

High Purity Fittings & Tubing Products



Saint-Gobain Performance Plastics (SGPPL) offers superior engineering expertise, with an experienced injection molding staff that brings innovative solutions to even the most challenging molding requirements. Better technical solutions, combined with precision molding capabilities, plus over 35 years of dedicated PTFE

processing, and more than 20 years of PFA injection molding deliver a significant competitive advantage for our customers.

SGPPL's injection molding machines are equipped with custom-built, highly specialized components to produce fluoropolymer products that

meet or exceed the most stringent Semiconductor Industry standards for purity and ionic extractables. SGPPL's injection molding machines employ state-of-the-art process controls to assure accurate and repeatable delivery of high-purity fluoropolymer materials into each mold, every time.

Furon® Flare Grip® II Fine Thread Flare Fittings

SGPPL manufactures a complete line of industry standard fine thread flare type fittings in the following sizes. 1/4", 3/8", 1/2", 3/4" and 1". Flare Grip II offers the industry a fitting line that is compatible with a large number of fluid handling systems.

Features

- Same footprint as industry standard fine thread flare fittings
- Minimum dead volume
- Minimum pressure drop
- Assembled and double bagged in a class 100 clean room environment

Benefits

- Interchangeable, industry compatible with industry standard fine thread flare fittings
- Designed for complete drain down to assure high purity fluid environment
- Designed to maximize system chemical delivery efficiency



Fuse Bond

SGPPL manufactures a complete line of industry standard high purity PFA weldable Fuse-Bond pipe fittings. The product line size ranges from 1/4" to 2" and are designed to be compatible with "Schedule 40" pipe. All industry standard Furon fittings are manufactured with the additional feature of alignment marks. (patent pending). This simple system maintains precise alignment of the fittings during assembly and welding.

The alignment marks at every 45° offer the following:

1. Simple system to maintain precise alignment of fittings during assembly welding
2. Faster and easier to use for assembly

3. Compatible with all Fuse-Bond Welding equipment
4. Ensures that welded assemblies are consistent and repeatable for ease of system integration

Benefits

- Fuse-Bond fittings are also offered in optional compact configurations. Please consult factory for availability.
- Compact designs save up to 50% reduction in assembly time due to the elimination of cutting, squaring and facing each fitting prior to welding.
- Reduces the overall system footprint.
- Reduces hold-up volume due to reduced fitting size.
- Material savings reduce overall cost.



Flare Grip® Course Thread Flare Fittings

Specifically designed to handle aggressive chemicals or the transfer of inert and ultrapure fluids, Furon Flare Grip Course Thread Fittings accommodate a wide range of temperatures and pressures and are designed to maximize system chemical delivery efficiency.

Benefits

- Course thread design is stronger than comparable flare fittings with fine threads
- Available in a wide range of sizes: 1/4" 3/8", 1/2", 3/4" and 1"
- Accommodates temperatures up to 150 degrees C
- Working pressures range from vacuum to 150 PSIG at ambient temperature
- Designed for complete drain down to assure high purity fluid environment



Dual Containment (DCFM)

The Dual Containment Fittings provide Flare over Flare dual containment which makes them ideal for valve box, bulk chemical delivery and hard plumbing to wet tool applications.

Benefits

- Flexible outer containment line
- Available in three configurations to meet a wide range of customer requirements:

1/2" over 1/4"
3/4" over 1/2"
1" over 3/4"



Grab Seal™ Compression Fittings (IMP)

Furon Grab Seal Fittings are designed to make installation as easy as possible. Grab Seal Fittings can be installed without any tool, once the tubing lengths have been cut to the desirable lengths.

Benefits

- Simple, two-piece design for ease of use
- Operates effectively in temperatures up to 100° C
- Can withstand pressures up to 100 PSIG



Nippon Pillar Super Fittings

The Pillar “Super Fitting” is used in high temperature fitting applications up to 200° C, allowing double the high sealing performance strength of a traditional seal structure. Under a licensee agreement with Pillar, SGPPL has exclusive North American rights to design the “Super Fitting” onto any components. Additionally, SGPPL is an authorized U.S. distributor of the “Super Fitting” product.

Benefits

- Double sealing structure ensures accurate performance under high temperatures up to 200° C
- High safety due to robust design
- No hold up volume due to complete flow-through design
- Class 100 assembly and packaging assures consistently high quality



No O-Ring Union

Used in welded PFA piping systems for ambient and high temperature process tools, the No O-Ring Union’s specialized configuration eliminates O-rings and provides a leak-tight seal for all semiconductor fluid chemicals. SGPPL’s patented tongue and groove seals are stable over time, and provide a preferable alternative to O-ring seals.

Benefits

- No replacement parts
- O-ring free design excludes contamination to the process
- Easy maintenance of equipment components connected with No O-ring unions, reducing or eliminating replacement and servicing costs



UltraTrace™ Tubing

UltraTrace Tubing is specifically designed to be used with SGPPL's line of Flare Grip®, Flare Grip II and Grab Seal™ Tube Compression Fittings. UltraTrace Tubing should be specified when the reliability and dependability of an application requires the ultimate in traceability, purity and chemical resistance. Ideal for use in the Semiconductor, Biotech, Pharmaceutical, Food and Beverage, as well as Chemical Process industries.

Benefits

- Laser scribing allows positive identification of size, material and 100% lot traceability
- Also available with custom laser scribing for identification of chemicals, process media, tool numbers, etc.
- Manufactured using ISO 9000 guidelines
- Heat stabilized during extrusion to maximize service temperature range
- Capped tube ends prevent I.D. contamination, guaranteeing high purity maintenance



CT-Flex Tubing

Furon CT-Flex Corrugated Tubing shapes and flexes easily to conform to a desired path. Featuring a virtually zero bend radius, the CT-Flex allows extension and compression without compromising the inner diameter. CT-Flex is ideal for dual containment applications.

Benefits

- Bend radius: 1/2 of tubing I.D. for maximum flexibility
- Highest continuous service temperature: 93° C/0 pressure
- Resists chemicals, elevated temperatures, cut through and strain
- Compatible with Grab Seal™ PFA Compression Fittings (diameter of the straight Cuff O.D.)



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Flare Grip® is a registered trademark.
Grab Seal™ is a trademark.

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