Solutions for Medical Applications

Biocompatible extrusions for next-generation minimally invasive medical technology.

ZEUS®

Critical Applications

Created from medical-grade resins such as PTFE, FEP, PFA, PVDF, PEEK, LCP, ETFE, THV, Polyimide, Pebax®, Nylon, and more.

Medical Market Focus

At Zeus, we deliver revolutionary polymer components for minimally invasive medical devices. Every day we meet your challenging clinical demands with core products modified for enhanced performance and manufacturability.

From material selection to custom designed polymer solutions, we get you where you need to be within the body. Zeus scientists and polymer engineers work with you to develop products that are stronger, thinner, and safer to improve clinical outcomes and raise the level of patient care.
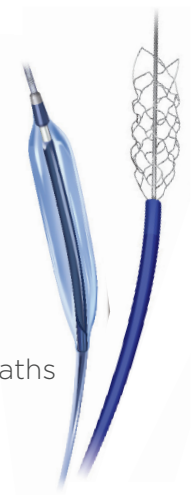
The biocompatibility of our products coupled with their exceptional material properties allow the medical industry to move innovative devices and therapies from concept to reality.

Catheter Components

ADVANCED EXTRUSIONS
Our ability to assist in material selection and provide tightly toleranced and highly engineered polymer extrusions enable clinicians to navigate the most tortuous anatomies. This provides the precision and predictability necessary to ensure the highest level of procedural success.

- Processing and Support Mandrels
- Catheter Liners
- Tie-Layer Materials
- Non-metallic High Tensile Fibers and Filaments
- Jacketing Materials
- Fusing Sleeves
- Guide Wire Coverings
- Balloon Tacking
- Balloon and Stent Protectors
- Introducer Sheaths and Long Sheaths
- Multi-lumen Catheter Tubing
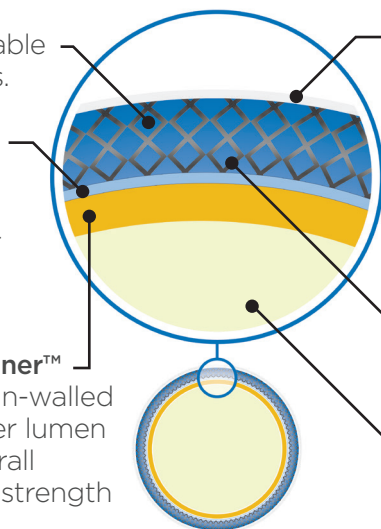- Customized Tubing

Catheter Construction

Pebax® / Nylon Jacket is available in a wide range of durometers.

Tie Layer is a thin thermoplastic coating that creates a melt bondable surface that improves jacket-to-liner bond strength.

PTFE Sub-Lite-Wall® StreamLiner™ Series is our series of ultra-thin-walled catheter liners offering greater lumen potential (ID) or reduced overall profile (OD). StreamLiner™ is strength with flexibility.

OPTIONS:
JACKET REFLOW:
FEP Heat Shrink reflows the Pebax®/Nylon jacket over braid, in ratios up to 2:1.

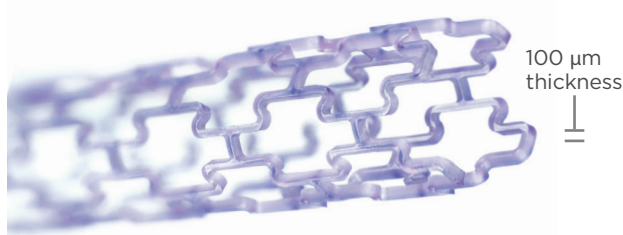**FluoroPEELZ®** is a peelable optically clear heat shrink.

LCP *(Liquid Crystal Polymer)* **Monofilament** replaces traditional metallic braid.

PTFE Mandrel supports the ID of the catheter during the construction process.

Implantable Products

Absorv™ Bioabsorbable Extrusions
- Finite functionality
- Customized absorption profiles

100 μm thickness

Bioweb™ Encapsulation Technology
- Mimics the body's extracellular matrix
- Novel stent encapsulation technology

Aeos™ ePTFE Microporous Products
- Microporous structure that promotes cellular in-growth
- Highly customizable density and pore size for selective permeability
- Available in numerous forms such as suture monofilament, tubing, ribbons, multi-lumen, membranes, and other monofilaments.

