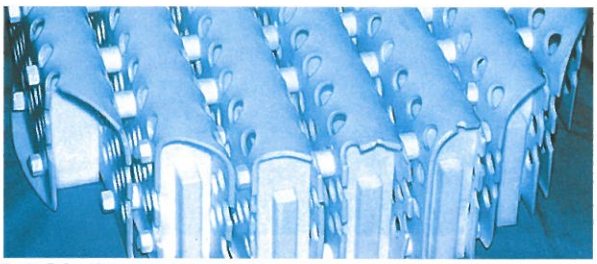
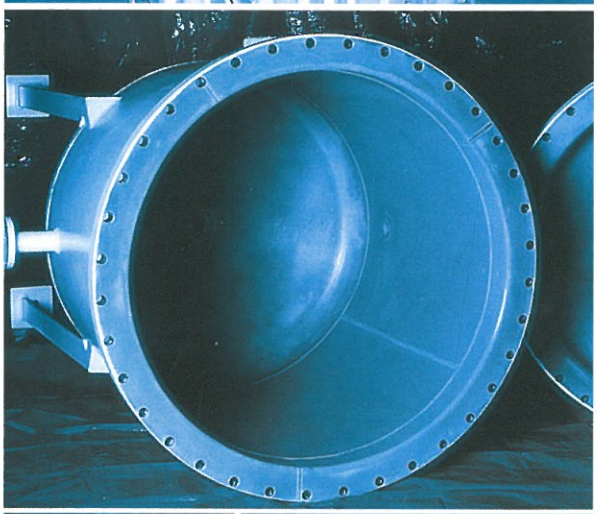
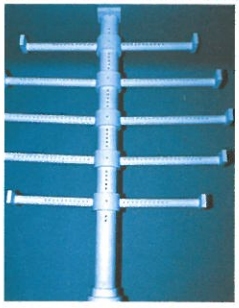
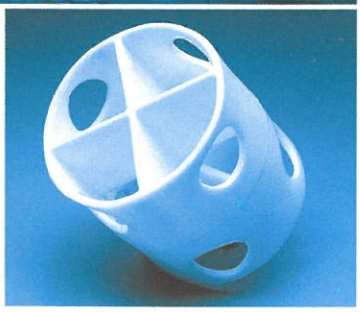
For applications involving elevated temperatures or vacuum, Edlon offers a variation on rotolining called **Fluorolock** (TM). Fluorolock is offered in both **ETFE** and **PFA**. A wire screen or mesh is welded to the interior of the metal before being rotolined. When the plastic cools, it will have cooled under, around, and over the wire screen, creating a stronger mechanical bond with a liner capable of withstanding more severe conditions.

Column Systems

Edlon's loose and bonded lining systems incorporating proprietary fusion welding techniques in **PVDF, FEP, PFA** and **PTFE** materials ensure column linings of the highest integrity and performance.

Edlon packed column internals made from corrosion resistant materials including **PTFE, PFA** and **PVDF** are customised to suit each application Edlon's Distributors, redistributors, feed pipes, gas Spargers, and packing support plates combine corrosion resistance with performance and superior structural integrity.

Plastic packing is recommended for Glasteel or Fluoropolymer columns. Edlon can supply either structured packing or random packing including Raschig rings, Exlon rings, cascade mini rings and ballast saddle rings in materials from **PP** through to **PTFE**.

