



Medical Extrusion Core Wire

ELASTICORE® Wire is a single end wire that is used as a mandrel, or place holder, during the medical tubing extrusion process. Once the tubing polymer has been extruded, the core wire (often a Copper or Silver-Clad Copper) is then elongated to decrease the wire's diameter. The final step of the process is sliding the wire out of its "sheathing", and leaving a round tube for drug delivery, guide wire/device insertion, or other technical application.

Why Choose ELASTICORE®?

ELASTICORE® provides an alternative to the expense of using copper or plated copper core wires in your extrusion process. ELASTICORE® Wire is **annealed stainless steel wire** with an elongation profile that exceeds 30% and **deforms similar to copper**. In order to demonstrate these points, we have provided two illustrations of the performance characteristics of ELASTICORE® versus silver-plated copper on the opposite side of this sheet.

ADDITIONAL CHARACTERISTICS

ELASTICORE®'s **surface finish** allows for adequate friction during the extrusion process. Unlike plated copper materials, ELASTICORE® wire won't flake and contaminate equipment or finished product. ELASTICORE® is available in **stock and custom sizes** for a quick turnaround — reducing your lead times and getting your products to customers quicker.

How does ELASTICORE® add value to your tubing?

- Reduces Cost
- Reduces Lead Time
- Eliminates Contamination



PHYSICAL PROPERTIES

Materials: 300 Series Stainless Steel

Diameters: 0.006" to 0.100"

Surface Finish: Bright or Matte

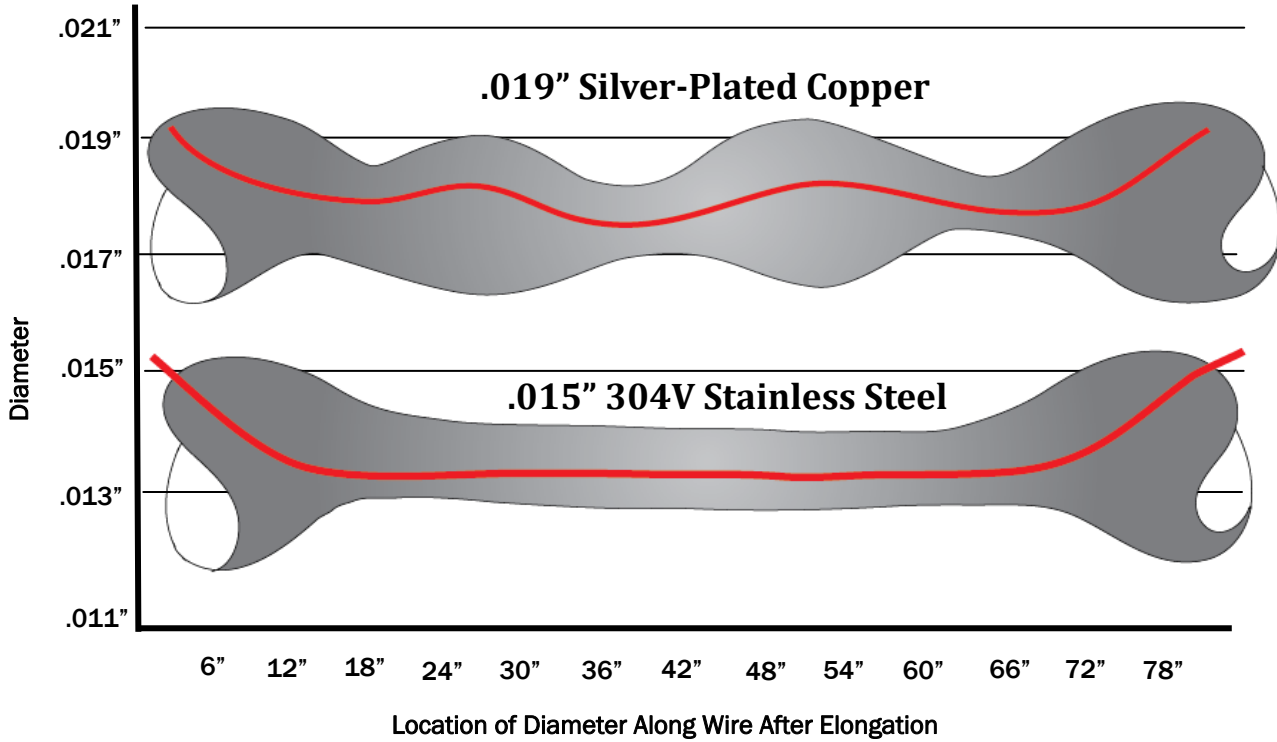
Elongation: 40% to 50%

Tensile Strength: 100 to 120 kPSI

Turn over →

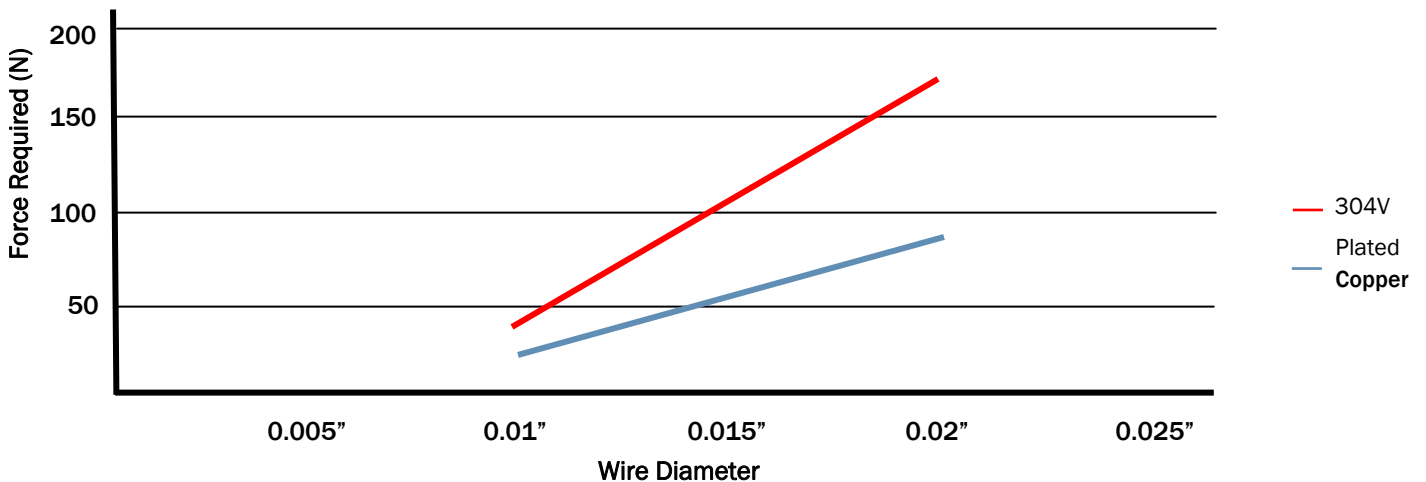
Diameter Reduction Profile

The graph below represents how 304V stainless steel (ELASTICORE®) deforms under an axial load versus silver-plated copper under a similar load. As you will see, 304V has a much more consistent profile compared to silver-plated copper.*



Elongation Force Requirements

The chart below represents the amount of force required at a given outer diameter to elongate a 304V stainless steel wire versus silver-plated copper.*



*This illustration is for representative purposes only. Actual performance data may be provided upon request.