



Value-add Services for Extrusions

Zeus offers an array of value-add services to optimize extrusions to your precise needs.



Improve manufacturing and save time.

Experience Matters

For 50 years, we've offered an impressive selection of value-add services for advanced applications. Our ability to produce tubing with flares (accessibility), flanges (mechanical stop), etching (bonding), pad printing (graphics, text), and other value-add services allow us to optimize materials to the precise needs of the application.

A Varied Portfolio

Convoluted/cuffing (1): Convolutes allow for more flexibility and kink resistance compared to smooth bore tubing. We can cuff the ends of PTFE convoluted tubing to allow for a smooth finish that easily attaches to fittings.

- PEEK, PTFE, PFA, FEP and ETFE

Chemical Etching (2): Surface properties are physically altered to allow bonding with conventional adhesives.

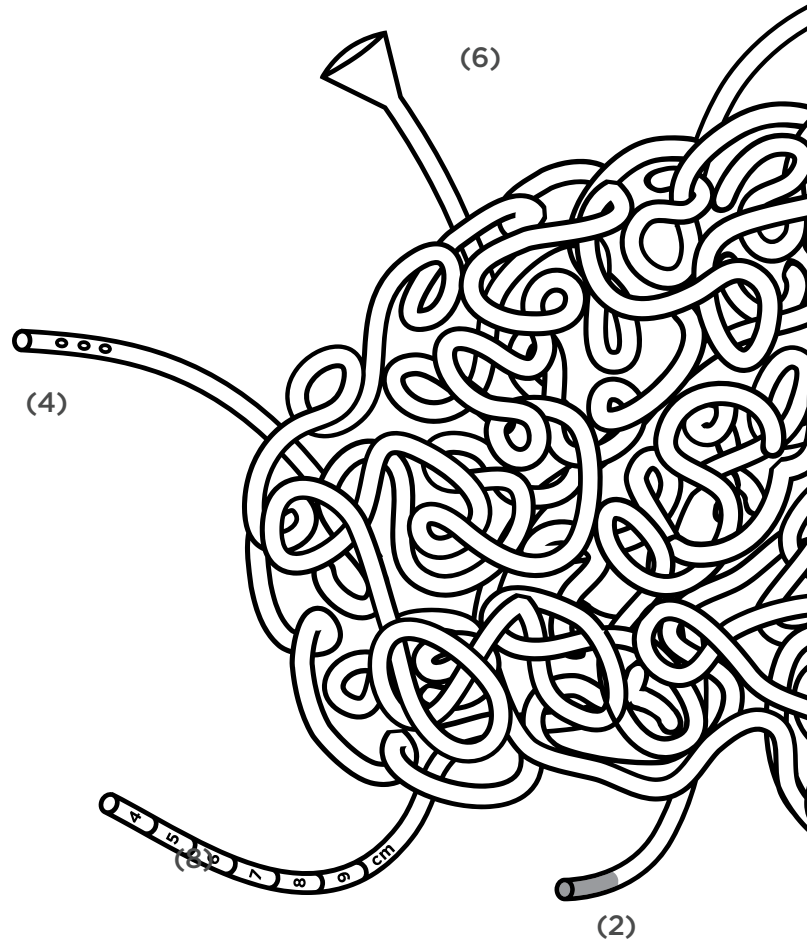
- PTFE and FEP

Draw Down (3): Utilizing many manufacturing and value-add processes, we've developed the technology to reduce the ID and OD of tubing with a minimal transition length.

- PEEK, PTFE, PFA, FEP, ETFE, Nylons, Pebax® and PE

Drilling/Punching/Skiving (4): Performed through one or both walls, holes can be in line or spiraled.

