Technology

Conductors & Cables

Conductors

- Insulated and Bare Wire to 60 AWG
- Thermocouple Wire

Cables

- 2-528 Conductors in Coax
- 2-130 Conductors for Composite
- Round, Flat or Square Cable Depending on Equipment Space
- Capacitance within the 55-95 pF/m Range for **Ultrasound Probes**

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- Single Wires and Coaxial Cables in Various Constructions for CCD Cameras
- MRI Safe Materials Available
- Bundles with Identification Thread
- Colored insulation or Specific color by Micro-coax
- Antimicrobial options
- Dielectric: Fluoropolymers, PE, Foam PE
- Outer sheath: Fluoropolymers, Polyurethane, PE, PVC

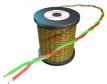
Wire Technologies

- Precious Metal Wire
- Monel / Inconel Wire
- · Cladded and Plated Wire
- Litz Wire
- PTFE Coated Mandrels
- Micro Coils

















Technology

Injection Molding

- Clean Room Molding with 40 to 240 Ton Presses
- · Standard, Micro, Insert and Two Shot
- Mold and Process Validation Capabilities in House
- Proprietary Textures Etched into Molds to Increase and Decrease Lubricity
- · Materials: Polyurethanes, Polyethylenes, Polycarbonites, Polysulfones, Polypropylenes, PVCs, PEEK and ULTEM



Coatings

- Continuous and Discrete PTFE Processes
- Proprietary Electrosurgical
- Lubricious
- Hydrophillic
- Anti-microbial
- Permanent Marking
- Substrates: Metal, Silicone, Polyisoprene, **Polymer Catheters**





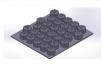




Micro Surfaces

- Prevent Implant Migration
- Prevent 'Seeding' of Balloons
- Improve Grip of Surgical Tools and Jaws
- Substrates: Metals, Silicones and Thermo Plastics





Catheter Tubing

- Tightly toleranced Multilumen and **Profile Extrusion**
- Deflectable, Balloon and Smart Catheters
- Braid and Coil Reinforcement
- Thermoset Polyimide Tubing
- Electrophysiology and Sensing Devices



Laser Services

- Ablation
- Cutting
- Welding
- Marking
- Drilling
- Materials: Steels, Nitinol, Plastics







Machining

- Laser Micro Machining for Needle and Hypo-tube Fabrication
- Laser Cutting
- Laser Welding
- 5 Axis CNC Swiss
- Wire EDM
- Surface Grinding
- Full Cleaning, Passivation, and Electropolishing Capabilities
- Materials: Steel, Nitinol, Titanium, Cobalt Chromium





- Packaging
- Fulfillment
- Sterilization Management
- Microelectronics





Secondary Operations

- Hubbing, Tipping, Flaring, Porting, Skiving and Printing
- Reflow and Wire Reinforcement
- Dipped Structures
- Blow and Dip Molded Balloons













PRINCIPIAMED

Our Partners









ELEKTRISOLA Medical Technologies



 Off-Shore Molding + Overmolding, Hypotube Machining, Cannula, and Trocars

- 4 and 5 Axis Precision Machining
- Swiss
- EDM
- Milling
- Finishing

- · Polyimide (Kapton) Tubing
- Braided, Coiled, PTFE Lined and/or Polymer Coated Polyimide Tubing
- Coated Mandrels
- Silver Plated Copper Mandrel Wire

hoowaki









- Microgrip® Surfaces
- Hoowaki® Low Friction Surfaces
- RNA Collection Swabs

- Tightly Toleranced Multilumen and Profile Extrusion
- Deflectable, Balloon and Smart Catheters
- Electrophysiology and Sensing Devices
- Microelectronics and Coils
- Miniature Molding
- Clean Room Assembly, Packaging and Labeling

- Deep Learning Visual Inspection
- Custom Material Development
- PVD for Wear / Corrosion Resistance and **Flectrical Insulation**
- PVD Deposition of Metals and Ceramics













- Micro Molding
- Micro Machining
- · Micro Insert & Over Molding
- Micro Subassembly

- Bare and Coated Wire to 60 AWG
- Single, Bonded, Twisted and Shaped Wire
- Wire Cutting, Straightening and Laser Ablation
- Coaxial Cables
- Micro Cables
- Optical Cables
- Hybrid Cables













- Laser Cut Tubing
- Laser Welding
- Laser Marking
- Wire Stripping
- Polymer Ablation



- Catheter Tipping, Flaring, Printing and Porting
- Device Assembly
- Multi-layer Cannula
- Wire Reinforced Cannula
- Plastic and Silicone Dipping
- Plastic and Silicone Overmolding
- Semi-automated Design and Manufacturing

- PTFE Coating
- · Lubricious Coatings for Metals, Wires, and Plastics
- Hydrophilic Coating
- Antimicrobial Coating