

DURCOR®

Like no other

Durcor® is the world's first advanced structural composite piping system designed exclusively to be lined with seamless PTFE. Durcor's architecture was optimized from the start, not compromised by conversion. It is the strongest, lightest, most chemically resistant piping system available. Durcor's thick wall PTFE liner provides unmatched internal chemical resistance while its revolutionary vinyl ester / fiberglass housing provides outstanding exterior corrosion protection, high impact resistance and excellent span and burst capabilities. The construction of Durcor offers the ultimate in physical properties and corrosion resistance and carries the industry's first (5) year bumper to bumper warranty.

Advanced Composite PTFE Lined Piping System



Strong, Light Weight, Zero Corrosion



Durcor Piping System is NOT a Dual Laminate

Durcor piping system should not be confused with dual laminate. Unlike dual laminate fittings & pipe, Durcor has excellent dimensional control and tolerance as well as outstanding surface quality. Durcor utilizes thick, seamless PTFE liners that don't require any chemical or mechanical bonding to composite that could lead to delamination failure. Dual laminate liners are typically made from sheets that are rolled and welded to form geometrical shapes.

The nature of the hand lay-up dual laminate process results in parts with inconsistent fiber orientations and resin wet-out. Resin is applied over glass with rollers and excess is removed with squeegees, the process is highly reliant on operator skill. This process typically generates a textured finish on inner surfaces which provide a poor condition for bonding between added layers. The resins need to be low viscosity to be workable by hand, which compromises

their mechanical / thermal properties due to the need for high diluents / styrene levels. Porous voids are common in hand lay-up parts and tight dimensional accuracy & smooth surfaces are impossible. Lastly, this technique raises environmental & safety concerns with the amount of volatiles it generates and releases into the atmosphere due to rollers and squeegees being used to apply resin. Contact molding is also another term used for hand lay-up.

DURCOR[®]

Outstanding Dimensional Control and Tolerance

ETHYLENE[®] PTFE
an ANDRONACO INDUSTRIES company

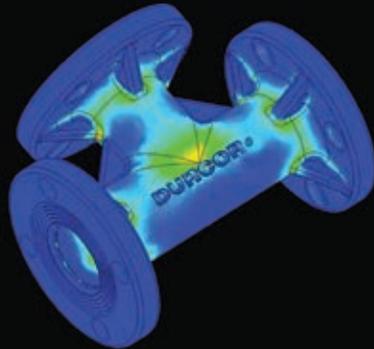


For over 50 years, Ethylene has been a recognized leader in the design and manufacture of advanced PTFE lined products. Durcor utilizes that experience in its PTFE fitting liners. All Ethylene liners are seamless, isostatically molded and independent of the Durcor composite housing. The process enables all liners to be tightly controlled for conformity to dimensional requirements and leak-free performance. The thick wall PTFE liners incorporate exclusive radial locking ribs for maintaining dimensional stability during temperature cycling. All Ethylene / Durcor fitting liners are rated for full vacuum to 300°F.



Advanced Design

The same approach, practice and technique that was used to design this 21st century composite jet fighter was used to design Durcor's advanced structural composite fittings. Through Finite Element Analysis (FEA), Durcor developed its sequence of fiberglass reinforcement placement. It improved Durcor's strength to weight ratio especially in areas of critical stress. FEA provided the building blocks that give Durcor its ultimate in physical properties. All Durcor fittings carry the industry's first (5) year bumper to bumper warranty.



Consistency

Durcor fittings are manufactured in two part closed molds, resin injection completely wetting out all fibers. Speed and pressures remain consistent producing uniform product thickness that is void free, has smooth surfaces and all parts are identical to one another. Durcor's manufacturing process also offers health & safety, and environmental control due to enclosed resin injection which releases less volatiles into the atmosphere and less exposure to employees during manufacturing.



PureFlex[®] Inc.
an ANDRONACO INDUSTRIES company

4855 Broadmoor Ave
Kentwood, MI. 49512
Ph 616.554-1100 Fax 616.554-3633
www.pureflex.com