- PEEK, PTFE, PFA, FEP, ETFE, Nylons, Pebax® and PE

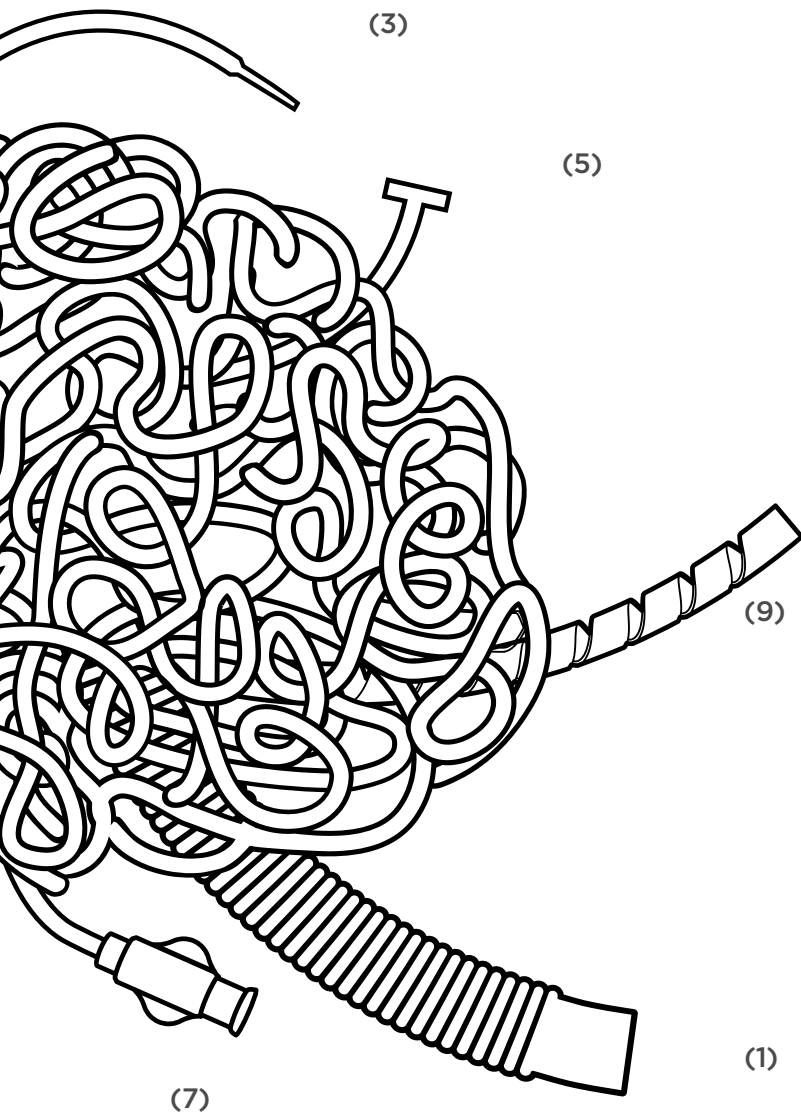


Engineered Surface: Provides improved lubricity without fillers or additives, available on inner, outer or both surfaces.

- PEEK, PTFE, FEP, PFA, PVDF, ETFE and Nylons

Flanging (5): Extrusion is heat formed to be 90 degrees from the OD of the tube. This feature is beneficial for increasing pull strength for over molded components.

- PEEK, PTFE, PFA, FEP, ETFE, Nylons, Pebax® and PE



Flaring (6): We're capable of forming flares onto almost any tubing we manufacture. Flares can be various angles or we can produce straight "goblet" style flares.

- PEEK, PTFE, PFA, FEP, ETFE, Nylons, Pebax®, and PE

Heat Sealing: Reflowing of material to seal the tip of a tube.

- PEEK, PFA, FEP, ETFE, Nylons, Pebax® and PE

Laser Marking: Alphanumeric text, light graphics, or other imprints.

- PEEK, PFA, FEP, ETFE, Nylons, Pebax® and PE

Light Product Assembly: Assembly of our tubing and/or other supplied components together.

- PEEK, PTFE, PFA, FEP, ETFE, Nylons, Pebax®, and PE

Injection Overmolding (7): A hub or luer insert molded onto our tubing.

Pad Printing (8): Pad printing services allow for the custom printing of graphics, logos and text onto extruded and lay-flat tubing.

- PEEK, FEP, Nylons and Pebax®

Retractable coils: Helical coils are heat set for a high degree of flexibility and retractability.

Scoring: Extrusion is partially slit through the wall either along the length. Typically used for tear-away purposes.

- PTFE

Slitting: Extrusion is cut down the length of the tube.

- PTFE, PFA, FEP, ETFE, Pebax® and PE

Spiral Cut (9): Expandable abrasion resistant wrap for wire harnessing and insulation.

- PEEK (wall<0.008), PTFE, PFA, FEP, ETFE, Nylons, Pebax® and PE

Tapering: *OD only* - outer tube wall is thinned with the ID remaining the same size

ID and OD - reduces the ID and OD while thinning the wall over the length of the taper.

- LDPE, HDPE, PEEK and FEP

Tippping: The outer tube wall is rounded off, providing an atraumatic tip.

- PEEK, FEP, PFA, PVDF, ETFE, Nylons, Pebax® and PE

Tube Bonding: Two or more tubes heat fused together.

- PEEK, PFA, FEP, ETFE, Nylons, Pebax®, and PE

Get to know Zeus.



2,400+
TEAM MEMBERS



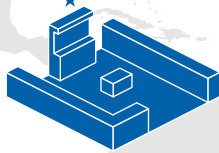
ZOS
OPERATIONAL
EXCELLENCE



100+
COUNTRIES
SERVED



160+
SCIENTISTS, ENGINEERS,
AND R&D PERSONNEL



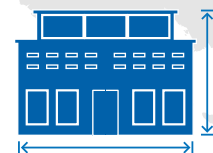
35+
DEVOTED
CLEAN ROOMS



CERTIFIED
ISO 9001 | AS 9100
ISO 13485



CLASS VI
APPROVED RESINS &
PIGMENTS AVAILABLE



13
WORLD-CLASS
FACILITIES

— 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.



AMERICAS: +1 803.268.9500 | EUROPE: +353 (0)74 9109700 | ASIA/PACIFIC: +(86)20-38254906

support@zeusinc.com | www.zeusinc.com