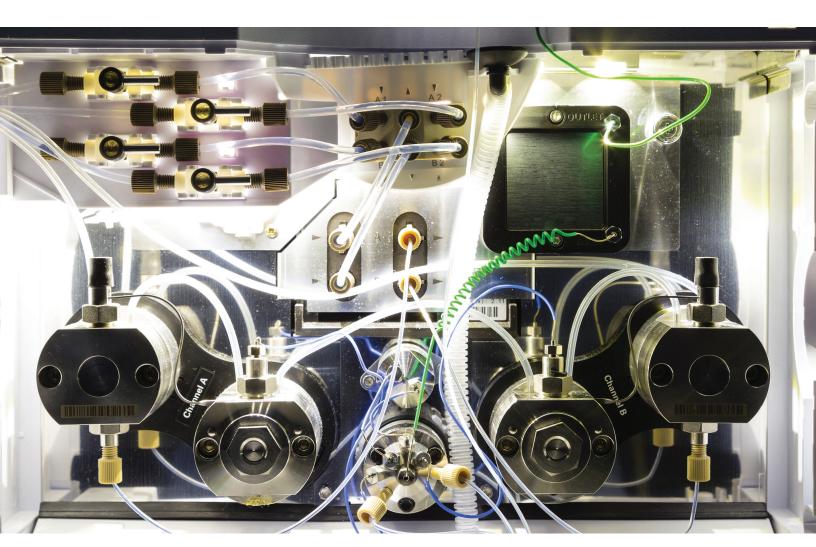


Solutions for Fluid Management Applications

High-performance extrusions for critical fluid transfer technology.





Critical Applications

Diverse products for use when materials are exposed to difficult working conditions and environmental extremes.

Fluid Transfer Extrusions

OUR TUBING SOLUTIONS: We are a world leader in developing, manufacturing, and supplying high-performance polymer extrusions for the transfer of critical fluids. Companies turn to us when they demand innovation, quality products, responsiveness, and competitive pricing from their suppliers. For over 50 years, we have focused entirely on the success of our customers and in the process built an organization that now includes:

- Multiple facilities worldwide
- High volume, precision extrusion, and postproduction finishing
- Sophisticated analytical testing
- Multilingual technical sales and support teams
- Multidisciplinary team of chemists and engineers
- Network of knowledgeable and responsive distributors
- Flexible, strategic supply solutions that ensures product availability anywhere in the world
- SEMI F57 certification
- ISO 9001:2008

ADVANCED EXTRUSION ROOM FOR EXCEPTIONAL QUALITY AND PURITY:

- 100% inspected with dual axis laser micrometer
- Positive pressure microfilters trap and reduce airborne particulates
- In-line laser marking aligns with SEMI F57
- Biocompatible (USP Class VI approved)
- Clean room packaging

Co-extrusion Tri-Layer

- Configurations designed for custom applications
- Resins include EVA, Nylon, PE, as well as fluoropolymers



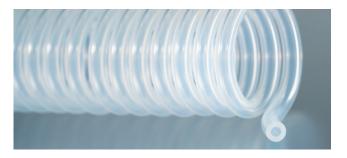
PFA High Purity Tubing

- Working temperature up to 500 °F (260 °C)
- Multiple resin grades
- Choice tubing for semiconductor applications
- Excellent chemical resistance
- Low metallic extractable characteristics
- Low gas permeability
- Maintains mechanical strength at high temps.

Double Containment

- Inner layer of High Purity PFA tubing and outer layer of FEP tubing for enhanced safety and easy inspection
- Manufactured in accordance with SEMI F57
- Can be produced in long continuous lengths
- Chemically resistant to most common solvents
- Custom laser marked for identification

Fluid Handling Resin Properties			
PROPERTY	ASTM METHOD	PTFE	
Elongation (%)	D638	300 - 500	
Tensile Strength (Mpa)	D638	21-35	
Flexural Modulus (Gpa)	D790	490-588	
Max Service Temperature	n/a	260 °C / 500 °F	
Chemical Resistance	n/a	excellent	
Coefficient of Friction	D1894	0.02 - 0.10	



