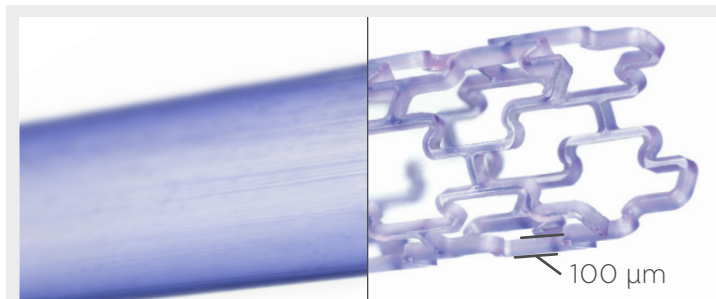


Absorv™

Bioabsorbable Extrusions



We provide tight tolerance extrusions that are strong and thin enough to be used for the next generation of scaffold applications.

Overview

Absorv™ bioabsorbable products are particularly suitable for medical applications seeking to provide an alternative to metal stents or other components. Absorv™ products are extruded from synthetic homopolymers such as PLA, PGA, PCL, and others. These materials can be combined by our design engineers as co-polymers to achieve controlled degradation profiles for bioabsorbable scaffolds. Our extruded products can be precision laser cut or coated with medications to create drug-eluting implants.

Zeus Absorv™ tubing is used in many clinical situations including cardiovascular, neurovascular, and peripheral applications. Because we often engage with customers during development, we are able to perform custom extrusion and post processing with bioabsorbable polymers to meet specified degradation rates and strength values.



BIOCOMPATIBLE



CHEMICALLY INERT



COEFFICIENT OF FRICTION

Applications

- Scaffolds
- Orthopedic
- Dental
- Tissue engineering
- Support for tissue in-growth
- Controlled drug delivery

Products

- Extruded Tubing, Profiles, Monofilament, and Ribbon
- 100 μm wall thicknesses available
- Ability to compound and synthesize bioabsorbable resins for in vitro testing
- Advanced processing and development expertise
- Custom extrusion and processing of proprietary resins
- Network of partners to laser cut end devices

Key Properties

- Controlled / rates of degradation
- Capable of safely existing in the body
- Varying strengths and stiffness
- Absence of stress shielding
- FDA-approved for medical devices
- No explantation surgery
- Controlled load transfer



Absorv™

Bioabsorbable Extrusions

Approximate values for a representative selection of absorbable materials processed by Zeus.

Capabilities		
PRODUCT TYPE	OUTER DIAMETER (OD) RANGE	
	in.	mm
Monofilament	0.004 - 0.080	0.102 - 2.032
Drawn Fiber	0.004 - 0.025	0.102 - 0.635

Capabilities				
PRODUCT TYPE	OUTER DIAMETER (OD) RANGE		WALL THICKNESS RANGE	
	in.	mm	in.	mm
Tubing	0.012 - 0.250	0.305 - 6.350	0.001 - 0.079	0.025 - 2.010
Oriented Tubing*	0.059 - 0.177	1.499 - 4.500	0.004 - 0.008	0.102 - 0.203

Capabilities				
PRODUCT TYPE	WIDTH RANGE		THICKNESS RANGE	
	in.	mm	in.	mm
Ribbon	1.0	25.4	0.0015 - 0.0080	0.0381 - 0.2032

*Custom sizes outside the listed capabilities may be possible upon request