RESONETICS®

NITINOL CAPABILITIES

The Experts in Nitinol Processing & Manufacturing Solutions

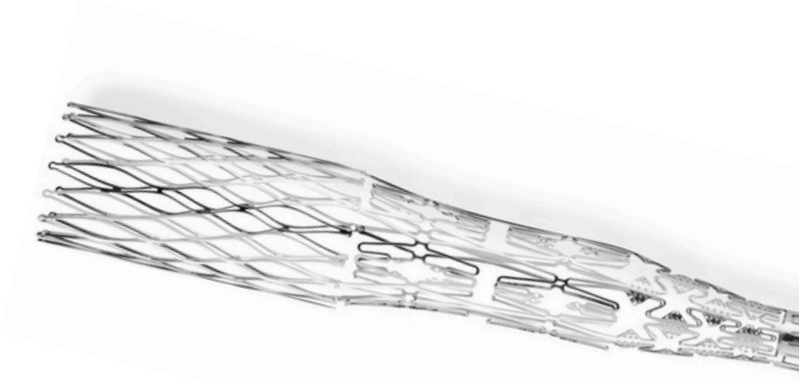
Nitinol, a nickel-titanium (NiTi) alloy, has unique superelastic and shape-memory capabilities essential to medical devices and technologies.

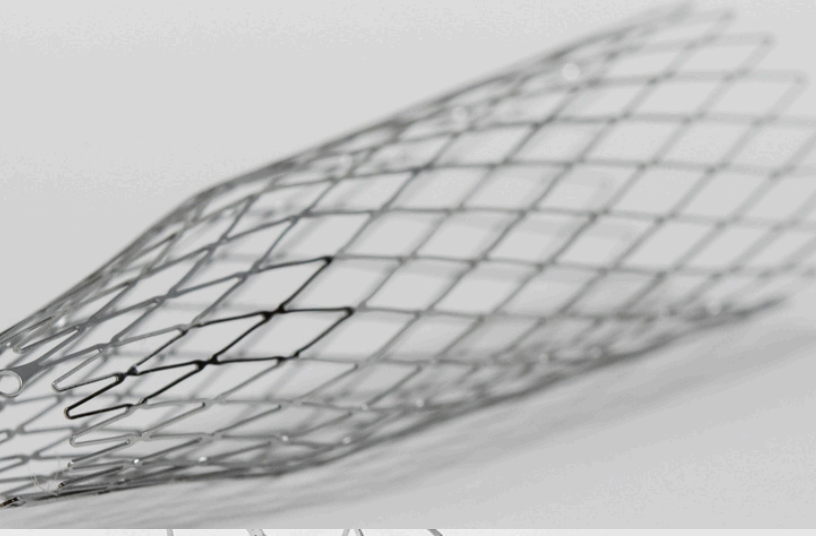
Our expertise in highspeed femtosecond laser cutting, laser ablation, centerless grinding, shape setting, electropolishing, and braiding enables MedTech innovators to leverage this revolutionary material with comprehensive processing and manufacturing solutions.

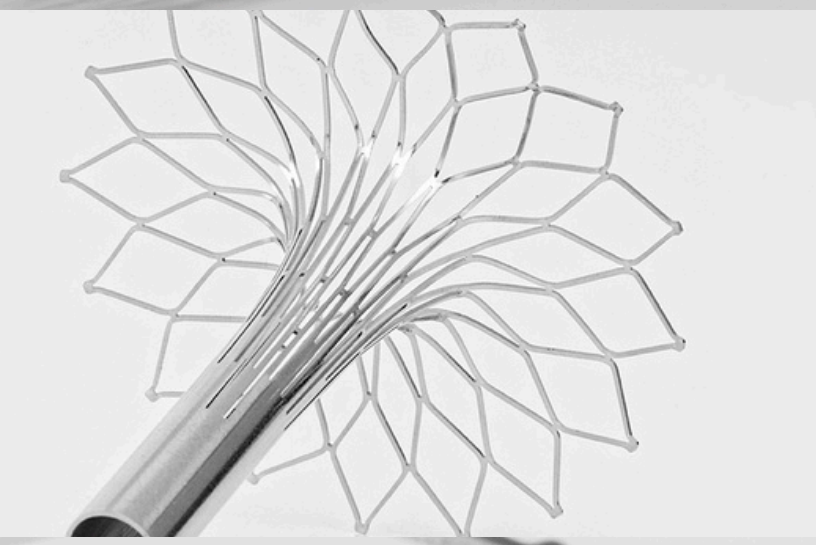
Our nitinol processing capabilities, dedicated resources, and unmatched expertise help accelerate time-to-market for groundbreaking devices that change and improve lives.

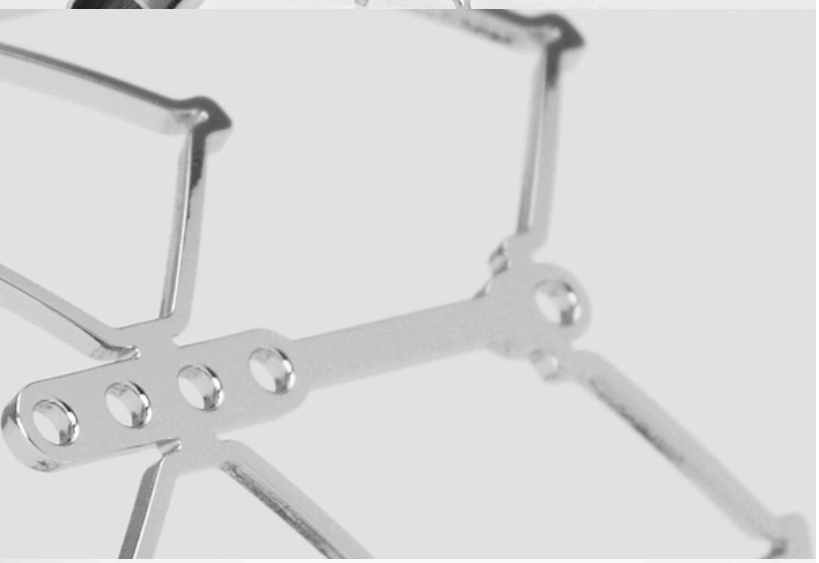
Nitinol Capabilities

- Laser Cutting
- Shape Setting
- Electropolishing
- Braiding
- Milling
- EDM
- Microjet Cutting
- Welding
- Centerless Grinding
- Laser Ablation









Laser Cutting

We use ultrafast femtosecond laser systems to produce nitinol devices faster that require less post processing.

Standard Specs.	Min.	Max.
Feature Sizes	0.012 mm	10 mm
Wall Thickness	0.012 mm	1.5 mm
Outside Diameter	0.0125 mm	20 mm

Shape Setting

We use our in-house precision tooling center to make fixtures to produce complex nitinol shapes.

Standard Specs.	Min.	Max.
Feature Sizes	0.012 mm	10 mm
Material Thickness	0.012 mm	0.5 mm
Material Diameter	0.125 mm	10 mm

Electropolishing

We lead industry standards in quality and repeatability, no matter the shape or complexity of your nitinol parts for flawless surface finishing.

Standard Specs.	Min.	Max.
Feature Sizes	0.012 mm	10 mm
Wall Thickness	0.012 mm	0.1 mm
Material Diameter	0.0125 mm	10 mm

Laser Ablation

We have developed proprietary processes that use high-speed lasers to 3D machine micro-scale components and devices from a solid metal material. These processes minimize heat input, reduce thermal damage, and can be done in one setup, reducing handling and cost.

Learn More
Resonetics.com