Market Application

Neurovascular

ENT

Neuromodulation
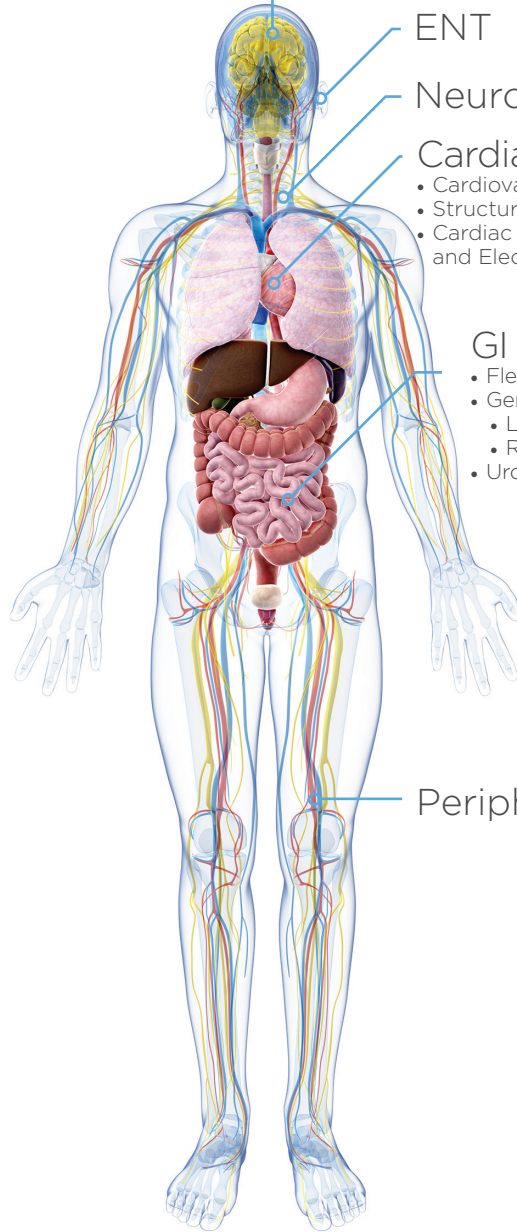
Cardiac Intervention
- Cardiovascular
- Structural Heart Repair
- Cardiac Rhythm Management and Electrophysiology

GI Endoscopy
- Flexible Endoscopy
- General Surgery
  - Laparoscopy
  - Robotic Surgery
- Urology

Peripheral

Value-Add Services

IMPROVE MANUFACTURING EFFICIENCY
- Skiving
- Pad Printing
- Flanging
- Overmolding
- Drilling/Punching
- Flaring
- Scoring
- Slitting
- Draw Down
- Heat Sealing

FAST. EASY. FREE. SAMPLES.

The Zeus Virtual Sample Locker makes ordering the most advanced tubing, heat shrinks, and extrusion samples for your prototypes fast, simple, and free. Additional services include R&D support and prototype sampling.

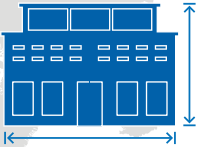Register for your private VSL account at: www.zeusinc.com/VSL.

Orders received before 11:00 A.M. EST (3:00 P.M. GMT for European customers) will ship same-day, via two-day delivery.
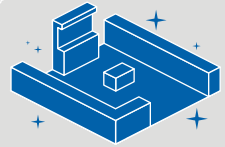
About Zeus.

1,500
EMPLOYEES

400,000+ ft^2
MANUFACTURING SPACE

23
CLEAN ROOMS

3,876 ft^2
DEVOTED TO
CLEAN ROOMS

50+
SCIENTISTS,
ENGINEERS &
R&D PERSONNEL

5,000 ft^2
BIOABSORBABLES
RESEARCH & MFG.

100+
CLASS VI APPROVED
RESINS & PIGMENTS

ZOS
OPERATIONAL
EXCELLENCE

**ISO
CERTIFIED**
ISO 9001
AS 9100
ISO 13485
IATF 16949

- OVER 50 YEARS OF INDUSTRY SOLUTIONS -

Zeus delivers precision polymer solutions that transform businesses, markets, and lives. We have dedicated ourselves to building partnerships, products, and services for the benefit of our customers.

Headquartered in Orangeburg, South Carolina, Zeus employs approximately 1,500 people and operates multiple facilities around the world.

ZEUS