FEP Tubing

- Working temperature up to 400 °F (204 °C)
- Preferred for applications requiring optical clarity and flexibility
- Great for analytical testing and ground water sampling
- Very low microbiological attachment

PEEK Tubing

- Working temperature up to 500 °F (260 °C)
- Gold standard for HPLC analytical science applications
- Outstanding chemical resistance
- Ideal replacement for stainless steel
- High burst pressure and tensile strength

PVDF Tubing

- Working temperature up to 302 °F (150 °C)
- Chemically resistant
- High flexibility and outstanding physical properties
- Can be formed to reduce weight and cost

FEP	PFA	PEEK	PVDF
300 - 400	300	40 - 45	20 - 800
20 - 34	28 - 30	98 - 100	14 - 55
539 - 637	625 - 686	3800 - 4200	192 - 2310
204 °C/	260 °C /	260 °C /	150 °C /
400 °F	500 °F	500 °F	302 °F
excellent	excellent	excellent	excellent
0.04 - 0.06	0.04 - 0.06	0.58	0.14 - 0.54



PTFE Tubing

- Broad working temperature range of -200 °C to 260 °C (-328 °F to 500 °F)
- Lowest coefficient of friction of any polymer (0.02)
- Chemically resistant to nearly all common solvents

Value-Add

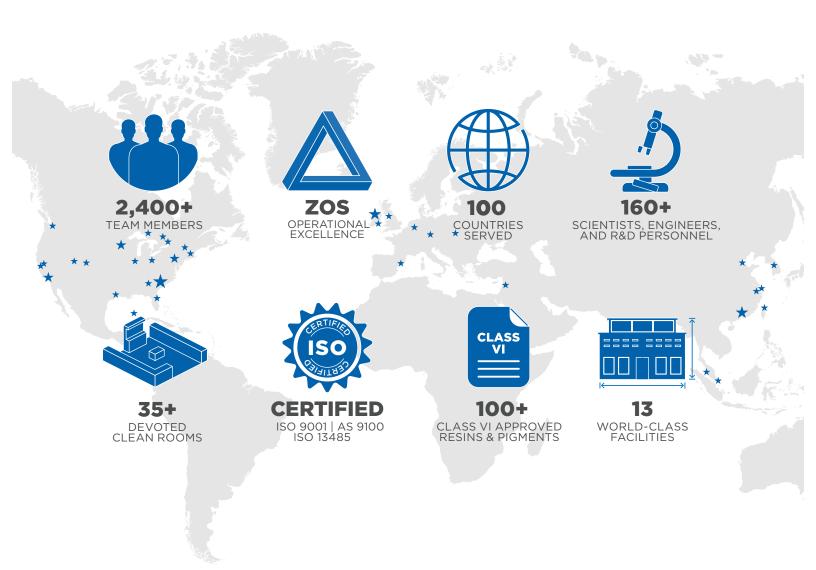
- Drilling
- Flanges
- Flares
- Light assembly
- Laser Marking
- Custom packaging
- Retractable coils for high degree of flexibility
- Striping for identification
- Thermoforming 3D configurations

Continuous Improvement

Zeus has a portfolio of proven highly engineered performance extrusions specifically for handling highly caustic, corrosive, and sensitive fluids. Our extrusions are tested in advanced analytical laboratories, and production takes place in highly controlled environments.

Zeus is ISO certified. We are committed to being an innovative collaborative partner with the capability and capacity that our customers demand.

Get to know Zeus.



——OUR MISSION ——

PROVIDE SOLUTIONS · ENABLE INNOVATION · ENHANCE LIVES

Zeus, headquartered in Orangeburg, South Carolina, is the world's leading polymer extrusion and catheter design manufacturer. With over 55 years of experience in medical, aerospace, energy, automotive, fiber optics, and other leading industries, Zeus's mission is to provide solutions, enable innovation, and enhance lives. The company employs over 2,400 people worldwide with facilities in Aiken, Columbia, Gaston, Orangeburg, and St. Matthews, South Carolina; Branchburg, New Jersey; Chattanooga, Tennessee; San Jose, California; Arden Hills, Minnesota; Guangzhou, China; and Letterkenny, Ireland. For more information, visit www.zeusinc.com.