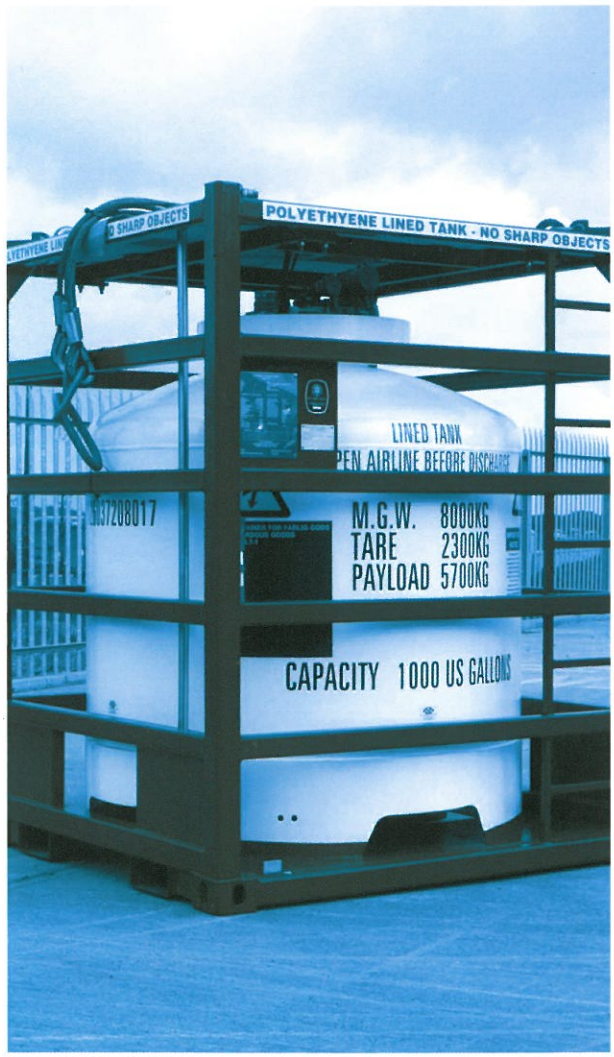







Secure and Pure

Edlon have used their fabrication and material knowledge to create a range of equipment for the Microelectronics industry, where corrosion resistance and product purity are of equal importance.
Edlon's in-depth technical expertise with all plastic materials including **PFA450HP, PFA350, PTFM, FEP, ETFE, EcTFE, PVDF** and **PP** linked with fusion welding technology and advanced **PFA** spray coating systems ensures PPT purity levels and eliminate metal , silicate, particulate, and organic contamination in a variety of equipment including:

- Day tanks, storage tanks and transport tanks
- Pressure vessels
- Filter housings
- Wafer processing tools
- Etch tanks and rinse baths.



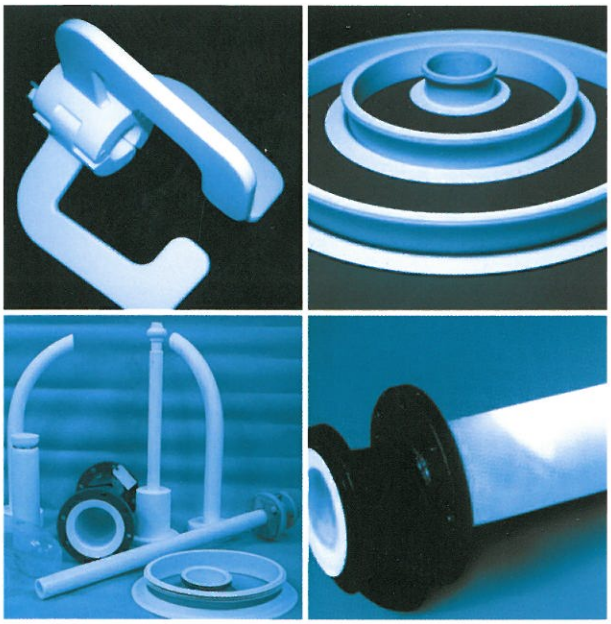
Fluoropolymer accessories for Glass Lined Equipment

Edlon's Fluoropolymer accessories and repair services eliminates downtime and increases the service life of glass lined equipment.

Produced in both standard and custom designs, Fluoropolymer accessories are manufactured in **PTFE, PFA** or **FEP** using isostatic molding, fusion welding and thermoforming. Advanced fabrication techniques combined with rugged construction make Edlon Fluoropolymer accessories strong, durable and easily installed by Edlon trained personnel. All components are readily available with items manufactured for immediate fitting.

Edlon's range of Accessories include:

- Manway & nozzle repair shields
- Nozzle liners
- Manway and protector ring liners
- Dip tubes
- Spargers
- Vortex breakers
- Coated agitators
- Agitator boots
- Vortex breakers
- Coated baffles
- Coated vessel covers and heads.



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